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PERJURY STATEMENT

Site Location: 15101 Freedom Avenue, San Leandro, California

"I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge".

A handwritten signature in black ink that reads "M. Pazdel". The signature is written in a cursive style and is positioned above a horizontal line.

Mohammad Pazdel
1770 Pistacia Court
Fairfield, California 94533
Responsible Party

**Additional Off-Site Investigation Report and
Updated Site Conceptual Model**

**Freedom Gas and Food
15101 Freedom Avenue
San Leandro, California**

March 7, 2014

Project 2552

Prepared for

**Mohammad Pazdel
1770 Pistacia Court
Fairfield, California**



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March 7, 2014

Mr. Mark Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Freedom Food and Gas (Formerly Freedom ARCO Mini-Mart)
Site Address: 15101 Freedom Avenue, San Leandro, California
STID 4473/RO0000473

Dear Mr. Detterman:

SOMA's "Additional Off-Site Investigation Report and Updated Site Conceptual Model" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have questions or comments.

Sincerely,

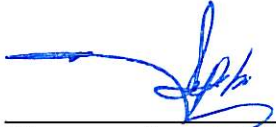
Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure



CERTIFICATION

SOMA Environmental Engineering, Inc. submits this report on behalf of Mr. Mohammad Pazdel, owner of the property located at 15101 Freedom Avenue, San Leandro, California. This report has been prepared pursuant to correspondence of Alameda County Health Care Services – Environmental Health Services dated October 30, 2013, approving the workplan.



Mansour Sepehr, PhD, PE
Principal Hydrogeologist

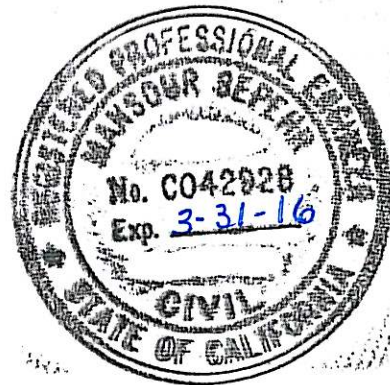


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1. INTRODUCTION

1.1 Overview

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report documenting results of a soil and groundwater investigation at 15101 Freedom Avenue, San Leandro, California. Based on Alameda County Health Care Services (ACHCS) directive dated April 22, 2013, SOMA prepared a data gaps workplan and subsequently a workplan addendum dated October 17, 2013. ACEH approved the workplan in their correspondence dated October 30, 2013. This report provides details of the investigation and includes an updated site conceptual model in tabular format.

1.2 Site Location and Description

The Site is located at the foot of the San Leandro Hills, along the west side of San Leandro Valley (Figure 1). It is bounded on the north by Freedom Avenue, on the east by Fairmont Avenue, on the south by residential properties and on the west by 151st Avenue. It currently operates as a gasoline service station with mini-mart, and retails gasoline and diesel fuel. No automotive repair facility is on the Site. Three canopied product dispenser islands are on-site as well as three underground storage tanks (USTs): one 6,000-gallon diesel UST, one 8,000-gallon gasoline UST, and one 10,000-gallon gasoline UST. Figure 2 illustrates site features.

The Site has operated as a gasoline service station since the 1960s. Mr. Pazdel, the responsible party, sold the property to Farrokh Hosseinyoun in 2010. Mr. Hosseinyoun subsequently sold the property to Mohammad Mashhoon in 2010. The station currently operates under the business name Freedom Gas and Food (formerly Freedom ARCO Mini-Mart). Previous site activities are summarized in Appendix A.

1.3 Regional Geology and Hydrology

The Site is located in the San Leandro Valley at an elevation of approximately 54 feet above mean sea level with a moderate topographic gradient toward the south. The San Leandro Valley is within the San Francisco Bay – Santa Clara Valley depression, a northwest-to-southeast trending basin bounded on the east and west by mountains. The basin is characterized by Quaternary alluvium, chiefly fan and terrace deposits that are generally several hundred feet thick and flat lying.

There is no water body within a half-mile radius of the Site. The nearest water body, Estudillo Canal, is located about 0.6 miles southwest of the Site. The next closest water body is San Leandro Creek, located approximately 1.5 miles south

of the Site. The Site is approximately four miles north of the San Francisco Bay. East of the Site are the northwest-trending Hayward Fault Zone, the San Leandro Hills, and an assemblage of ultramafic metamorphic and volcanic rocks (California Division of Mines and Geology, 1990).

The United States Geological Survey (USGS) mapped the Site on Late Pleistocene age (10,000 to 70,000 years old) alluvium consisting of irregularly interbedded clay, silt, sand and gravel. Due to the age of this alluvium, these stream-deposited sediments are typically more consolidated than alluvial deposits of Holocene age. In developed urban areas such as the Bay Area, earthwork construction often involves the emplacement of artificial fill derived from nearby cuts or quarries. Artificial fill is emplaced over native earth materials to provide level building pads and base rock for roadways.

The Site is located in the East Bay Groundwater Basin of the San Francisco Bay hydrologic study area. Water-bearing formations include the Santa Clara Formation of Plio-Pleistocene age and late Pleistocene, and recent sediments that have been grouped as Late Quaternary alluvium. Non-water-bearing units underlie the water-bearing formations and are exposed along the surface in the Diablo Range east of the Site and Coyote Hills, near Newark, which is south of the Site.

2. SCOPE OF WORK

Based on SOMA's approved workplan, the scope of work includes the following:

1. Installation of direct-push boring on the neighboring property
2. Cone penetrometer test (CPT) and membrane interface probe (MIP) investigation
3. Laboratory analysis of soil and groundwater samples
4. Crawl space vapor sampling and laboratory analysis
5. Free-product fingerprinting
6. Attempt to sample residential well

2.1 Fieldwork Preparation

Before initiating field assessment activities, SOMA obtained required encroachment and drilling permits from the Alameda County Public Works Agency (ACPWA) (encroachment permit R13LD13059, drilling permit W2013-0950, Appendix B). Traffic control plans, one for each drilling location, were prepared and submitted to the County for approval. The approved traffic plans were utilized during drilling activities (Appendix B). SOMA retained Traffic Management, Inc. to execute the approved traffic plans. SOMA submitted all

required drilling notifications to the ACPWA and ACHCS in advance of drilling activities.

SOMA prepared a site-specific Health and Safety Plan (HASP). The HASP is a requirement of the Occupational Safety and Health Administration (OSHA), “Hazardous Waste Operation and Emergency Response” guidelines (29 CFR 1910.120) and the California Occupational Safety and Health Administration (Cal/OSHA) “Hazardous Waste Operation and Emergency Response” guidelines (CCR Title 8, section 5192). The HASP is designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. It establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans. The HASP was reviewed and signed by field staff and contractors prior to beginning field operations at the Site.

On December 18, 2013 SOMA retained a private utility locator (OJH Subsurface Utility Locator) to survey proposed drilling areas and locate any additional subsurface conduits. On January 2, 2014, SOMA notified Underground Service Alert (USA) to ensure drilling areas were clear of underground utilities (USA numbers 0001039, 0001045, 0001048, 0001055, 0001070).

2.2 Borings Advancement

On January 28, 2014, under SOMA’s oversight Fisch Drilling (Fisch), a licensed C-57 driller, advanced one soil boring (DP-6) on the property adjacent to the southern boundary of the Site in order to delineate the extent of contamination into the residential neighborhood. Boring location is as shown on Figure 2.

DP-6 was advanced to 30 feet bgs similar to the previous borings installed in the vicinity. Soil samples for chemical analysis were collected from areas of discoloration, PID detections, and at the terminal depth of boring.

Based on ACHCS directive dated October 30, 2013, SOMA installed a step-out boring (DP-6-SO) on-site on February 6, 2014 in order to obtain shallow soil samples between 0 to 5 and 5 to 10 feet intervals to satisfy Low Threat Closure Policy (LTCP) requirements. Two soil samples were collected at 3 feet and 6 feet respectively.

Direct Push Technology (DPT) was utilized to advance DP-6. To clear all underground utilities, boring location was hand augered to 5 feet bgs. DPT is an efficient method of collecting continuous soil cores while preventing cross-contamination; it involves hydraulically hammering a set of steel rods into the subsurface with the lead section consisting of a polyethylene-lined sampler. After drilling rods were pushed to the desired depth, the soil-filled liner was retrieved. The boring was continuously cored, and descriptions of cored soil were entered

in logs (Appendix C) in accordance with the Unified Soil Classification System (USCS). In addition, cored soil sections were checked for hydrocarbon odors and visual staining, and screened using a photo-ionization detector (PID). PID readings were noted on boring logs.

During boring advancement, multiple interbedded layers of sandy lean clays and clayey sands were encountered. Groundwater was first encountered at 24 feet bgs and was later stabilized between 20-30 feet bgs. Boring logs attached in Appendix C illustrate lithologies encountered.

SOMA collected grab groundwater sample using a temporarily installed perforated PVC casing. A disposable bailer was used to evacuate a desirable amount of groundwater and decant it, slowly to avoid volatilization, into appropriately preserved laboratory-supplied containers. The sample was labeled with a unique sample identifier and preserved on ice pending delivery to a certified analytical laboratory. All samples were delivered to the laboratory for chemical analysis under appropriate chain-of-custody protocol.

Following sampling, the boring was destroyed with a neat cement grout mixture, tremmied into place, and completed at the surface with materials to match existing grade.

2.3 CPT/MIP Investigation

To evaluate the site hydrogeologic conditions and collect pertinent soil and groundwater samples, SOMA proposed using combined CPT and direct push technology (DPT) at nine locations to continuously log subsurface lithology and stratigraphy up to 50-60 feet bgs to the south of DP-4 and DP-5 (installed in July 2011) and two additional CPTs upgradient of the source on 151st Avenue to evaluate the source of benzene in wells MW-1 and MW-2.

However, due to the presence of utilities in the subsurface, a clear location could not be obtained and the drilling crew was unable to advance CPT borings at proposed locations CPT/MIP-9, CPT/MIP-12, CPT/MIP-13, CPT/MIP-16, CPT/MIP-18, and CPT/MIP-19. However, MIP investigation was conducted at these locations and DP borings were installed for soil and groundwater samples. Therefore these locations have been renamed as MIP-9, MIP-12, MIP-13, MIP-16, MIP-18, and MIP-19, respectively hereon for clarity. All CPT and MIP boreholes could not be drilled to the proposed 50-60 feet bgs due to early refusal at some locations.

2.3.1 Calibration Borehole Drilling

To verify that the CPT/MIP produced reliable logs, a direct-push (DP) borehole was drilled adjacent to one of the CPT boreholes (CPT/MIP-10) to calibrate the CPT lithology and MIP logs. By comparing the CPT log with the log of DP borehole CPT/MIP-10, and photo-ionization detector (PID) readings of soil cores, SOMA's field geologist evaluated the CPT/MIP software. This comparison indicated that CPT software accurately detected vertical intervals of water-bearing zones and the lithologic characterization was found to be similar in both logs.

The DP boring was drilled to a total depth of 60 feet bgs. The boring was continuously cored and SOMA's field geologist notated the observed soil characteristics encountered and documented them on the geologic log for CPT/MIP-10, included in Appendix C.

After completing the sample collection, the borehole was tremie grouted from the bottom of the borehole to one-foot bgs with Portland I/II cement. The cement grout was mixed at an approximate ratio of one 94-pound bag of cement to approximately six gallons of water with about 5% bentonite. The remaining borehole depth was then backfilled with concrete to existing grade.

2.3.2 CPT/MIP Study

CPT is a process for determining subsurface soil characteristics employing a cone penetrometer attached to a data acquisition system, which is pushed into the subsurface using a hydraulic ram. The soundings were conducted using a 20-ton capacity cone with a tip area of 10 cm² and a friction sleeve area of 150 cm². The cone takes measurements of cone bearing (q_c), sleeve friction (f_s) and dynamic pore water pressure (u_2) at 5-centimeter intervals during penetration to provide a nearly continuous hydrogeological log. In addition, the cone also contains a porous filter element located directly behind the cone tip (u_2). The filter element is used to obtain dynamic pore pressure as the cone is advanced. By qualitatively integrating these parameters, CPT provides a rapid means of determining relative soil lithology and hydrogeologic information. CPT data reduction and interpretation is performed in real time, facilitating on-site decision making by a field geologist. The hydrogeologic information gathered is used to identify different WBZs using pore pressure data, as well as any confining layers beneath the Site.

Concurrent with the CPT study, SOMA utilized MIP to evaluate vertical extent of petroleum hydrocarbons. The MIP provided information regarding residual levels of petroleum hydrocarbons at different depth intervals. The MIP uses a thin film fluorocarbon polymer membrane, which stays in direct contact with the soil during MIP logging. The downhole membrane serves as an interface to a detector at the surface. Volatiles in the subsurface are transferred across the

membrane and partition into a stream of carrier gas where they are swept to the detector. The three detectors that were used include:

- photoionization detector (PID),
- electron capture detector (ECD) and
- flame ionization detector (FID).

Each detector is designed for sensitivity to a group or type of contaminant. The ECD is used for chlorinated contaminant (trichloroethylene [TCE], perchloroethylene [PCE]) detection; the PID is best used for the detection of aromatic hydrocarbons (benzene, toluene, ethylbenzene, total xylenes [BTEX] compounds); the FID is best used for straight-chained hydrocarbons (methane, butane). As the MIP module collects information on contaminant characteristics, the CPT characterizes sediment types (e.g., clay, silt, silty clay) in the subsurface. Therefore, at each CPT location an integrated vertical profile of approximate soil/sediments stratigraphy, contaminant location, and relative contaminant concentration is generated.

The CPT characterized the underlying sediments at the Site as consisting primarily of clay, clayey silt to silty clay, silty clay to clay, sandy silt to clayey silt, silty sand to sandy silt, sand to silty sand, sand, gravelly sand to sand, and very stiff fine grained. The CPT also characterized two distinct water-bearing zones between 22 and 28 feet bgs and 45 to 60 feet bgs. The MIP indicated that the most significant contaminant concentrations are located between 20 and 40 feet bgs. The logs of the CPT/MIP generated data are included in Appendix C. Following completion of the CPT/MIP activities at each location, the boring was tremie grouted from the bottom of the borehole to one-foot bgs with Portland I/II cement. The cement grout was mixed at an approximate ratio of one 94-pound bag of cement to approximately six gallons of water with about 5% bentonite. The remaining borehole depth was then backfilled with asphalt cold-patch to surface grade.

2.3.3 Soil and Groundwater Sample Collection

Boreholes for sampling groundwater and soil were drilled in the immediate proximity to the CPT/MIP boreholes using a DPT rig. Soil samples for chemical analysis were collected from these adjacent borings, at MIP-identified depths indicative of gross contamination. Soil and groundwater borings were continuously logged and used to correlate CPT obtained data with existing subsurface lithology and MIP data with existing contaminant distribution. These boreholes were installed to approximately 60 feet bgs even though at a few of these locations CPT and MIP boreholes could not be drilled to that depth due to early refusal.

Soil samples were collected at MIP-identified depths from each boring by advancing a 2-inch-diameter DP sampler lined with 4-foot-long clear polybutyrate

sleeves into the undisturbed soil profile at the base of the boring. The locations where CPT could not be implemented continuous logging via DP borings was conducted. (Appendix C includes the CPT, MIP, and DP boring logs).

SOMA used a handsaw to cut the retrieved plastic liner into small sections for laboratory submittal. The collected sleeves were covered at both ends with Teflon sheeting, sealed at both ends with polyethylene end caps, labeled, logged on a chain-of-custody form, placed in an ice-filled cooler, and kept at 4⁰C for transport to a state-certified laboratory for analysis.

Depth-discrete groundwater sampling was conducted for the two WBZs during drilling. In addition, SOMA utilized a dual tube sampler to isolate the First WBZ and prevent cross contaminating samples collected at lower depths. Depth-discrete groundwater samples were collected by driving a 4-foot-long Hydropunch tip attached to the end of the inner drive DP rod to the desired depth-discrete interval. The outer drive casing was retracted, exposing the 4-foot-long screen interval of the Hydropunch tip. Groundwater samples were collected with a stainless steel bailer lowered through and beneath the drive casing into the Hydropunch screen. Prior to downhole collection events and between borings, the Hydropunch and stainless steel bailer were field decontaminated to avoid cross-contaminating groundwater samples.

Each sample was labeled with a unique sample identifier and preserved on ice pending delivery to a certified analytical laboratory. All samples were delivered to the laboratory for chemical analysis under appropriate chain-of-custody protocol.

Upon completion, all advanced boreholes were grouted to surface grade in accordance with ACHCS requirements, with a neat cement grout mixture, tremmied into place, and completed at the surface with materials to match existing grade.

2.4 Waste Disposal

Soil cuttings generated during soil boring advancement were temporarily stored on-site in a secure area in a DOT-rated 55-gallon steel drum pending characterization, profiling, and transport to an approved disposal-recycling facility. This drum was labeled with site address, contents, date of accumulation, and contact phone number.

On February 14, 2014, two 55-gallon drums of non-hazardous solid waste (soil cuttings) generated during drilling operations was transported from the Site to a licensed disposal facility. A waste manifest is attached in Appendix D.

2.5 Laboratory Analyses of Soil and Groundwater Samples

As described in the previous section, groundwater samples, along with selected soil samples based on PID readings, were submitted to a California state-certified environmental laboratory for chemical analysis of the following:

- Total PHCs as gasoline (TPH-g)
- Benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX)
- Fuel oxygenates, additives and lead scavengers including methyl tertiary-butyl ether (MtBE), tertiary-butyl alcohol (TBA), ethyl tertiary-butyl ether (ETBE), diisopropyl ether (DIPE), tertiary-amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromomethane (EDB), and ethanol.

All analyses were conducted using USEPA Method 8260B except for TPH-g in soil which was conducted using USEPA Method 8015B.

2.6 Site Hydrogeology

The results of the CPT/MIP study and borehole logs of the existing groundwater monitoring wells and earlier soil borings were used to construct five geologic cross-sections. Figure 3 shows the locations of geologic cross-section A-A', B-B', C-C', D-D', and EE'. As shown in the cross-sections (Figures 4 through 8), an unconsolidated sequence of permeable and relatively impermeable sediments underlies the Site and adjacent areas.

Two main water-bearing zones were encountered within the depths explored by the CPT/MIP and are designated the First and Second water-bearing zones (WBZs). Based on the CPT data and borehole logs of the groundwater monitoring wells and soil borings, both WBZs appear to be laterally continuous across the Site and hydraulically downgradient of the Site, and are separated by a laterally continuous non water-bearing unit. Table 7 includes an updated site conceptual model.

2.6.1 First WBZ

During well borehole drilling, groundwater in the First WBZ was encountered between approximately 25 and 30 feet bgs. Following well completion and development, groundwater elevations were measured above the depth at which groundwater was encountered during drilling. Over the period of record for quarterly groundwater monitoring at the Site (2002 to 2013), groundwater elevations in the monitoring wells have consistently been measured above the depth at which groundwater was first encountered in the well borings during drilling, and suggest groundwater elevations in the First WBZ reflect potentiometric pressure. Therefore, the First WBZ is considered a confined aquifer. Over the period of record for quarterly groundwater monitoring at the Site in on-site and off-site wells, depth to groundwater in the First WBZ has

ranged from approximately 9 to 24 feet bgs (approximately 26 to 33 feet above mean sea level), with the groundwater flow gradient in the First WBZ predominately towards the south/southwest.

From approximately 15 to 30 feet bgs the First WBZ occurs as an approximate 10- to 15-foot thick interbedded sequence of sand, silty sand to sandy silt, cemented sand, and silt to clayey silt. As illustrated on cross-section A-A' and B-B' (Figures 4 and 5), the top of the First WBZ is inferred at greater than 15 feet bgs but less than 30 feet bgs beneath the Site. In addition, as illustrated on cross-section C-C' (Figure 6), the top of the First WBZ is inferred to be shallower (approximately 12 feet bgs) hydraulically downgradient of the Site from MW-5 to DP-4, but increases in depth beyond CPT/MIP-11 to TWB-4 (approximately 20 feet bgs). Also, the thickness of the First WBZ is inferred to increase to approximately 30 feet beyond CPT/MIP-7 to CPT/MIP-6 and at TWB-1, DP-2, DP-4, and DP-5, and is inferred to decrease to approximately 8 feet to 2 feet beyond DP-5 to CPT/MIP-7 and at TWB-4, respectively. The First WBZ is overlain by CPT-interpreted clay and clayey silt with thin interbeds of sand, silty sand, and silty clay to clay, approximately 1 to 2 feet thick in the upper portion of the sequence (< 10 feet bgs) beneath the Site, with massive clay and clayey silt to the top of the First WBZ (12 to 22 feet bgs). Based on the CPT and monitoring well and soil boring borehole log data, this layer seems to be an unsaturated layer. As illustrated on cross-sections DD' and EE' (Figures 7 and 8), further downgradient of the site, First WBZ still extends from approximately 15 to 30 feet bgs as 4 to 10-foot thick interbedded sequence of sand, clayey silt to silty clay, sandy silt to clayey silt, clay, silty clay to clay, and very stiff fine grained.

2.6.2 Second WBZ

During the well borehole drilling of MW-1D, MW-3D, and MW-4D, groundwater in the Second WBZ was encountered during drilling between approximately 53 and 54 feet bgs. The soils at this depth were classified as silty clay (CL) with sand and gravel. Over the period of record for quarterly groundwater monitoring of these wells (2008 to 2013), groundwater elevations have consistently been measured above the depth at which groundwater was first encountered in the well borings during drilling, and suggest groundwater elevations in the Second WBZ reflect potentiometric pressure. Therefore, the Second WBZ beneath the Site is considered a confined aquifer.

Based on the groundwater elevations reported during Fourth Quarter 2013, groundwater within the Second WBZ beneath the Site flows southwesterly at a gradient of 0.004 feet/feet.

From approximately 32 to 67 feet bgs, the Second WBZ occurs as an approximately 5 to at least 35-foot thick interbedded sequence of the same lithologic type as seen in the First WBZ, silty clay to clay, clay, clayey silt to silty clay, silty sand to sandy silt, sand, very stiff grained, sand to silty sand, and

gravelly sand to sand. The minimum thickness observed was determined at CPT/MIP-1 as illustrated on cross-section B-B' (Figure 5), and the maximum thickness observed (35 feet) was determined at CPT/MIP-3 as illustrated on cross-section A-A' (Figure 4). As illustrated on cross-sections C-C', D-D', and E-E' (Figures 6 through 8), hydraulically downgradient of the Site, the top of the Second WBZ is inferred to occur at approximately 40 feet bgs, and is inferred to be shallower farther south as can be seen at TWB-4 (approximately 32 feet bgs).

2.6.3 Aquitard

A 5 to 25-foot thick laterally continuous CPT-interpreted unsaturated layer of clay, clayey silt, and silt separate the First and Second WBZs. This unit is referred to as an aquitard. The thinner thickness of the aquitard is inferred at the northeast (CPT/MIP-3, MW-3D) and southwest (CPT/MIP-4) portions of the Site, as illustrated on cross-section A-A' (Figure 4). At CPT/MIP-2 the thickness of the aquitard increases to approximately 10 feet. Hydraulically downgradient of the Site, as illustrated on cross-section C-C', D-D', and E-E' (Figure 6 through 8), the top of the aquitard is inferred to occur at approximately 20 feet bgs at CPT/MIP-7 and CPT/MIP-8, and increases with depth to approximately 30 feet bgs at CPT/MIP-11 and at the same depth further downgradient at TWB-1, TWB-6 and decreases to 25 feet bgs at TWB-4. The aquitard is thickest (approximately 25 feet) at CPT/MIP-7 and CPT/MIP-8, but thins to approximately 15 feet at CPT/MIP-6, and thins more (approximately 7 feet and 5 feet) further downgradient at CPT/MIP-15 and TWB-4, respectively.

The lower limit of the Second WBZ is not defined at this time. Soil data from 60 feet bgs (MW-1D, 3D, 4D) and CPT data to 65 feet bgs (CPT-3) beneath the Site do not clearly define a transition to an aquitard. Similar conclusions are indicated for downgradient off-site CPT data from 55 feet to 65 feet bgs.

2.7 Nature and Extent of Soil Impact

The results of the MIP study indicated the presence of straight-chain and ring structure hydrocarbons in the soil profile of the First WBZ, the aquitard, and the Second WBZ. The PID/FID data suggest the presence of moderately weathered fuel hydrocarbons adsorbed to the soil or dissolved in groundwater within the First and Second WBZs downgradient of the site in MIP-9, CPT/MIP-10, and MIP-16. The distribution of the PID/FID data indicates concentrations of fuel hydrocarbons are much lower in the aquitard relative to the First and Second WBZ, suggesting that the aquitard is not a source of impact to groundwater in the Second WBZ, and is effectively preventing cross-contamination between both aquifers.

The results of laboratory analyses conducted on the soil samples collected from the Site during the present field investigation, and during the July 2011, are listed on Table 1. The data indicates soil impact beneath the subsurface occurs in the

saturated soil profile of the First WBZ in previously installed DP-1 (20 feet bgs), DP-4 (24 feet bgs) and immediately downgradient (of DP-4) in MIP-9, which is approximately 190 feet downgradient of the site. Petroleum hydrocarbons detected above ESLs in the soil samples collected from these off-site locations include ethylbenzene, total xylenes, and naphthalene.

During the current investigation, elevated PID readings and hydrocarbon odor and staining were observed in borings DP-6 at 21 feet bgs (380 ppm).

However, all contaminants of concern (COCs) were either below laboratory-reporting limits or below environmental screening levels (ESL) published by SF Bay Region RWQCB in DP-6 (located on the property adjacent to the southern boundary of the site) at 21 and 28 feet bgs.

All COCs were either below laboratory-reporting limits or below ESL in soil samples collected from CPT/MIP borings installed during this investigation except soil sample obtained from MIP-9 at 21 feet. In this sample ethylbenzene, total xylenes, and naphthalene were detected at 5.2 mg/kg (ESL 3.3 mg/kg), 17.9 mg/kg (ESL 2.3 mg/kg), and 1.9 mg/kg (ESL 1.2 mg/kg), respectively. Figure 9 and Table 1 summarize soil sample analytical results. The complete laboratory analytical report is in Appendix F.

It appears that vertical extent of off-site soil contamination is limited to 24 feet bgs as illustrated by low to non-detectable levels, below laboratory-reporting limits, of COCs in deeper samples collected from each boring.

2.8 Nature and Extent of Groundwater Impact

From 2002 to the Fourth Quarter 2013, groundwater samples have been collected and analyzed for COCs on-site and off-site during subsurface assessments and quarterly groundwater monitoring events. Quarterly groundwater monitoring/ sampling has been conducted since Second Quarter 2002. Groundwater collected from three on-site monitoring wells within the Second WBZ was first analyzed during January 2008. Additional analysis of limited grab groundwater sampling was conducted during 2006 to evaluate the presence of dissolved-phase hydrocarbons in the Second WBZ.

Results of groundwater analyses to date indicate that the First and Second WBZs beneath the Site and off-site to the south and southeast are impacted by dissolved-phase fuel hydrocarbons. The First WBZ contains significantly greater concentrations of dissolved-phase fuel hydrocarbons than those detected in the Second WBZ.

The existing groundwater monitoring well network on the Site includes MW-1 through MW-5, MPE-1 and MPE-2 (First WBZ) and MW-1D, 3D and 4D (Second

WBZ). The off-site network includes MW-6, MW-7, extraction wells EX-1 and EX-2 completed only within the First WBZ.

Comparing the most recent groundwater elevation data collected during Fourth Quarter 2013 groundwater monitoring indicated a slight vertical downward gradient between the First and the Second WBZs at MW-1, MW-3, and MW-4.

2.8.1 Impact to First WBZ

Analyses results for grab groundwater samples collected from soil borings completed in the First WBZ in September and October 2003 (TWB-1 through TWB-6) detected dissolved-phase hydrocarbons including TPH-g, BTEX and MtBE in proximity to groundwater monitoring well MW-6 (TWB-1), MW-7 (TWB-2), and east of MW-8 (TWB-3). Elevated concentrations were detected in TWB-1. Low concentrations were detected in TWB-3.

Analyses results for grab groundwater samples collected from soil borings completed in the First WBZ during the 2006 CPT/MIP investigation (DPW-4 through DPW-6 and DPW-8) detected dissolved-phase hydrocarbons including TPH-g, BTEX, MtBE, TBA, DIPE and ETBE in the southern portion of the Site (DPW-4 and DPW-5), and south of the Site in DPW-6 and DPW-8. Elevated concentrations were detected in DPW-5 and DPW-6. Lower concentrations were detected in DPW-4 and DPW-8.

Analyses results for grab groundwater samples collected from soil borings completed in the First WBZ in July 2011 (DP-1 through DP-5) detected dissolved-phase hydrocarbons including TPH-g, BTEX and MtBE. TPH-g in grab groundwater samples from advanced soil borings ranged from 1,500 µg/L (DP-3) to 84,000 µg/L (DP-1). Maximum benzene concentration was detected in DP-5 at 290 µg/L. Maximum MtBE and TBA were detected in DP-3 at 150 µg/L and 40 µg/L, respectively. 1,2-DCA was above the laboratory-reporting limit, at 0.65 µg/L, in DP-4.

During January 2014, TPH-g, benzene, ethylbenzene, total xylenes, MtBE, TBA, and naphthalene in grab groundwater samples from DP-6 were above the ESLs (Table 2).

TPH-g was detected in grab groundwater samples obtained from DP-6, MIP-16 and MIP-19 above the ESL (100 µg/L) at 3,900 µg/L, 980 µg/L and 690 µg/L, respectively. TPH-g was either below laboratory-reporting limit or below ESL in all other groundwater samples. The lateral extent of impact of TPH-g plume in the First WBZ is illustrated in Figure 10. This figure also illustrates TPH-g concentrations during the most recent groundwater monitoring event (Fourth Quarter 2013) during which free-product (FP) was observed in multi-phase extraction (MPE) well MPE-2 and highest TPH-g concentration was observed in MPE-1. (Tables 3 and 4)

Benzene was detected in grab groundwater samples obtained from DP-6, MIP-16 and MIP-18 above the ESL (1.0 µg/L) at 3.1 µg/L, 1.8 µg/L and 1.1 µg/L, respectively. Benzene was either below laboratory-reporting limit or below ESL in all other groundwater samples. Toluene, ethylbenzene, and total xylenes were either below laboratory-reporting limit or below ESL in all groundwater samples except DP-6 where ethylbenzene and total xylenes were detected at 130 µg/L and 235 µg/L, respectively.

Figure 11 illustrates benzene concentrations in First WBZ. This figure also illustrates benzene concentrations during the most recent groundwater monitoring event (Fourth Quarter 2013) during which highest benzene concentration was observed in MPE-1.

MtBE concentrations were above ESL (5 µg/L) in groundwater samples obtained from DP-6, CPT/MIP-10, CPT/MIP-11, MIP-12, CPT/MIP-14 and CPT/MIP-15, ranging from 5.4 µg/L in CPT/MIP-10 to 220 µg/L in DP-6.

Figure 12 illustrates MtBE concentrations in First WBZ. This figure also illustrates MtBE concentrations during the most recent groundwater monitoring event (Fourth Quarter 2013). The highest MtBE concentration was observed in DP-6 located on the residential property along the southern boundary of the site.

1,2-DCA concentrations were above ESL (0.5 µg/L) in groundwater samples obtained from MIP-12 and CPT/MIP-14 detected at 72 µg/L and 0.69 µg/L, respectively. TBA, TAME, DIPE, ETBE, and EDB were either below laboratory-reporting limit or below ESL in all other groundwater samples. Figure 13 illustrates 1,2-DCA concentrations in First WBZ.

Naphthalene was detected at 14 µg/L (above ESL of 6.1 µg/L) in MIP-19 and was below laboratory-reporting limit in all other groundwater samples.

In general, dissolved-phase hydrocarbon concentrations are elevated in on-site groundwater monitoring wells MPE-1, MPE-2, MW-3 and off-site well MW-6 relative to other groundwater monitoring wells.

The lateral extent indicates that impact to the First WBZ occurs beneath the greater part of the footprint of the Site, including the area of the UST cluster and product dispensers, and continues to the south beneath the residence to immediate south of the Site, continuing farther southeast and east beneath the intersection of Fairmont Drive, 152nd Avenue and Liberty Street, and beyond on Fairmont Drive (MIP-16). MtBE plume seems to have travelled farther south along Fairmont Drive based on detections in CPT/MIP-17. Grab groundwater sampling also indicated impact to First WBZ upgradient of the source in MIP-18 and MIP-19 (Figures 10 through 12).

2.8.2 Impact to Second WBZ

TPH-g was detected in grab groundwater samples obtained from MIP-9 above the ESL (100 µg/L) at 160 µg/L. TPH-g was either below laboratory-reporting limit or below ESL in all other groundwater samples.

Benzene was detected in grab groundwater samples obtained from CPT/MIP-12, MIP-16 and CPT/MIP-17 above the ESL (1.0 µg/L) at 1.1 µg/L, 1.0 µg/L and 1.2 µg/L, respectively. Benzene was either below laboratory-reporting limit or below ESL in all other groundwater samples. Toluene, ethylbenzene, and total xylenes were either below laboratory-reporting limit or below ESL in all groundwater samples.

1,2-DCA concentrations were above ESL (0.5 µg/L) in groundwater samples obtained from MIP-9, CPT/MIP-10, CPT/MIP-11, MIP-12, and MIP-13, ranging from 1.1 µg/L in CPT/MIP-11 to 9.1 µg/L in CPT/MIP-10. MtBE, TBA, TAME, DIPE, ETBE, EDB, and naphthalene were either below laboratory-reporting limit or below ESL in all other groundwater samples. Figure 14 illustrates 1,2-DCA concentrations in Second WBZ.

Groundwater monitoring and grab groundwater sampling results indicate that impact to the Second WBZ occurs off-site downgradient of the site along 152nd Avenue based on TPH-g and 1,2-DCA concentrations (Figure 13) and along Fairmont Avenue to the south of intersection of Liberty and Fairmont Drive based on benzene concentrations.

Grab groundwater analytical results are shown in Table 2. The complete laboratory analytical report is in Appendix F. Historical groundwater analytical results are documented in Tables 3 and 4.

2.9 Crawl Space Vapor Sampling

In order to determine the risk of vapor intrusion into the neighboring residences, SOMA collected a vapor sample (SV-1) from the crawl space of the residence adjacent to the southern boundary of the Site. This vapor sampling was conducted in accordance with the most recent DTSC guidelines. Along with the contaminants of concern, oxygen, nitrogen, and tracer gas samples were also collected. Sampling location is as shown on Figure 2. General field procedures followed were adopted from the DTSC document 'Guidance for the evaluation and mitigation of subsurface vapor intrusion to indoor air', dated October 2011.

SOMA used an evacuated SUMMA passivated stainless steel canister to collect the air sample from the crawl space. The canister was provided by the laboratory, along with flow controllers equipped with an in-line particulate filter and vacuum gauge. Each flow controller was pre-calibrated by the laboratory for

the desired flow rate or duration of sample collection (in this case, 24 hours). The sampling flow rate was set at 2-4 milliliters per minute (< 0.2 lpm). The canister was placed in the crawl space. The protective brass plug was removed from canister and the pre-calibrated flow controller was connected to it. Valve on the vacuum pressure was completely opened. The time that the valve was opened (beginning of sampling) and the canister pressure on the vacuum gauge was recorded on a field observation sheet (Appendix C). Photographic documentation is attached in Appendix E. Sample collection was stopped after the scheduled duration of 24 hours and it was made sure that the canister has a minimum amount of vacuum remaining (3-inches of mercury). The final vacuum pressure was recorded and canister valves were closed. Date and time was recorded of when the sample collection was stopped. Flow controller was removed and protective brass plugs were replaced. The canister was delivered to a state certified analytical laboratory in laboratory-supplied packaging along with appropriate label and chain of custody documentation.

2.9.1 Vapor Analytical Results

The vapor sample was analyzed for TPH-g by method TO-3, VOCs including naphthalene by method TO-15, oxygen, carbon-dioxide, and nitrogen. As illustrated in Table 5, TPH-g, BTEX, and naphthalene were detected at very low concentrations, significantly below the soil gas screening levels as established by the Regional Water Quality Control Board-SF Bay Region (Interim Final December 2013). Therefore, risk to human health due to vapor intrusion does not exist at this time. The complete laboratory analytical report is in Appendix F.

2.10 Free-Product Fingerprinting

SOMA field crew obtained a grab sample of the FP from MW-6 on October 11, 2013. The sample was obtained using a disposable bailer which was used to evacuate a desirable amount of groundwater and decant it, slowly to avoid volatilization, into laboratory-supplied containers. The sample was labeled, preserved on ice and delivered to a certified analytical laboratory for fingerprint analysis under appropriate chain-of-custody protocol.

The laboratory reported that chromatographic pattern for the sample included a wide range of peaks in C6 through C12 range. However, this pattern did not resemble that of TPH-g or any other light-end distillates for which the laboratory has standards (including aviation gas, mineral spirits and JP-4 jet fuel). Chromatograms for the sample and the gasoline standard are attached in Appendix F.

2.11 Residential Well

TBA was detected in the groundwater sample collected from the residential well located at 1573 153rd Avenue at 21 µg/L in January 2008. Two more samples were collected from this well later in 2008. Both times all contaminants of concern were below laboratory-reporting limits. Based on ACHCS directive dated April 22, 2013 and October 10, 2013, SOMA contacted the occupant at this address for further groundwater sampling. He informed SOMA that the pump in his well is broken and no samples can be retrieved. SOMA's field crew attempted to contact the occupant so they could personally inspect the well in December 2013. However, they were unable gain to access to the well.

During the next groundwater monitoring event (First Quarter 2014), SOMA will re-attempt to personally inspect the well.

3. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

The current groundwater extraction and treatment system (GWETS) was installed at the site in December 2009. The GWETS system includes two extraction wells (EX-1 and EX-2), trenching containing influent and effluent lines and electrical conduits, and the treatment system compound. During system operation, the fuel-impacted groundwater is pumped from the two extraction wells and through an underground piping is delivered to a fenced treatment compound, adjacent to the existing service station building.

In the treatment compound, the extracted groundwater is treated using granular activated carbon (GAC) and subsequently discharged into the sanitary sewer under a discharge permit. Two GAC vessels are connected in series. The first unit (1,000 gallons) serves as the primary treatment unit, and the second (55 gallons) provides an additional safety buffer prior to discharge. Effectiveness of the GAC units is monitored by collection and analysis of samples from the system influent and effluent sampling ports as well as a sample collected between the two GAC vessels. When the analytical results indicate that the first GAC unit is no longer effectively treating groundwater, the vessel is removed from the treatment line and replaced with a new refurbished carbon vessel.

3.1 System Operation

Since the GWETS began discharging, approximately 2,960,274 gallons of groundwater have been treated and discharged at the site (as of February 25, 2014).

The GWETS operates under discharge permit issued by Oro Loma Sanitary District (OLSD) in May 2009. This discharge permit was most recently renewed in May 2012. Treated groundwater has been discharging to the OLSD sewer

since December 9, 2009. Treatment system effluent is sampled monthly to comply with OLSD discharge permit requirements. As shown in Table 6, as of January 9, 2014, cumulative masses of TPH-g and BTEX extracted from groundwater were approximately 36.04 pounds, 1.38 pounds, 0.36 pounds, 0.89 pounds, and 4.84 pounds, respectively.

3.2 System Maintenance

Based on ACHCS directive, SOMA conducted an evaluation of the GWETS effectiveness for hydraulic containment. The GWETS did not show an effective capture zone in the vicinity of EX-1 during Fourth Quarter 2012 groundwater monitoring event because the downhole pump in the extraction well was inoperative. Therefore, in May 2013, extensive maintenance activities were conducted at the treatment system. Post maintenance, the well pumps have shown an effective capture zone (Figure 15).

During its first year of operation, the GWETS removed over 15 pounds of contaminants. Subsequently the removal rate dropped to a little over 4 pounds/year. However, with the recent maintenance performed on downhole pumps, contaminant removal rate has been calculated to be 17 pounds during 2013.

Operation of GWETS is important for containment of off-site contaminant plume in the vicinity of MW-6 from migrating farther downgradient beneath the residential neighborhood.

4. SUMMARY OF MULTI-PHASE EXTRACTION EVENTS

SOMA has conducted several multi-phase extraction (MPE) events at the site since the pilot test of November 2007.

The MPE operations were performed using a self-contained mobile treatment system (MTS), equipped with an electrical generator, propane tank, liquid ring vacuum pump rated at 25-horsepower and 428-standard cubic feet per minute (scfm), electrical submersible pumps, air/water separator vessel, discharge hoses and traffic-rated hose ramps, downhole stingers, and a thermal oxidizer for vapor abatement. The oxidizer operates under a valid various locations BAAQMD permit. Both soil vapor and groundwater were extracted from the subsurface. Extracted groundwater was discharged into the existing groundwater treatment system.

The overall estimated total mass of VOCs extracted by MPE events is 2,737 pounds. The most recent event was conducted from October 15, 2013 to November 15, 2013. During this event approximately 790 lbs of VOCs were removed from beneath the subsurface at the rate of 26 lb/day. Upon the conclusion of this 30-day MPE event, Fourth Quarter 2013 groundwater

monitoring event was conducted at the site. Results of the monitoring event indicated that TPH-g, benzene, toluene, ethylbenzene, and total xylenes all decreased in MPE extraction well MPE-1 and FP was detected in MPE-2. Details of this event were included in SOMA's 'Fourth Quarter 2013 Groundwater Monitoring and Remediation Progress Report' dated January 31, 2014.

5. CONCLUSIONS AND RECOMMENDATIONS

To evaluate the site hydrogeologic conditions and collect pertinent soil and groundwater samples, SOMA advanced five off-site CPT/MIP borings, six off-site MIP borings, and one direct-push boring on the neighboring residential property. One vapor sample was also collected from the crawl space of the residence along the southern boundary of the site. In addition, a sample of FP from off-site well MW-6 was sent to the analytical laboratory for finger-printing.

- Results of soil analytical data indicate that in MIP-9 ethylbenzene, total xylenes, and naphthalene were detected above their ESLs at 5.2 mg/kg (ESL 3.3 mg/kg), 17.9 mg/kg (ESL 2.3 mg/kg), and 1.9 mg/kg (ESL 1.2 mg/kg), respectively. COCs in all other soil samples were either below laboratory-reporting limits or below ESL. These relatively low COC detections in soil indicate that soil impact in the studied area is limited.
- Results of groundwater analytical data show that following COCs were above ESLs in First WBZ: TPH-g in DP-6, MIP-16 and MIP-19; benzene in DP-6, MIP-16 and MIP-18; MtBE in DP-6, CPT/MIP-10, CPT/MIP-11, MIP-12, CPT/MIP-14 and CPT/MIP-15; 1,2-DCA in MIP-12 and CPT/MIP-14; and naphthalene in MIP-19.
- In Second WBZ, the following COCs were above ESLs: TPH-g in MIP-9; benzene in CPT/MIP-12, MIP-16 and CPT/MIP-17; and 1,2-DCA in MIP-9, CPT/MIP-10, CPT/MIP-11, MIP-12, and MIP-13.
- Grab groundwater sampling indicated that TPH-g and benzene concentrations above ESLs are present downgradient of the Site as far as MIP-16. MtBE concentrations above the ESLs were observed farther south in CPT/MIP-17. TPH-g and benzene above ESLs were also detected upgradient of the source in MIP-19 and MIP-18, respectively. High concentration of 1,2-DCA was observed in MIP-12 (72 µg/L) at the southeast corner of intersection of Fairmont drive and Liberty Street. No free product was noted during boring advancement. Based on COC concentrations in MIP-13, CPT/MIP-14, CPT/MIP-15, and MIP-16, the off-site downgradient extent of dissolved contaminant plume has been delineated.
- Results of this investigation indicate that contamination is mainly in groundwater, rather than in soil. The lateral extent indicates that impact to the

First WBZ occurs beneath the greater part of the footprint of the Site, including the area of the UST cluster and product dispensers, and continues to the south beneath the residence to immediate south of the Site, continuing farther southeast and east beneath the intersection of Fairmont Drive, 152nd Avenue and Liberty Street, and beyond on Fairmont Drive (MIP-16). MtBE plume seems to have travelled farther south along Fairmont Drive based on detections in CPT/MIP-17. Grab groundwater sampling also indicated impact to First WBZ upgradient of the source in MIP-18 and MIP-19.

- Impact to the Second WBZ occurs off-site downgradient of the Site along 152nd Avenue and along Fairmont Avenue to the south of intersection of Liberty and Fairmont Drive based on benzene concentrations.
- Based on results of crawl space sampling at the neighboring property it was concluded that risk to human health due to vapor intrusion does not exist at this time because TPH-g, BTEX, and naphthalene were detected at very low concentrations, significantly below the soil gas screening levels as established by the Regional Water Quality Control Board-SF Bay Region (Interim Final December 2013).
- Results of the FP finger-printing showed that chromatographic pattern for the sample did not resemble that of TPH-g or any other light-end distillates for which the laboratory has standards.
- Groundwater pump and treat system has been creating an effective capture zone at the Site. Operation of GWETS is essential for containment of off-site contaminant plume in the vicinity of MW-6 from migrating farther downgradient beneath the residential neighborhood.
- The overall estimated total mass of VOCs extracted by MPE events is 2,737 pounds. During the most recent MPE event approximately 790 lbs of VOCs were removed from the subsurface using this well combination at the rate of 26 lbs/day. After this event all contaminant concentrations decreased in MPE well MPE-1.

Based on results of this and previous investigations SOMA recommends the following action items:

- Connecting 4-inch well MW-6, screened from 12 to 27 feet bgs (boring log in Appendix C) via the subsurface trenching to the existing treatment system, in order to contain the plume from migrating farther south.
- Conducting extended MPE events utilizing MPE-1, MPE-2, and MW-6. Based on the mass removed and mass removal rate data, MPE events have been effectively removing contaminants from the subsurface.

- Install a groundwater monitoring well in the vicinity of boring CPT/MIP-11 based on MtBE concentrations at this location and install a groundwater monitoring well in the vicinity of boring MIP-12 based on high 1,2-DCA concentrations at this location. Figure 16 shows the locations of proposed monitoring wells. At the request of ACHCS, SOMA will prepare a workplan to install groundwater monitoring wells.

FIGURES

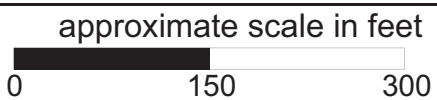
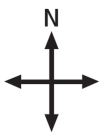
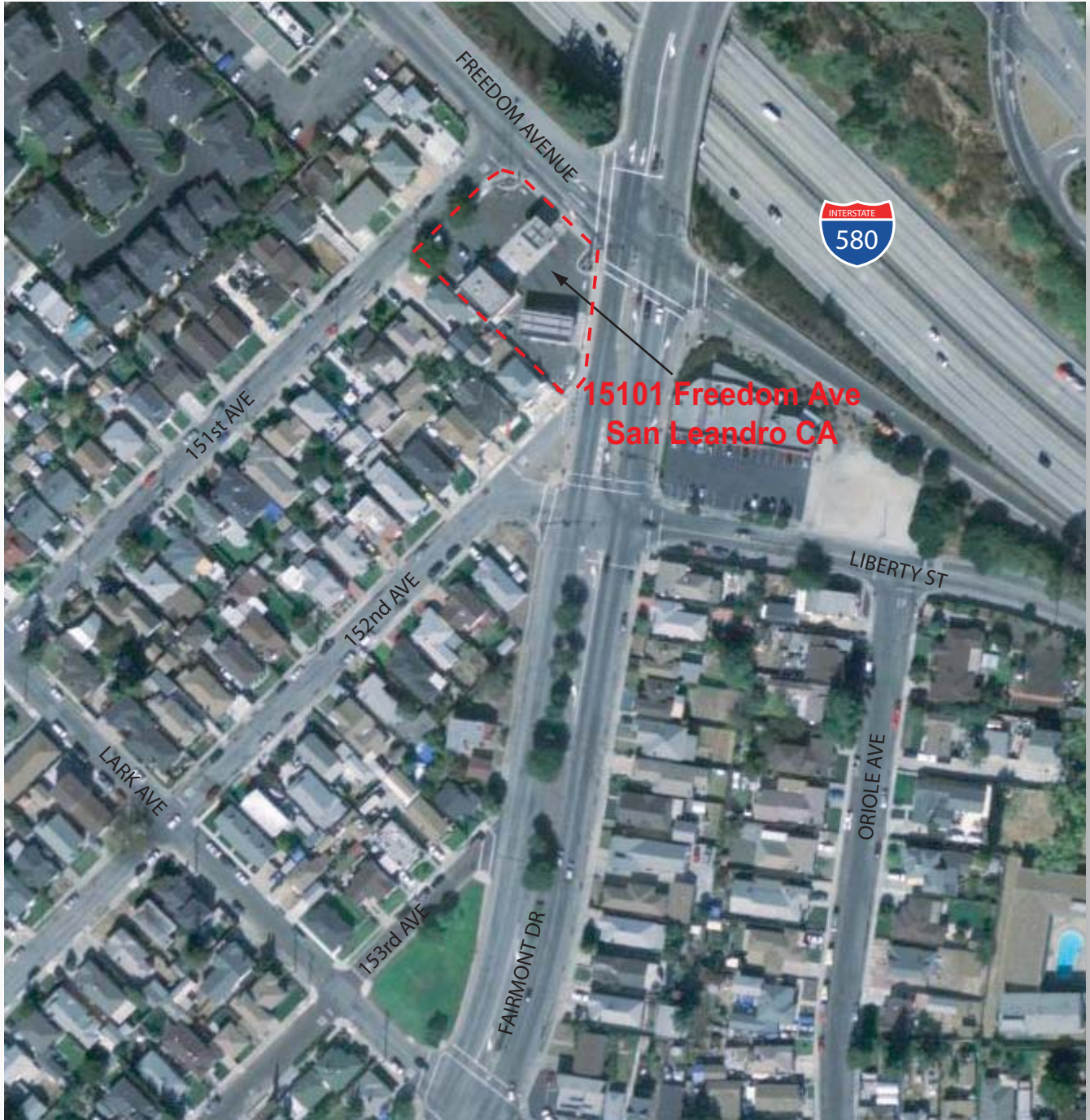


Figure 1: Site vicinity map.

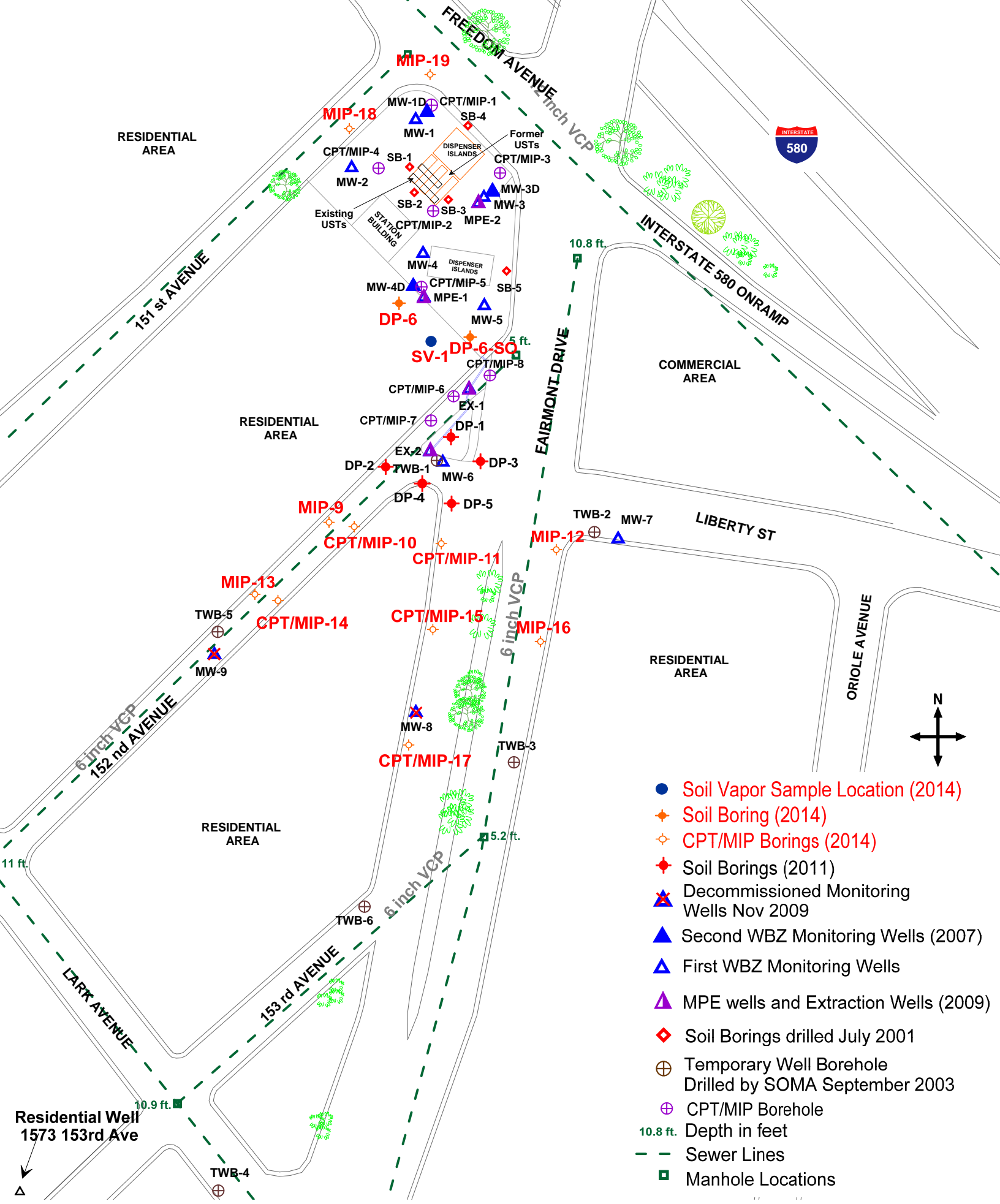
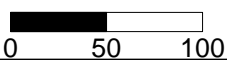
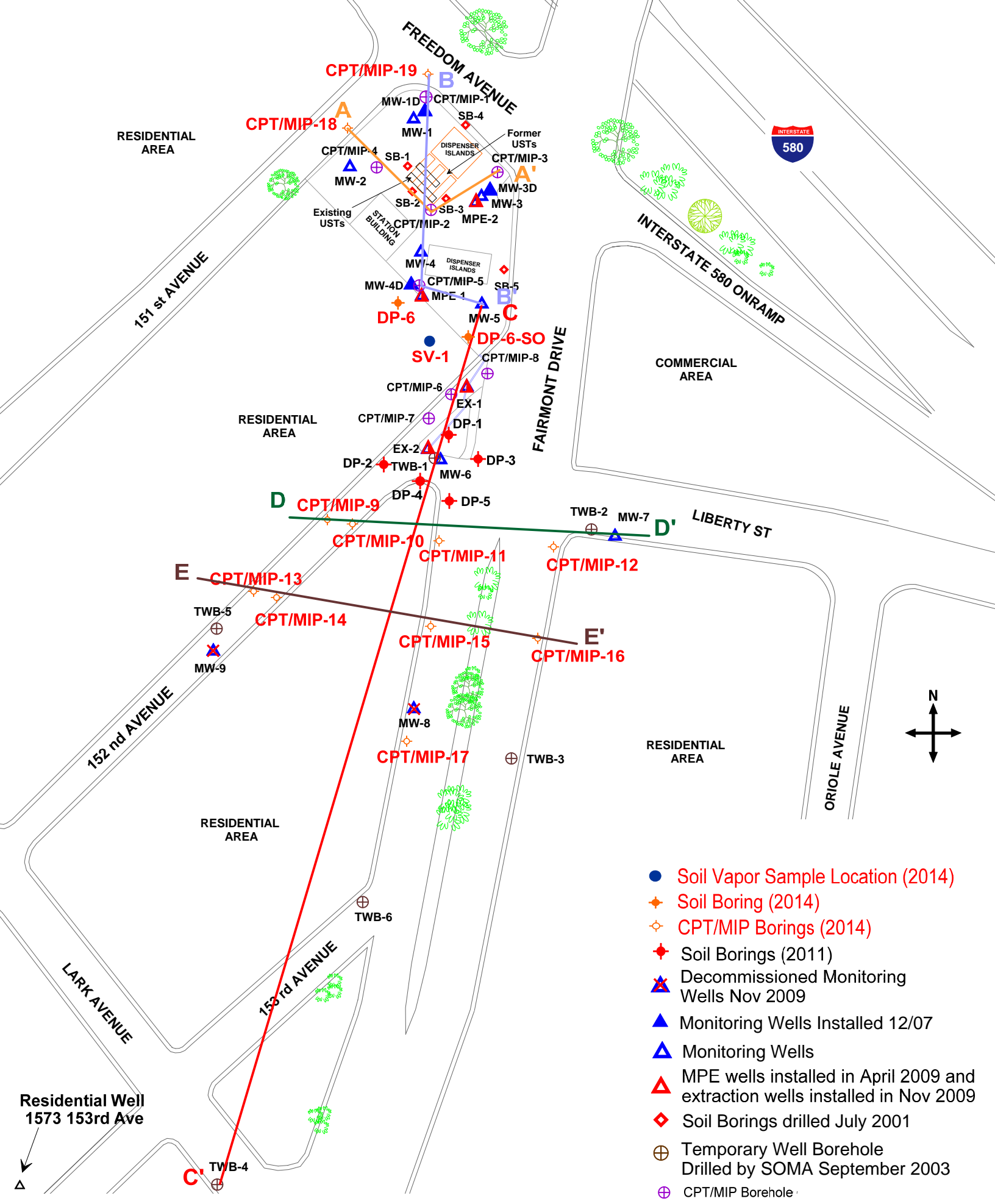


Figure 2: Site Map Showing Locations of USTs, Fuel Dispensers, Soil Borings, and Groundwater Monitoring Wells

approximate scale in feet





approximate scale in feet

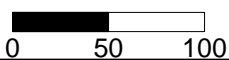
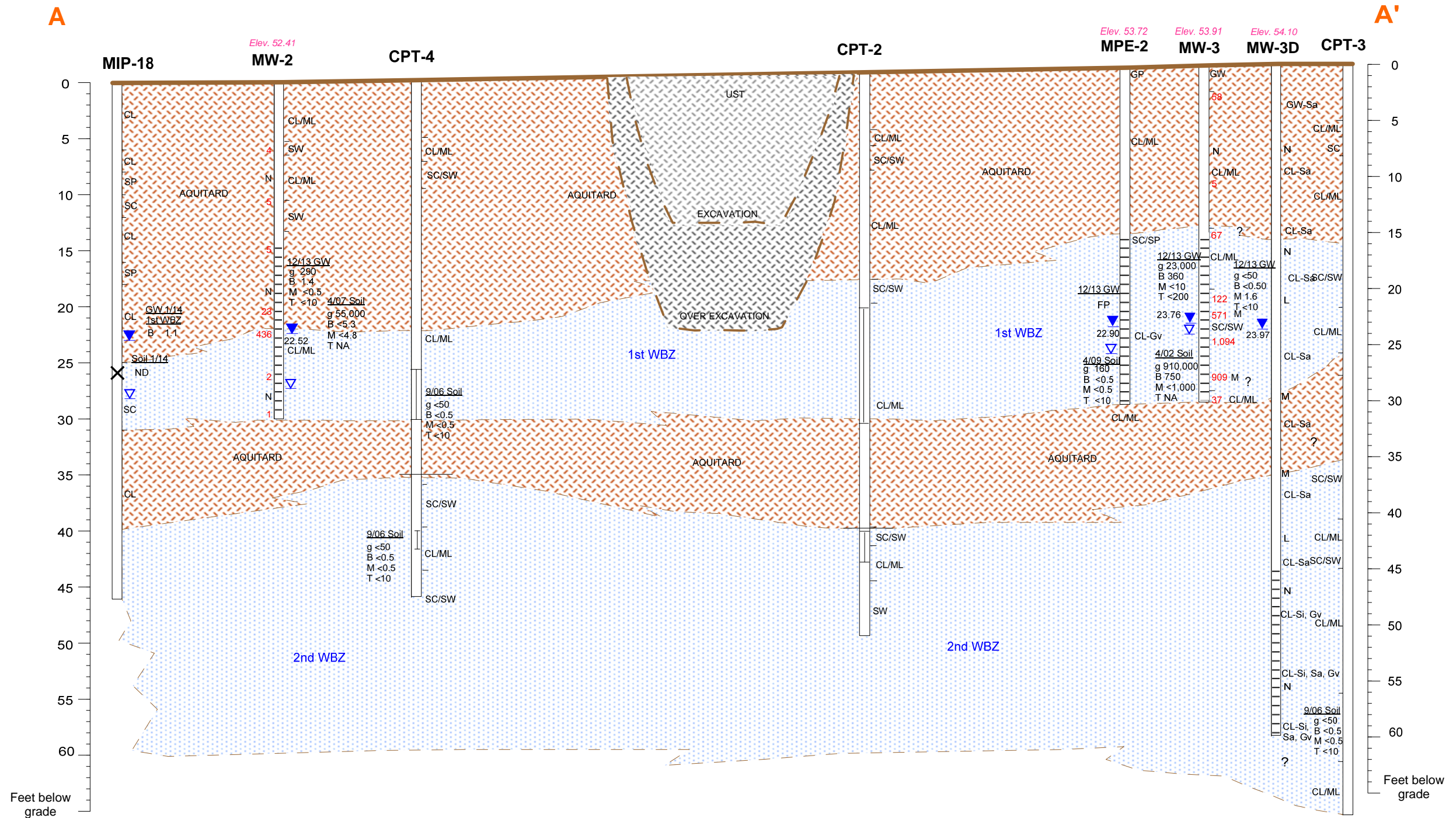


Figure 3: Locations of Geologic Cross-Sections



EXPLANATION

- ▼ Static groundwater in borings & wells
- ▽ Groundwater encountered during well borehole drilling
- Monitoring well screen interval
- ? Inferred contact

Note: Analytical Soil and Groundwater Data for CPT borings taken from soil borings (GS)

— Membrane Interface Probe (MIP) PID + FID response interval

122 - PID readings ppm VOCs

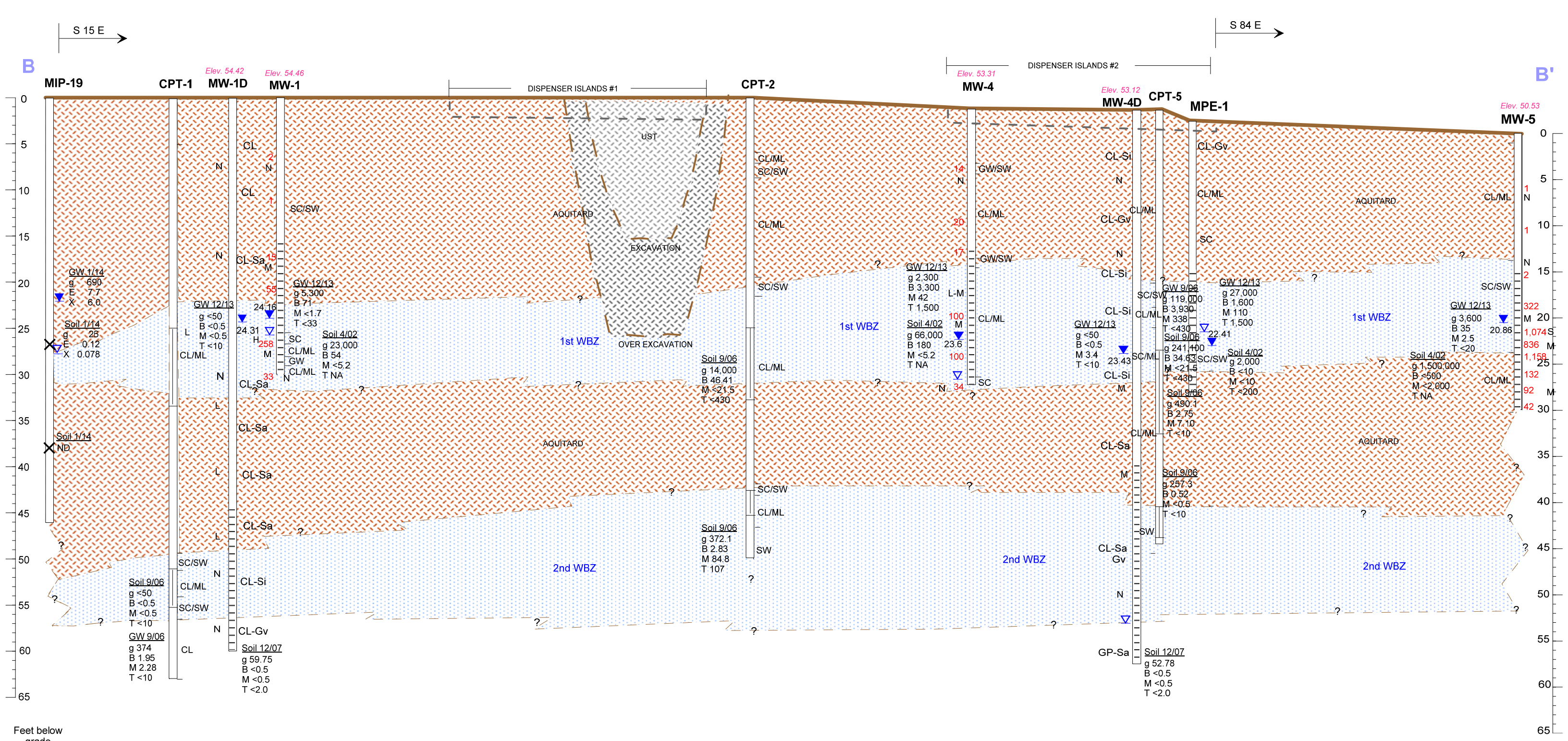
N, L, M, S: No, Light, Medium, Strong PHC Odor

GW - GroundWater (ug/L)
Soil (ug/kg)
ug/L g - TPH-g
ug/L B - Benzene
ug/L M - MtBE
ug/L T - TBA

Unified Soil Classification System

- | | | | |
|----|---------------------|-------|---------------|
| CL | Clay | CL-Sa | Sandy Clayey |
| SP | Sand, Poorly Graded | CL-Si | Silty Clay |
| SW | Sand, Well Graded | CL-Gv | Gravelly Clay |
| GW | Gravel, Well Graded | GP-Sa | Sandy Gravel |
| ML | Silt | | |
| SM | Silty Sand | | |

Figure 4: Geologic Cross-Section AA'



EXPLANATION

- ▼ Static groundwater in borings & wells
- ▽ Groundwater encountered during well borehole drilling
- Monitoring well screen interval
- ?

Note: Analytical Soil and Groundwater Data for CPT borings taken from soil borings (GS)

Membrane Interface Probe (MIP) PID + FID response interval

122 - PID readings ppm VOCs

N, L, M, S: No, Light, Medium, Strong PHC Odor

Fill material Excavation Area

GW - GroundWater (ug/L)
Soil (ug/kg)

ug/L g - TPH-g
ug/L B - Benzene
ug/L M - MtBE
ug/L T - TBA

Unified Soil Classification System

- | | | | |
|----|---------------------|-------|---------------|
| CL | Clay | CL-Sa | Sandy Clayey |
| SP | Sand, Poorly Graded | CL-Si | Silty Clay |
| SW | Sand, Well Graded | CL-Gv | Gravelly Clay |
| GW | Gravel, Well Graded | GP-Sa | Sandy Gravel |
| ML | Silt | | |
| SM | Silty Sand | | |

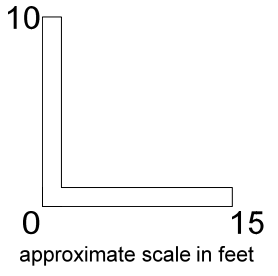


Figure 5: Geologic Cross-Section BB'



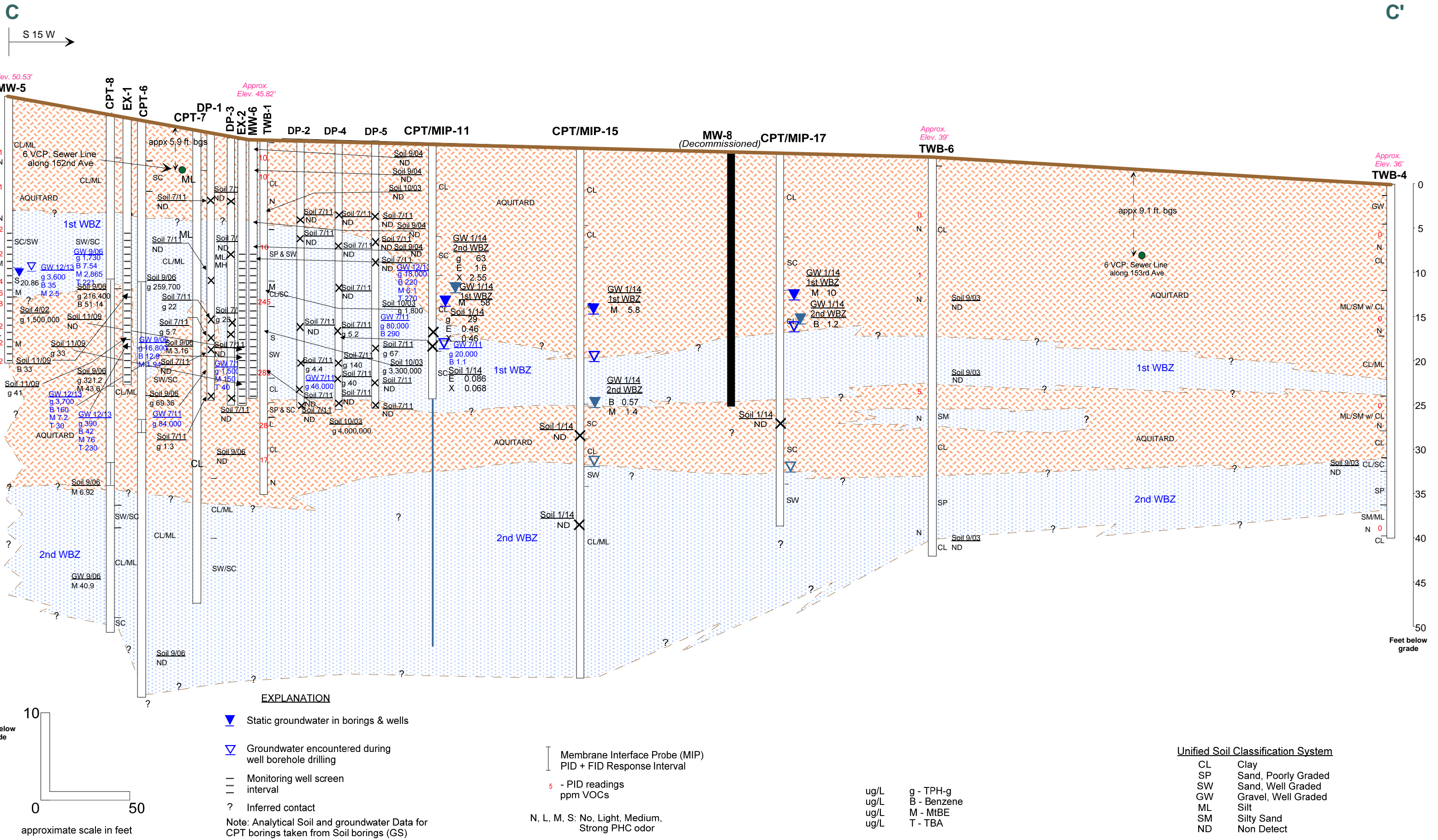
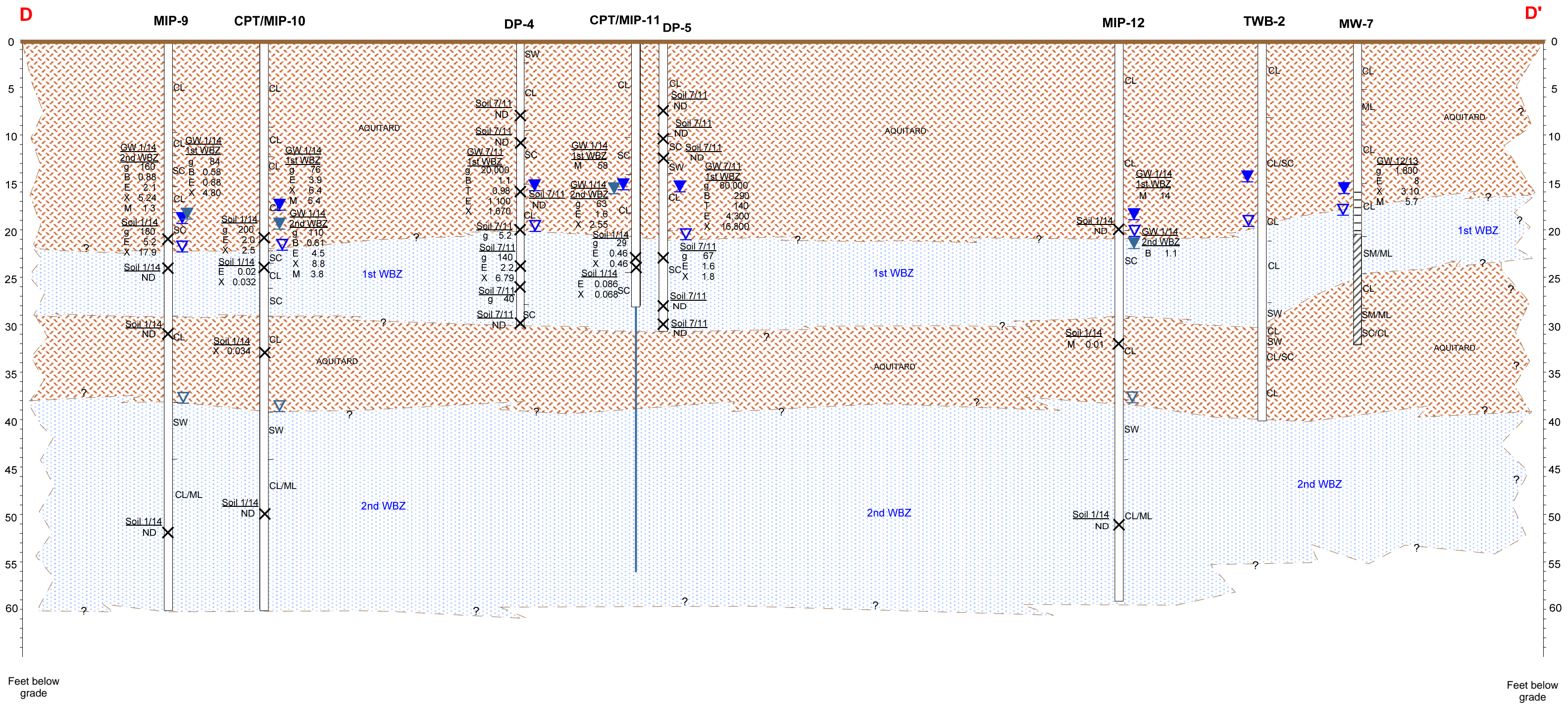


Figure 6: Geologic Cross-Section CC'





EXPLANATION

- ▼ Static groundwater in borings & wells
- ▽ Groundwater encountered during well borehole drilling
- Monitoring well screen interval
- ? Inferred contact

Membrane Interface Probe (MIP)
PID + FID response interval

122 - PID readings
ppm VOCs

N, L, M, S: No, Light, Medium,
Strong PHC Odor

GW - GroundWater (ug/L)
Soil (ug/kg)

ug/L g - TPH-g
ug/L B - Benzene
ug/L M - MTBE
ug/L T - TBA

Unified Soil Classification System

- | | | | |
|----|---------------------|-------|---------------|
| CL | Clay | CL-Sa | Sandy Clayey |
| SP | Sand, Poorly Graded | CL-Si | Silty Clay |
| SW | Sand, Well Graded | CL-Gv | Gravelly Clay |
| GW | Gravel, Well Graded | GP-Sa | Sandy Gravel |
| ML | Silt | | |
| SM | Silty Sand | | |

Note: Analytical Soil and Groundwater
Data for CPT borings taken from soil borings (GS)

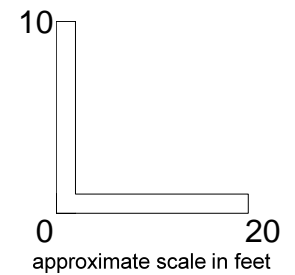
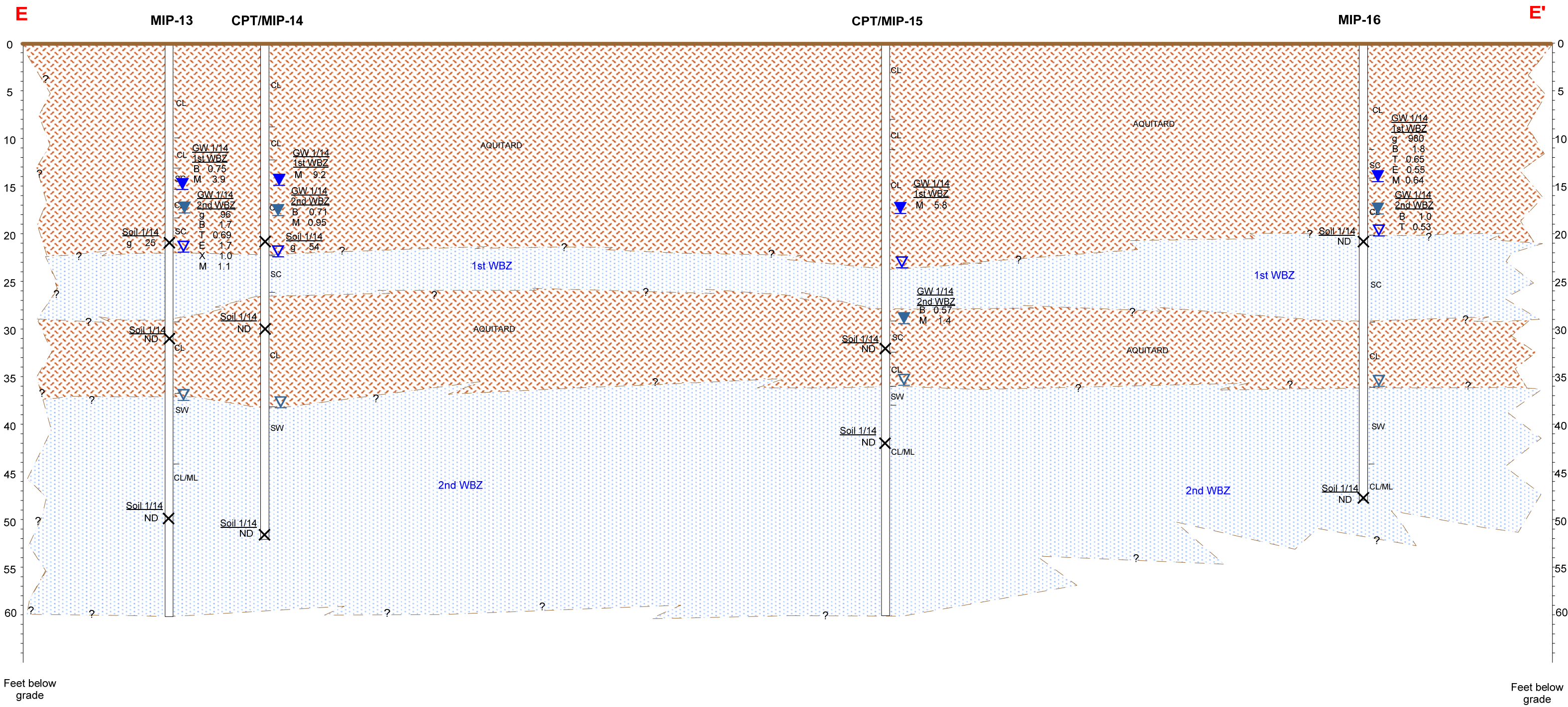


Figure 7: Geologic Cross-Section DD'





Feet below grade

Feet below grade

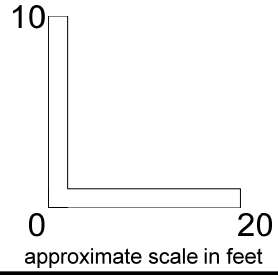
EXPLANATION

- Static groundwater in borings & wells
- Groundwater encountered during well borehole drilling
- Monitoring well screen interval
- Inferred contact

Membrane Interface Probe (MIP) PID + FID response interval

122 - PID readings ppm VOCs
 N, L, M, S: No, Light, Medium, Strong PHC Odor

Note: Analytical Soil and Groundwater Data for CPT borings taken from soil borings (GS)



GW - GroundWater (ug/L)
 Soil (ug/kg)
 ug/L g - TPH-g
 ug/L B - Benzene
 ug/L M - MtBE
 ug/L T - TBA

Unified Soil Classification System

CL	Clay	CL-Sa	Sandy Clayey
SP	Sand, Poorly Graded	CL-Si	Silty Clay
SW	Sand, Well Graded	CL-Gv	Gravelly Clay
GW	Gravel, Well Graded	GP-Sa	Sandy Gravel
ML	Silt		
SM	Silty Sand		

Figure 8: Geologic Cross-Section EE'



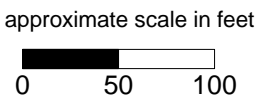
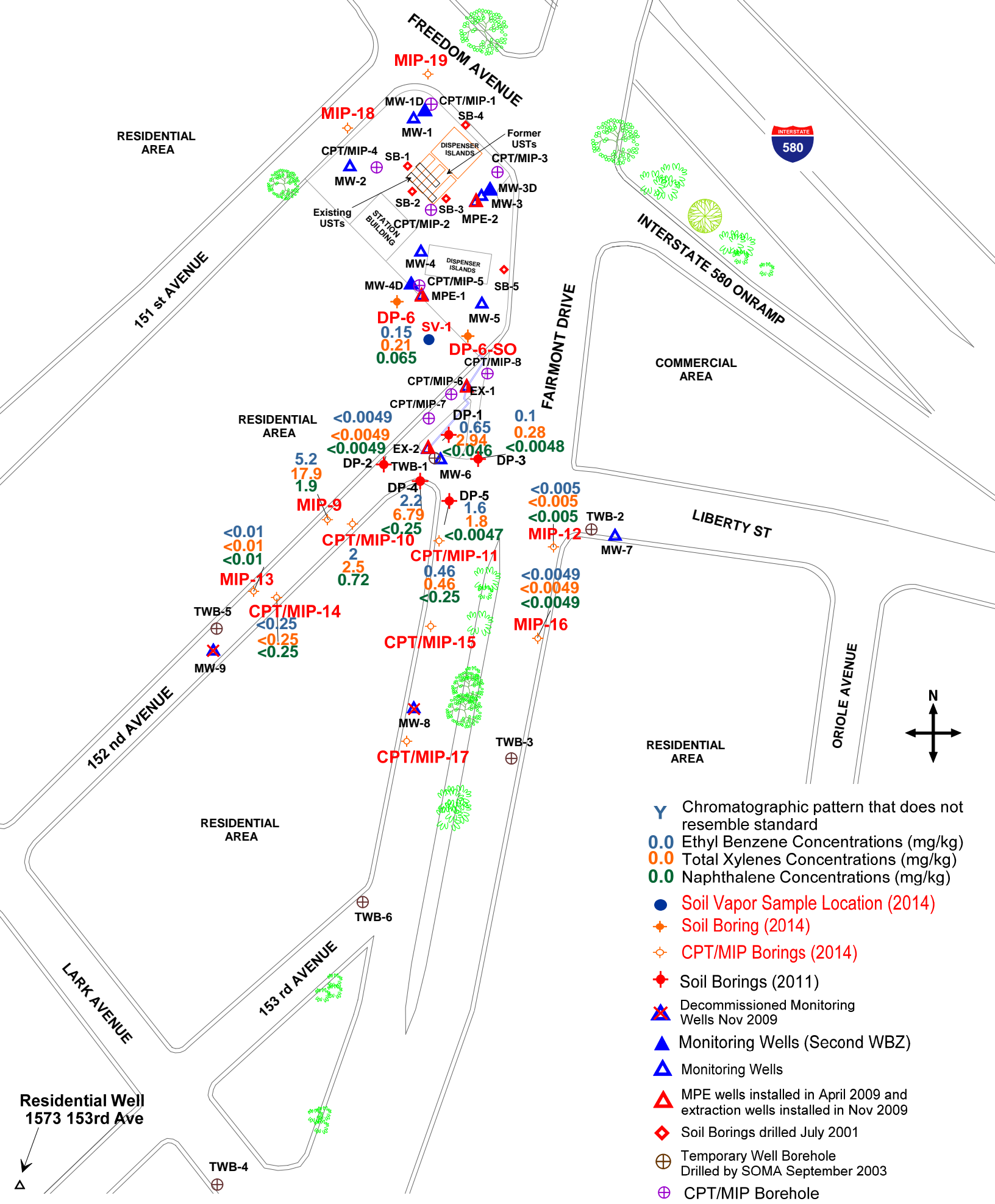


Figure 9: Map Showing Ethylbenzene, Total Xylenes, and Naphthalene Concentrations in Soil (20 to 24 feet bgs)



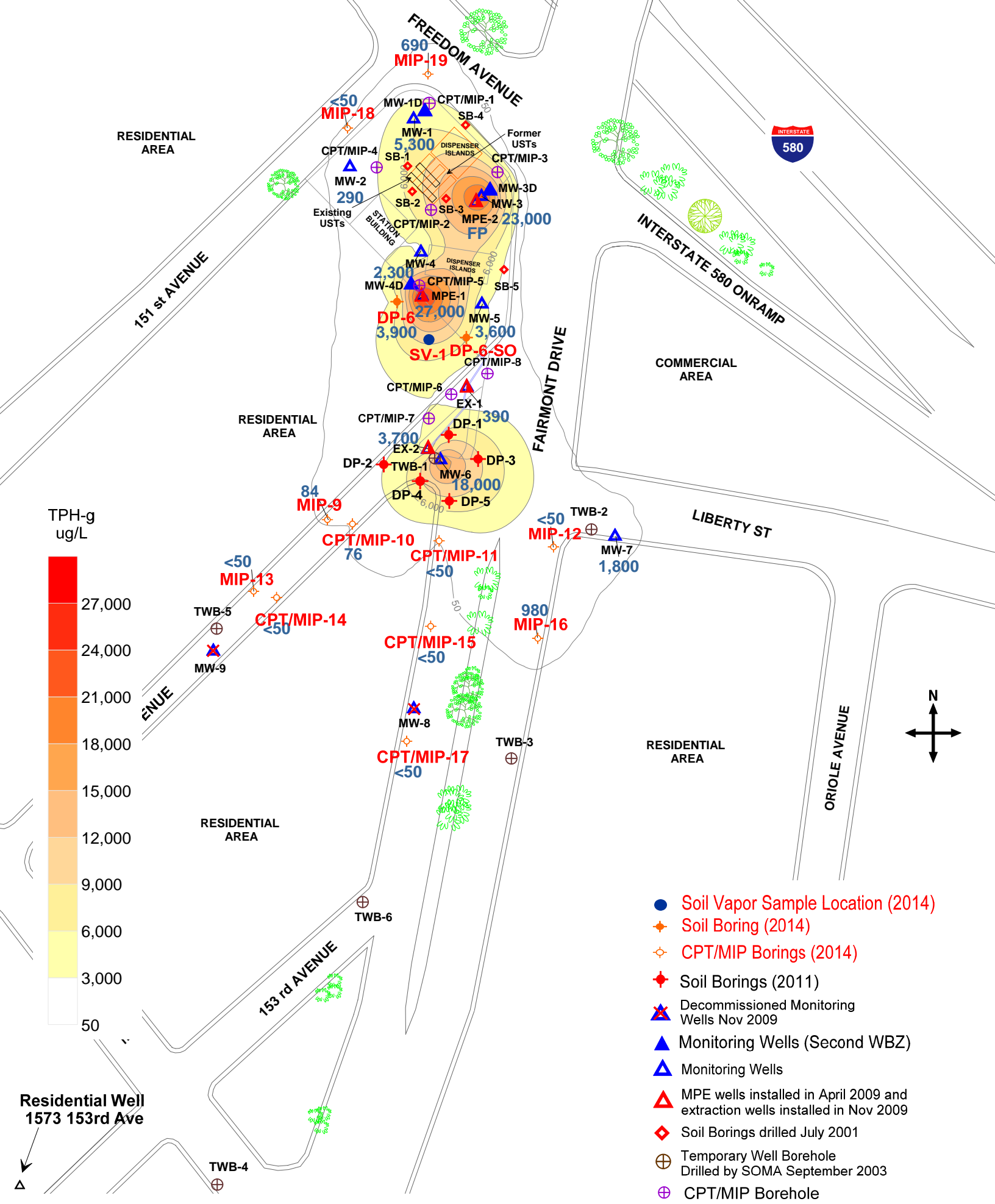


Figure 10: Contour Map Showing TPH-g Concentrations in Groundwater in First WBZ

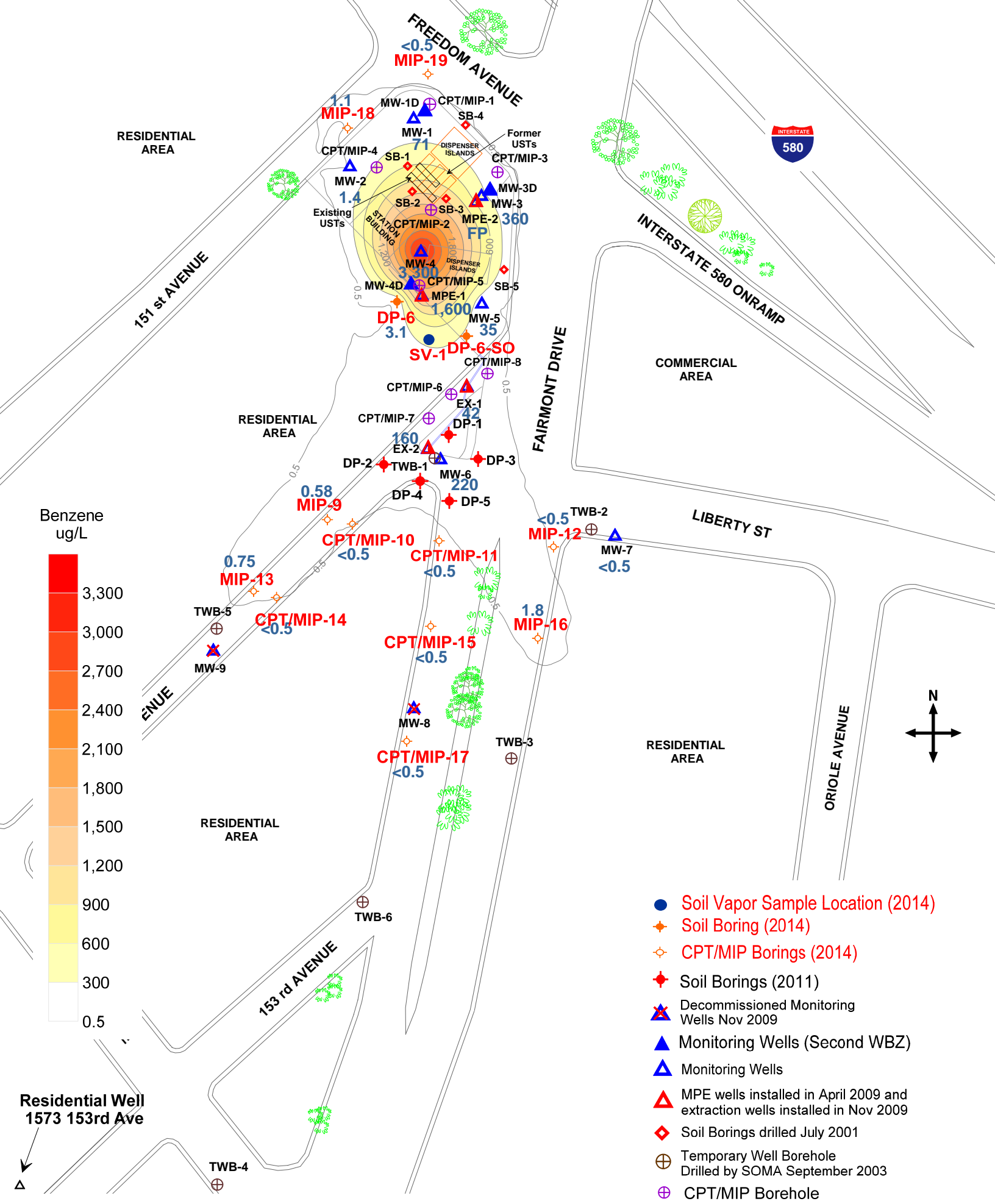


Figure 11: Contour Map Showing Benzene Concentrations in Groundwater in First WBZ

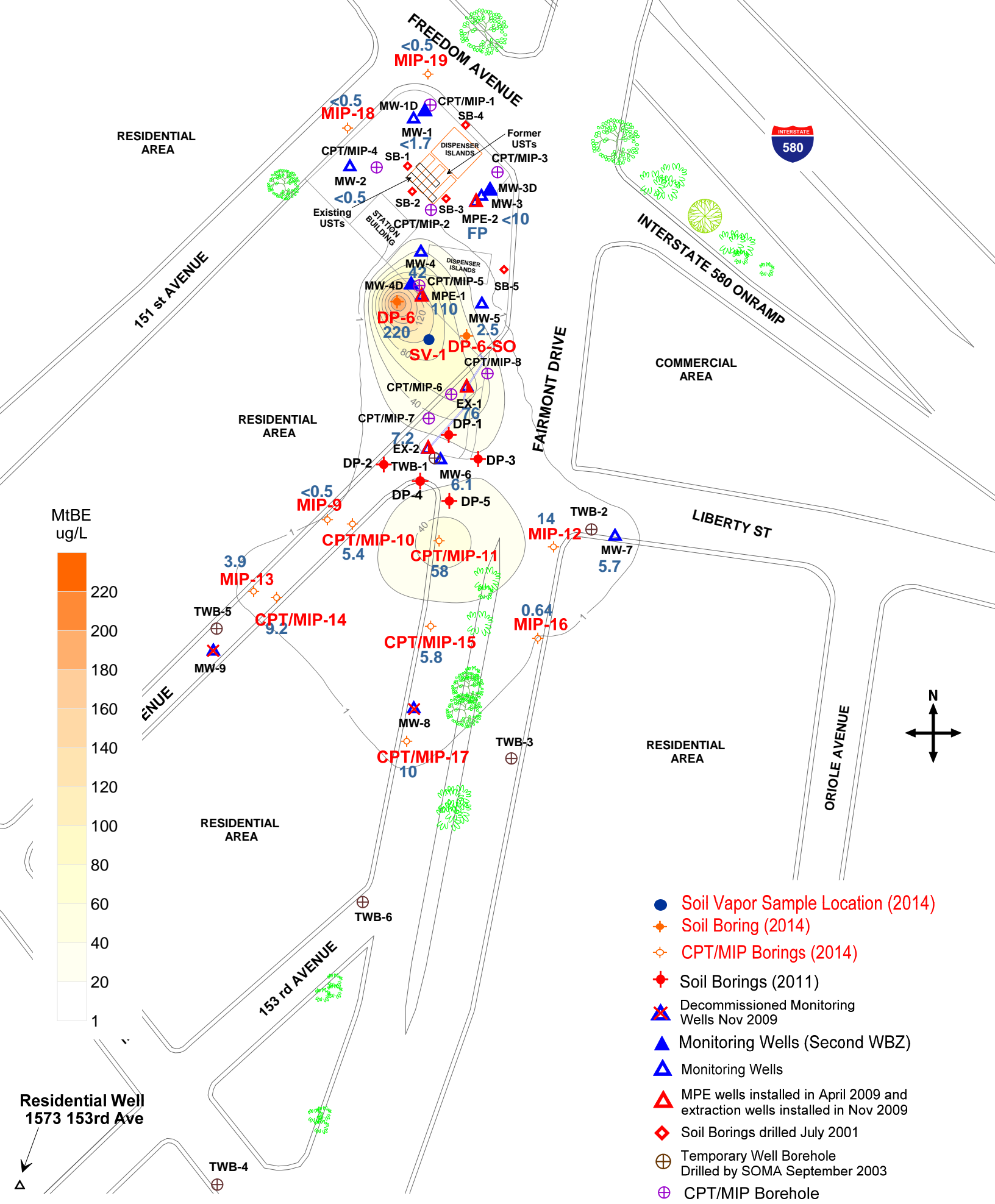
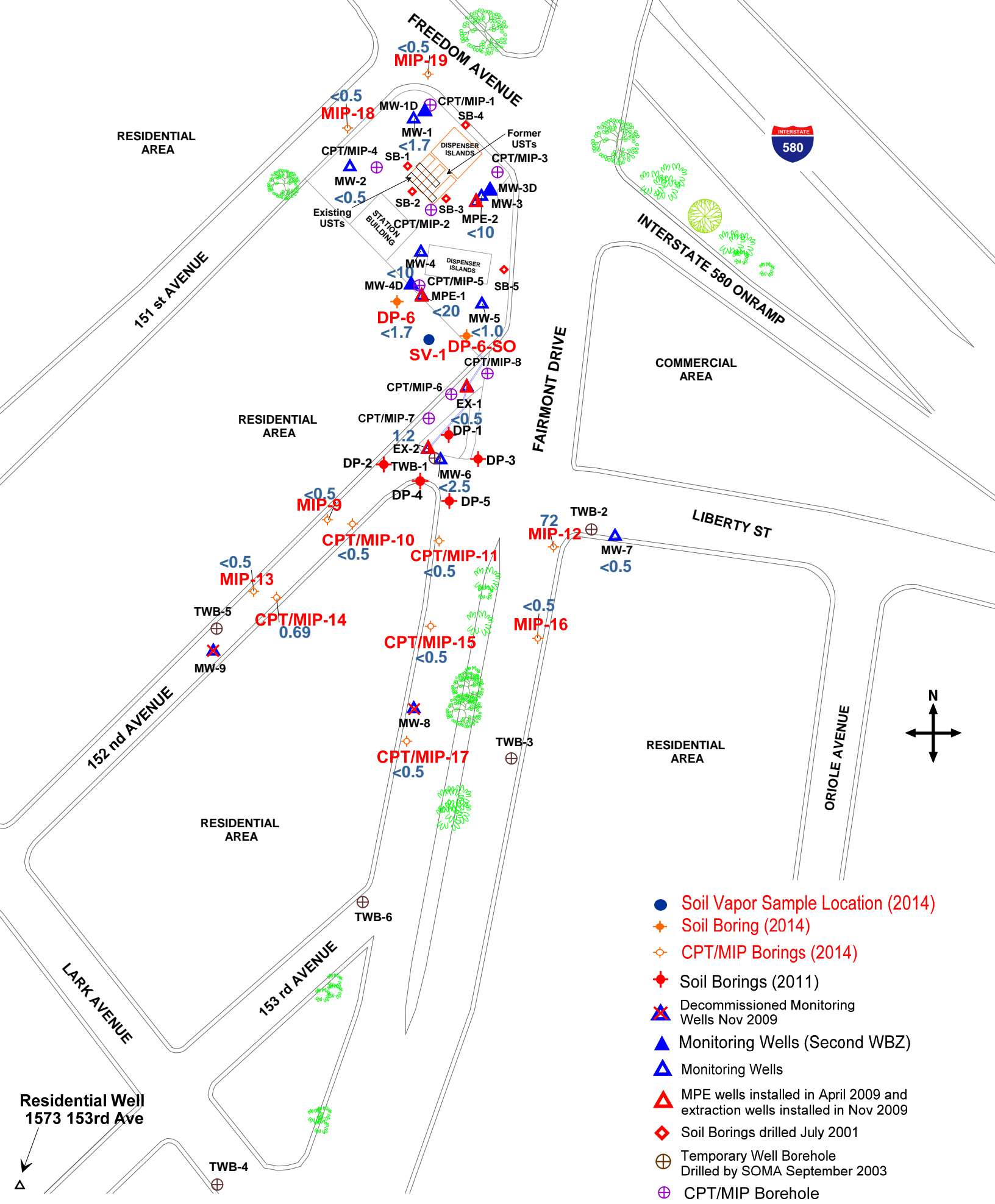


Figure 12: Contour Map Showing MtBE Concentrations in Groundwater in First WBZ



- Soil Vapor Sample Location (2014)
- ◆ Soil Boring (2014)
- ◇ CPT/MIP Borings (2014)
- ◆ Soil Borings (2011)
- ⊗ Decommissioned Monitoring Wells Nov 2009
- ▲ Monitoring Wells (Second WBZ)
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003
- ⊕ CPT/MIP Borehole

Figure 13: Map Showing 1,2-DCA Concentrations in Groundwater in First WBZ

approximate scale in feet
 0 50 100

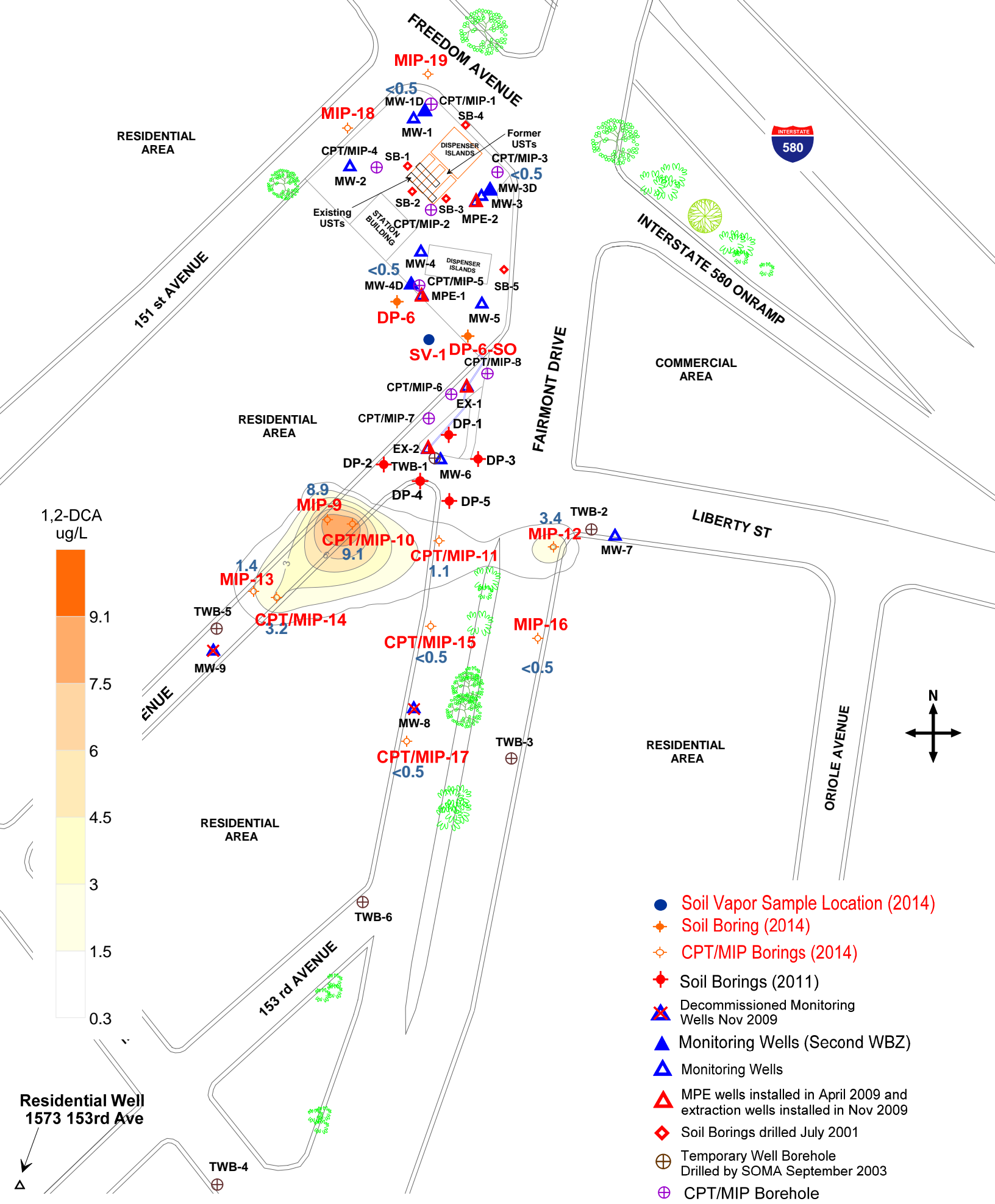
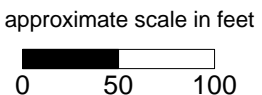
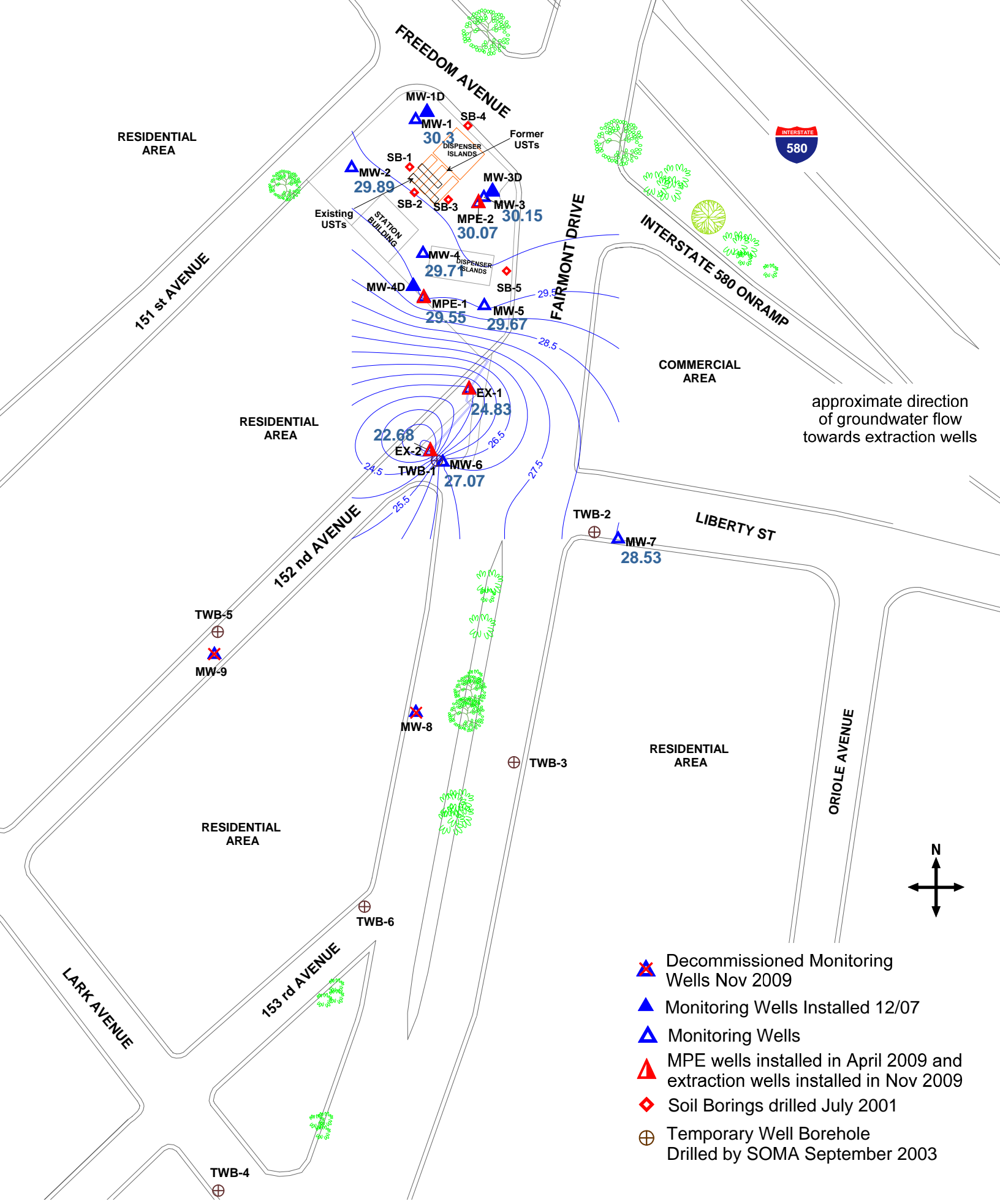


Figure 14: Contour Map Showing 1,2-DCA Concentrations in Groundwater in Second WBZ





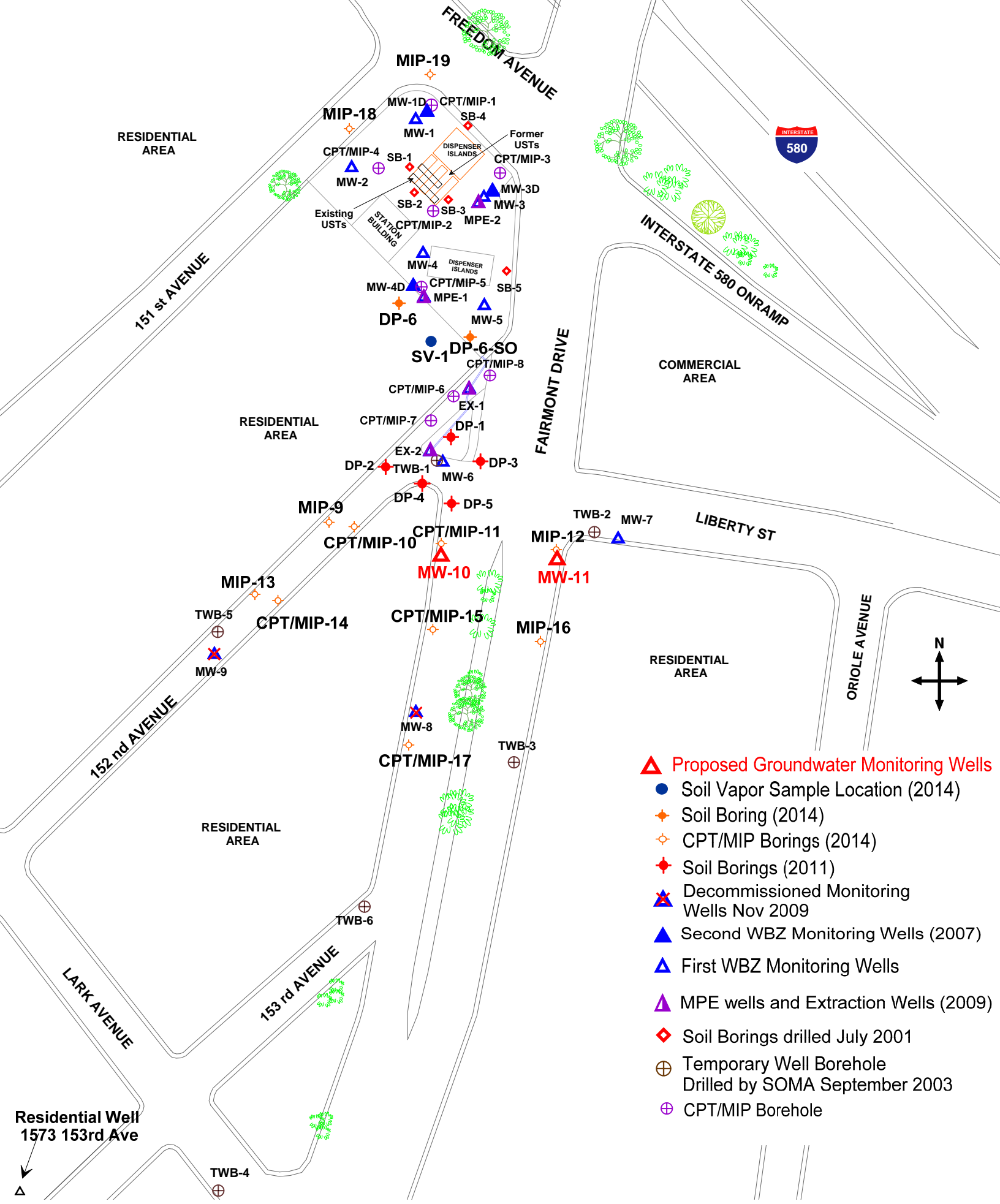
- Decommissioned Monitoring Wells Nov 2009
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

approximate scale in feet

0 50 100

Figure 15: Groundwater Elevation Contour Map in Feet, First WBZ, December 5, 2013





- ▲ Proposed Groundwater Monitoring Wells
- Soil Vapor Sample Location (2014)
- ◆ Soil Boring (2014)
- ◇ CPT/MIP Borings (2014)
- ◆ Soil Borings (2011)
- ⊗ Decommissioned Monitoring Wells Nov 2009
- ▲ Second WBZ Monitoring Wells (2007)
- ▲ First WBZ Monitoring Wells
- ▲ MPE wells and Extraction Wells (2009)
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003
- ⊕ CPT/MIP Borehole

Residential Well
1573 153rd Ave

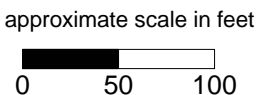


Figure 16: Proposed Well Locations

TABLES

Table 1
Soil Sample Analytical Results
15101 Freedom Avenue
San Leandro, California

Sample ID	Depth (Feet)	Date	TPH-g (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	MtBE (mg/Kg)	TBA (mg/Kg)	TAME (mg/Kg)	DIPE (mg/Kg)	ETBE (mg/Kg)	1,2-DCA (mg/Kg)	EDB (mg/Kg)	Naphthalene (mg/Kg)
Limited Off-Site Investigation 2011															
DP-1	6.5	7/20/2011	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	16	7/20/2011	<0.91	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	20	7/20/2011	22	<0.046	<0.046	0.65	2.94	<0.046	<0.93	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046
	22	7/20/2011	5.7	<0.0048	0.0086	0.14	1.15	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	23	7/20/2011	<1.0	<0.0048	<0.0048	0.01	0.0253	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	30	7/20/2011	1.3	<0.0044	<0.0044	0.024	0.122	<0.0044	<0.088	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044
DP-2	8	7/20/2011	<0.92	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	10	7/20/2011	<1.1	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	20	7/20/2011	<0.94	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	24	7/20/2011	4.4 Y	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	28	7/20/2011	<1.0	<0.0047	<0.0047	0.034	0.042	<0.0047	<0.095	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	30	7/20/2011	<0.92	<0.0047	<0.0047	0.0071	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
DP-3	6	7/21/2011	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	12	7/21/2011	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	20	7/21/2011	26 Y	<0.0048	<0.0048	0.1	0.28	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	21	7/21/2011	<0.98	<0.0046	<0.0046	<0.0046	<0.0046	0.0051	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
		30	7/21/2011	<1.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
DP-4	8	7/21/2011	<1.1	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	11	7/21/2011	<0.99	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	16	7/21/2011	<1.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	20	7/21/2011	5.2 Y	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.092	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	24	7/21/2011	140	<0.25	<0.25	2.2	6.79	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
	26	7/21/2011	40	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
		30	7/21/2011	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
DP-5	7.5	7/20/2011	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	10.5	7/20/2011	<1.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.095	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	12.5	7/20/2011	<0.93	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	23	7/20/2011	67	<0.0047	<0.0047	1.6	1.8	<0.0047	<0.093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	28	7/20/2011	<0.96	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	30	7/20/2011	<0.96	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	
Off-Site Investigation 2014															
DP-6	21	1/28/2014	24 Y	<0.0048	<0.0048	0.15	0.21	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.065
	28	1/28/2014	<0.97	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
DP-6-SO	3	2/6/2014	<0.98	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	6	2/6/2014	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
MIP-9	21	1/17/2014	180	<0.25	<0.25	5.2	17.9	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	1.9
	24	1/17/2014	<0.98	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	31	1/17/2014	<1.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	52	1/17/2014	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048

Table 1
Soil Sample Analytical Results
15101 Freedom Avenue
San Leandro, California

Sample ID	Depth (Feet)	Date	TPH-g (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	MtBE (mg/Kg)	TBA (mg/Kg)	TAME (mg/Kg)	DIPE (mg/Kg)	ETBE (mg/Kg)	1,2-DCA (mg/Kg)	EDB (mg/Kg)	Naphthalene (mg/Kg)
CPT/MIP-10	21	1/15/2014	200	<0.25	<0.25	2.0	2.5	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	0.72
	24	1/15/2014	<0.96	<0.0049	<0.0049	0.02	0.032	<0.0049	<0.099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	0.0079
	33	1/15/2014	<1.1	<0.0048	<0.0048	<0.0048	0.034	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	0.0052
	50	1/16/2014	<0.92	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CPT/MIP-11	23	1/13/2014	29 ^Y	<0.25	<0.25	0.46	0.46	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
	24	1/13/2014	<1.1	<0.005	<0.005	0.0086	0.0068	<0.005	<0.099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
MIP-12	20	1/20/2014	<1.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.099	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	32	1/20/2014	<1.1	<0.0049	<0.0049	<0.0049	<0.0049	0.01	<0.099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
MIP-13	52	1/20/2014	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	21	1/16/2014	25 ^Y	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	31	1/16/2014	<0.99	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
CPT/MIP-14	50	1/16/2014	<1.1	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	21	1/14/2014	54 ^Y	<0.25	<0.25	<0.25	<0.25	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
	30	1/14/2014	<0.95	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.095	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
CPT/MIP-15	52	1/14/2014	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	32	1/13/2014	<0.96	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	42	1/13/2014	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
MIP-16	21	1/17/2014	<1.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	48	1/20/2014	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
CPT/MIP-17	30	1/14/2014	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	MIP-18	26	1/21/2014	<1.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
MIP-19	27	1/21/2014	26 ^Y	<0.048	<0.048	0.12	0.078	<0.048	<0.96	<0.048	<0.048	<0.048	<0.048	<0.048	0.19
	38	1/21/2014	<1.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
ESLs (mg/Kg)		Residential	500	0.044	2.9	3.3	2.3	0.023	0.075	NA	NA	NA	0.0045	0.00033	1.2
		Commercial	770	0.044	2.9	3.3	2.3	0.023	0.075	NA	NA	NA	0.0045	0.00033	1.2

Notes:

- ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final December 2013
(Tables C-1 & C-2. Deep Soils (>3m bgs) Groundwater is a Current or Potential Source of Drinking Water)
- NA Not listed on the ESL Tables
- < Below laboratory detection limits

Table 2
Groundwater Analytical Results
15101 Freedom Avenue
San Leandro, California

Sample ID	Date	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Naphthalene (µg/L)
Limited Off-Site Investigation 2011														
DP-1	7/20/2011	84,000	<17	250	3,600	15,300	<17	<330	<17	<17	<17	<17	<17	NA
DP-2	7/20/2011	46,000	<5.0	<5.0	540	1,130	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0	NA
DP-3	7/21/2011	1,500	<1.0	<1.0	42	120	150	40	8.9	<1.0	<1.0	<1.0	<1.0	NA
DP-4	7/21/2011	20,000	1.1	0.98	1,100	1,670	<0.5	<10	<0.5	<0.5	<0.5	0.65	<0.5	NA
DP-5	7/20/2011	80,000	290	140	4,300	16,800	<25	<500	<25	<25	<25	<25	<25	NA
Off-Site Investigation 2014														
DP-6	1/28/2014	3,900	3.1	<1.7	130	235	220	760	<1.7	<1.7	20	<1.7	<1.7	35
MIP-9-1	1/17/2014	84	0.58	<0.5	0.88	4.80	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
CPT/MIP-10-1	1/15/2014	76	<0.5	<0.5	3.9	6.4	5.4	<10	0.51	<0.5	<0.5	<0.5	<0.5	<2.0
CPT/MIP-11-1	1/13/2014	<50	<0.5	<0.5	<0.5	<0.5	58	<10	5.2	<0.5	<0.5	<0.5	<0.5	<2.0
MIP-12-1	1/20/2014	<50	<0.5	<0.5	<0.5	<0.5	14	<10	<0.5	<0.5	<0.5	72	<0.5	<2.0
MIP-13-1	1/16/2014	<50	0.75	<0.5	<0.5	<0.5	3.9	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
CPT/MIP-14-1	1/14/2014	<50	<0.5	<0.5	<0.5	<0.5	9.2	<10	0.53	<0.5	<0.5	0.69	<0.5	<2.0
CPT/MIP-15-1	1/13/2014	<50	<0.5	<0.5	<0.5	<0.5	5.8	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
MIP-16-1	1/17/2014	980	1.8	0.65	0.55	<0.5	0.64	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
CPT/MIP-17-1	1/14/2014	<50	<0.5	<0.5	<0.5	<0.5	10	<10	0.77	<0.5	<0.5	<0.5	<0.5	<2.0
MIP-18-1	1/28/2014	<50	1.1	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
MIP-19-1	1/21/2014	690	<0.5	<0.5	7.7	6.0	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	14
Second WBZ														
MIP-9-2	1/17/2014	160	0.88	<0.5	2.1	5.24	1.3	<10	<0.5	<0.5	<0.5	8.9	<0.5	<2.0
CPT/MIP-10-2	1/16/2014	110	0.61	<0.5	4.5	8.8	3.8	<10	<0.5	<0.5	<0.5	9.1	<0.5	<2.0
CPT/MIP-11-2	1/13/2014	63	<0.5	<0.5	1.6	2.55	<0.5	<10	<0.5	<0.5	<0.5	1.1	<0.5	<2.0
MIP-12-2	1/20/2014	<50	1.1	0.51	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	3.4	<0.5	<2.0
MIP-13-2	1/16/2014	96	1.7	0.69	1.7	1.0	1.1	<10	<0.5	<0.5	<0.5	1.4	<0.5	<2.0
CPT/MIP-14-2	1/15/2014	<50	0.71	<0.5	<0.5	<0.5	0.95	<10	<0.5	<0.5	<0.5	3.2	<0.5	<2.0
CPT/MIP-15-2	1/13/2014	<50	0.57	<0.5	<0.5	<0.5	1.4	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
MIP-16-2	1/20/2014	<50	1.0	0.53	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
CPT/MIP-17-2	1/14/2014	<50	1.2	0.57	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0
ESLs		100	1	40	30	20	5	12	NA	NA	NA	0.5	0.05	6.1

Notes:

- ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final December 2013
(Table F1a. Groundwater is a Current or Potential Source of Drinking Water)
- NA Not listed on the ESL Tables
- < Below laboratory detection limits

Table 3
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
1st WBZ											
MW-1	5/10/2002	51.71	22.85	-	28.86	5,700	360	4.5	340	450	2
	8/8/2002	51.71	23.31	-	28.40	9,100	590	2.6	830	362	<1.3
	11/8/2002	51.71	23.58	-	28.13	7,900	570	3.1	680	392	< 1.0
	2/21/2003	51.71	22.62	-	29.09	2,900	160	1.6 C	170	211	<0.5
	5/28/2003	51.71	22.43	-	29.28	1,700	55	<0.5	90	115	2.00
	8/12/2003	51.71	21.30	-	30.41	2,600	2.5	<0.5	190	130	<0.5
	10/9/2003	51.71	23.49	-	28.22	9,200	560.0	2.7 C	670	648	<1.0
	1/15/2004	51.71	22.43	-	29.28	5,500	190	<1.0	220	124.4	<0.5
	5/25/2004	51.71	22.94	-	28.77	8,000	400	1.50	420	393	3.40
	9/21/2004	54.46	23.49	-	30.97	9,300	580	9.30	690	683	4.60
	12/14/2004	54.46	23.01	-	31.45	7,360	337	<4.3	731	633	<4.3
	3/11/2005	54.46	21.48	-	32.98	2,510	45.2	<0.5	23.2	39.63	2.80
	6/15/2005	54.46	22.42	-	32.04	1,690	36.3	<2.0	59.5	28.73	2.01
	8/26/2005	54.46	23.00	-	31.46	7,310	318	<8.60	475	316	5.15
	11/11/2005	54.46	21.40	-	33.06	9,640	341	<8.6	467	329.7	6.04
	2/9/2006	54.46	21.81	-	32.65	775	14	<2.0	12.6	10.32	4.01
	5/9/2006	54.46	21.68	-	32.78	444	7.80	<2.0	12.1	6.31	1.75
	8/10/2006	54.46	22.79	-	31.67	5,090	324	<8.60	108	59.9	8.24
	10/26/2006	54.46	23.19	-	31.27	6,950	556	<4.0	190	136.09	8.61
	1/25/2007	54.46	22.82	-	31.64	2,640	196	<2.0	105	25.5	7.92
	4/26/2007	54.46	22.67	-	31.79	861	95.5	<2.0	17	6.36	4.00
	7/25/2007	54.46	23.25	-	31.21	4,520	412	<4.0	182	77.9	7.48
	10/23/2007	54.46	23.42	-	31.04	3,900	117	<2.0	87.1	23.87	4.54
1/22/2008	54.46	22.59	-	31.87	2,260	81.3	<2.0	17.5	<2.0	4.23	
4/16/2008	54.46	22.89	-	31.57	2,320	248	<2.0	54.1	37.3	<0.5	
7/3/2008	54.46	23.33	-	31.13	5,240	414	<2.0	168	94	6.56	
10/15/2008	54.46	23.76	-	30.70	4,500 ^Y	260	<1.0	150	130	3.40	
1/7/2009	54.46	23.25	-	31.21	4,800	140	<1.3	48	32	1.70	
4/14/2009	54.46	22.52	-	31.94	1,800 ^Y	78	<0.5	35	18	2.50	
8/27/2009	54.46	23.6	-	30.86	4,500	330	<2.0	97	42	4.60	
12/2/2009	54.46	23.43	-	31.03	3,800 ^Y	250	<2.0	110	25	2.50	

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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-1 cont	3/17/2010	54.46	22.32	-	32.14	1,100	33	<0.50	46	18	1.70
	6/3/2010	54.46	22.88	-	31.58	10,000	330	4.3	680	841.5	5.20
	9/2/2010	54.46	23.28	-	31.18	8,900	440	<5.0	510	310	<5.0
	12/2/2010	54.46	23.21	-	31.25	7,400	250	<3.1	390	180	<3.1
	3/4/2011	54.46	21.95	N	32.51	2,400	67	<0.5	45	8.4	2.20
	5/20/2011	54.46	22.8	N	31.66	9,500	260	6.2	970	480	<3.6
	9/9/2011	54.46	22.81	N	31.65	6,400	220	<1.3	380	160	2.30
	12/2/2011	54.46	21.97	N	32.49	4,700 ^x	96	<1.7	310	200	<3.3
	3/2/2012	54.46	22.82	N	31.64	6,800	320	<2.5	430	120	<2.5
	6/7/2012	54.46	22.92	N	31.54	5,600	130	<2.5	360	160	2.9
	9/21/2012	54.46	23.56	N	30.90	8,000	300	<2.5	410	340	2.6
	12/14/2012	54.46	22.77	N	31.69	5,900	130	<2.5	320	97	<2.5
	3/28/2013	54.46	23.15	N	31.31	5,100	230	<2.5	280	48	3.6
	6/11/2013	54.46	23.48	N	30.98	6,800	200	<2.5	300	120	<2.5
	9/17/2013	54.46	23.84	N	30.62	7,500	120	<2.5	410	260	<2.5
	12/6/2013	54.46	24.16	N	30.30	5,300	71	<1.7	240	84	<1.7
MW-2	5/10/2002	49.66	22.83	-	26.83 *	3,100	67	8	250	215	56
	8/8/2002	49.66	21.41	-	28.25	2,700	4.6	<0.5	310	140	<0.5
	11/8/2002	49.66	21.79	-	27.87	3,400	4.6	< 0.5	310	160	< 0.5
	2/21/2003	49.66	20.51	-	29.15	890	1.7 C	0.80 C	68	38.92 C	<0.5
	5/28/2003	49.66	20.33	-	29.33	2,700	5.2 C	<0.5	120	140	1.2
	8/12/2003	49.66	23.18	-	26.48*	8,500	640	<2.5	560	659	<0.8
	10/9/2003	49.66	21.71	-	27.95	3100 H	4.3 C	<0.5	210	160	<0.5
	1/15/2004	49.66	20.31	-	29.35	660 H	1.5 C	<0.5	8.9	25	<0.5
	5/25/2004	49.66	21.09	-	28.57	4,500	5.1 C	<0.5	190	230	0.70
	9/21/2004	52.41	21.71	-	30.70	370	0.76 C	<0.5	25	16	0.50
12/14/2004	52.41	21.20	-	31.21	880	1.0	<0.5	66	52	<0.5	

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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-2 cont.	3/11/2005	52.41	19.15	-	33.26	564	<0.5	<0.5	21	11.9	<0.5
	6/15/2005	52.41	20.30	-	32.11	2,040	1.2	<2.0	78.2	22	<0.5
	8/26/2005	52.41	20.97	-	31.44	1,500	0.930	<2.00	87.6	21	0.86
	11/11/2005	52.41	25.30	-	27.11	2,140	1.08	<2.0	104	29	0.79
	2/9/2006	52.41	19.41	-	33.00	1,410	<0.5	<2.0	99.6	21.4	0.72
	5/9/2006	52.41	19.41	-	33.00	1,100	<0.5	<2.0	86.5	17	<0.5
	8/10/2006	52.41	20.8	-	31.61	3,180	2.87	<2.0	88.9	24.8	<0.50
	10/26/2006	52.41	21.22	-	31.19	1,200	<0.5	<2.0	23.5	4.79	0.6
	1/25/2007	52.41	20.89	-	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	-	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	-	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	-	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	-	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	-	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	-	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	52.41	22.06	-	30.35	1,400 ^Y	<0.5	<0.5	60	17	<0.5
	1/7/2009	52.41	21.35	-	31.06	93	<0.5	<0.5	2.1	0.74	<0.5
	4/13/2009	52.41	20.52	-	31.89	480 ^Y	<0.5	<0.5	20	5.5	<0.5
	8/27/2009	52.41	21.85	-	30.56	130	<0.5	<0.5	2.5	0.61	<0.5
	12/1/2009	52.41	21.59	-	30.82	760 ^Y	<0.5	<0.5	14	1.5	<0.5
	3/17/2010	52.41	20.11	-	32.30	480	<0.5	<0.5	30	6.9	<0.5
	6/3/2010	52.41	21	-	31.41	690	<0.5	<0.5	14	2.6	<0.5
	9/2/2010	52.41	21.42	-	30.99	470	<0.5	<0.5	7.6	1	<0.5
12/2/2010	52.41	21.44	-	30.97	470	<0.5	<0.5	7.6	3.3	<0.5	
3/4/2011	52.41	19.65	N	32.76	240	<0.5	<0.5	6.6	0.8	<0.5	
5/20/2011	52.41	20.75	N	31.66	310	<0.5	<0.5	4.8	<0.5	<0.5	
9/9/2011	52.41	21.05	N	31.36	1,000	<0.5	<0.5	12	0.76	<0.5	
12/2/2011	52.41	20.14	N	32.27	900 ^X	<2.9	<1.7	14	1.9	<3.3	

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MW-2 cont.	3/2/2012	52.41	19.98	N	32.43	880	<0.5	<0.5	5.3	0.58	<0.5
	6/7/2012	52.41	21.04	N	31.37	720	<0.5	<0.5	7.9	0.79	<0.5
	9/21/2012	52.41	21.78	N	30.63	1,400	<0.5	<0.5	11	<0.5	<0.5
	12/14/2012	52.41	20.71	N	31.70	760	<0.5	<0.5	10	1.5	<0.5
	3/28/2013	52.41	21.24	N	31.17	890	<0.5	<0.5	4.3	<0.5	<0.5
	6/11/2013	52.41	21.67	N	30.74	510	150	<0.5	15	12.3	3.1
	9/16/2013	52.41	22.15	N	30.26	210	<0.5	<0.5	1.1	<0.5	<0.5
	12/6/2013	52.41	22.52	N	29.89	290	1.4	<0.5	1.1	<0.5	<0.5
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MW-3	5/10/2002	51.16	22.28	-	28.88	44,000	6,000	900	1,500	6,200	2,400
	8/8/2002	51.16	22.88	-	28.28	40,000	5,800	1,100	1,600	6,500	1,300
	11/8/2002	51.16	23.19	-	27.97	47,000	5,300	1,200	2,200	8,600	1,000
	2/21/2003	51.16	22.02	-	29.14	39,000	5,500	1,500	2,000	8,600	1,300
	5/28/2003	51.16	21.89	-	29.27	52,000	7,300	3,000	2,800	12,700	2,100
	8/12/2003	51.16	22.66	-	28.50	31,000	6,100	860	1,500	6,900	1,200
	10/9/2003	51.16	23.06	-	28.10	41,000	6,100	1,100	2,200	10,200	960
	1/15/2004	51.16	21.85	-	29.31	51,000	4,100	1,100	2,000	8,400	590
	5/25/2004	51.16	22.55	-	28.61	65,000	4,300	1,300	2,500	10,500	720
	9/21/2004	53.91	23.08	-	30.83	42,000	4,900	890	2,200	8,700	480
	12/14/2004	53.91	22.52	-	31.39	35,151	4,066	972	2,942	13,032	491
	3/11/2005	53.91	20.90	-	33.01	42,600	3,040	1,100	1,530	6,670	968
	6/15/2005	53.91	21.85	-	32.06	84,100	5,110	2,160	3,030	8,800	2,670
	8/26/2005	53.91	22.49	-	31.42	43,500	3,630	1,080	2,500	6,830	1,440
	11/11/2005	53.91	22.81	-	31.10	47,700	4,240	520	2,170	6,320	1,390
	2/9/2006	53.91	21.12	-	32.79	44,500	5,070	1360	1,920	4,840	3,280
5/9/2006	53.91	21.09	-	32.82	48,100	2,510	1,140	1,950	5,030	2,210	
8/10/2006	53.91	22.26	-	31.65	42,100	3,450	869	1,760	5,650	3,570	
10/26/2006	53.91	22.73	-	31.18	33,400	4,800	331	1,170	3,510	4,790	

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MW-3 cont.	1/25/2007	53.91	22.34	-	31.57	19,300	4,820	167	1,540	3,740	3,430
	4/26/2007	53.91	22.24	-	31.67	30,700	2,350	158	1,470	4,320	1,330
	7/25/2007	53.91	22.83	-	31.08	34,900	5,400	364	2,080	6,360	1,980
	10/23/2007	53.91	23.01	-	30.9	22,600	4,070	<86	1,120	3,095	970
	1/22/2008	53.96	22.04	-	31.92	22,100	1,280	453	1,330	3,520	490
	4/16/2008	53.91	22.4	-	31.51	20,700	2,790	182	860	3,389	263
	7/3/2008	53.91	22.9	-	31.01	48,500	3,760	346	3,130	12,980	573
	10/16/2008	53.91	23.36	-	30.55	50,000	3,900	300	3,100	11,000	460
	1/8/2009	53.91	22.82	-	31.09	54,000	2,600	180	2,500	8,800	220
	4/13/2009	53.91	22.06	-	31.85	49,000	2,900	170	2,100	8,100	490
	8/27/2009	53.91	23.11	-	30.80	43,000	2,500	160	1,900	7,000	210
	12/2/2009	53.91	23.00	-	30.91	30,000	2,100	180	1,600	5,600	91
	3/17/2010	53.91	21.90	-	32.01	24,000	970	81	1,100	3,700	38
	6/3/2010	53.91	22.49	-	31.42	31,000	1,200	110	1,300	4,400	34
	9/2/2010	53.91	22.76	-	31.15	26,000	1,100	81	1,200	3,810	26
	12/2/2010	53.91	22.86	-	31.05	18,000	830	47	780	2,360	14
	3/4/2011	53.91	21.44	N	32.47	18,000	410	32	850	2,480	16
	5/20/2011	53.91	22.36	N	31.55	12,000	710	24	620	1,460	11
	9/9/2011	53.91	22.44	N	31.47	11,000	1,100	26	580	1,430	7.8
	12/2/2011	53.91	21.60	N	32.31	5,100 ^x	280	12	370	740	<1.7
3/2/2012	53.91	22.39	N	31.52	13,000	440	23	690	1,570	<5.0	
6/7/2012	53.91	22.50	N	31.41	9,000	290	9.3	520	900	<5.0	
9/21/2012	53.91	23.17	N	30.74	12,000	710	26	630	1,230	8.2	
12/14/2012	53.91	22.32	Y	31.59	8,500	350	8.7	550	1,003	<5	
3/28/2013	53.91	22.69	Y	31.22	9,300	790	8.2	760	974	8.7	
6/11/2013	53.91	23.06	Y	30.85	14,000	700	26	860	1,630	6.1	
9/17/2013	53.91	23.41	Y	30.50	28,000	570	37	1,800	3,560	<10	
12/6/2013	53.91	23.76	Y	30.15	23,000	360	26	1,700	3,330	<10	
MW-4	5/10/2002	50.54	21.78	-	28.76	880	25	1.0C	110	52	12,000
	8/8/2002	50.54	22.50	-	28.04	3,800	70	<5.0	300	115	4,800
	11/8/2002	50.54	22.81	-	27.73	5,100	150	10	460	258	2,400

Table 3
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-4 cont.	2/21/2003	50.54	21.48	-	29.06	3,200	98	66	220	360	6,600
	5/28/2003	50.54	21.24	-	29.30	6,200	140	46	200	790	2,300
	8/12/2003	50.54	22.32	-	28.22	7,500	180	57	220	1450	1,900
	10/9/2003	50.54	22.74	-	27.80	5,800	250	32	300	970	7,800
	1/15/2004	50.54	21.19	-	29.35	5,900	270	17 C	150	640	7,300
	5/25/2004	50.54	22.03	-	28.51	9,100	210	51	200	1190	1800
	9/21/2004	53.31	22.76	-	30.55	5,200	290	12	370	600	7300
	12/14/2004	53.31	21.99	-	31.32	8,937	538	114	416	2379	5021
	3/11/2005	53.31	20.01	-	33.30	12,300	225	39.6	80.1	1465	3870
	6/15/2005	53.31	21.25	-	32.06	7,690	114	32.6	77.1	555	1150
	8/26/2005	53.31	22.03	-	31.28	8,850	175	24.6	150	851	1380
	11/11/2005	53.31	22.43	-	30.88	9,990	356	<43	196	700	3,640
	2/9/2006	53.31	20.31	-	33.00	6,850	205	<43	67.2	255.2	5,120
	5/9/2006	53.31	20.33	-	32.98	1,290	18.1	<8.6	12.9	25.87	799
	8/10/2006	53.31	21.74	-	31.57	7,830	118	<8.60	25.3	174.6	919
	10/26/2006	53.31	22.29	-	31.02	1,540	81.9	<43	96	46.4	3,610
	1/25/2007	53.31	21.86	-	31.45	4,370	163	<8.6	85.1	269.1	1,050
	4/26/2007	53.31	21.63	-	31.68	4,380	140	<8.6	67	276.8	576
	7/25/2007	53.31	22.49	-	30.82	4,970	220	<8.60	198	241.5	1,040
	10/23/2007	53.31	22.69	-	30.62	4,200	267	<8.6	147	155.5	1,220
	1/22/2008	53.36	21.39	-	31.97	2,180	133	<22.0	43.1	32.2	1,800
	4/15/2008	53.31	21.9	-	31.41	4,240	90.4	<22.0	107	380	674
	7/2/2008	53.31	22.55	-	30.76	2,300	193	<22.0	212	183	4,050
10/16/2008	53.31	23.13	-	30.18	8,900	320	3.7	430	1,160	450	
1/8/2009	53.31	22.42	-	30.89	19,000	430	44	590	3,380	440	
4/13/2009	53.31	21.51	-	31.80	21,000	400	38	450	2,880	330	
8/27/2009	53.31	22.94	-	30.37	16,000	960	64	560	2,120	290	
12/2/2009	53.31	22.36	-	30.95	4,400	480	6	170	640	110	

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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-4 cont.	3/17/2010	53.31	21.39	-	31.92	14,000	260	6	230	1,220	93
	6/3/2010	53.31	22.23	-	31.08	18,000	240	4	310	770	41
	9/2/2010	53.31	22.51	-	30.80	1,800	800	<3.6	150	25	33
	12/2/2010	53.31	22.71	-	30.60	3,800	1,500	<10	200	115	29
	3/3/2011	53.31	20.64	N	32.67	2,400	28	<0.71	28	17	3
	5/19/2011	53.31	21.84	N	31.47	1,800	27	<0.5	29	11.2	4.8
	9/8/2011	53.31	22.11	N	31.20	3,600	300	2.6	270	68.5	59
	12/1/2011	53.31	21.38	N	31.93	1,400 ^x	370	<0.84	110	30.6	110
	3/2/2012	53.31	22.02	N	31.29	3,100	780	<2.0	150	59.6	50
	6/7/2012	53.31	22.24	N	31.07	2,000	290	<2.5	66	23	29
	9/21/2012	53.31	22.87	N	30.44	2,900	820	<2.5	75	17	72
	12/14/2012	53.31	21.84	N	31.47	840	48	<0.5	14	4.5	2.5
	3/28/2013	53.31	22.24	N	31.07	790	650	<5.0	26	<5.0	15
	6/11/2013	53.31	22.71	N	30.60	1,100	860	<5.0	64	<5.0	35
	9/17/2013	53.31	23.23	N	30.08	<1,000	1,300	<10	22	<10	44
12/6/2013	53.31	23.6	N	29.71	2,300	3,300	<10	78	199	42	
MW-5	5/10/2002	47.79	19.02	-	28.77	25,000	1,000	1200	1,100	3,060	1,800
	8/8/2002	47.79	19.80	-	27.99	18,000	1,000	660	950	1,720	1,500
	11/8/2002	47.79	20.14	-	27.65	16,000	1,300	380	930	1,550	1,200
	2/21/2003	47.79	18.70	-	29.09	12,000	390	71	770	1,100	860
	5/28/2003	47.79	18.52	-	29.27	9,100	210	31	560	790	600
	8/12/2003	47.79	19.54	-	28.25	12,000	660	75	660	1,110	1,000
	10/9/2003	47.79	20.06	-	27.73	15,000	1,000	130	1,000	1,430	1,700
	1/15/2004	47.79	18.42	-	29.37	9,900	450 C	16	500	431	1,100
	5/25/2004	47.79	19.30	-	28.49	9,200	380	24	490	536	720
	9/21/2004	50.53	20.15	-	30.38	10,000	980	71	560	770	1200
	12/14/2004	50.53	19.30	-	31.23	10,502	587	64	1040	1133	1015
	3/11/2005	50.53	17.20	-	33.33	8,390	407	<5.5	83	42.5	1530
	6/15/2005	50.53	18.54	-	31.99	9,350	147	18.3	435	146.2	573
	8/26/2005	50.53	19.31	-	31.22	9,500	261	<22	726	321.3	749
	11/11/2005	50.53	19.75	-	30.78	10,000	443	41.5	527	278.5	1,430

Table 3
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15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-5 cont.	2/9/2006	50.53	17.58	-	32.95	7,640	237	<22	187	50.2	2,050
	5/9/2006	50.53	17.54	-	32.99	8,360	111	<8.6	300	75.84	566
	8/10/2006	50.53	19.02	-	31.51	16,100	250	<22	455	187.4	1,590
	10/26/2006	50.53	19.61	-	30.92	10,100	430	<22	375	192.6	3,060
	1/25/2007	50.53	19.19	-	31.34	3,960	340	<22	323	150.1	1,740
	4/26/2007	50.53	18.89	-	31.64	4,590	187	<8.6	307	116.5	861
	7/25/2007	50.53	19.81	-	30.72	6,490	419	21.8	413	223.2	913
	10/23/2007	50.53	19.98	-	30.55	6,120	550	11	284	141.4	433
	1/22/2008	50.18	18.69	-	31.49	9,810	572	22	574	184.1	126
	4/15/2008	50.18	19.16	-	31.02	8,890	335	15.1	477	397.5	136
	7/3/2008	50.53	19.88	-	30.65	13,100	949	34.4	875	825.5	176
	10/16/2008	50.53	20.45	-	30.08	11,000	870	25	820	668	160
	1/8/2009	50.53	19.72	-	30.81	12,000	490	21	690	456	76
	4/13/2009	50.53	18.81	-	31.72	9,000 ^Y	200	11	390	198	44
	8/27/2009	50.53	21.30	-	29.23	7,400	610	15	320	185	66
	12/2/2009	50.53	20.00	-	30.53	8,400 ^Y	400	12	540	296	45
Pre-MPE	3/17/2010	50.53	18.73	-	31.80	4,800	120	8.7	120	107	14
	6/4/2010	50.53	19.60	-	30.93	7,200	160	5.7	190	149.2	24
	9/2/2010	50.53	19.82	-	30.71	9,200	110	12	270	318	35
	12/2/2010	50.53	20.10	-	30.43	9,100	170	6.7	350	442	23
	3/4/2011	50.53	18.00	N	32.53	2,600	18	0.62	54	18.1	3
	5/20/2011	50.53	19.18	N	31.35	4,000	91	8.5	110	106	33
	8/4/2011	50.53	NM	-	NC	3,000	23	0.95	92	43.7	5.4
	9/9/2011	50.53	19.41	N	31.12	4,200	120	2.8	140	61.1	22
	12/2/2011	50.53	18.59	N	31.94	6,900 ^x	96	12	220	104	32
	3/2/2012	50.53	19.30	N	31.23	5,400	43	1.8	110	85	7
	6/7/2012	50.53	19.45	N	31.08	3,700	32	<1.0	100	59	4.4
	9/21/2012	50.53	20.17	N	30.36	3,900	68	1.5	140	88.5	9.8
	12/14/2012	50.53	19.12	N	31.41	3,100	48	6.7	100	62.3	5.2
	3/28/2013	50.53	19.47	N	31.06	1,900	30	<1.0	59	48.4	4.5
	6/11/2013	50.53	20.03	N	30.50	2,900	22	3.9	110	131	3.0
	9/17/2013	50.53	20.54	N	29.99	4,200	55	7.9	180	229	5.2
12/6/2013	50.53	20.86	N	29.67	3,600	35	2.1	160	241	2.5	

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MW-6	9/21/2004	45.82	17.64	-	28.18	34,000	150	130	2200	8100	0.6
	12/14/2004	45.82	15.75	-	30.07	5,161	137	7	436	1136	<5.5
	3/11/2005	45.82	13.80	-	32.02	6,040	125	3.22	260	722.1	4.94
	6/15/2005	45.82	14.78	-	31.04	5,590	44.3	6.60	272	382	5.85
	8/26/2005	45.82	15.91	-	29.91	6,130	99	<8.6	378	492.9	5.66
	11/11/2005	45.82	16.55	-	29.27	11,400	101	<8.6	645	834.7	4.33
	2/9/2006	45.82	13.92	-	31.90	2,790	32.3	<8.6	131	131.22	7.30
	5/9/2006	45.82	13.95	-	31.87	3,730	25	<2.0	213	207.82	5.87
	8/10/2006	45.82	15.28	-	30.54	4,800	41.9	<2.0	201	189	10.4
	10/26/2006	45.82	16.11	-	29.71	6,080	37.4	<2.0	116	183	9.78
	1/25/2007	45.82	15.76	-	30.06	3,220	25.2	<2.0	219	174	14.7
	4/26/2007	45.82	15.18	-	30.64	3,110	28	<2.0	165	138.47	14.6
	7/25/2007	45.82	16.82	-	29.00	4,960	54.1	<2.0	199	255.87	8.05
	10/23/2007	45.82	16.91	-	28.91	9,610	64.3	<2.0	188	302.6	5.81
	1/21/2008	45.82	15.36	-	30.46	3,290	33	<2.0	149	131.31	3.86
	4/15/2008	45.82	15.73	-	30.09	2,070	10.8	<2.0	51.1	67	<0.5
	7/2/2008	45.82	16.9	-	28.92	7,900	42.4	<2.0	194	296	3.58
	10/15/2008	45.82	17.21	-	28.61	18,000 ^Y	42	1.4	320	673	1.7
	1/7/2009	45.82	17.08	-	28.74	13,000	47	<3.1	210	425	<3.1
	4/13/2009	45.82	15.52	-	30.30	7,200 ^Y	26	<1.3	170	312.6	2.6
8/26/2009	45.82	17.82	-	28.00	10,000 ^Y	25	<2.0	130	294	2.2	
12/1/2009	45.82	17.34	-	28.48	11,000 ^Y	31	6.1	220	539	<2.0	
3/16/2010	45.82	14.81	-	31.01	31,000	63	140	970	4,200	64	
6/3/2010	45.82	15.72	-	30.10	27,000	22	67	840	3,100	32	
9/1/2010	45.82	16.86	-	28.96	33,000	24	34	1,100	3,780	12	
12/2/2010	45.82	16.98	-	28.84	70,000	32	55	1,700	5,670	18	

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MW-6 cont.	3/3/2011	45.82	14.35	Y	31.47	7,000	18	<2.5	97	237	11
	5/20/2011	45.82	14.95	Y	30.87	14,000	14	<2.5	300	823	7.2
	9/8/2011	45.82	16.14	Y	29.68	23,000	28	<2.5	360	812	3.4
	12/1/2011	45.82	16.17	16.15	29.66	FP	FP	FP	FP	FP	FP
	3/2/2012	45.82	16.11	Y	29.71	14,000	23	<4.2	400	694.4	<4.2
	6/6/2012	45.82	16.31	Y	29.51	9,200	12	<1.7	210	320	<1.7
	9/20/2012*	45.82	17.36	17.32	28.49	FP	FP	FP	FP	FP	FP
	12/13/2012	45.82	15.46	Y	30.36	13,000	22	<0.71	83	62.8	5.1
	3/27/2013	45.82	16.3	Y	29.52	7,400	27	<1.3	190	221.8	<1.3
	6/10/2013	45.82	17.37	Y	28.45	12,000	20	<2.5	280	230	<2.5
	9/16/2013	45.82	18.11	18.06	27.74	FP	FP	FP	FP	FP	FP
	12/5/2013	45.82	18.75	Y	27.07	18,000	220	330	460	2,030	6.1
MW-7	9/21/2004	44.74	15.21	-	29.53	2,900	<0.5	<0.5	52	61	8.1
	12/14/2004	44.74	13.90	-	30.84	<50	1.6	<0.5	29	58	6.0
	3/11/2005	44.74	11.46	-	33.28	2,230	<2.5	<2.5	39.4	51.4	12.4
	6/15/2005	44.74	12.97	-	31.77	2,940	0.85	<2.0	50.6	31.9	13.7
	8/26/2005	44.74	14.10	-	30.64	2,310	<0.50	<2.0	55.7	29.6	4.01
	11/11/2005	44.74	14.59	-	30.15	3,030	<0.5	<2.0	66.5	42.3	9.76
	2/9/2006	44.74	NM	-	NM	NA	NA	NA	NA	NA	NA
	5/9/2006	44.74	12.02	-	32.72	1,400	<0.5	<2.0	19.8	12.4	2.30
	8/10/2006	44.74	13.72	-	31.02	604	<0.50	<2.0	6.2	4.63	1.42
	10/26/2006	44.74	14.38	-	30.36	1,350	<0.50	<2.0	16.6	10.8	1.87
	1/25/2007	44.74	13.93	-	30.81	340	<0.5	<2.0	6.84	2.44	1.63
	4/26/2007	44.74	14.44	-	30.30	552	<0.5	<2.0	11.4	6.11	4.12
	7/25/2007	44.74	14.79	-	29.95	1,230	<0.5	<2.0	27	19.24	3.2
	10/23/2007	44.74	14.88	-	29.86	1,730	0.67	<2.0	20.7	17.31	8.44
	1/21/2008	44.74	13.34	-	31.40	610	1.15	<2.0	8.4	4.34	17.2
	4/15/2008	44.74	13.91	-	30.83	1,460	<0.5	<2.0	15.9	19.7	17.3
7/2/2008	44.74	14.87	-	29.87	1,450	<0.5	<2.0	11	6.8	22.1	
10/15/2008	44.74	15.68	-	29.06	1,900 ^Y	0.56	1.2	27	39.5	55	

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MW-7 cont.	1/7/2009	44.74	14.72	-	30.02	2,700	1.2	2.9	11	25	39
	4/13/2009	44.74	13.54	-	31.20	2,300 ^Y	<0.5	<0.5	15	6.3	63
	8/26/2009	44.74	15.84	-	28.90	2,700 ^Y	<0.5	<0.5	48	53	140
	12/1/2009	44.74	15.03	-	29.71	1,800 ^Y	<0.5	<0.5	22	15	120
	3/16/2010	44.74	12.56	-	32.18	1,100	<0.5	<0.5	3.2	1.4	65
	6/3/2010	44.74	13.80	-	30.94	740	<0.5	<0.5	1.8	0.62	28
	9/1/2010	44.74	14.84	-	29.90	1,200	<0.5	<0.5	10	3.2	29
	12/2/2010	44.74	14.74	-	30.00	1,400	<0.5	<0.5	8	0.74	21
	3/3/2011	44.74	13.31	N	31.43	1,000	<0.5	<0.5	1.8	<0.5	16
	5/19/2011	44.74	13.43	N	31.31	810	<0.5	<0.5	2.2	0.79	7.8
	9/8/2011	44.74	14.38	N	30.36	1,000	<0.5	<0.5	8.3	2.9	5.4
	12/1/2011	44.74	13.57	N	31.17	1,500 ^X	<0.33	<0.19	12	5.7	13
	3/2/2012	44.74	14.16	N	30.58	1,000	<0.5	<0.5	4	1.1	5.1
	6/6/2012	44.74	14.00	N	30.74	780	<0.5	<0.5	2.9	1.0	2.6
	9/20/2012	44.74	15.26	N	29.48	1,200	<0.5	<0.5	4.3	0.92	2.7
	12/13/2012	44.74	13.34	N	31.40	1,100	<0.5	<0.5	0.99	<0.5	3.4
	3/27/2013	44.74	14.30	N	30.44	680	<0.5	<0.5	1.8	<0.5	4.2
	6/10/2013	44.74	15.06	N	29.68	890	<0.5	<0.5	2.6	<0.5	2.3
	9/16/2013	44.74	15.78	N	28.96	1,400	<0.5	<0.5	7.9	2.70	4.1
12/5/2013	44.74	16.21	N	28.53	1,800	<0.5	<0.5	8	3.10	5.7	
MW-8	9/21/2004	41.14	12.98	-	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	41.14	11.22	-	29.92	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	41.14	NM	-	NM	NA	NA	NA	NA	NA	NA
	6/15/2005	41.14	10.46	-	30.68	<200	0.53	<2.0	<0.5	<1.0	<0.5
	8/26/2005	41.14	11.53	-	29.61	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	41.14	11.92	-	29.22	<50	<0.5	<2.0	1.36	1.8	<0.5
	2/9/2006	41.14	9.74	-	31.40	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	41.14	9.90	-	31.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	41.14	10.9	-	30.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	41.14	11.68	-	29.46	<50	<0.50	<2.0	3.37	<1.0	<0.50

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Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-8 cont.	1/25/2007	41.14	11.44	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	41.14	10.81	-	30.33	<50	<0.5	<2.0	4.29	<2.0	<0.5
	7/25/2007	41.14	12.31	-	28.83	<50	<0.5	<2.0	4.39	<2.0	<0.5
	10/23/2007	41.14	12.37	-	28.77	<50	<0.5	<2.0	4.31	<2.0	<0.5
	1/21/2008	41.14	11.02	-	30.12	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	41.14	11.44	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	41.14	12.39	-	28.75	94.8	<0.5	<2.0	1	<2.0	<0.5
	10/15/2008	41.14	13.42	-	27.72	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	41.14	12.50	-	28.64	<50	<0.5	<0.5	<0.5	0.6	<0.5
	4/13/2009	41.14	11.23	-	29.91	<50	<0.5	<0.5	<0.5	<0.5	<0.5
8/27/2009	41.14	13.24	-	27.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
Well Decommissioned 11/13/2009											
MW-9	9/21/2004	40.26	12.18	-	28.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	40.26	10.91	-	29.35	<50	<0.5	<0.5	<0.5	<1.0	<0.5
	3/11/2005	40.26	10.52	-	29.74	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2005	40.26	14.73	-	25.53	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	8/26/2005	40.26	10.59	-	29.67	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	40.26	11.25	-	29.01	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/9/2006	40.26	10.05	-	30.21	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	40.26	9.06	-	31.20	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	40.26	10.01	-	30.25	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	40.26	10.81	-	29.45	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	1/25/2007	40.26	10.67	-	29.59	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	40.26	10.05	-	30.21	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/25/2007	40.26	11.44	-	28.82	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/23/2007	40.26	11.59	-	28.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/21/2008	40.26	10.37	-	29.89	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	40.26	10.56	-	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
7/2/2008	40.26	11.95	-	28.31	161	<0.5	<2.0	2.15	<2.0	<0.5	
10/15/2008	40.26	12.64	-	27.62	<50	<0.5	<0.5	<0.5	<0.5	<0.5	

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MW-9 cont.	1/7/2009	40.26	11.75	-	28.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	40.26	10.89	-	29.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	40.26	12.50	-	27.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Well Decommissioned 11/13/2009											
Extraction Wells											
EX-1	12/2/2009	47.36	17.02	-	30.34	2,900	120	4	64	410	25
	3/16/2010	47.36	19.08	-	28.28	2,200	150	18	94	326	210
	6/3/2010	47.36	17.02	-	30.34	3,600	180	6.3	150	428	83
	9/1/2010	47.36	16.88	-	30.48	550	6.5	0.5	6.9	31.7	38
	12/2/2010	47.36	19.84	-	27.52	<200	3.1	<2.0	<2.0	<2.0	210
	3/3/2011	47.36	14.96	N	32.4	530	51	0.94	15	31.3	110
	5/19/2011	47.36	16.12	N	31.24	370	42	<0.71	7.6	17.2	110
	9/8/2011	47.36	16.47	N	30.89	110	5	<0.5	2.2	6.4	12
	12/1/2011	47.36	16.1	N	31.26	780 ^x	91	3	29	85	150
	3/2/2012	47.36	16.35	N	31.01	140	6	<0.5	3.5	8	14
	6/6/2012	47.36	24.76	N	22.6	250	22	<0.5	4.7	20	71
	9/20/2012	47.36	17.26	N	30.1	95	24	<0.5	<0.5	2.61	36
	12/13/2012	47.36	16.55	N	30.81	1,000	73	2.3	47	110	48
	3/27/2013	47.36	16.15	N	31.21	69	4.1	<0.5	3.3	10	1.8
	6/10/2013	47.36	24.25	N	23.11	340	37	<0.5	5.9	15.1	62
9/16/2013	47.36	22.54	N	24.82	97	14	<0.5	<0.5	<0.5	65	
12/5/2013	47.36	22.53	N	24.83	390	42	2.5	9.8	32.6	76	
Extraction Wells											
EX-2	12/2/2009	45.96	17.56	-	28.4	7,100 ^y	9.3	3.2	440	770	<3.1
	3/16/2010	45.96	19.65	-	26.31	13,000	600	360	770	2,250	15
	6/3/2010	45.96	17.10	-	28.86	16,000	590	400	700	2,500	9.5
	9/1/2010	45.96	16.99	-	28.97	6,100	230	74	200	890	11
	12/2/2010	45.96	20.87	-	25.09	14,000	510	270	640	2,170	15
	3/3/2011	45.96	14.61	N	31.35	8,600	340	52	460	1,350	13
	5/19/2011	45.96	15.08	N	30.88	7,500	260	65	390	1,080	11
	9/8/2011	45.96	16.34	N	29.62	3,400	190	28	160	451	5.4
	12/1/2011	45.96	22.60	N	23.36	9,900 ^x	630	200	690	1,760	<3.3

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EX-2 cont.	3/2/2012	45.96	16.48	N	29.48	5,000	220	25	200	600	7.1
	6/6/2012	45.96	18.90	N	27.06	6,900	290	97	310	790	5.2
	9/20/2012	45.96	17.49	N	28.47	1,800	170	14	62	204	5.0
	12/13/2012	45.96	15.96	N	30	7,300	490	180	610	1,290	5.2
	3/27/2013	45.96	16.59	N	29.37	2,200	130	9.6	100	288	4.3
	6/10/2013	45.96	23.11	N	22.85	2,600	190	20	100	248	6.8
	9/20/2013	45.96	23.11	N	22.85	3,900	210	37	170	450	6.3
	12/5/2013	45.96	23.28	N	22.68	3,700	160	46	110	394	7.2
MPE Wells											
MPE-1	12/1/2009	51.96	21.41	-	30.55	NA	NA	NA	NA	NA	NA
	3/16/2010	51.96	20.22	-	31.74	NA	NA	NA	NA	NA	NA
	6/3/2010	51.96	21.18	-	30.78	NA	NA	NA	NA	NA	NA
	9/1/2010	51.96	21.25	-	30.71	NA	NA	NA	NA	NA	NA
	12/2/2010	51.96	21.64	-	30.32	NA	NA	NA	NA	NA	NA
Pre-MPE	3/3/2011	51.96	19.33	-	32.63	NA	NA	NA	NA	NA	NA
	5/19/2011	51.96	20.6	-	31.36	NA	NA	NA	NA	NA	NA
	8/4/2011	51.96	NM	-	NC	49,000	210	100	840	7,070	45
Post-MPE	9/8/2011	51.96	20.83	-	31.13	NA	NA	NA	NA	NA	NA
	9/26/2011	51.96	20.94	Y	31.02	62,000	6,300	3,700	1,800	9,400	1,200
	12/2/2011	51.96	20.14	Y	31.82	56,000	9,000	7,700	2,200	10,800	2,600
	3/2/2012	51.96	20.73	Y	31.23	97,000	11,000	11,000	2,600	12,600	2,700
	6/6/2012	51.96	20.96	Y	31.00	78,000	4,500	4,900	2,300	10,700	750
	9/20/2012	51.96	21.58	Y	30.38	89,000	8,600	9,200	3,400	14,800	1,900
	12/14/2012	51.96	20.57	Y	31.39	98,000	7,400	9,600	2,900	13,300	1,300
3/27/2013	51.96	20.91	Y	31.05	61,000	6,600	4,500	2,200	9,400	1,500	
6/10/2013	51.96	21.47	Y	30.49	42,000	1,900	980	630	4,400	670	
9/17/2013	51.96	21.98	Y	29.98	45,000	2,400	1,400	1,200	8,000	150	
12/6/2013	51.96	22.41	Y	29.55	27,000	1,600	220	990	5,000	110	
MPE-2											
MPE-2	12/1/2009	53.72	22.87	-	30.85	NA	NA	NA	NA	NA	NA
	3/16/2010	53.72	21.7	-	32.02	NA	NA	NA	NA	NA	NA
	6/3/2010	53.72	22.35	-	31.37	NA	NA	NA	NA	NA	NA
	9/1/2010	53.72	23.7	-	30.02	NA	NA	NA	NA	NA	NA
	12/2/2010	53.72	22.7	-	31.02	NA	NA	NA	NA	NA	NA

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MPE-2 cont. Pre-MPE Post-MPE	3/3/2011	53.72	21.25	-	32.47	NA	NA	NA	NA	NA	NA
	5/19/2011	53.72	22.19	-	31.53	NA	NA	NA	NA	NA	NA
	8/4/2011	53.72	NM	-	NC	46,000	2,100	80	1,900	5,300	75
	9/8/2011	53.72	22.31	-	31.41	NA	NA	NA	NA	NA	NA
	9/26/2011	53.72	22.38	N	31.34	37,000	1,800	33	1,700	2,760	<17
	12/2/2011	53.72	21.44	N	32.28	26,000	1,600	43	1,800	3,370	<17
	3/2/2012	53.72	22.24	N	31.48	36,000	1,100	19	1,700	2,970	<17
	6/7/2012	53.72	22.35	N	31.37	33,000	1,800	27	1,600	2,700	29
	9/21/2012	53.72	23.03	N	30.69	31,000	1,700	13	1,900	2,747	14
	12/14/2012	53.72	22.17	N	31.55	31,000	1,700	20	1,800	2,490	16
	3/28/2013	53.72	22.53	N	31.19	20,000	2,200	<20	1,300	960	<20
	6/11/2013	53.72	22.9	N	30.82	26,000	920	<13	1,500	1,352	<13
	9/17/2013	53.72	23.29	N	30.43	23,000	680	15	1,400	1,059	<13
	12/5/2013	53.72	23.73	23.61	30.07	FP	FP	FP	FP	FP	FP
	2nd WBZ										
MW-1D	1/3/2008	54.42		-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	-	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	-	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	-	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	54.42	23.82	-	30.60	120	1.6	<0.5	2.8	3.6	<0.5
	1/8/2009	54.42	23.44	-	30.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	54.42	23.06	-	31.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	54.42	23.73	-	30.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	54.42	23.59	-	30.83	330 ^Y	<0.5	<0.5	1.3	2.2	<0.5
	3/16/2010	54.42	22.60	-	31.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	54.42	23.10	-	31.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	54.42	23.51	-	30.91	<50	<0.5	<0.5	0.52	1.8	<0.5
	12/3/2010	54.42	23.41	-	31.01	61	<0.5	<0.5	1.0	3.73	<0.5
	3/3/2011	54.42	22.27	N	32.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	54.42	22.89	N	31.53	<50	<0.5	<0.5	<0.5	<0.5	<0.5
9/8/2011	54.42	23.08	N	31.34	220	<0.5	<0.5	0.6	1.4	<0.5	
12/1/2011	54.42	22.26	N	32.16	<22	<0.33	<0.19	<0.15	<0.20	<0.38	

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MW-1D cont.	3/2/2012	54.42	23.01	N	31.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	54.42	23.18	N	31.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	54.42	23.76	N	30.66	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	54.42	23.04	N	31.38	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	54.42	23.34	N	31.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	54.42	23.69	N	30.73	110	<0.5	<0.5	0.55	<0.5	<0.5
	9/16/2013	54.42	24.02	N	30.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/5/2013	54.42	24.31	N	30.11	<50	<0.5	<0.5	<0.5	1.3	<0.5
MW-3D	1/3/2008	54.10		-	-	<50	<0.50	<2.0	<0.50	<2.0	87.6
	1/22/2008	54.10	22.31	-	31.79	<50	<0.50	<2.0	<0.50	<2.0	88.3
	4/16/2008	54.10	22.64	-	31.46	<50	<0.5	<2.0	<0.5	<2.0	71.1
	7/3/2008	54.10	23.17	-	30.93	<50	<0.5	<2.0	<0.5	<2.0	67.4
	10/16/2008	54.10	23.62	-	30.48	<50	<0.5	<0.5	<0.5	<0.5	37
	1/8/2009	54.10	23.07	-	31.03	<50	<0.5	<0.5	<0.5	<0.5	29
	4/14/2009	54.10	22.36	-	31.74	<50	<0.5	<0.5	<0.5	<0.5	44
	8/26/2009	54.10	23.41	-	30.69	<50	<0.5	<0.5	<0.5	<0.5	20
	12/1/2009	54.10	23.27	-	30.83	110 Y	<0.5	<0.5	<0.5	0.52	24
	3/16/2010	54.10	22.10	-	32.00	<50	<0.5	<0.5	<0.5	<0.5	7.1
	6/4/2010	54.10	22.70	-	31.40	<50	<0.5	<0.5	<0.5	<0.5	17
	9/1/2010	54.10	23.09	-	31.01	78	<0.5	<0.5	1.1	4.71	24
	12/3/2010	54.10	22.90	-	31.20	<50	<0.5	<0.5	0.56	1.4	13
	3/3/2011	54.10	21.66	N	32.44	<50	1.3	<0.5	<0.5	0.59	14
	5/19/2011	54.10	22.61	N	31.49	<50	<0.5	<0.5	<0.5	<0.5	5.2
	9/8/2011	54.10	22.68	N	31.42	69	<0.5	<0.5	<0.5	0.62	4.8
	12/1/2011	54.10	22.86	N	31.24	<22	<0.33	<0.19	<0.15	<0.20	10
	3/2/2012	54.10	22.60	N	31.50	<50	<0.5	<0.5	<0.5	<0.5	4.2
	6/6/2012	54.10	22.77	N	31.33	<50	<0.5	<0.5	<0.5	<0.5	4.8
	9/20/2012	54.10	23.42	N	30.68	<50	<0.5	<0.5	<0.5	<0.5	5.1
12/13/2012	54.10	22.57	N	31.53	<50	<0.5	<0.5	<0.5	<0.5	4.4	
3/27/2013	54.10	22.87	N	31.23	<50	<0.5	<0.5	<0.5	<0.5	4.4	
6/10/2013	54.10	23.27	N	30.83	<50	<0.5	<0.5	<0.5	<0.5	3.5	
9/16/2013	54.10	23.65	N	30.45	<50	<0.5	<0.5	<0.5	<0.5	2.1	
12/5/2013	54.10	23.97	N	30.13	<50	<0.5	<0.5	<0.5	0.53	1.6	

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Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
MW-4D	1/4/2008	53.12		-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	53.12	21.11	-	32.01	91.5	18.7	<2.0	7.08	11.42	219
	4/15/2008	53.12	21.67	-	31.45	<50	<0.5	<2.0	<0.5	<2.0	27
	7/3/2008	53.12	22.39	-	30.73	<50	<0.5	<2.0	<0.5	<2.0	6.27
	10/16/2008	53.12	22.98	-	30.14	<50	<0.5	<0.5	<0.5	<0.5	1.9
	1/8/2009	53.12	22.25	-	30.87	<50	<0.5	<0.5	<0.5	<0.5	2
	4/14/2009	53.12	21.34	-	31.78	<50	<0.5	<0.5	<0.5	<0.5	2.2
	8/27/2009	53.12	22.79	-	30.33	<50	<0.5	<0.5	<0.5	<0.5	2.2
	12/1/2009	53.12	22.49	-	30.63	120 ^Y	<0.5	<0.5	1.4	2.3	2.3
	3/16/2010	53.12	21.02	-	32.10	<50	<0.5	<0.5	<0.5	<0.5	0.65
	6/4/2010	53.12	21.93	-	31.19	<50	<0.5	<0.5	<0.5	<0.5	1.1
	9/1/2010	53.12	23.32	-	29.80	<50	<0.5	<0.5	0.85	3.76	2.2
	12/3/2010	53.12	22.46	-	30.66	<50	<0.5	<0.5	<0.5	0.67	<0.5
	3/3/2011	53.12	20.45	N	32.67	<50	<0.5	<0.5	<0.5	<0.5	0.58
	5/19/2011	53.12	21.57	N	31.55	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	53.12	21.92	N	31.20	59	<0.5	<0.5	<0.5	0.51	1.7
	12/1/2011	53.12	21.19	N	31.93	<22	<0.33	<0.19	<0.15	<0.20	4.2
	3/2/2012	53.12	21.8	N	31.32	<50	<0.5	<0.5	0.85	1.2	2.7
	6/6/2012	53.12	22.00	N	31.12	<50	<0.5	<0.5	<0.5	<0.5	1.3
	9/20/2012	53.12	22.67	N	30.45	<50	<0.5	<0.5	<0.5	<0.5	1.6
12/13/2012	53.12	21.55	N	31.57	<50	<0.5	<0.5	<0.5	<0.5	0.94	
3/27/2013	53.12	21.98	N	31.14	<50	<0.5	<0.5	<0.5	<0.5	2.1	
6/10/2013	53.12	22.55	N	30.57	<50	<0.5	<0.5	<0.5	<0.5	1.7	
9/16/2013	53.12	23.05	N	30.07	<50	<0.5	<0.5	<0.5	<0.5	4.6	
12/6/2013	53.12	23.43	N	29.69	<50	<0.5	<0.5	<0.5	<0.5	3.4	
1573 153 RD	1/3/2008	NS	NM	-	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	NS	NM	-	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2008	NS	NM	-	NC	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Historical Groundwater Elevation Data and Analytical Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Free-Product (feet)/ Sheen (Y/N)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B ² (µg/L)
Equipment Blanks											
EB-PMP	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB	1/21/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PMP2	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB2	1/22/2008	-	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
ESL (ug/L)	-	-	-	-	-	100	1	40	30	20	5

Notes:

The first time SOMA monitored this Site was in May 2002.

*: Due to minimal recharge rates in well MW-2, the groundwater elevation recorded on these dates did not match the overall site conditions, May 2002 & August 2003.

NC: Not Calculated

¹: Top of casing elevations were surveyed to a datum of 67.07 M.S.L by Kier & Wright Civil Engineers & Land Surveyors on May 7, 2002.
 On October 11, 2004, the site was re-surveyed by Harrington Surveys, Inc. of Walnut Creek, CA to a datum of California Coordinate System, Zone 3, NAD 83.

² MtBE analyzed by EPA Method 8021B, and confirmed by EPA Method 8260B.

<: Not detected above the laboratory reporting limit.

Y: Sample exhibits chromatographic pattern which does not resemble standard

^c Presence confirmed, but confirmation concentration differed by more than a factor of two.

C: Presence confirmed, but RPD between columns exceeds 40%.

H: Heavier hydrocarbons contributed to the quantitation.

x: Does not match pattern of reference Gasoline Standard. Hydrocarbons in the range of C5-C12 quantified as gasoline (possibly aged gasoline)

NA: Not Analyzed. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.
 Not Analyzed. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

NM: Not Measured. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.
 Not Measured. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

The first time SOMA monitored wells MW-6 to MW-9 was in September 2004.

EB-PMP/EB-PRB: Equipment Blanks for Pump and Probe

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);
 Table F-1a, Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

MW-8 and MW-9 were decommissioned November 13, 2009

FP: Groundwater not sampled due to presence of free-product
 Groundwater elevation corrected upon presence of FP as follows:
 Corrected depth to groundwater is equal to (measured depth)- 0.68(free product thickness)
 The correction factor is derived by the following: specific gravity of gas at 20°C is 0.68, then specific gravity is multiplied by the thickness of free product

Table 4
Historical Gasoline Oxygenate Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
1st WBZ							
MW-1	8/8/2002	78	<1.3	<1.3	<1.3	NA	NA
	11/1/2002	42	< 1.0	< 1.0	< 1.0	NA	NA
	2/21/2003	47	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	25	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	<10	<0.5	<0.5	<0.5	NA	NA
	10/9/2003	70	<1.0	<1.0	<1.0	NA	NA
	1/15/2004	55	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	62	<0.7	<0.7	<0.7	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<21.5	<4.3	<4.3	<17.2	NA	NA
	3/11/2005	81	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	68.9	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	46	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	11.3	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	0.51	<0.5
	8/10/2006	<43	<2.15	<2.15	<8.60	3.37	<2.15
	10/26/2006	39.4	<1.0	<1.0	<4.0	2.92	<1.0
	1/25/2007	41.4	<0.5	<0.5	<2.0	1.36	<0.5
	4/26/2007	39.6	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	46.5	<1.0	<1.0	<4.0	<1.0	<1.0
	10/23/2007	53.7	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	23.8	<0.5	<0.5	<2.16	<0.5	<0.5
	4/16/2008	8.36	<0.5	<0.5	<2.0	164	<0.5
	7/3/2008	30.5	<0.5	<0.5	<2.0	1.08	<0.5
	10/15/2008	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	1/7/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	4/14/2009	15	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/2/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	26	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
12/2/2010	<63	<3.1	<3.1	<3.1	<3.1	<3.1	
3/4/2011	40	<0.5	<0.5	<0.5	<0.5	<0.5	
5/20/2011	<71	<3.6	<3.6	<3.6	<3.6	<3.6	
9/9/2011	33	<1.3	<1.3	<1.3	<1.3	<1.3	
12/2/2011	49	<3.2	<3.5	<3.5	<2.8	<1.7	
3/2/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
6/7/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
9/21/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
12/14/2012	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
3/28/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
6/11/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
9/17/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
12/6/2013	<33	<1.7	<1.7	<1.7	<1.7	<1.7	
MW-2							
MW-2	8/8/2002	21	<0.5	<0.5	<0.5	NA	NA
	11/1/2002	15	<0.5	<0.5	<0.5	NA	NA
	2/21/2003	12	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	31	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	69	<0.8	<0.8	<0.8	NA	NA
	10/9/2003	12	<0.5	<0.5	<0.5	NA	NA
	1/15/2004	<10	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	14	<0.5	<0.5	<0.5	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA

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MW-2 cont.	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	2.44	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/9/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2011	<13	<3.2	<3.5	<2.8	<2.4	<1.7
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/7/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/21/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/28/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
6/11/2013	150	<0.5	<0.5	1.6	<0.5	<0.5	
9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/6/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-3	8/8/2002	<330	<8.3	<8.3	330	NA	NA
	11/1/2002	85	< 1.3	<1.3	220	NA	NA
	2/21/2003	140	<5.0	<5.0	320	NA	NA
	5/28/2003	520	<10	<10	530	NA	NA
	8/12/2003	180	<4.2	<4.2	270	NA	NA
	10/9/2003	<170	<8.3	<8.3	200	NA	NA
	1/15/2004	<100	<5.0	<5.0	150	NA	NA
	5/25/2004	<100	<5.0	<5.0	270	NA	NA
	9/21/2004	<140	<7.1	<7.1	110	NA	NA
	12/14/2004	<100	<20	<20	154	NA	NA
	3/11/2005	<215	<43	<43	256	NA	NA
	6/15/2005	<215	<10.8	<10.8	374	NA	NA
	8/26/2005	699	<21.5	<21.5	277	NA	NA
	11/11/2005	<430	<21.5	<21.5	171	NA	NA
	2/9/2006	<430	<21.5	<21.5	620	NA	NA
	5/9/2006	367	<10.8	<10.8	594	<10.8	<10.8
	8/10/2006	365	<10.8	<10.8	727	<10.8	<10.8
	10/26/2006	591	<10.8	<10.8	899	<10.8	<10.8
	1/25/2007	711	<10.8	<10.8	768	<10.8	<10.8
	4/26/2007	690	<10.8	<10.8	369	<10.8	<10.8
	7/25/2007	1,340	<10.8	<10.8	565	<10.8	<10.8
	10/23/2007	1,050	<21.5	<21.5	301	<21.5	<21.5
	1/22/2008	373	<10.8	<10.8	170	<0.5	<0.5
4/16/2008	881	<5.50	<5.50	<22.0	1,850	12.1	
7/3/2008	426	<10.8	<10.8	124	<10.8	<10.8	
10/16/2008	<400	<20	<20	<20	<20	<20	
1/8/2009	<500	<25	<25	<25	<25	<25	
4/13/2009	<500	<25	<25	<25	<25	<25	
8/27/2009	<500	<25	<25	<25	<25	<25	
12/2/2009	270	<13	<13	<13	<13	<13	

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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3 cont.	3/17/2010	<250	<13	<13	<13	<13	<13
	6/3/2010	<250	<13	<13	<13	<13	<13
	9/2/2010	<250	<13	<13	<13	<13	<13
	12/2/2010	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	3/4/2011	<170	<8.3	<8.3	<8.3	<8.3	<8.3
	5/20/2011	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	9/9/2011	<140	<7.1	<7.1	<7.1	<7.1	<7.1
	12/2/2011	<6.6	<1.6	<1.7	<1.4	<1.2	<0.86
	3/2/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/7/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/21/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	12/14/2012	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	3/28/2013	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/11/2013	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/17/2013	<200	<10	<10	<10	<10	<10
	12/6/2013	<200	<10	<10	<10	<10	<10
	MW-4	8/8/2002	1500	<17	<17	18	NA
11/1/2002		580	< 5.0	6	13	NA	NA
2/21/2003		1600	<20	22	<20	NA	NA
5/28/2003		690	<8.3	<8.3	17	NA	NA
8/12/2003		550	<7.1	7.3	18	NA	NA
10/9/2003		1400	<31	50	<31	NA	NA
1/15/2004		1,300	<20	25	21	NA	NA
5/25/2004		560	<8.3	<8.3	24	NA	NA
9/21/2004		1,300	<50	<50	<50	NA	NA
12/14/2004		826	<10.75	21	49	NA	NA
3/11/2005		1,110	<10.8	12.1	<43	NA	NA
6/15/2005		<110	<5.5	<5.5	22.9	NA	NA
8/26/2005		902	<5.50	<5.50	37.4	NA	NA
11/11/2005		884	<10.8	<10.8	<43	NA	NA
2/9/2006		769	<10.8	16.4	45.6	NA	NA
5/9/2006		405	<2.15	2.95	31.3	<2.15	<2.15
8/10/2006		306	<2.15	<2.15	35.3	<2.15	<2.15
10/26/2006		3430	<10.8	13.8	<43	<10.8	<10.8
1/25/2007		822	<2.15	2.4	28	<2.15	<2.15
4/26/2007		556	<2.15	2.28	29.2	<2.15	<2.15
7/25/2007		1,860	<2.15	9.94	24	<2.15	<2.15
10/23/2007		3,400	<2.15	18.4	25.9	<2.15	<2.15
1/22/2008		2,580	<5.50	64.7	<22	<0.5	<0.5
4/15/2008		1,100	<5.50	11.7	<22	39.9	<5.50
7/2/2008		8,720	<5.50	75.2	<22	<5.50	<5.50
10/16/2008		700	<3.6	4.2	37	5.4	<3.6
1/8/2009		1,500	<3.6	9.9	41	3.6	<3.6
4/13/2009		1,100	<8.3	<8.3	28	<8.3	<8.3
8/27/2009		4,900	<5.0	24	<5.0	<5.0	<5.0
12/2/2009		6,800	<5.0	69	<5.0	<5.0	<5.0
3/17/2010		1,900	<3.6	18	<3.6	<3.6	<3.6
6/3/2010		930	<3.6	7.7	<3.6	<3.6	<3.6
9/2/2010		7,200	<3.6	57	<3.6	<3.6	<3.6
12/2/2010		3,800	<10	30	<10	<10	<10
3/3/2011		410	<0.71	3.2	<0.71	<0.71	<0.71
5/19/2011		130	<0.5	1.4	<0.5	<0.5	<0.5
9/8/2011	380	<0.5	3.5	<0.5	1.1	<0.5	
12/1/2011	790	<1.6	5.4	8.2	<1.2	<0.86	
3/2/2012	920	<2.0	5.9	24	<2.0	<2.0	
6/7/2012	1,000	<2.5	13	<2.5	<2.5	<2.5	
9/21/2012	1,300	<2.5	14	<2.5	<2.5	<2.5	
12/14/2012	36	<0.5	0.65	<0.5	<0.5	<0.5	
3/28/2013	2,500	<5.0	29	<5.0	<5.0	<5.0	
6/11/2013	890	<5.0	12	<5.0	<5.0	<5.0	
9/17/2013	1,100	<10	<10	<10	<10	<10	
12/6/2013	1,500	<10	<10	<10	<10	<10	
MW-5	8/8/2002	<250	<6.3	<6.3	510	NA	NA
	11/1/2002	66	< 2.0	< 2.0	560	NA	NA

Table 4
Historical Gasoline Oxygenate Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-5 cont.	2/21/2003	<63	<3.1	<3.1	280	NA	NA
	5/28/2003	<33	<1.7	<1.7	110	NA	NA
	8/12/2003	130	<3.6	<3.6	270	NA	NA
	10/9/2003	<100	<5.0	<5.0	740	NA	NA
	1/15/2004	<63	<3.1	<3.1	300	NA	NA
	5/25/2004	<100	<5.0	<5.0	210	NA	NA
	9/21/2004	<130	<6.3	<6.3	550	NA	NA
	12/14/2004	40	<5.5	<5.5	444	NA	NA
	3/11/2005	88.8	<5.5	<5.5	448	NA	NA
	6/15/2005	<43	<2.15	<2.15	88.1	NA	NA
	8/26/2005	274	<5.50	<5.50	195	NA	NA
	11/11/2005	192	<5.50	<5.50	360	NA	NA
	2/9/2006	218	<5.50	<5.50	523	NA	NA
	5/9/2006	91.8	<2.15	<2.15	163	<2.15	<2.15
	8/10/2006	138	<5.50	<5.50	342	<5.50	<5.50
	10/26/2006	322	<5.50	<5.50	712	<5.50	<5.50
	1/25/2007	878	<5.50	<5.50	552	<5.50	<5.50
	4/26/2007	708	<2.15	<2.15	310	<2.15	<2.15
	7/25/2007	1,020	<2.15	<2.15	356	<2.15	<2.15
	10/23/2007	1,510	<2.15	<2.15	181	<2.15	<2.15
1/22/2008	470	<0.5	4.56	62.1	<0.5	<0.5	
4/15/2008	566	<1.0	<1.0	29.6	231	5.66	
7/3/2008	2,320	<2.15	<2.15	53.3	<2.15	<2.15	
10/16/2008	990	<5.0	<5.0	82	<5.0	<5.0	
1/8/2009	360	<6.3	<6.3	51	<6.3	<6.3	
4/13/2009	280	<3.1	<3.1	<3.1	<3.1	<3.1	
8/27/2009	1,300	<5.0	<5.0	<5.0	<5.0	<5.0	
12/2/2009	320	<5.0	<5.0	25	<5.0	<5.0	
3/17/2010	570	<1.0	<1.0	<1.0	<1.0	<1.0	
6/4/2010	340	<1.0	<1.0	<1.0	<1.0	<1.0	
9/2/2010	320	<2.5	<2.5	13	<2.5	<2.5	
12/2/2010	200	<3.1	<3.1	<3.1	<3.1	<3.1	
3/4/2011	180	<0.5	<0.5	<0.5	<0.5	<0.5	
5/20/2011	480	<1.0	<1.0	<1.0	<1.0	<1.0	
8/4/2011	110	<0.71	<0.71	2.6	<0.71	<0.71	
9/9/2011	260	<1.0	<1.0	11	<1.0	<1.0	
12/2/2011	95	<3.2	<3.5	14	<2.4	<1.7	
3/2/2012	59	<1.0	<1.0	4.1	<1.0	<1.0	
6/7/2012	22	<1.0	<1.0	2.8	<1.0	<1.0	
9/21/2012	66	<1.0	<1.0	<1.0	<1.0	<1.0	
12/14/2012	<20	<1.0	<1.0	4.2	<1.0	<1.0	
3/28/2013	<20	<1.0	<1.0	<1.0	<1.0	<1.0	
6/11/2013	<20	<1.0	<1.0	2.5	<1.0	<1.0	
9/17/2013	20	<1.0	<1.0	5.7	<1.0	<1.0	
12/6/2013	<20	<1.0	<1.0	3.9	<1.0	<1.0	
MW-6	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<5.5	<5.5	<5.5	<22	NA	NA
	3/11/2005	2.54	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<20	<1.0	<1.0	<4.0	NA	NA
	8/26/2005	<43	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	<43	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	<43	<2.15	<2.15	<8.6	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	7.21	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	5.66	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.68	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	13.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	6.78	1.49
	7/2/2008	4.54	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	4/13/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
8/26/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0	
12/1/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0	

Table 4
Historical Gasoline Oxygenate Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-6 cont.	3/16/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	6/3/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	9/1/2010	<200	<10	<10	<10	<10	<10
	12/2/2010	<330	<17	<17	<17	<17	<17
	3/3/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	5/20/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/8/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/1/2011	NA	NA	NA	NA	NA	NA
	3/2/2012	<83	<4.2	<4.2	<4.2	<4.2	<4.2
	6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	9/20/2012	NA	NA	NA	NA	NA	NA
	12/13/2012	29	<0.71	<0.71	<0.71	<0.71	<0.71
	3/27/2013	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	6/10/2013	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	9/16/2013	FP	FP	FP	FP	FP	FP
	12/5/2013	270	<2.5	<2.5	<2.5	<2.5	<2.5
MW-7	9/21/2004	<10	<0.5	<0.5	1.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<12.5	<2.5	<2.5	<2.5	NA	NA
	6/15/2005	<10	<0.5	<0.5	2.23	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	NA	NA	NA	NA	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.49	<0.5	<0.5	2.58	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	6.01	<0.5	<0.5
	4/15/2008	8.8	<0.5	<0.5	<2.0	<0.5	1.26
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	14	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	11	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	16	<0.5	<0.5
	8/26/2009	<33	<0.5	<0.5	33	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	30	<0.5	<0.5
	3/16/2010	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	20	<0.5	<0.5	7.1	<0.5	<0.5
	9/1/2010	47	<0.5	<0.5	7.2	<0.5	<0.5
	12/2/2010	22	<0.5	<0.5	4.9	<0.5	<0.5
	3/4/2011	14	<0.5	<0.5	4.0	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	2.1	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2011	15	<0.36	<0.40	2.4	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	0.82	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/5/2013	<10	<0.5	<0.5	0.73	<0.5	<0.5	
MW-8	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	NA	NA	NA	NA	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5

Table 4
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	
MW-8 cont.	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
	Well Decommissioned 11/13/2009							
	MW-9	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
12/14/2004		<2.5	<0.5	<0.5	<2.0	NA	NA	
3/11/2005		<2.5	<0.5	<0.5	<2.0	NA	NA	
6/15/2005		<10	<0.5	<0.5	<2.0	NA	NA	
8/26/2005		<10	<0.5	<0.5	<2.0	NA	NA	
11/11/2005		<10	<0.5	<0.5	<2.0	NA	NA	
2/9/2006		<10	<0.5	<0.5	<2.0	NA	NA	
5/9/2006		<10	<0.5	<0.5	<2.0	2.8	<0.5	
8/10/2006		<10	<0.5	<0.5	<2.0	1.83	<0.5	
10/26/2006		<10	<0.5	<0.5	<2.0	3.07	<0.5	
1/25/2007		<2.0	<0.5	<0.5	<2.0	2.92	<0.5	
4/26/2007		<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
7/25/2007		<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
10/23/2007		<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
1/21/2008		<2.0	<0.5	<0.5	<2.0	1.18	<0.5	
4/15/2008		<2.0	<0.5	<0.5	<2.0	<0.5	<0.5	
7/2/2008		<2.0	<0.5	<0.5	<2.0	2.07	<0.5	
10/15/2008		<10	<0.5	<0.5	<0.5	1.5	<0.5	
1/7/2009		<10	<0.5	<0.5	<0.5	1.4	<0.5	
4/13/2009		<10	<0.5	<0.5	<0.5	0.97	<0.5	
8/26/2009	<10	<0.5	<0.5	<0.5	2.6	<0.5		
Well Decommissioned 11/13/2009								
EX-1	12/2/2009	150	<1.3	<1.3	<1.3	<1.3	<1.3	
	3/16/2010	980	<1.3	2.4	27	<1.3	<1.3	
	6/3/2010	570	<1.3	1.9	<1.3	<1.3	<1.3	
	9/1/2010	470	<0.5	1.4	2	<0.5	<0.5	
	12/2/2010	1,300	<2.0	3.6	15	<2.0	<2.0	
	3/3/2011	690	<0.71	2.5	12	<0.71	<0.71	
	5/19/2011	370	<0.71	1.9	13	<0.71	<0.71	
	9/8/2011	32	<0.5	<0.5	0.53	<0.5	<0.5	
	12/1/2011	1,200	<1.6	8.3	6.8	<1.2	<0.86	
	3/2/2012	31	<0.5	<0.5	<0.5	<0.5	<0.5	
	6/6/2012	390	<0.5	2.9	4.8	0.57	<0.5	
	9/20/2012	170	<0.5	1.5	<0.5	<0.5	<0.5	
	12/13/2012	210	<0.5	2.7	5.2	<0.5	<0.5	
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
	6/10/2013	280	<0.5	4.0	1.6	<0.5	<0.5	
	9/16/2013	450	<0.5	2.4	1.9	<0.5	<0.5	
	12/5/2013	230	<0.5	1.7	5.5	<0.5	<0.5	
EX-2	12/2/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1	
	3/16/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0	
	6/3/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0	
	9/1/2010	<50	<2.5	<2.5	<2.5	<2.5	<2.5	
	12/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0	
	3/3/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0	
	5/19/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0	
	9/8/2011	<25	<1.3	<1.3	<1.3	<1.3	<1.3	
	12/1/2011	74	<3.2	<3.5	<2.8	<2.4	<1.7	

Table 4
Historical Gasoline Oxygenate Results
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
EX-2 cont.	3/2/2012	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	6/6/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	9/20/2012	<33	<1.7	<1.7	<1.7	<1.7	<1.7
	12/13/2012	<71	<3.6	<3.6	<3.6	<3.6	<3.6
	3/27/2013	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	6/10/2013	32	<1.0	<1.0	<1.0	<1.0	<1.0
	9/20/2013	<20	<1.0	<1.0	<1.0	1.4	<1.0
	12/5/2013	30	<1.0	<1.0	<1.0	1.2	<1.0
MPE Wells							
MPE-1	8/4/2011	<500	<25	<25	<25	<25	<25
	9/26/2011	<500	<25	<25	600	<25	<25
	12/2/2011	830	<32	<35	750	<24	<17
	3/2/2012	<710	<36	<36	1,200	<36	<36
	6/6/2012	<630	<31	<31	430	<31	<31
	9/20/2012	<1,300	<63	<63	1,200	<63	<63
	12/14/2012	<1,300	<63	<63	940	<63	<63
	3/27/2013	<710	<36	<36	890	<36	<36
	6/10/2013	660	<13	<13	380	<13	<13
	9/17/2013	1,400	<13	<13	<13	<13	<13
	12/6/2013	1,500	<20	<20	30	<20	<20
	MPE-2	8/4/2011	<330	<17	<17	<17	<17
9/26/2011		<330	<17	<17	<17	<17	<17
12/2/2011		<66	<16	<17	<14	<12	<8.6
3/2/2012		<330	<17	<17	<17	<17	<17
6/7/2012		<250	<13	<13	<13	<13	<13
9/21/2012		<250	<13	<13	<13	<13	<13
12/14/2012		<250	<13	<13	<13	<13	<13
3/28/2013		<400	<20	<20	<20	<20	<20
6/11/2013		<250	<13	<13	<13	<13	<13
9/17/2013		<250	<13	<13	<13	<13	<13
12/5/2013		FP	FP	FP	FP	FP	FP
2nd WBZ							
MW-1D	1/3/2008	111	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	12.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/16/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
12/5/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
MW-3D	1/3/2008	37.3	<0.5	3.12	15.3	NA	NA
	1/22/2008	15.6	<0.5	3.1	15.3	<0.5	<0.5
	4/16/2008	17.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	7.45	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	4.7	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	3.4	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	2.2	<0.5	<0.5

Table 4
Historical Gasoline Oxygenate Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3D cont.	3/16/2010	<10	<0.5	<0.5	<0.5	0.65	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	1.8	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	0.93	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	1.0	<0.5
	5/19/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/8/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2011	<1.5	<0.36	<0.40	0.52	<0.28	<0.19
	3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/5/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	MW-4D	1/4/2008	25	<0.5	<0.5	<2.0	NA
1/22/2008		124	<0.5	<0.5	3.32	<0.5	<0.5
4/15/2008		25.7	<0.5	<0.5	<2.0	<0.5	<0.5
7/3/2008		3.38	<0.5	<0.5	<2.0	<0.5	<0.5
10/16/2008		<10	<0.5	<0.5	<0.5	<0.5	<0.5
1/8/2009		<10	<0.5	<0.5	<0.5	<0.5	<0.5
4/14/2009		<10	<0.5	<0.5	<0.5	<0.5	<0.5
8/27/2009		<10	<0.5	<0.5	<0.5	<0.5	<0.5
12/1/2009		<10	<0.5	<0.5	<0.5	<0.5	<0.5
3/16/2010		<10	<0.5	<0.5	<0.5	<0.5	<0.5
6/4/2010		<10	<0.5	<0.5	<0.5	<0.5	<0.5
9/1/2010		<10	<0.5	<0.5	<0.5	<0.5	<0.5
12/3/2010		<10	<0.5	<0.5	<0.5	<0.5	<0.5
3/3/2011		<10	<0.5	<0.5	<0.5	<0.5	<0.5
5/19/2011		<10	<0.5	<0.5	<0.5	<0.5	<0.5
9/8/2011		<10	<0.5	<0.5	<0.5	<0.5	<0.5
12/1/2011		<1.5	<0.36	<0.40	<0.32	<0.28	<0.19
3/2/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
6/6/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
9/20/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/13/2012	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
3/27/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
6/10/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
9/16/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
12/6/2013	<10	<0.5	<0.5	<0.5	<0.5	<0.5	
1573 153 RD	1/3/2008	21	<0.5	<0.5	<2.0	<0.5	<2.0
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
EB-PMP	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PMP2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
ESL		12	NE	NE	NE	0.5	0.05

Notes:
August 8, 2002 was the first time that samples were analyzed for Gasoline Oxygenates
<: Not detected above the laboratory reporting limit.
NA: Not Analyzed. Well MW-8 was inaccessible during the 1Q05 & well MW-7 (1Q06) car was parked over each well.
NE: Not Established
TBA: tert-Butyl Alcohol
DIPE: Isopropyl Ether
ETBE: Ethyl tert-Butyl Ether
TAME: Methyl tert-Amyl Ether
ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);
Table F-1a, Groundwater Screening Levels (groundwater is a current or potential drinking water resource)
MW-8 and MW-9 were decommissioned November 13, 2009
FP: Groundwater not sampled due to presence of free-product in MW-6

Table 5
Crawl Space Sampling Results - January 2014
 15101 Freedom Ave
 San Leandro, California

	TPH-g µg/m ³	Benzene µg/m ³	Toluene µg/m ³	Ethylbenzene µg/m ³	Total Xylenes µg/m ³	Naphthalene µg/m ³	Oxygen %	Carbon dioxide %	Nitrogen %
SV-1	90 J	2.7	7.6	<3.6	5.3	<18	19	<0.17	69
ESL (Soil Gas)-Residential	300,000	42	160,000	490	52,000	36	-	-	-
ESL (Soil Gas)-Commercial	2,500,000	420	1,300,000	4,900	440,000	360	-	-	-

Note

ESLs Environmental Screening Levels per CRWQCB SFBay Region, Interim Final December 2013, Table E-2 (Soil Gas Screening levels for evaluation of Potential Vapor

Intrusion Concerns

J Estimated Value

Table 6
Cumulative Mass of Petroleum Hydrocarbons Removed from
the Groundwater Since Installation of the Treatment System

15101 Freedom Ave, San Leandro, CA

Date	Volume (gallons)	Influent Concentration (µg/L)					Mass removed (pounds)				
		TPH-g	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-g	Benzene	Toluene	Ethyl- benzene	Total Xylenes
2009											
9-Dec-2009	0	Installation of GWETS, began discharging treated groundwater to site sewer main									
2010											
18-Jan-2010	215,453	1,900	79	32.00	2.4	260	3.41	0.14	0.06	0.00	0.47
19-Apr-2010	621,180	2,100	75	28	56	332	10.50	0.40	0.15	0.19	1.59
19-Jul-2010	910,652	56 ^Y	<0.5	<0.5	<0.5	<0.5	10.64	0.40	0.15	0.19	1.59
26-Oct-2010	1,013,700	2,600	200	25	68	405	12.87	0.57	0.17	0.25	1.94
2011											
11-Jan-2011	1,179,075	1,700	80	19	50	295	15.21	0.68	0.20	0.32	2.34
11-Apr-2011	1,364,272	1,200	41	3.3	23	185	17.06	0.75	0.20	0.36	2.63
28-Jul-2011	1,573,295	540	21	2.8	5.4	49	18.00	0.78	0.21	0.37	2.71
27-Oct-2011	1,642,277	<50	1.50	<0.5	<0.5	2.9	18.00	0.78	0.21	0.37	2.71
2012											
19-Jan-2012	1,715,163	110 ^Y	<0.5	<0.5	<0.5	<0.5	18.07	0.78	0.21	0.37	2.71
17-Apr-2012	1,876,439	1,100	60	6.8	24	161	19.54	0.87	0.22	0.40	2.93
12-Jul-2012	1,943,456	320	30	1.6	15	34	19.72	0.88	0.22	0.41	2.95
23-Oct-2012	1,989,022	1,400 ^Y	130	12	42	153	20.25	0.93	0.22	0.42	3.01
2013											
7-Jan-2013	2,099,002	1,500	66	9.8	37	228	21.63	0.99	0.23	0.46	3.22
12-Apr-2013	2,198,793	1,600	110	3.8	64	131	22.96	1.08	0.24	0.51	3.32
5-Jul-2013	2,282,444	680	71	1.8	22	33.9	23.43	1.13	0.24	0.52	3.35
28-Oct-2013	2,551,538	4,900	88	49	150	583	34.41	1.33	0.35	0.86	4.65
2014											
9-Jan-2014	2,884,292	590	17	4.1	9.1	68	36.04	1.38	0.36	0.89	4.84

Notes:

< : Below laboratory-reporting limit

Y : sample exhibits chromatographic pattern which does not resemble standard

Table 7
Updated Site Conceptual Model
15101 Freedom Avenue, San Leandro

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
1	Geology and Hydrogeology	Geology	<p>The Site is located in the San Leandro Valley at an elevation of approximately 54 feet above mean sea level with a moderate topographic gradient toward the south. The San Leandro Valley is within the San Francisco Bay – Santa Clara Valley depression, a northwest-to-southeast trending basin bounded on the east and west by mountains. The basin is characterized by Quaternary alluvium, chiefly fan and terrace deposits that are generally several hundred feet thick and flat lying.</p> <p>There is no water body within a half-mile radius of the Site. The nearest water body, Estudillo Canal, is located about 0.6 miles southwest of the Site. The next closest water body is San Leandro Creek, located approximately 1.5 miles south of the Site. The Site is approximately four miles north of San Francisco Bay. East of the Site are the northwest-trending Hayward Fault Zone, the San Leandro Hills, and an assemblage of ultramafic metamorphic and volcanic rocks (California Division of Mines and Geology, 1990).</p> <p>The United States Geological Survey (USGS) mapped the Site on Late Pleistocene age (10,000 to 70,000 years old) alluvium consisting of irregularly interbedded clay, silt, sand and gravel. Due to the age of this alluvium, these stream-deposited sediments are typically more consolidated than alluvial deposits of Holocene age. In developed urban areas such as the Bay Area, earthwork construction often involves the emplacement of artificial fill derived from nearby cuts or quarries. Artificial fill is emplaced over native earth materials to provide level building pads and base rock for roadways.</p>		
		Hydrogeology	<p>The Site is located in the East Bay Groundwater Basin of the San Francisco Bay hydrologic study area. Water-bearing formations include the Santa Clara Formation of Plio-Pleistocene age and late Pleistocene, and recent sediments that have been grouped as Late Quaternary alluvium. Non-water-bearing units underlie the water-bearing formations and are exposed along the surface in the Diablo Range east of the Site and Coyote Hills, near Newark, which is south of the Site.</p> <p>The results of the CPT/MIP study and borehole logs of the existing groundwater monitoring wells and earlier soil borings were used to construct five geologic cross-sections. Figure 3 shows the locations of geologic cross-section A-A', B-B', C-C', D-D', and E-E'. As shown in the cross-sections (Figures 4 through 8), an unconsolidated sequence of permeable and relatively impermeable sediments underlies the Site and adjacent areas.</p>		

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
			<p>Two main water-bearing zones were encountered within the depths explored by the CPT/MIP and are designated the First and Second water-bearing zones (WBZs). Based on the CPT data and borehole logs of the groundwater monitoring wells and soil borings, both WBZs appear to be laterally continuous across the Site and hydraulically downgradient of the Site, and are separated by a laterally continuous non water-bearing unit.</p> <p>From approximately 15 to 30 feet bgs the First WBZ occurs as an approximate 10- to 15-foot thick interbedded sequence of sand, silty sand to sandy silt, cemented sand, and silt to clayey silt. As illustrated on cross-section A-A' and B-B' (Figures 4 and 5), the top of the First WBZ is inferred at greater than 15 feet bgs but less than 30 feet bgs beneath the Site. In addition, as illustrated on cross-section C-C' (Figure 6), the top of the First WBZ is inferred to be shallower (approximately 12 feet bgs) hydraulically downgradient of the Site from MW-5 to DP-4, but increases in depth beyond CPT/MIP-11 to TWB-4 (approximately 20 feet bgs). Also, the thickness of the First WBZ is inferred to increase to approximately 30 feet beyond CPT/MIP-7 to CPT/MIP-6 and at TWB-1, DP-2, DP-4, and DP-5, and is inferred to decrease to approximately 8 feet to 2 feet beyond DP-5 to CPT/MIP-7 and at TWB-4, respectively. The First WBZ is overlain by CPT-interpreted clay and clayey silt with thin interbeds of sand, silty sand, and silty clay to clay, approximately 1 to 2 feet thick in the upper portion of the sequence (< 10 feet bgs) beneath the Site, with massive clay and clayey silt to the top of the First WBZ (12 to 22 feet bgs). Based on the CPT and monitoring well and soil boring borehole log data, this layer seems to be an unsaturated layer. As illustrated on cross-sections DD' and EE' (Figures 7 and 8), further downgradient of the site, First WBZ still extends from approximately 15 to 30 feet bgs as 4 to 10-foot thick interbedded sequence of sand, clayey silt to silty clay, sandy silt to clayey silt, clay, silty clay to clay, and very stiff fine grained.</p> <p>From approximately 32 to 67 feet bgs, the Second WBZ occurs as an approximately 5 to at least 35-foot thick interbedded sequence of the same lithologic type as seen in the First WBZ, silty clay to clay, clay, clayey silt to silty clay, silty sand to sandy silt, sand, very stiff grained, sand to silty sand, gravelly and sand to sand. The minimum thickness observed was determined at CPT/MIP-1 as illustrated on cross-section B-B' (Figure 5), and the maximum thickness observed (35 feet) was determined at CPT/MIP-3 as illustrated on cross-section A-A' (Figure 4). As illustrated on cross-sections C-C', D-D', and E-E' (Figures 6 through 8), hydraulically downgradient of the Site, the top of the Second WBZ is inferred to occur at approximately 40 feet bgs, and is inferred to be shallower farther south as can be seen at TWB-4 (approximately 32 feet bgs).</p> <p>Based on the groundwater elevations reported during Fourth Quarter 2013, groundwater within the Second WBZ beneath the Site flows southwesterly at a</p>		

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
			gradient of 0.004 feet/feet.		
2	Surface Water Bodies		<p>Based on USGS topographic maps, and maps obtained from the Alameda County Public Works Department, it was determined that no water body exists within a half-mile radius of the Site. There is record of a former buried or drained creek (CIRCA 1950), that ran parallel to the Site, approximately 200 feet east between Fairmont Drive and Oriole Avenue. It appears that during the urbanization of the area the historical creek was filled, and to reduce the risk of flood damage an engineered Canal ("Estudillo Canal") was constructed. Estudillo Canal is a series of storm drains and canals draining the southern San Leandro Area. It runs below ground as a storm drain conduit along Freedom Avenue adjacent to the Site, then parallel to Oriole Avenue (between Oriole Avenue and Fairmont Drive). Approximately 800 feet southeast of the Site it becomes an above-ground concrete culvert that runs through the city of San Leandro and drains into the ocean. The next closest water body is San Leandro Creek, located approximately 1.5 miles south of the Site. These water bodies are located considerably more than 2,000 feet from the Site, and are not considered probable sensitive receptors.</p>		
3	Nearby Wells		<p>SOMA conducted a sensitive receptor survey in September and October 2003 that included locating water supply wells within a 2,000-foot radius of the Site. Well location information was obtained from the California Department of Water Resources (DWR).</p> <p>Based on DWR records, 10 wells were located within 2,000 feet of the Site. Three are located hydraulically downgradient of the Site, including two wells of unknown use and one irrigation well. Sensitive receptor survey results indicated that the off-site groundwater plume could impact two private wells, one of which is reportedly located at 1573 153rd Street, and the other at an unidentified address along Oriole Avenue.</p> <p>During the investigation of January 2008, a groundwater sample was obtained from residential well located at 1573 153rd Avenue. At that time TBA was detected in this well at 21 µg/L. Subsequently, groundwater samples were collected from this well during July 2008 and October 2008 with results showing that all contaminants of concern (including TBA) were below laboratory-reporting limits. SOMA also contacted the owner of this well early this year (April 2013) in attempt of collecting another groundwater sample. In response, the well owner informed SOMA that the pump in his well is broken and that there is no way to extract groundwater water from the well.</p> <p>Because well survey findings of 2004 did not indicate a specific address for the private well located in the area of Oriole Avenue (around the area of the reported</p>		

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
			<p>well location), written notifications were distributed to all residents on the potentially affected avenue. However, none responded to the notification. In attempts to locate the historical irrigation well reportedly present in the area, SOMA performed a door-to-door survey of Oriole Avenue residents on January 4, 2008. However, of the 23 residences visited, none could provide evidence of existing wells in the vicinity. SOMA acquired 13 responses to its inquiry. Of the 13 respondents, 12 reported no wells or no knowledge of wells in the area. One respondent, residing at 1612 Oriole Avenue, disclosed knowledge of a 4-inch metal casing on the parcel, set in existing pavement with no visible equipment attached. No further survey or sampling has been performed to date.</p>		
4	Preferential Flow Pathway		<p>To evaluate the potential preferential flow pathways at the Site and in the vicinity, recent revised records documenting locations and relative depths of utility line trenches were obtained from ORO Loma Sanitary District (OLSD). OLSD provided a utility map showing a sewer line at a depth of approximately 5.0 feet bgs located approximately 20 feet southeast of the Site along 152nd Avenue with a gradient to the southwest. The OLSD map also illustrated a sewer main at a depth of approximately 10.8 feet bgs located approximately 60 feet east of the Site along Fairmont Avenue, with a gradient to the south.</p> <p>Groundwater in the on-site First WBZ wells occurs at depths ranging from 17 to 24 feet bgs. Thus, the sewer line along 152nd Avenue and the sewer main along Fairmont Drive are situated above the minimum depth of groundwater in the First WBZ and hence, trenches carrying these sewer utilities are not submerged, and are not considered a preferential pathway for the migration of dissolved-phase hydrocarbons south and southeast of the Site. Figure 2 shows locations and depths of utility lines on the site map.</p>		
5	Site Zoning		<p>The Site is located in the unincorporated area in the City of San Leandro. According to the Alameda County Planning Department, the Site is zoned "C1," a retail business district with the service station as a conditional use. The surrounding area downgradient of the Site consists of single- and multi-family residential properties as far as East 14th Street</p>		
6	Contaminants of Concern		<p>Identified site-specific COCs include total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX); methyl tertiary-butyl ether (MtBE); tertiary-butyl alcohol (TBA) and other gasoline oxygenates, ethanol and lead scavengers. COCs have been detected in soil and groundwater beneath the site, including recently at concentrations that exceed CRWQCB Environmental Screening Limits (ESLs). Free product has been observed sporadically in groundwater in the off-site well MW-6 and recently in on-site extraction well MPE-2.</p>		

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
7	Source Removal		<p>In May 1999, three 10,000-gallon USTs, approximately 250 feet of product piping, and six product dispensers were removed from the site (Geo-Logic, 1999). Soil samples were collected for laboratory analyses from the removal areas. Analysis results indicated the need for removal of additional soil from product piping areas and the UST removal excavation. Concentrations of TPH-g, BTEX and MtBE in soil samples from the UST removal excavation were elevated relative to those from the product piping and dispenser areas, where concentrations were relatively low. Following over-excavation, three soil samples were collected for laboratory analysis from the enlarged UST removal excavation ranging in depth from 16.5 to 24.5 feet bgs, and one from the product delivery piping at 5 feet bgs. Laboratory analysis detected elevated concentrations in soil samples at 24.5 feet bgs from the UST removal excavation relative to those at 16.5 and 19.5 feet bgs. Low concentrations of petroleum hydrocarbons were detected in the soil sample from the product delivery piping.</p> <p>In July 1999, one 14,000-gallon UST divided into a 6,000-gallon unit for diesel and an 8,000-gallon unit for gasoline, and one 20,000-gallon UST for gasoline were installed at the site (Geo-Logic, 1999).</p> <p>On January 3, 2000, ACHCS notified the property owner, Mr. Pazdel, of an unauthorized release that had occurred during removal of old USTs in May 1999</p>		
8	Extent of Contamination in Soil		<p>Fuel USTs and associated piping and fuel dispensers were removed from the central portion of the Site in 1999 under regulatory oversight. Petroleum-impacted soils were removed during over-excavation and new UST systems were installed in the old UST pit during 1999. A 2001 subsurface investigation evaluated potential petroleum hydrocarbon contamination discovered during the removal and upgrade of USTs at the Site. Five hydropunches (SB-1 through SB-5) were advanced in proximity to the UST systems using the direct-push method (Figure 2). Results of that investigation indicated that petroleum-impacted soils are generally encountered below a 19-foot depth interval and are predominantly present within the capillary fringe, or below saturated zone. The maximum concentrations of TPH-g and BTEX in soil samples collected between 19 and 25.5 feet bgs were 470 mg/kg, 2.6 mg/kg, 16 mg/kg, 12 mg/kg, and 73 mg/kg, respectively. MtBE was not detected in any soil samples at the laboratory reporting limit of 0.005 mg/kg. Results of groundwater monitoring events indicate that depth to groundwater in on-site monitoring wells occurs between 17.2 and 23 feet bgs. Therefore, it can be concluded that the vadose zone beneath the Site is not significantly impacted by petroleum hydrocarbons. At greater depths below water table, saturated sediments have been impacted upon contact with fuel-impacted groundwater.</p> <p>Similar findings were reported by SOMA in 2003, concerning the depth of</p>		

No.	CSM Element	CSM Sub-Element	Description	Data Gap	How to Address
			<p>petroleum-impacted soils/saturated sediments located south-southeast and downgradient of the Site at 19-25 feet bgs. As such, it appears that the thickness of smear zone (below water table) extends at least 6 feet below water table.</p> <p>Areas of significant concentrations below water table in form of smear zone are located primarily around MW-3, MPE-1, and MW-5 at depths of 21-25 feet bgs in close proximity to the former UST pit, where historically no soil excavation has occurred.</p> <p>Results of off-site investigation of July 2011 and current investigation (January 2014) indicate that contamination above ESLs exists in DP-1 at 20 feet bgs, DP-4 (located in the sidewalk area) at 24 feet bgs and immediately downgradient of DP-4 in MIP-9 at 21 feet, which is approximately 190 feet downgradient of the site.</p>		
9	Extent of Contamination in Groundwater		<p>Based on recent groundwater monitoring event (December 2013) and recent site investigations (July 2011, January 2014):</p> <p>First WBZ: In general, dissolved-phase hydrocarbon concentrations are elevated in on-site groundwater monitoring wells MPE-1, MPE-2, MW-3 and off-site well MW-6 relative to other groundwater monitoring wells. The lateral extent indicates that impact to the First WBZ occurs beneath the greater part of the footprint of the Site, including the area of the UST cluster and product dispensers, and continues to the south beneath the residence to immediate south of the Site, continuing farther southeast and east beneath the intersection of Fairmont Drive, 152nd Avenue and Liberty Street, and beyond on Fairmont Drive (MIP-16). MtBE plume seems to have travelled farther south along Fairmont Drive based on detections in CPT/MIP-17.</p> <p>Second WBZ: Groundwater monitoring and grab groundwater sampling results indicate that impact to the Second WBZ occurs off-site downgradient of the site along 152nd Avenue based on TPH-g and 1,2-DCA concentrations (Figure 13) and along Fairmont avenue to the south of intersection of Liberty and Fairmont Drive.</p> <p>Therefore, Groundwater contamination has been laterally and vertically delineated within the First and Second WBZs.</p>		
10	Vapor Intrusion		<p>A soil vapor sample was collected from the crawl space of the residence adjacent to the southern boundary of the site. TPH-g, BTEX, and naphthalene were detected at very low concentrations, significantly below the soil gas screening levels as established by the Regional water Quality Control Board-SF Bay region (Interim Final December 2013). Therefore, risk to human health due to vapor intrusion does not exist at this time.</p>		

APPENDIX A

Previous Activities

In May 1999, three 10,000-gallon USTs, approximately 250 feet of product piping, and six product dispensers were removed from the Site (Geo-Logic, 1999). A total of 21 soil samples were collected for laboratory analyses from the removal areas, including seven from the east and west sides of the UST removal excavation, at depths ranging from 12 to 14 feet below ground surface (bgs), and 14 from beneath the fuel dispensers and product delivery piping ranging in depth from 2.5 to 3.5 feet bgs. Samples were analyzed for the following: total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, xylenes (BTEX); and methyl tertiary-butyl ether (MtBE). Analysis results indicated the need for removal of additional soil from product piping areas and the UST removal excavation. Concentrations of TPH-g, BTEX and MtBE in soil samples from the UST removal excavation were elevated relative to those from the product piping and dispenser areas, where concentrations were relatively low. Following overexcavation, three soil samples were collected for laboratory analysis from the enlarged UST removal excavation ranging in depth from 16.5 to 24.5 feet bgs, and one from the product delivery piping at 5 feet bgs. Laboratory analysis detected elevated concentrations in soil samples at 24.5 feet bgs from the UST removal excavation relative to those at 16.5 and 19.5 feet bgs. Low concentrations of petroleum hydrocarbons were detected in the soil sample from the product delivery piping.

In July 1999, one 14,000-gallon UST divided into a 6,000-gallon unit for diesel and an 8,000-gallon unit for gasoline, and one 20,000-gallon UST for gasoline were installed at the site (Geo-Logic, 1999).

On January 3, 2000, ACHCS notified the property owner, Mr. Pazdel, of an unauthorized release that had occurred during removal of old USTs in May 1999. ACHCS requested a preliminary site assessment.

On July 5, 2001, a soil and groundwater investigation was conducted at the Site to delineate the extent of soil and groundwater impact discovered during removal of the USTs, product delivery piping and product dispensers in May 1999 (CSS Environmental Services, 2001). Five soil borings, SB-1 through SB-5, were advanced using direct-push methods, to a maximum depth of 31 feet bgs. Groundwater was encountered in borings at depths ranging from 29 to 30 feet bgs, and stabilized at depths ranging from 17 to 20 feet bgs. Ten soil samples were collected from borings for laboratory analysis of TPH-g, BTEX and MtBE. Analytical results revealed elevated concentrations between 19 and 25.5 feet bgs. Maximum concentrations of TPH-g and BTEX in samples were 470,000 µg/kg, 2,600 µg/kg, 16,000 µg/kg, 12,000 µg/kg, and 73,000 µg/kg, respectively. MtBE was not detected in any soil samples. Grab groundwater samples were collected from each boring for laboratory analysis of TPH-g, BTEX and MtBE. Maximum concentrations of TPH-g and benzene in boring samples were 83,000 µg/L and 19,000 µg/L, respectively. MtBE was detected in four of five grab groundwater samples, at a maximum concentration of 87,000 µg/L.

In April 2002, groundwater monitoring wells MW-1 through MW-5 were installed on the Site to a total depth of 30 feet bgs, and completed with well screens installed between 15 and 30 feet bgs. The wells were installed to evaluate the groundwater flow gradient and the extent of dissolved-phase fuel hydrocarbons in groundwater (SOMA, 2002). Groundwater was first encountered at depths ranging from approximately 25 to 29 feet bgs, and stabilized at depths ranging from 21 to 23 feet bgs. Five soil samples were collected from borings for laboratory analyses of TPH-g, BTEX and MtBE. Results revealed elevated concentrations of TPH-g and BTEX between 21 and 26 feet bgs, coincident with the depth at which groundwater was first encountered in the boreholes. No MtBE was detected in soil samples. Groundwater samples were initially collected from each monitoring well during Second Quarter 2002 (May 2002) for laboratory analyses of TPH-g, BTEX and MtBE (SOMA, 2002a). Maximum concentrations of TPH-g, benzene and MtBE in groundwater samples were 44,000 µg/L, 6,000 µg/L and 12,000 µg/L, respectively. Groundwater was determined to flow south across the Site. Elevated levels of dissolved-phase hydrocarbons in the farthest downgradient monitoring well indicated off-site migration.

Between August and October 2003, a soil and groundwater investigation was conducted to evaluate off-site extent of dissolved-phase hydrocarbon migration with groundwater (SOMA, 2003). The investigation included a sensitive receptor survey to locate water supply wells and/or water bodies within a 2,000-foot radius of the Site, and a conduit study to identify underground utilities adjacent to the Site beneath Freedom Avenue, Fairmont Drive and 153rd Avenue. Soil borings TWB-1 through TWB-6 were advanced to depths ranging from 30 to 44 feet bgs, at locations ranging from 125 to 750 feet hydraulically downgradient from the Site. Fourteen soil samples were collected at depths ranging from 16 to 39 feet bgs for laboratory analysis of TPH-g, BTEX, MtBE and 1,2-dichloroethene (1,2-DCE). Results revealed soil impact off-site to a maximum distance of 265 feet hydraulically downgradient of the Site, at depths ranging from 18 to 31.5 feet bgs. Elevated concentrations were detected at depths ranging from 21.5 to 24.5 feet bgs, approximately 125 feet hydraulically downgradient from the Site. Concentrations of benzene, MtBE and 1,2 DCE were not detected in soil samples. Grab groundwater samples were collected from each boring for laboratory analysis of TPH-g, BTEX, MtBE and 1,2-dichloroethane (1,2-DCA). Maximum concentrations of TPH-g and benzene were 410,000 µg/L and 2,200 µg/L, respectively, detected in a boring 125 feet hydraulically downgradient of the Site. Maximum concentration of MtBE was 34 µg/L, detected in a boring 265 feet hydraulically downgradient of the Site. The investigation resulted in preliminary identification of two water-bearing zones beneath the Site and proximity. The sensitive receptor survey identified 10 wells within 2,000 feet of the Site. Three are located hydraulically downgradient of the Site: one irrigation well and two wells of unknown use. The remaining wells are either hydraulically upgradient or cross-gradient of the Site. No water body was identified within a 0.5-mile distance from the Site. The conduit study revealed two sewer lines beneath Fairmont

Drive and 153rd Avenue; it was determined that neither was submerged by groundwater.

In September 2004, an additional soil and groundwater investigation was conducted to further evaluate the extent of dissolved-phase hydrocarbon migration with groundwater off-site (SOMA 2004). Groundwater monitoring wells MW-6 thru MW-9 were installed downgradient from the Site to total depths ranging from 21 to 33 feet bgs, and completed with well screens ranging from 4 to 15 feet long installed at the base of each well. Groundwater was first encountered at depths ranging from approximately 15 to 20 feet bgs, and stabilized at depths ranging from 12 to 17 feet bgs. Four soil samples were collected from one monitoring well borehole. Soil samples were not collected from other boreholes because of extensive and unexpected lateral lithologic changes encountered between the well boreholes during drilling, necessitating continuous coring that precluded soil sample collection. Collected samples were analyzed for TPH-g and BTEX; neither was detected.

During this investigation, an attempt was made to collect a groundwater sample from an irrigation well hydraulically downgradient from the Site, identified by the sensitive receptor survey conducted between August and October 2003. The irrigation well had been unused for some time and, subsequently, no groundwater sample could be collected.

An attempt was made to locate another well of unknown use hydraulically downgradient from the Site, also identified by the sensitive receptor survey. This well could not be located despite canvassing of the surrounding residential neighborhood with written requests for information. Based on results of this investigation and the previous investigation conducted between August and October 2003, one water-bearing zone was identified to consist of discontinuous water-bearing layers and stringers separated by discontinuous clay lenses of varying thickness. Additionally, a preferential flow pathway study was proposed consisting of a possible buried stream channel trending north to south beneath the eastern portion of the Site, and extending off-site to the south, beneath the intersection of 153rd Avenue, Fairmont Drive and Liberty Avenue, which is hydraulically downgradient from the Site.

On November 21, 2005, ACHCS requested that the property owner submit a workplan for a soil and water investigation by January 21, 2006. It was submitted on December 28, 2005 (SOMA, 2005) and proposed installation of eight cone penetrometer test (CPT), membrane interface probe (MIP) borings to refine hydrogeologic conditions using CPT technology on- and off-site. The purpose of this investigation was to define the horizontal and vertical extent of the soil and groundwater impact on- and off-site using MIP technology, and to collect soil and groundwater samples for laboratory analyses to support MIP findings.

Based on a telephone conversation between SOMA and ACHCS, an addendum to SOMA's December 2005 workplan was prepared and submitted on March 3, 2006. The workplan provided further clarification for advancing the CPT/MIP as requested by ACHCS.

On April 10, 2006, SOMA oversaw drilling of CPT/MIP boreholes. Fisch Environmental, SOMA's subcontractor, used a Geoprobe 6600. Because of unforeseen subsurface drilling conditions, and the fact that Fisch's drilling rig was not strong enough to drill through the hard subsurface materials, drilling could not advance beyond 35 feet bgs in any of the CPT/MIP locations despite three days effort. An ACHCS representative was present during this operation. On April 26, using a hollow stem auger, a CPT calibration borehole was drilled to 47 feet bgs. Because CPT/MIP boreholes could not be advanced to targeted depths, Gregg Drilling was selected to drill CPT/MIP boreholes at a later date, and Fisch's compensation was to be appropriately reduced.

In a letter dated May 29, 2006, ACHCS reduced the quantity of on-site CPT/MIP borings from six to five, altered some boring locations, adjusted depths at which to collect groundwater samples, and requested development of a site conceptual model (SCM) and corrective action plan (CAP) along with an interim remediation and migration control evaluation. ACHCS established a November 30, 2006 deadline for report submittal.

On September 7, 2006, SOMA resumed the field investigation. To characterize site lithology and hydrogeology, and evaluate lateral and vertical distribution of soil and groundwater impact on- and off-site, SOMA supervised advancement of eight CPT/MIP borings by Gregg, using a 25-ton CPT rig. The MIP portion of the study was performed by Fisch utilizing an MIP probe attached to Gregg's CPT probe. After completion of the CPT/MIP program, eight borings were advanced using direct-push drilling methods, in the immediate proximity of the CPT/MIP borings. These borings were advanced to collect soil and groundwater samples for laboratory analyses to support MIP findings.

Investigation results were presented by SOMA in "Additional Soil and Groundwater Investigation Report and Initial Conceptual Site Model, Texaco Gasoline Service Station, 15101 Freedom Avenue, San Leandro, California," dated November 27, 2006. The report also included an interim remediation and migration control evaluation.

In summary, the report described two main water-bearing zones designated as the First and Second water-bearing zones (WBZs). Both WBZs appear to be laterally continuous across the Site and hydraulically downgradient of the Site, and are separated by a laterally continuous aquitard. Moderately weathered fuel hydrocarbons are adsorbed to soil or dissolved in groundwater within the First and Second WBZs. The source area in the First WBZ appears to be in proximity to the location of the former USTs and the existing fuel dispensers in both the

north and southeast portions of the Site. A source area for the Second WBZ is indeterminate because limited data for the Second WBZ was generated by the investigation. The Site is located in an area of primarily residential properties with a commercial property to the east. Population/receptors exposed to fuel hydrocarbons in soil and groundwater of the First WBZ on- and off-site include current and future on-site workers and current off-site commercial workers and residents. Sources are fuel hydrocarbons adsorbed to soil, and dissolved-phase hydrocarbons in groundwater, of the First WBZ. Exposure pathways for on-site receptors are inhalation of volatile emissions from impacted soil and groundwater of the First WBZ. The only exposure pathway for off-site residents appears to be incidental ingestion of groundwater from the First and Second WBZs. The soil interim remediation alternatives evaluated included soil excavation, soil vapor extraction (SVE), and multi-phase extraction (MPE). Groundwater interim remediation alternatives included groundwater extraction, ozone sparging and hydrogen peroxide injection.

ACHCS correspondence dated March 14, 2007 directed that a workplan be prepared to address ACHCS comments contained therein and SOMA's recommendations in the November 27, 2006 report.

A workplan detailing proposed monitoring well installation, soil gas survey and remediation feasibility study was submitted to ACHCS on April 11, 2007 and approved in ACHCS correspondence dated October 18, 2007.

SOMA submitted "Additional Soil and Groundwater Investigation for Remedial Investigation and Feasibility Study" on March 14, 2008. ACHCS comments included in correspondence dated April 25, 2008 were addressed by SOMA's correspondence dated June 9, 2008.

In December 2007 SOMA installed three groundwater monitoring wells within the Second WBZ (MW-1D, MW-2D, and MW-3D) to approximately 60 feet bgs. A soil vapor study was conducted utilizing four soil gas sampling probes (SGS-1 through SGS-4, advanced to 5 feet bgs). Based on results of the soil gas sampling, concentrations of COCs in soil gas at the Site are not considered a significant risk to human health.

In March 2009, ACHCS approved SOMA's CAP and initiated a public comment period for affected stakeholders to comment on SOMA's remedial action plan. On April 27, 2009, SOMA installed extraction wells MPE-1 and MPE-2 onsite. In their May 2009 correspondence, ACHCS approved SOMA's recommendation to decommission MW-8 and MW-9, off-site wells that have consistently demonstrated COCs below ESLs and laboratory detection limits. November 2009, SOMA installed EX-1 and EX-2 off-site, within the downgradient plume and installed a groundwater extraction and treatment system at the Site.

Quarterly and/or Semi-Annual groundwater monitoring/sampling has been regularly conducted at the Site since Second Quarter 2002. Currently there are 14 groundwater monitoring wells, ten on-site and four off-site.

SOMA conducted MPE pilot testing between November 13 and 16, 2007. An estimated VOC mass of 106 lbs was removed during testing, at a mass removal rate of 35 lbs/day over 72 hours. Several week-long and extended MPE events have been conducted at the Site with a total of 2,737 lbs of VOCs being removed as of November 2013.

The groundwater extraction system was initiated on December 9, 2009 and has removed and treated 2,960,274 gallons of groundwater as of February 25, 2014 and approximately 43.51 lbs of hydrocarbons.

In July 20 and 21, 2011, SOMA advanced five soil borings in the vicinity of MW-6 and EX-2 within the First WBZ. TPH-g was detected above environmental screening levels (ESL) published by SB Bay Region RWQCB in DP-4 (located in the sidewalk area) at 24 feet bgs (140 mg/kg). TPH-g in all other soil samples was either below the laboratory-reporting limit or below ESL (100 mg/kg). Toluene was the only other contaminant of concern (COC), and was detected above ESL (2.9 mg/kg) in DP-1 at 20 feet bgs (2.94 mg/kg), and in DP-4 at 24 feet bgs (6.79 mg/kg). TPH-g in grab groundwater samples from advanced soil borings ranged from 1,500 µg/L (DP-3) to 84,000 µg/L (DP-1). Maximum benzene concentration was detected in DP-5 at 290 µg/L; Maximum MtBE and TBA were detected in DP-3 at 150 µg/L and 40 µg/L, respectively, and were below laboratory-detection limits in the other borings.

Based on ACEH directive dated April 22, 2013, SOMA submitted a data gaps workplan along with an updated site conceptual model on July 22, 2013 and an addendum was submitted on October 17, 2013. ACEH approved the workplan on October 30, 2013.

APPENDIX B

Permits and Approved Traffic Plans

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 11/19/2013 By jamesy

Permit Numbers: W2013-0950
Permits Valid from 01/08/2014 to 01/24/2014

Application Id: 1384459215998
Site Location: 15101 Freedom Avenue
Project Start Date: 01/08/2014
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: San Leandro

Completion Date: 01/24/2014

Applicant: SOMA Environmental Engineering, Inc -

Phone: 925-734-6400

Mansour Sepehr
6620 Owens Drive, Suite A, Pleasanton, CA 94588

Property Owner:

Farrokh Hosseinyoun
95 Belvedere St., Suite 1, San Rafael, CA 94901

Phone: 415-458-8600

Client:

Mohammad Pazdel
1770 Pistacia Ct, Fairfield, CA 94533

Phone: --

Contact:

Lizzie Hightower

Phone: 925-734-6400
Cell: 925-330-5235

Receipt Number: WR2013-0441 Total Due: \$265.00
Payer Name : Mansour Sepehr Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 23 Boreholes
Driller: Fisch Drilling - Lic #: 683865 - Method: DPcpt

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2013-0950	11/19/2013	04/08/2014	23	3.00 in.	60.00 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.
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.

Alameda County Public Works Agency - Water Resources Well Permit

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
 6. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.
 7. 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.
 8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.
 9. 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.
-

Work Order Number:* 88001
*This WO is ___ / is not open for charges.

Permit Number: 2134D13059
Permit Issuance Date: 12-20-13
Permit Expiration Date: 12-20-14

**COUNTY OF ALAMEDA PUBLIC WORKS AGENCY
ROADWAY ENCROACHMENT PERMIT**

This Permit is issued in accordance with Chapter 12.08 of the Alameda County General Ordinance Code

Name & Address of Property Owner:
Mohammad Pázdal
1770 Pistacia Ct.
Fairfield, CA 94533

Job Site Address:
15101 Freedom Avenue, San Leandro, CA

Phone Number:

(This statement to be completed by the Agency)
This permit is issued to the owner / contractor ;
if "owner" is checked, he/she is / is not exempt
from the requirement that work in the roadway be
performed by a licensed contractor.

Name & Address of Contractor:
SOMA Environmental Engineering, Inc.
6520 Owens Drive, Suite A
Pleasanton, CA 94588
Phone Number: 925-734-6400

The Applicant intends to perform the following work scope:

Advance 11 offsite soil and groundwater borings to a depth of approximately
50 feet bgs. (Scope of work and figure attached).

Licensed Contractor Declaration:

I hereby affirm, under penalty of perjury, that I hold the
following contractor's license, which is in full force and
effect, under the applicable provisions of the State
Business and Professions Code.
License Class and No. C-57, A 689865
Contractor's Signature: [Signature]

Worker's Compensation Insurance Declaration:

I hereby affirm, under penalty of perjury, that I will, during
the performance of any and all work authorized by this
permit, satisfy the requirements of the State Labor Code
with regard to Worker's Compensation Insurance, as
declared below:
I will maintain a certificate of consent to self-insure.
 I will maintain the following insurance policy:
Carrier's Name and Policy No.:
State Comp. Ins. 9066433-13
I will not employ any person in any manner so as to become
subject to the worker's compensation laws of the State.
Owner's/Contractor's Signature: [Signature]

All work and/or access shall be performed in accordance with the requirements of Chapter 12.08 and,
unless otherwise specified below, shall be fully compliant with each of the terms and conditions of the
attached General Provisions:

STEVE MILLER

CALL THIS NUMBER FOR INSPECTIONS: 510 670 3517

Bond Information:
[Signature]
BY: [Signature] Alameda County

Insp. Fee ___ or Deposit ___:
\$ 500
Work Completed (Date): _____
Inspector: _____

I certify that the information that I have entered into this permit application is correct, and I agree to comply with all of the
terms and conditions and other requirements of the issued Permit.
[Signature] Date: 12/13/13

THIS PERMIT IS INCOMPLETE WITHOUT THE ATTACHED GENERAL PROVISIONS

INSPECTION REQUIREMENTS

- All encroachments authorized by this Permit shall be subject to monitoring, inspection, and/or testing by a County representative; notify the County before you start work by calling the number on the front of this form.
- If the face of this Permit is marked to indicate that the assigned County work order is open for charges, a job account will be opened and the assigned inspectors and other representatives will charge the actual cost of all required tests and inspections against this account. All cost overruns must be resolved prior to closeout of this Permit. Any underruns will be returned to the Permittee as soon as possible following the closeout.

CAUTION!

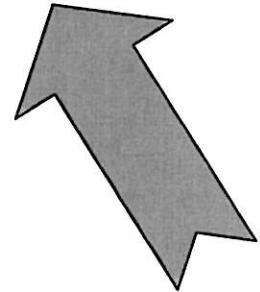
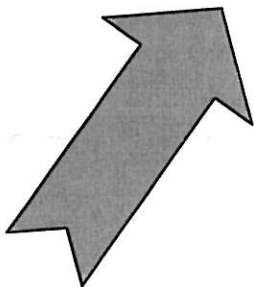
Most traffic signals and some streetlights are connected to their power sources with underground wiring. Many signals are also wired to traffic detector loops buried in the roadway. None of these County-owned wiring runs are included in the Underground Service Alert (USA) review and marking processes.

If you intend to excavate within 500' of a traffic signal, or in proximity to County-owned streetlights, you must contact the County traffic signal maintenance office at

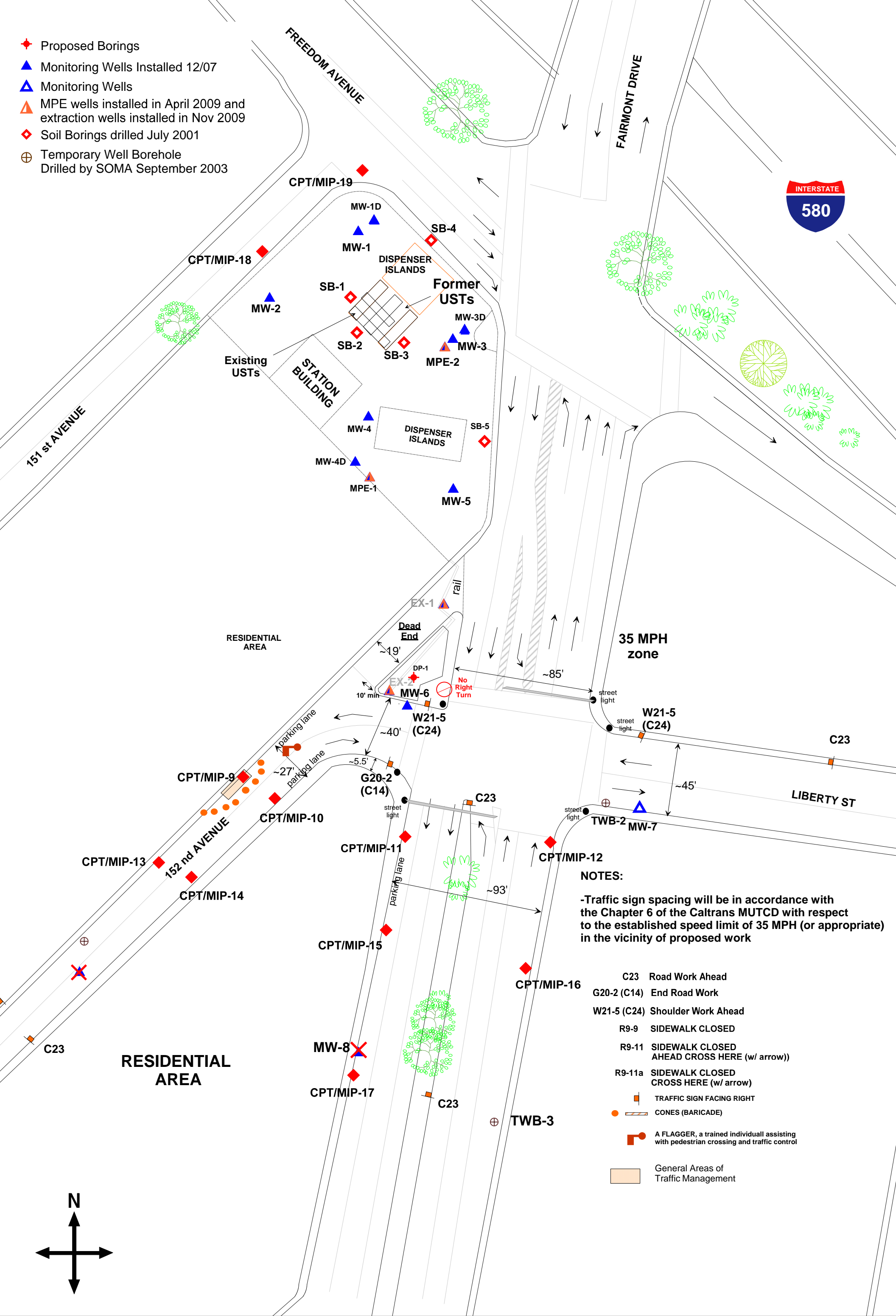
→(510) 670 - 5537←

at least 48 hours in advance of the start of your planned work.

If you cause a signal outage, a streetlight failure, or other damage to County signal or streetlight facilities because you failed to contact the signal office to get the facilities marked, you will be billed for the full cost of our emergency response and repairs.

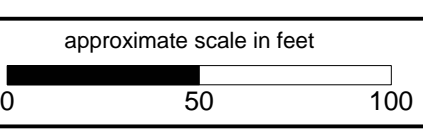
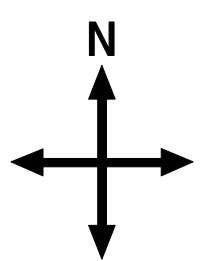


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

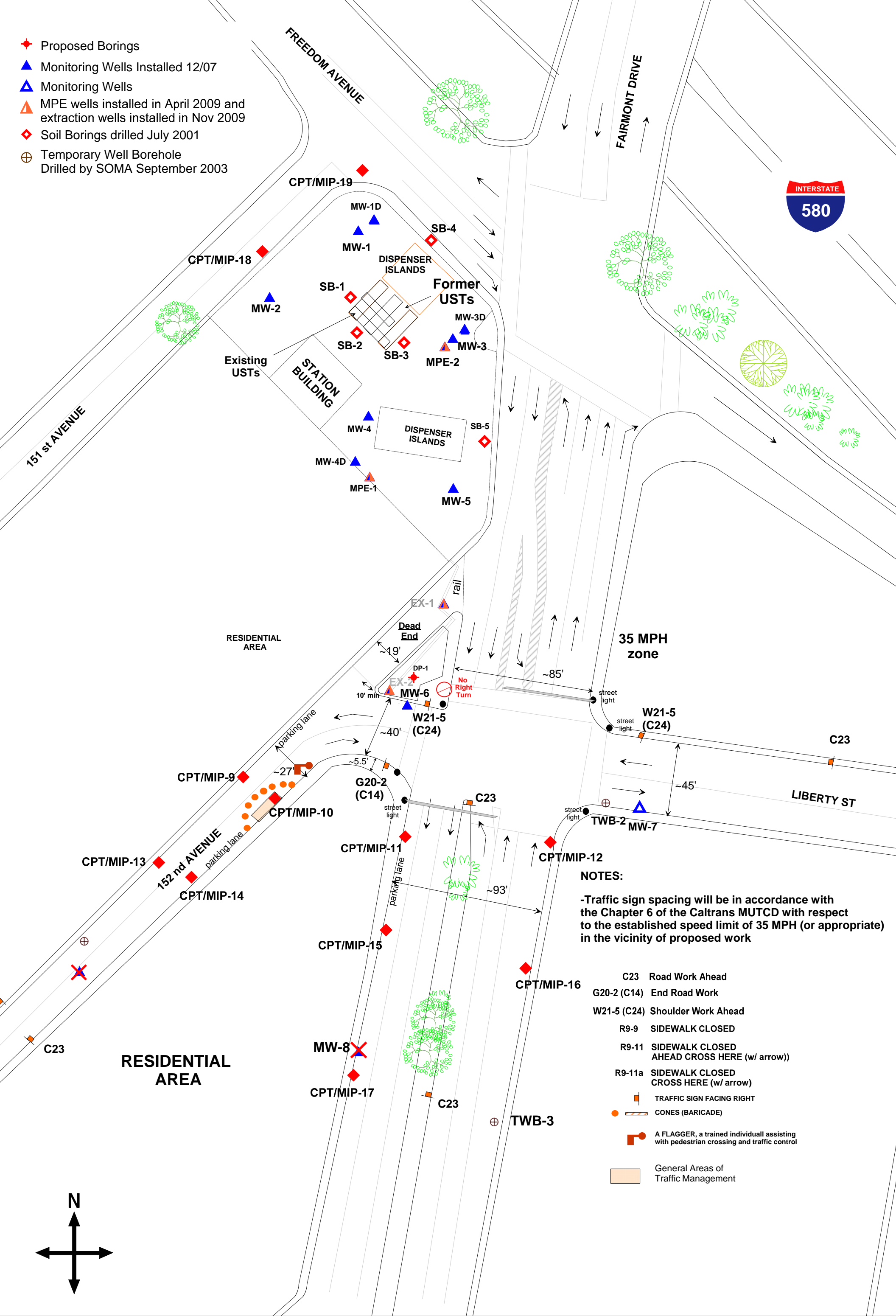
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 9

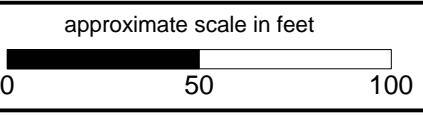
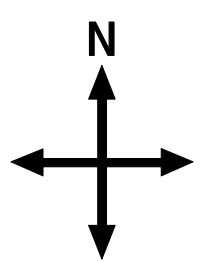


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

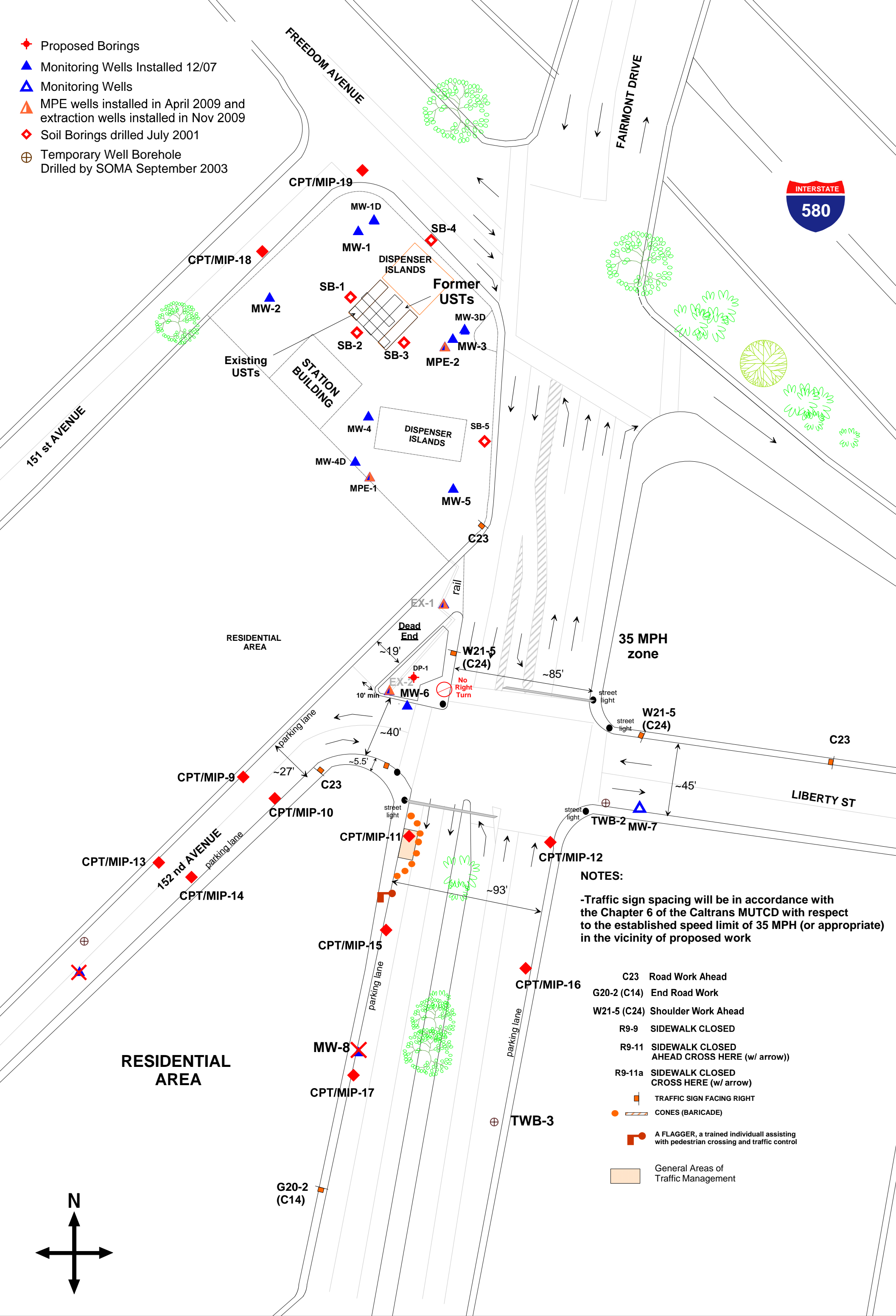
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow)
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 10

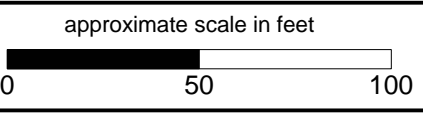
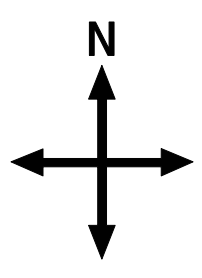


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

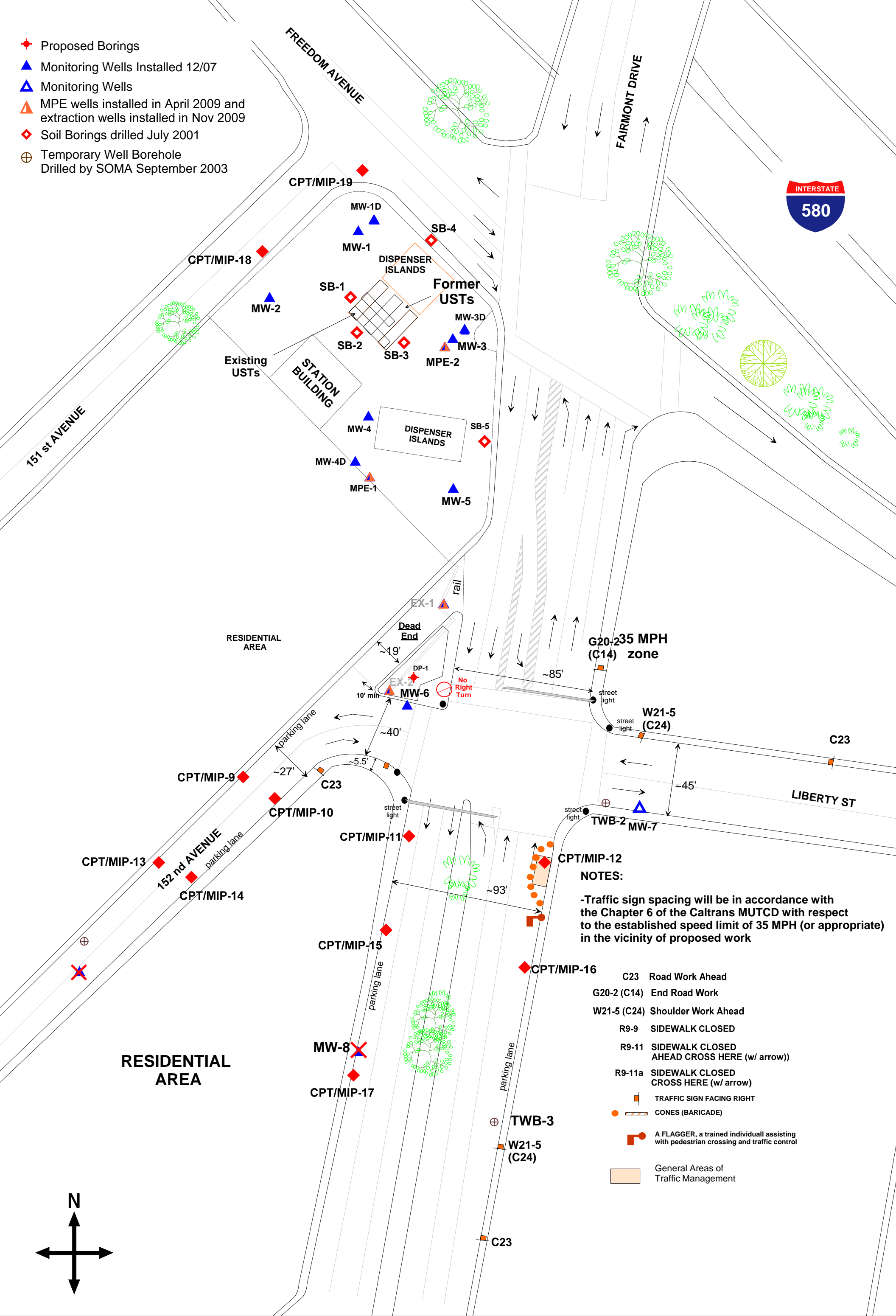
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 11



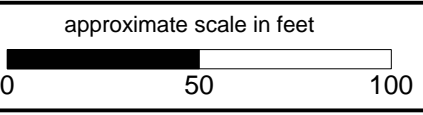
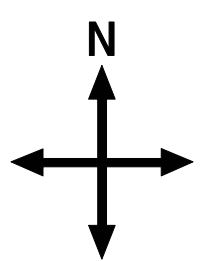
- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:

- Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

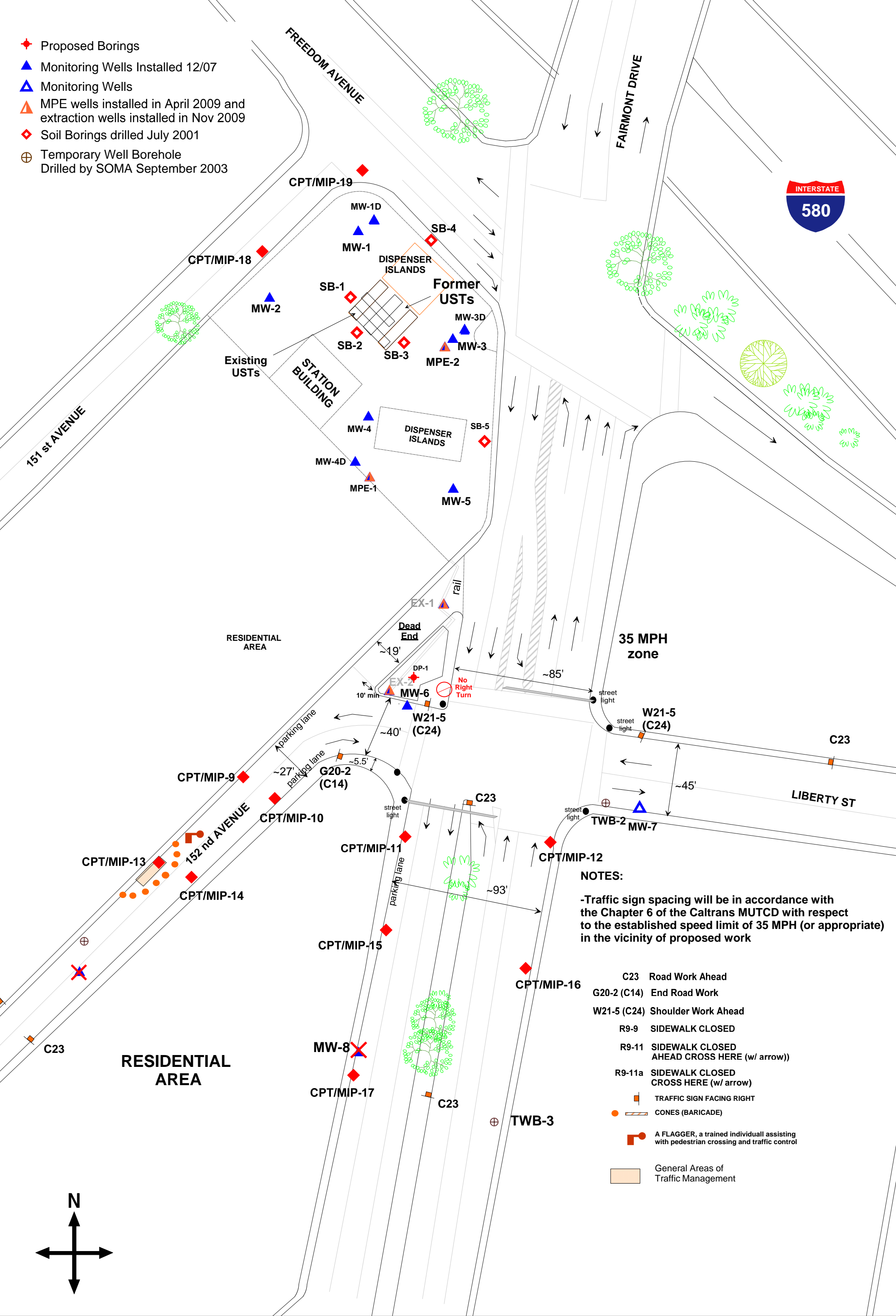
- ◆ CPT/MIP-16 C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow)
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- ▲ TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- ▲ A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 12

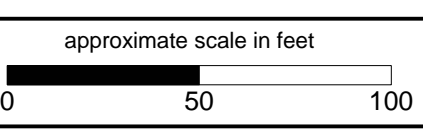
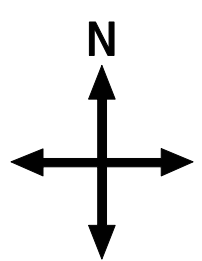


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

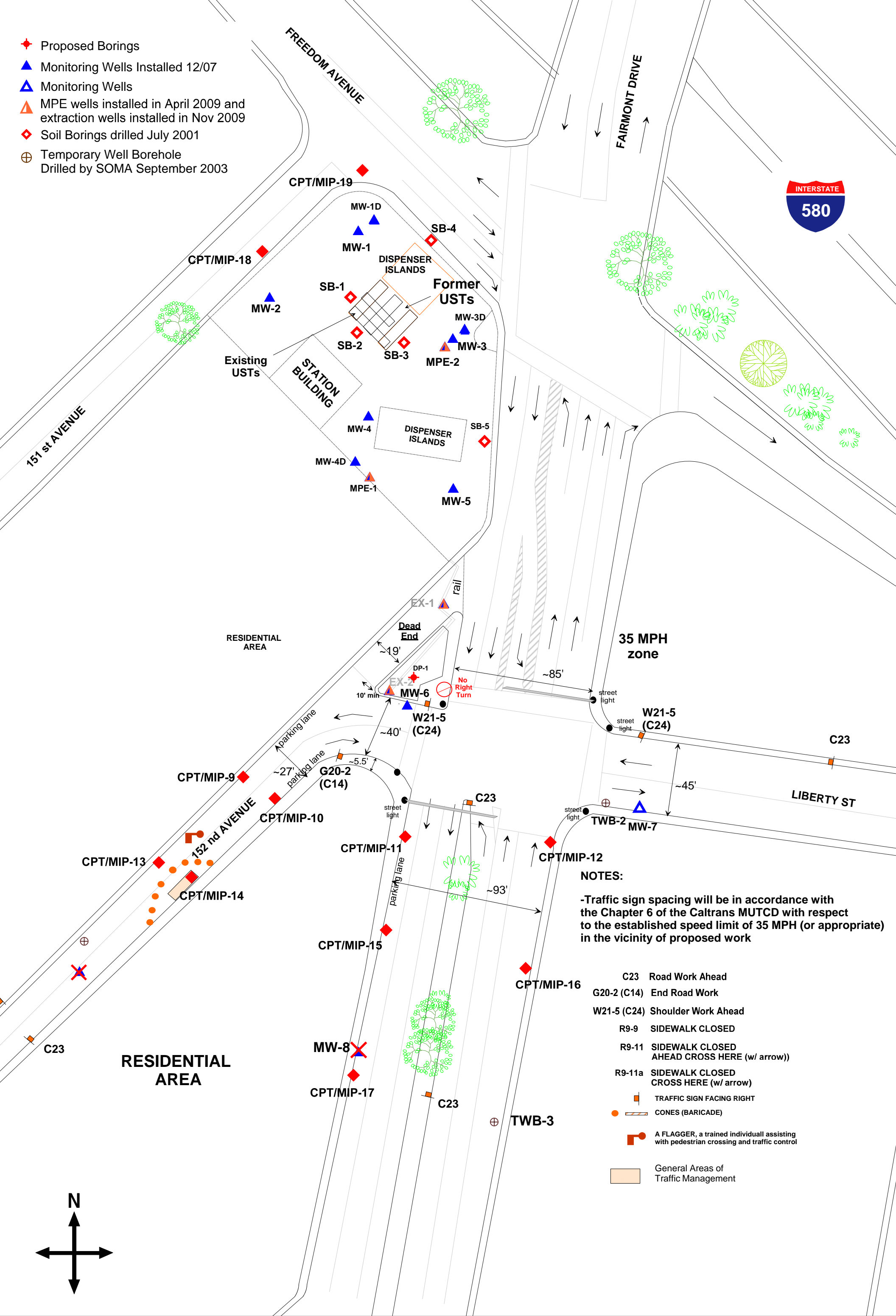
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow)
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 13



- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



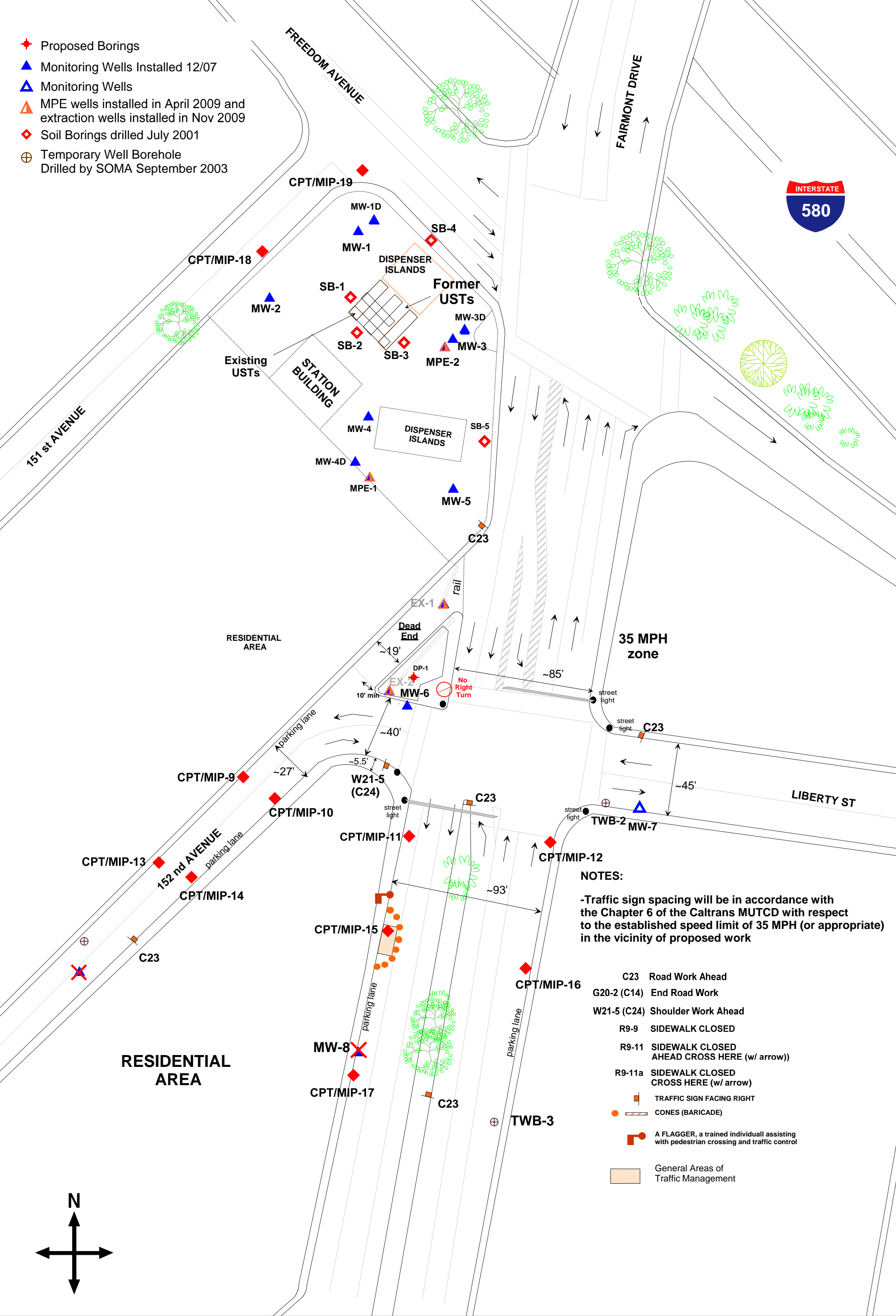
NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management

Traffic Plan for Boring CPT MIP 14

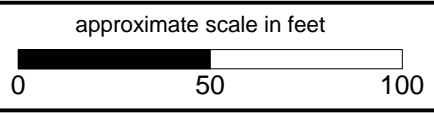
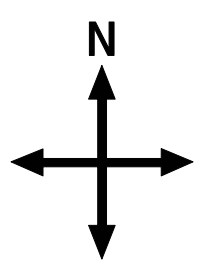


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

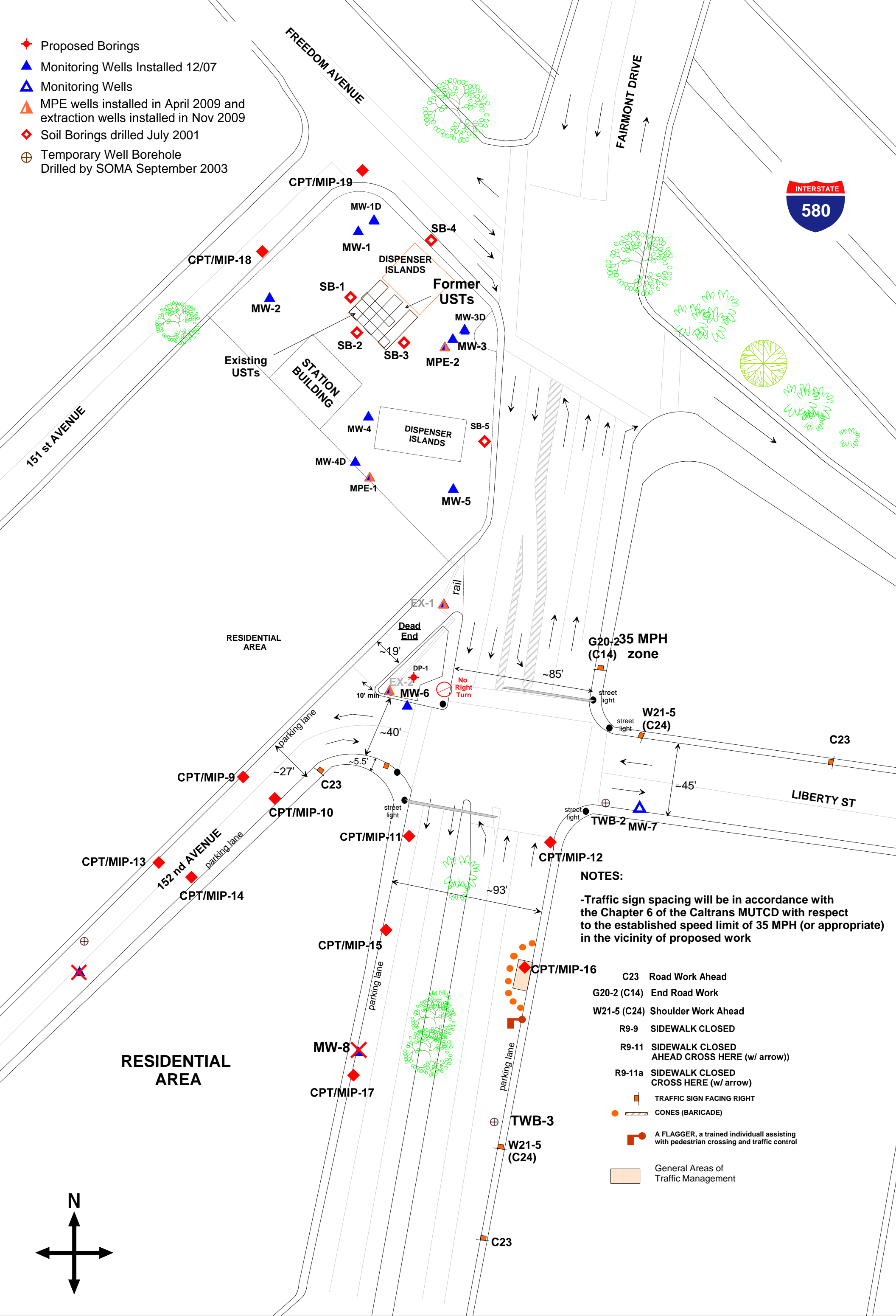
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



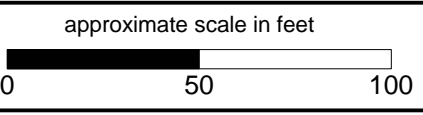
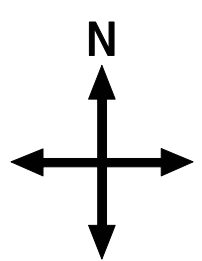
Traffic Plan for Boring CPT MIP 15



- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



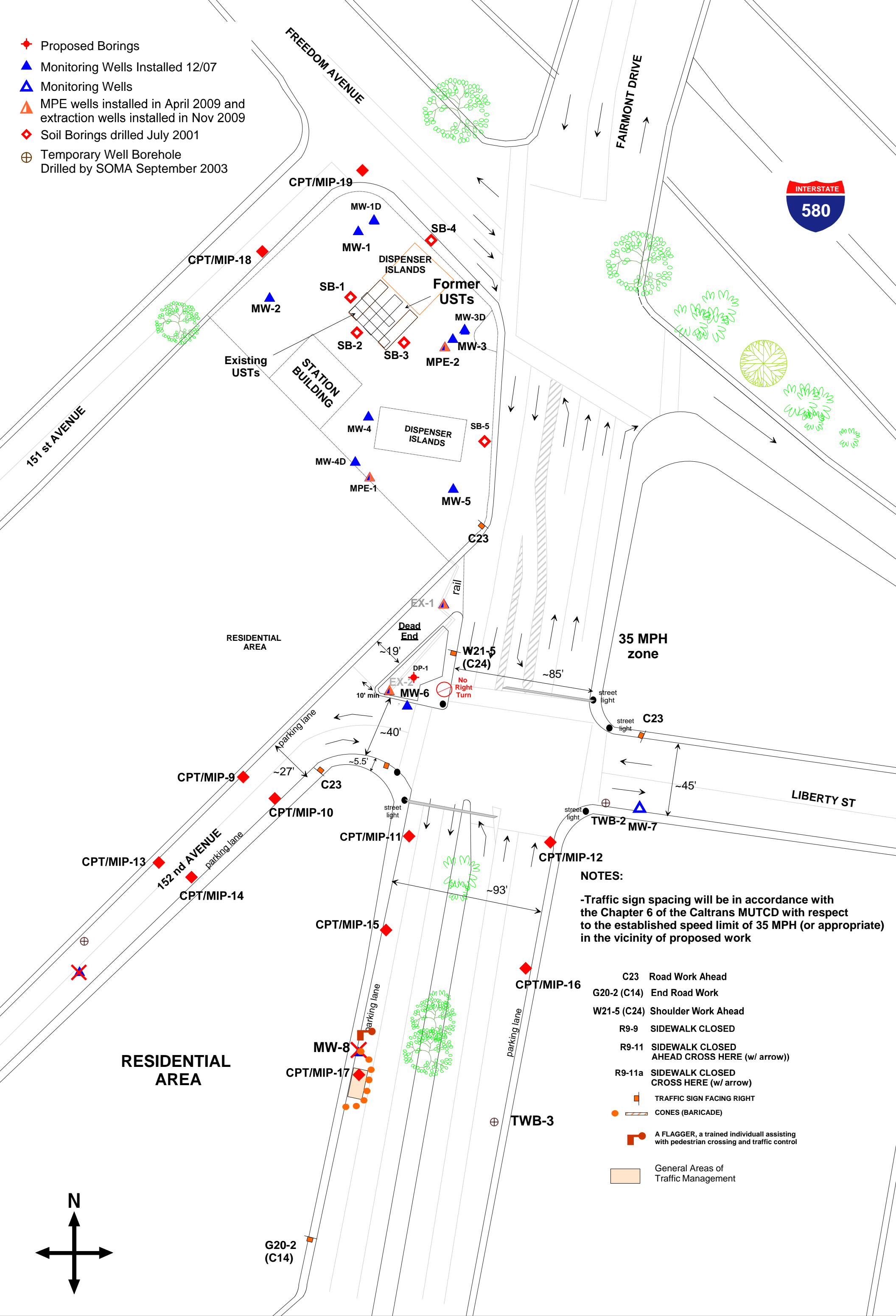
- NOTES:**
- Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work
 - C23 Road Work Ahead
 - G20-2 (C14) End Road Work
 - W21-5 (C24) Shoulder Work Ahead
 - R9-9 SIDEWALK CLOSED
 - R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow)
 - R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
 - TRAFFIC SIGN FACING RIGHT
 - CONES (BARICADE)
 - A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
 - General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 16

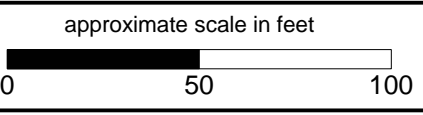
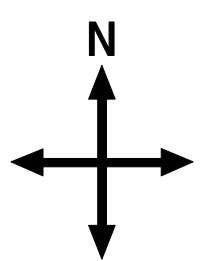


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

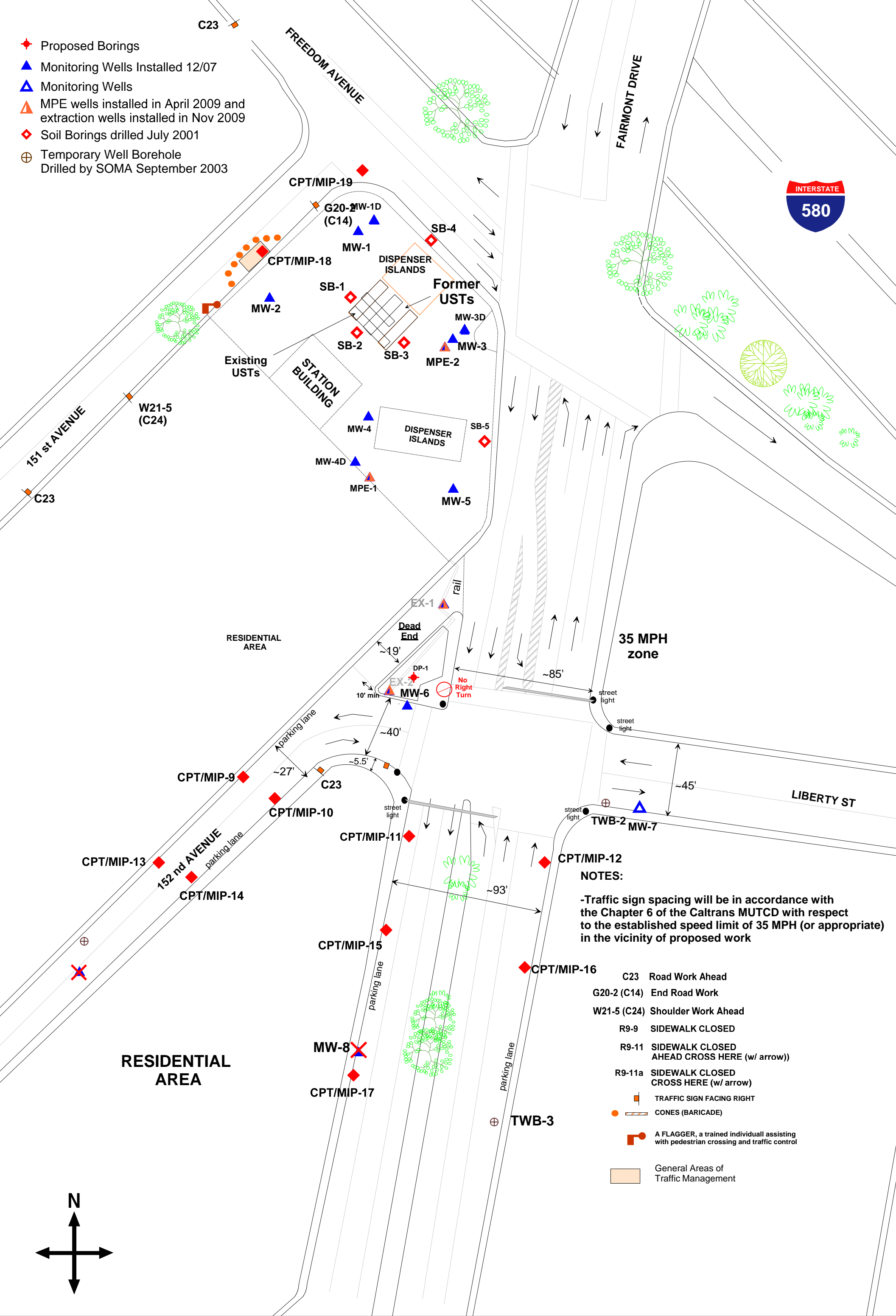
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 17

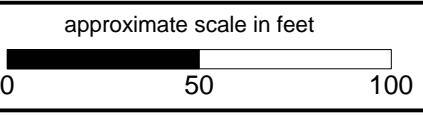
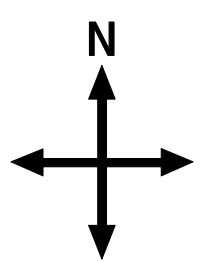


- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

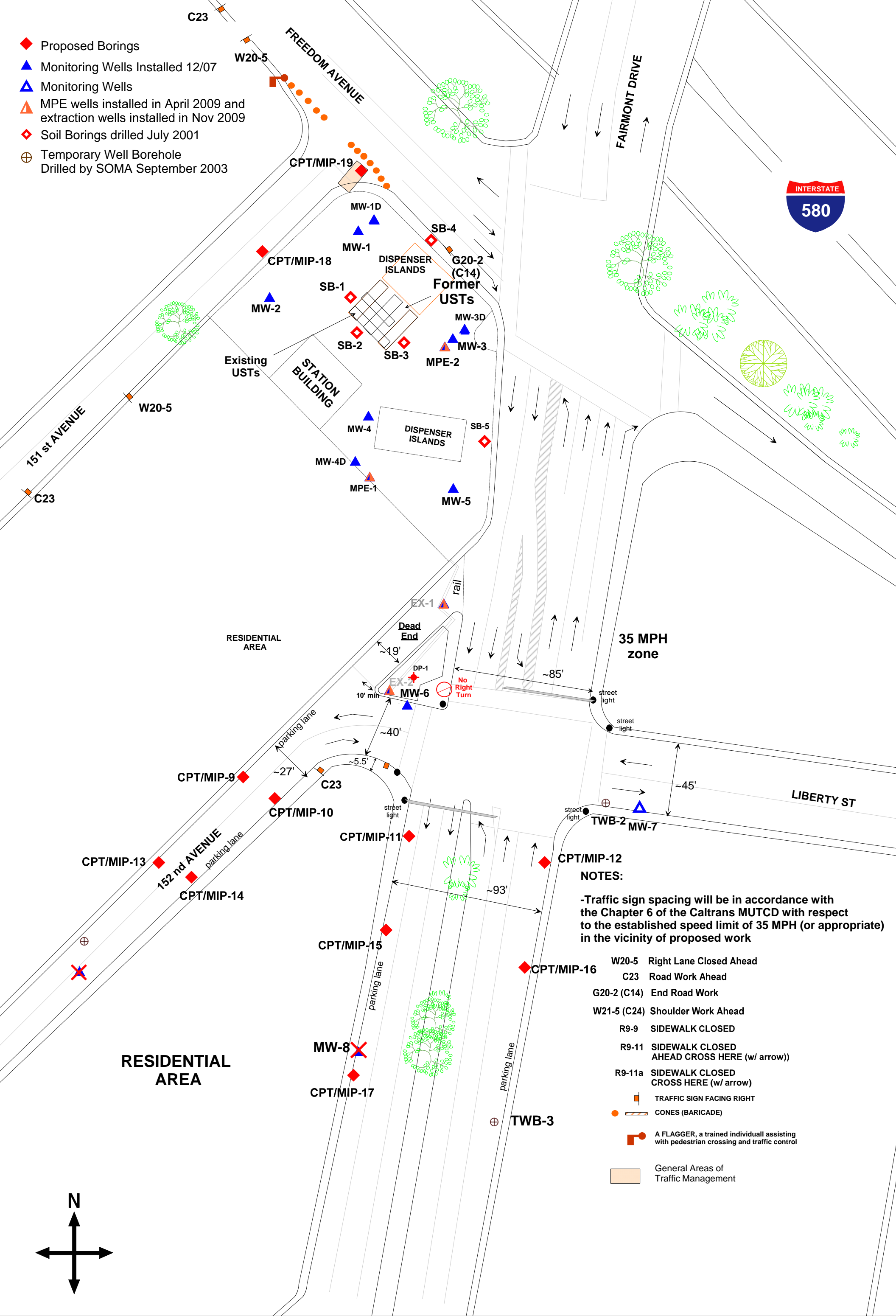
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow)
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management



Traffic Plan for Boring CPT MIP 18



- ◆ Proposed Borings
- ▲ Monitoring Wells Installed 12/07
- ▲ Monitoring Wells
- ▲ MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- ◆ Soil Borings drilled July 2001
- ⊕ Temporary Well Borehole Drilled by SOMA September 2003



NOTES:
 -Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

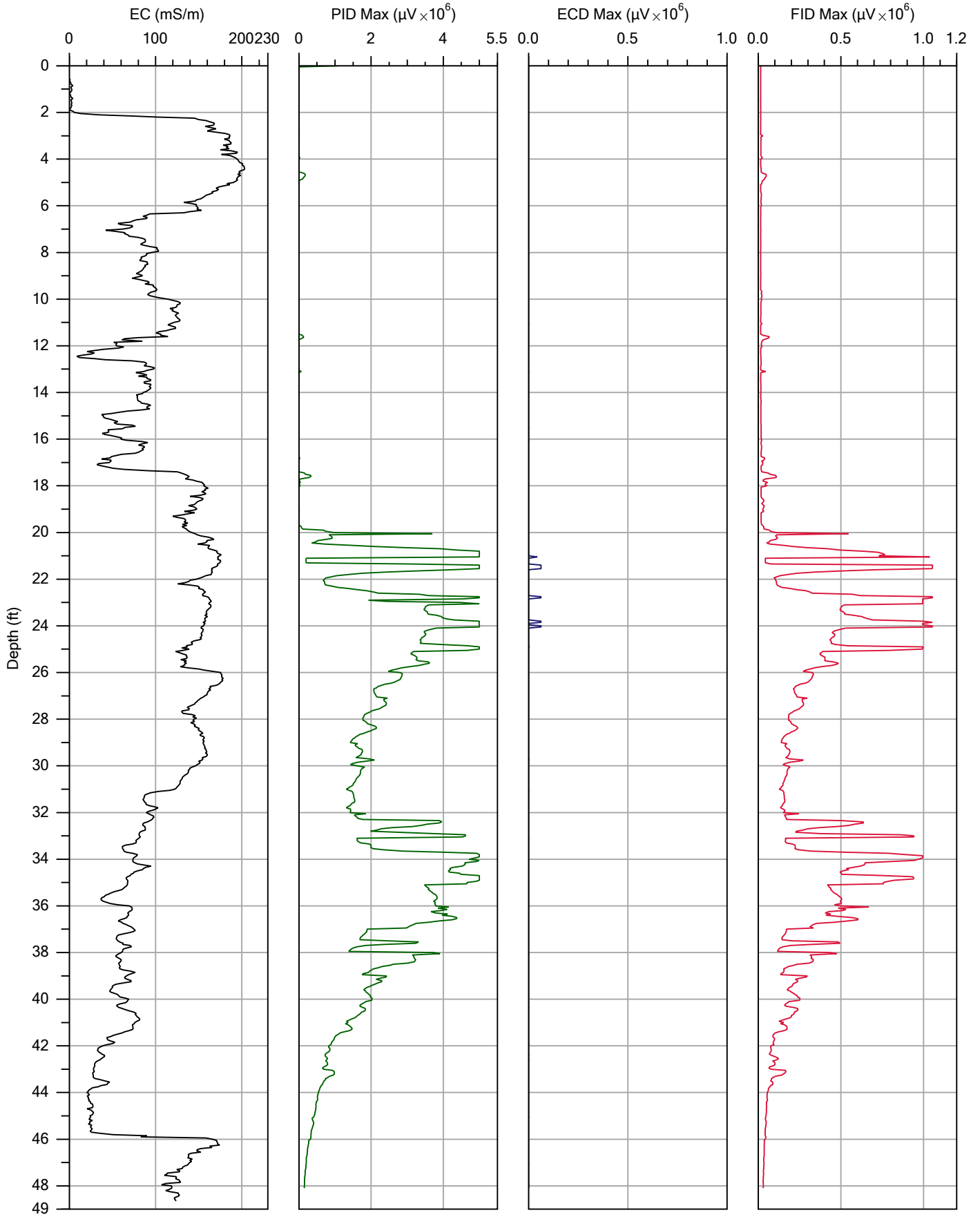
- W20-5 Right Lane Closed Ahead
- C23 Road Work Ahead
- G20-2 (C14) End Road Work
- W21-5 (C24) Shoulder Work Ahead
- R9-9 SIDEWALK CLOSED
- R9-11 SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
- R9-11a SIDEWALK CLOSED CROSS HERE (w/ arrow)
- TRAFFIC SIGN FACING RIGHT
- CONES (BARICADE)
- A FLAGGER, a trained individual assisting with pedestrian crossing and traffic control
- General Areas of Traffic Management

Traffic Plan for Boring CPT MIP 19



APPENDIX C

Boring Logs and Field Observations



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE09.DAT
Date:	1/10/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.5 OHMS	PASS
100 OHM:	98.3 OHMS	PASS
1000 OHM:	998.3 OHMS	PASS

SMAFRE09.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 10 2014 08:03

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 48.10 FEET 14.661 METERS

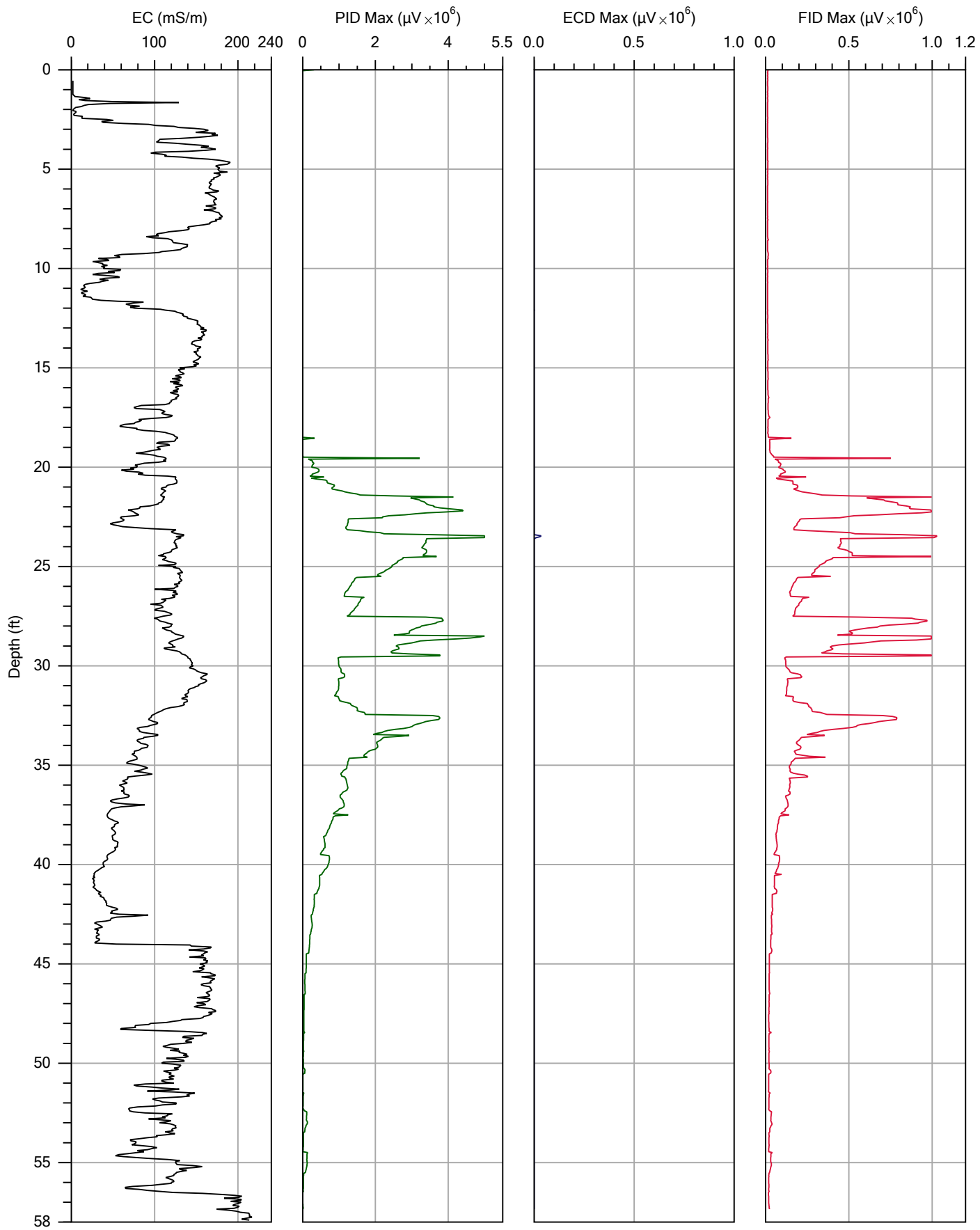
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Fri Jan 10 2014 10:14



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE10.DAT
Date:	1/9/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.4 OHMS	PASS
100 OHM:	98.0 OHMS	PASS
1000 OHM:	1008.1 OHMS	PASS

SMAFRE10.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Thu Jan 09 2014 09:35

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 57.35 FEET 17.480 METERS

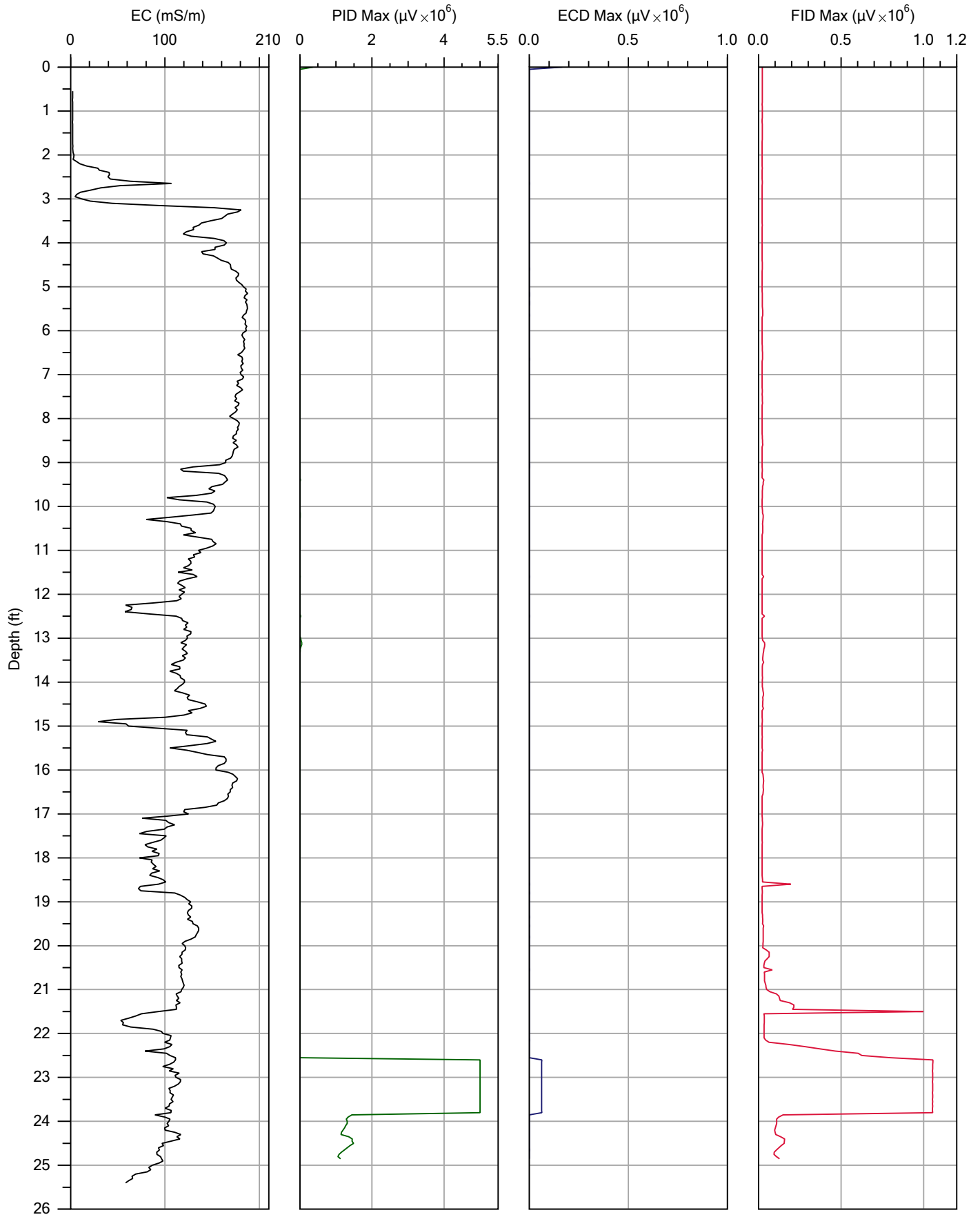
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Thu Jan 09 2014 11:13



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE11.DAT
Date:	1/8/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.5 OHMS	PASS
100 OHM:	98.0 OHMS	PASS
1000 OHM:	1009.8 OHMS	PASS

SMAFRE11.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Wed Jan 08 2014 10:02

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 24.85 FEET 7.574 METERS

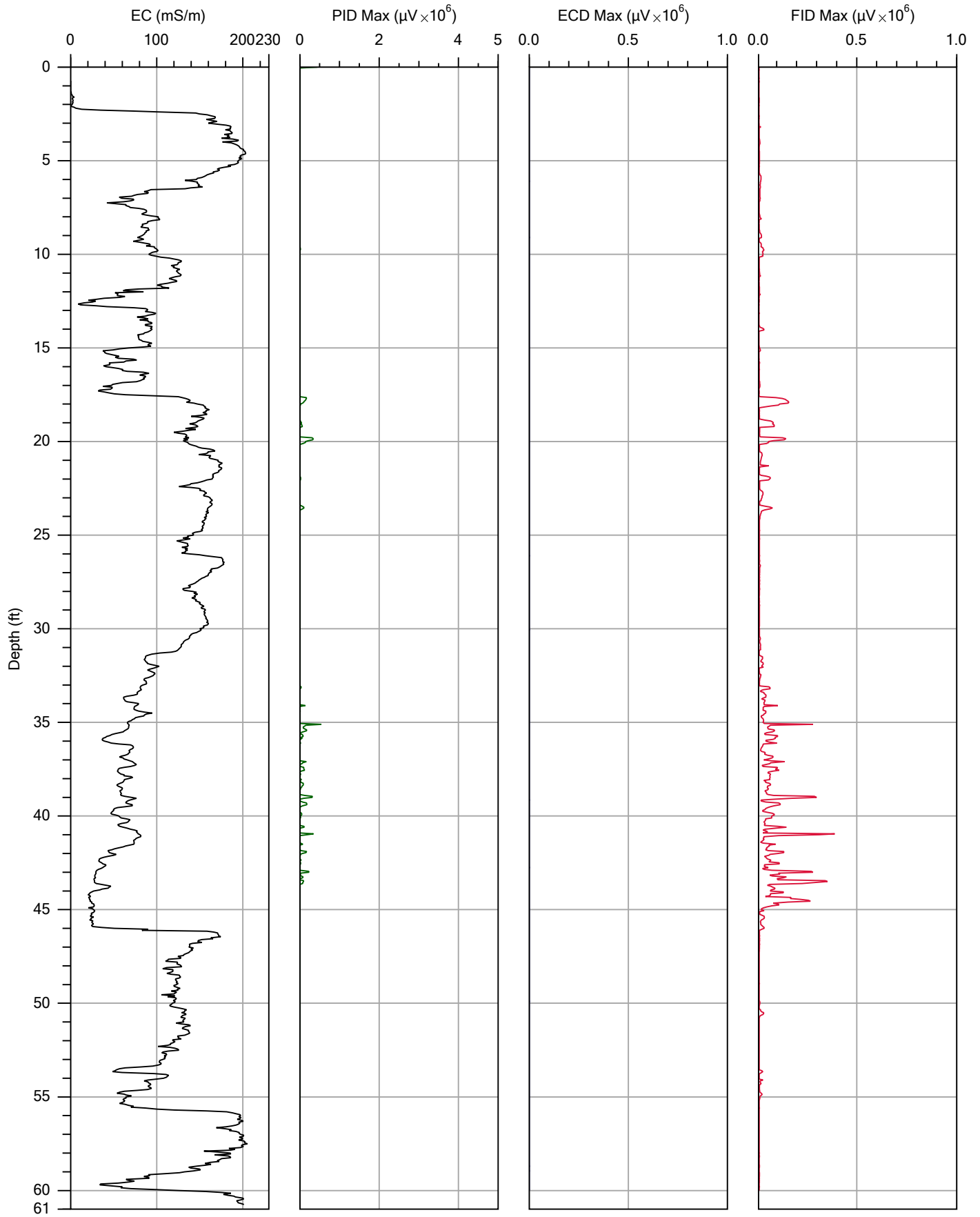
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Wed Jan 08 2014 11:05



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE12.DAT
Date:	1/10/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.2 OHMS	PASS
100 OHM:	97.8 OHMS	PASS
1000 OHM:	1014.6 OHMS	PASS

SMAFRE12.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP6510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 10 2014 12:06

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 60.00 FEET 18.288 METERS

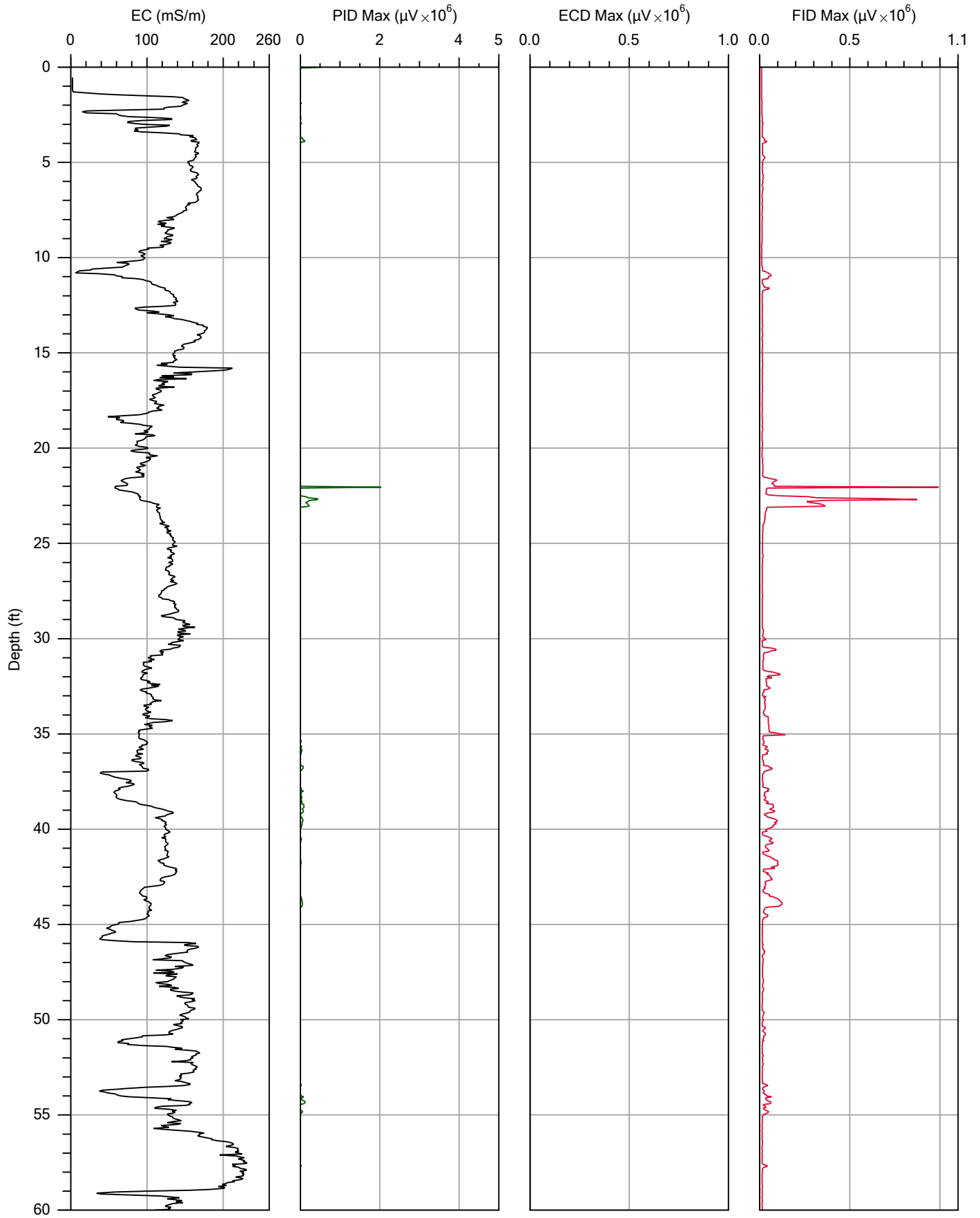
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Fri Jan 10 2014 13:55



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File: SMAFRE13.DAT
 Date: 1/9/2014
 Location:

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.2 OHMS	PASS
100 OHM:	97.7 OHMS	PASS
1000 OHM:	1011.6 OHMS	PASS

SMAFRE13.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

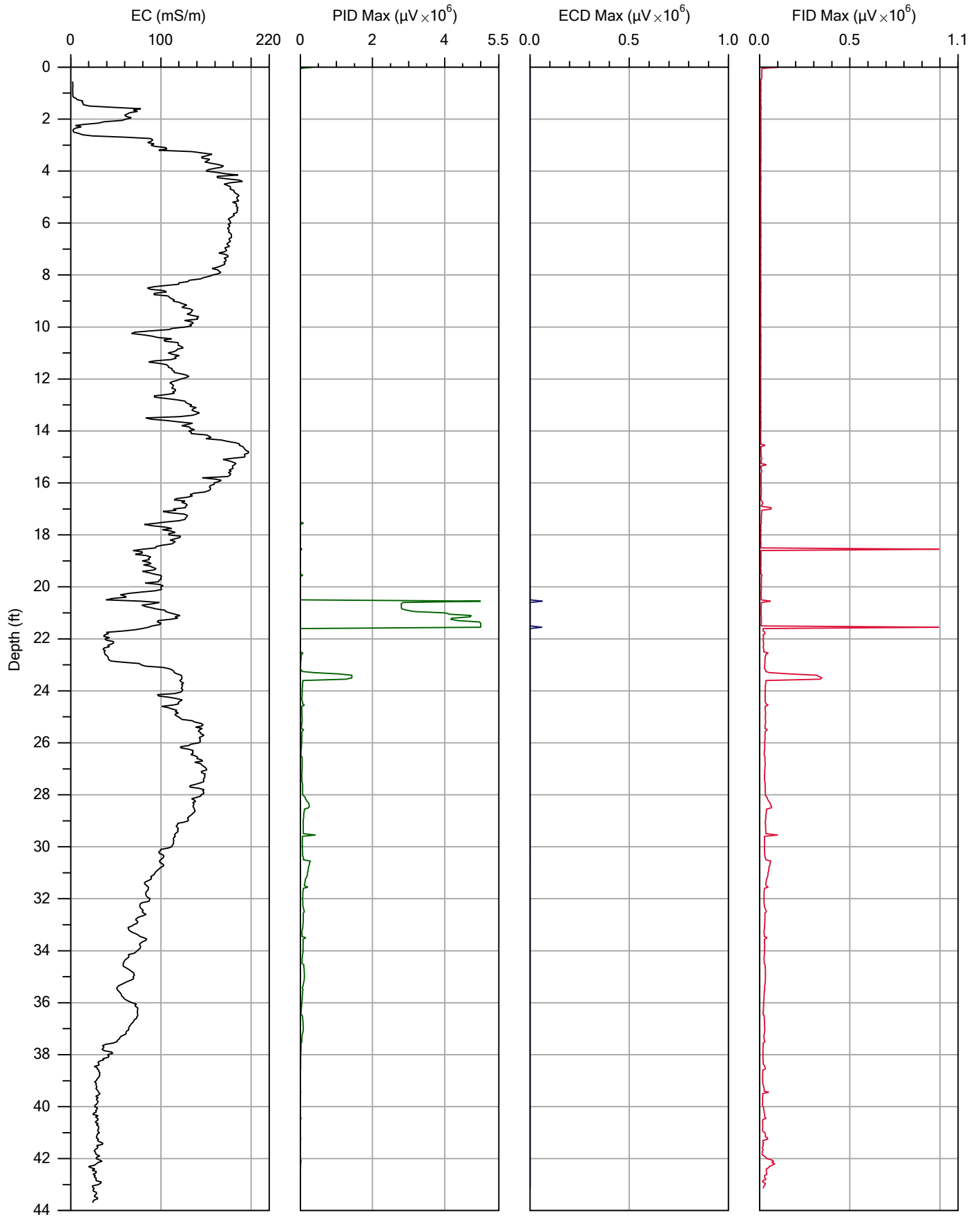
PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Thu Jan 09 2014 15:08

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE14.DAT
Date:	1/9/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.3 OHMS	PASS
100 OHM:	97.6 OHMS	PASS
1000 OHM:	1004.1 OHMS	PASS

SMAFRE14.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Thu Jan 09 2014 11:17

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 43.15 FEET 13.152 METERS

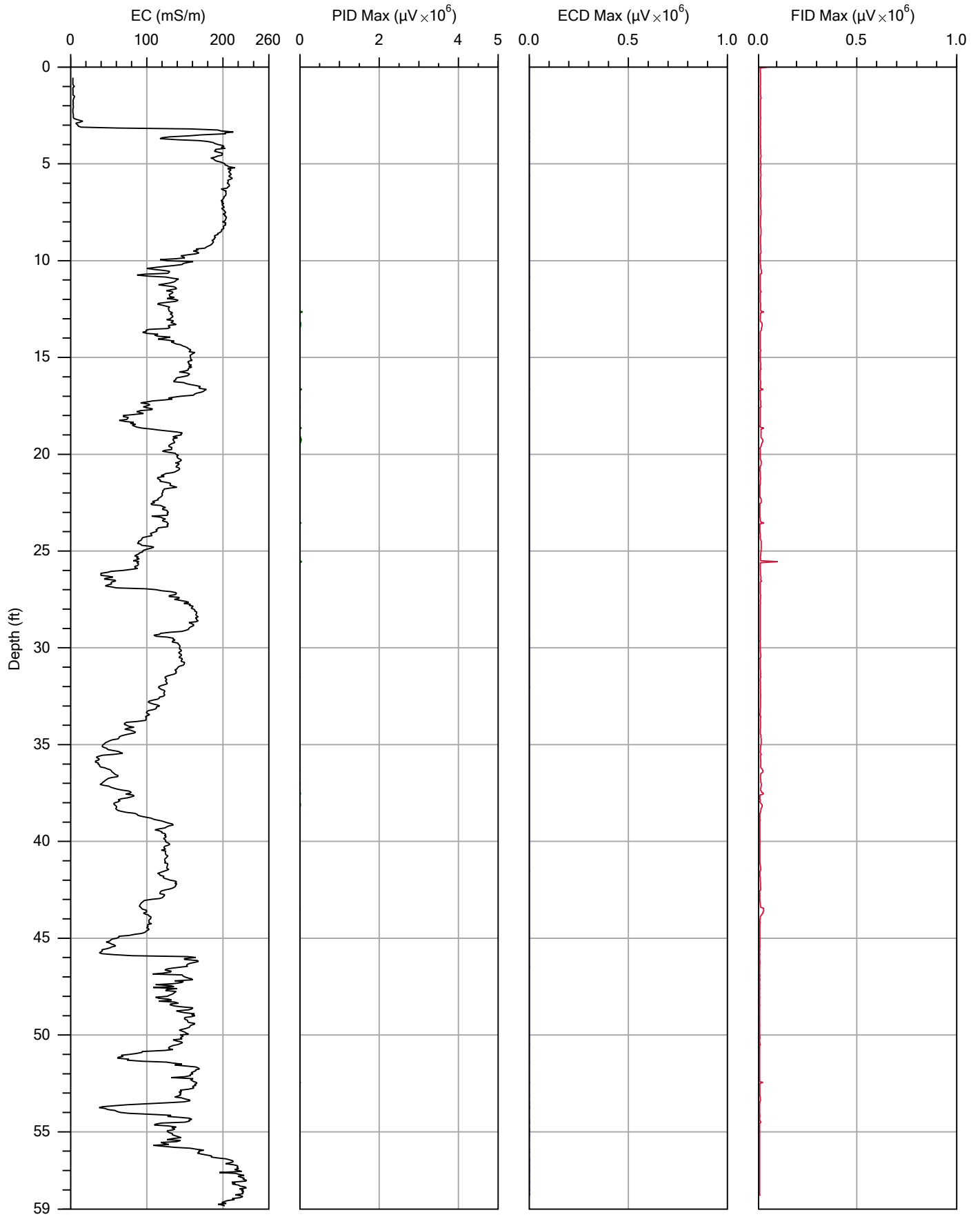
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Thu Jan 09 2014 13:13



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE15.DAT
Date:	1/8/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.3 OHMS	PASS
100 OHM:	97.5 OHMS	PASS
1000 OHM:	1006.1 OHMS	PASS

SMAFRE15.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

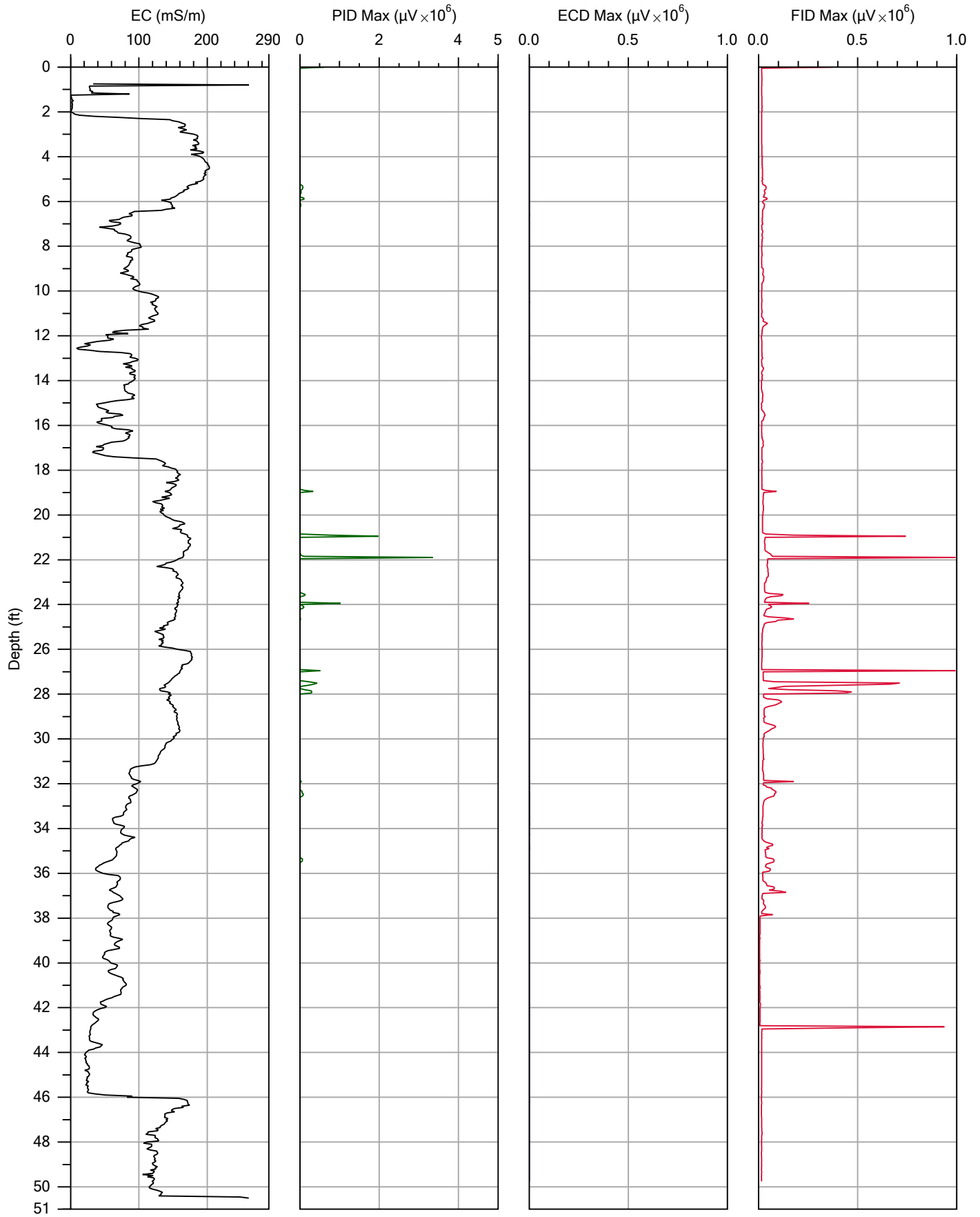
PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Wed Jan 08 2014 11:57

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE16.DAT
Date:	1/10/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.4 OHMS	PASS
100 OHM:	97.8 OHMS	PASS
1000 OHM:	1012.4 OHMS	PASS

SMAFRE16.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP6510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 10 2014 10:15

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 49.75 FEET 15.164 METERS

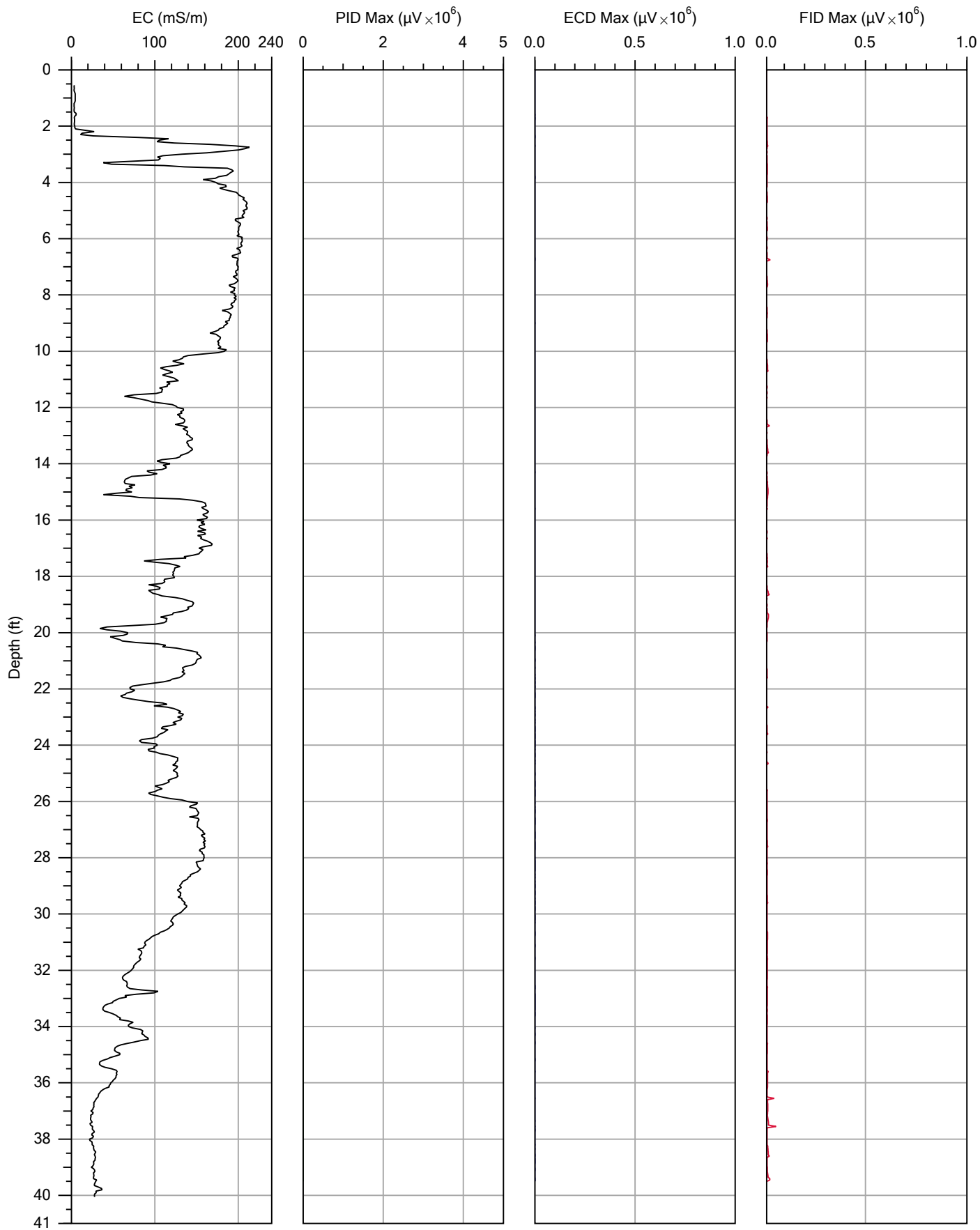
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Fri Jan 10 2014 11:26



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE17.DAT
Date:	1/1/1999
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.2 OHMS	PASS
100 OHM:	97.4 OHMS	PASS
1000 OHM:	1000.7 OHMS	PASS

SMAFRE17.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP4510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 01 1999 01:29

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 39.50 FEET 12.040 METERS

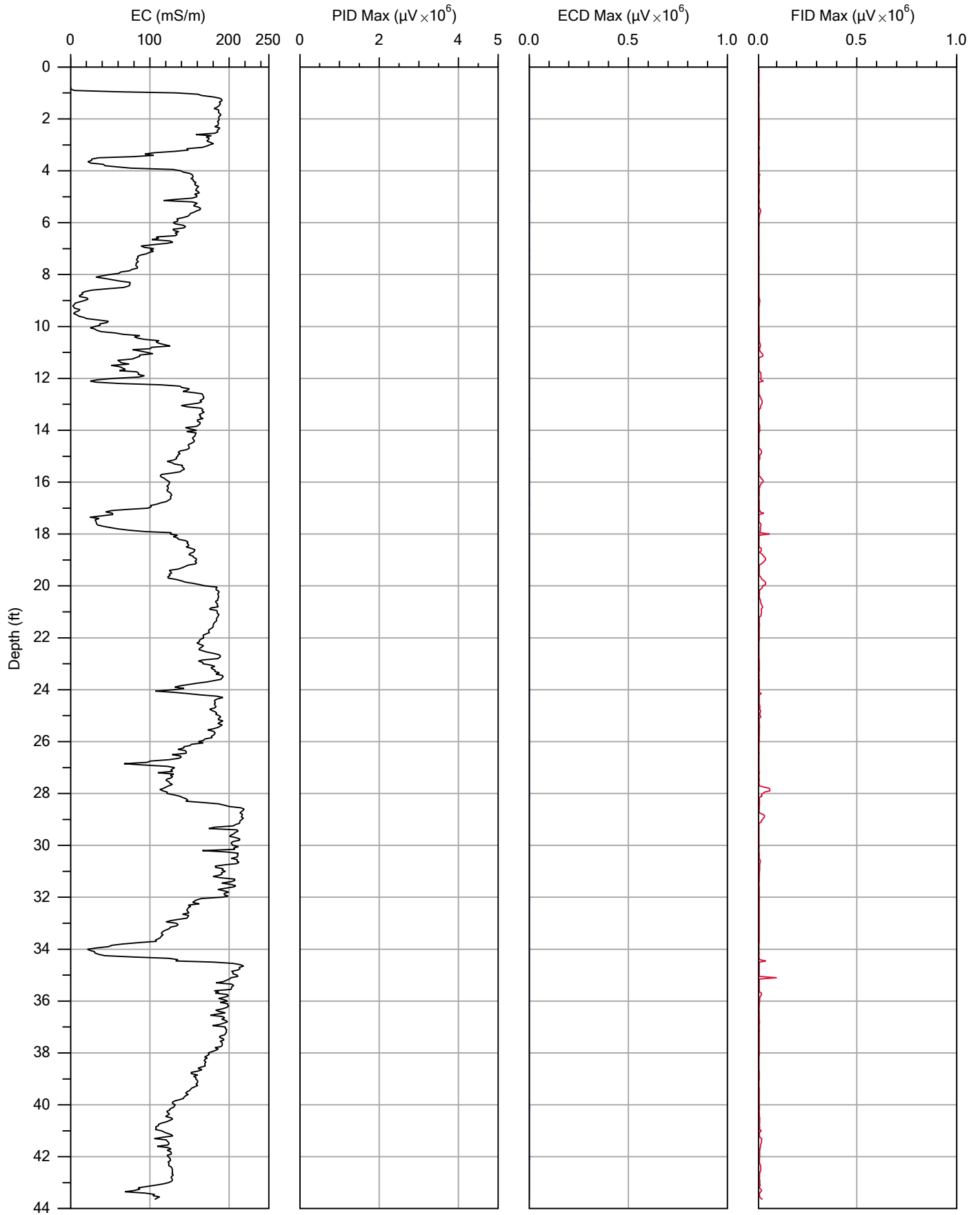
LATITUDE: 0.000000000

LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Fri Jan 01 1999 03:14



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE18.DAT
Date:	1/10/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.2 OHMS	PASS
100 OHM:	97.8 OHMS	PASS
1000 OHM:	1011.0 OHMS	PASS

SMAFRE18.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

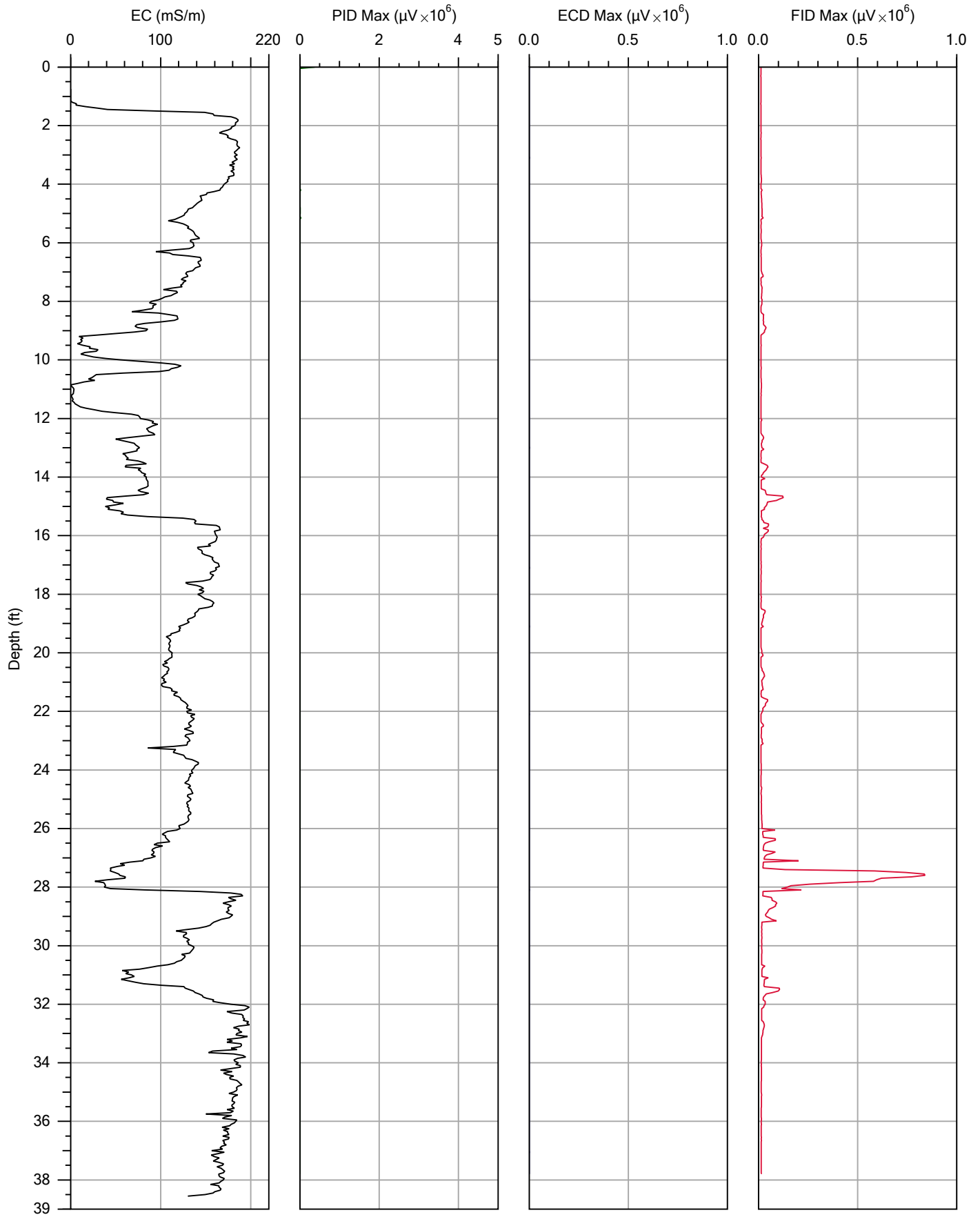
PROBE AND ARRAY: MP6510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 10 2014 15:17

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1



Company: SOMA
 Project ID: Freedom Ave.

Operator: FISCH
 Client:

File:	SMAFRE19.DAT
Date:	1/10/2014
Location:	

TEST	VALUE	P/F
INSTRUMENT CALIBRATION TESTS		
10 OHM:	9.2 OHMS	PASS
100 OHM:	97.6 OHMS	PASS
1000 OHM:	1008.9 OHMS	PASS

SMAFRE19.INF

SITE INFORMATION -- DIRECT IMAGE MIP PROBE

DATA FILE FORMAT:

(FT) (mS/M) (FT/MIN) (T MIN) (T MAX) (PSI) (M) (M/MIN) (KPA)

GAS FILE FORMAT:

D1MIN D1MAX D2MIN D2MAX D3MIN D3MAX D4MIN D4MAX

UNITS: ENGLISH

PROBE AND ARRAY: MP6510 MIP PROBE

80 INCH STRING POT USED

LOG START TIME: Fri Jan 10 2014 13:56

ATTENUATION CHANGES

DEPTH	DET1	DET2	DET3	DET4
0.00	1	1	1	1

LOG END DEPTH: 37.80 FEET 11.521 METERS

LATITUDE: 0.000000000

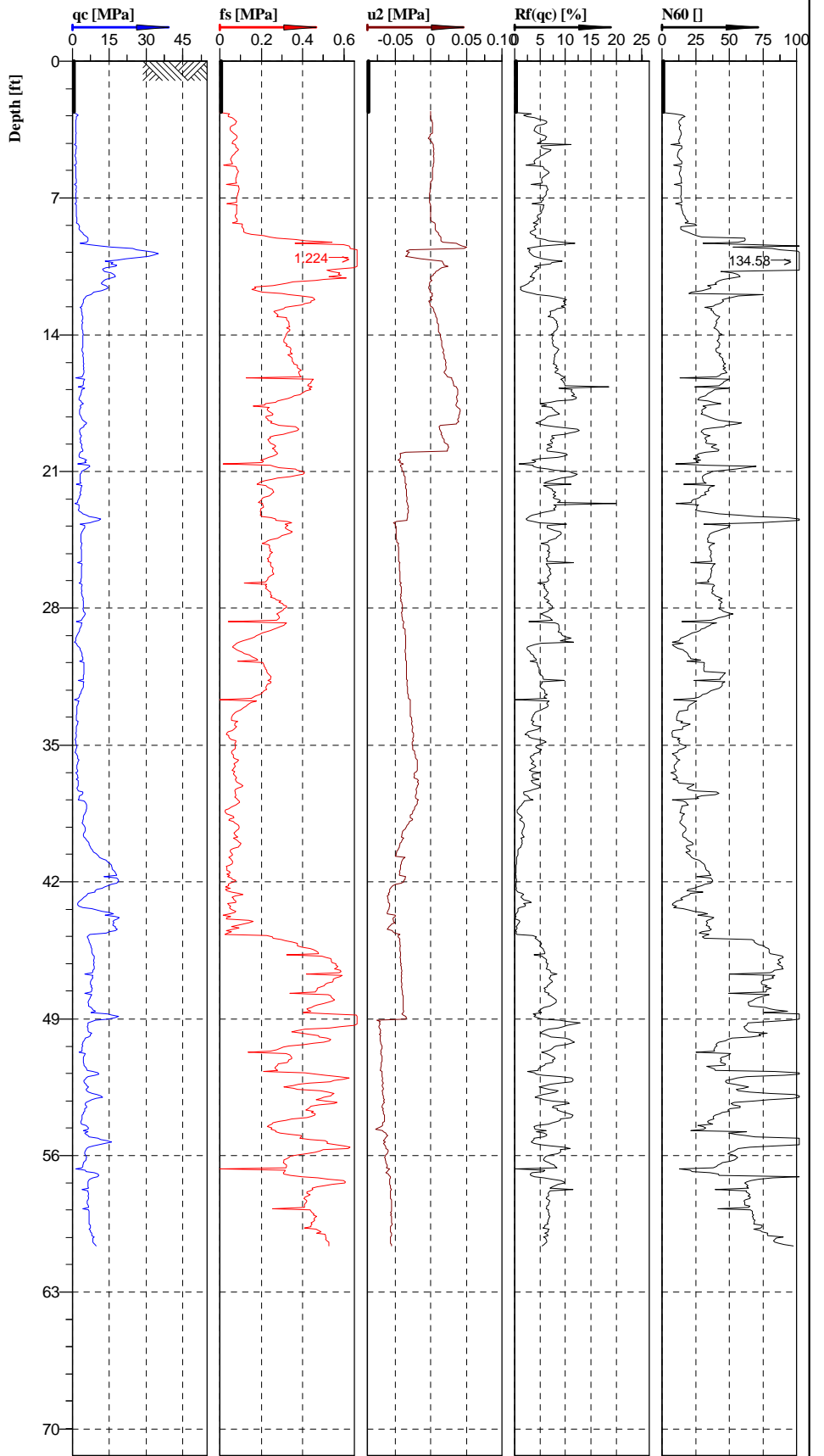
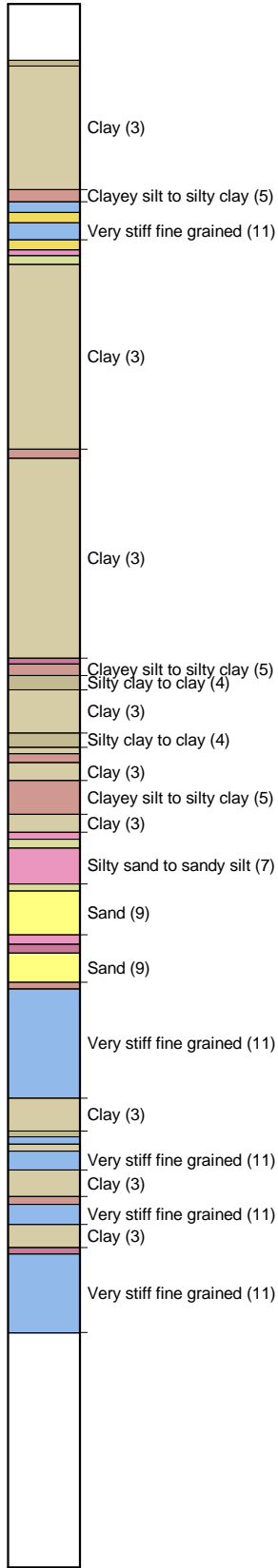
LONGITUDE: 0.000000000

ELEVATION: 0.00 METERS; 0.00 FEET

UNABLE TO ESTABLISH A FIX

LOG END TIME: Fri Jan 10 2014 15:15

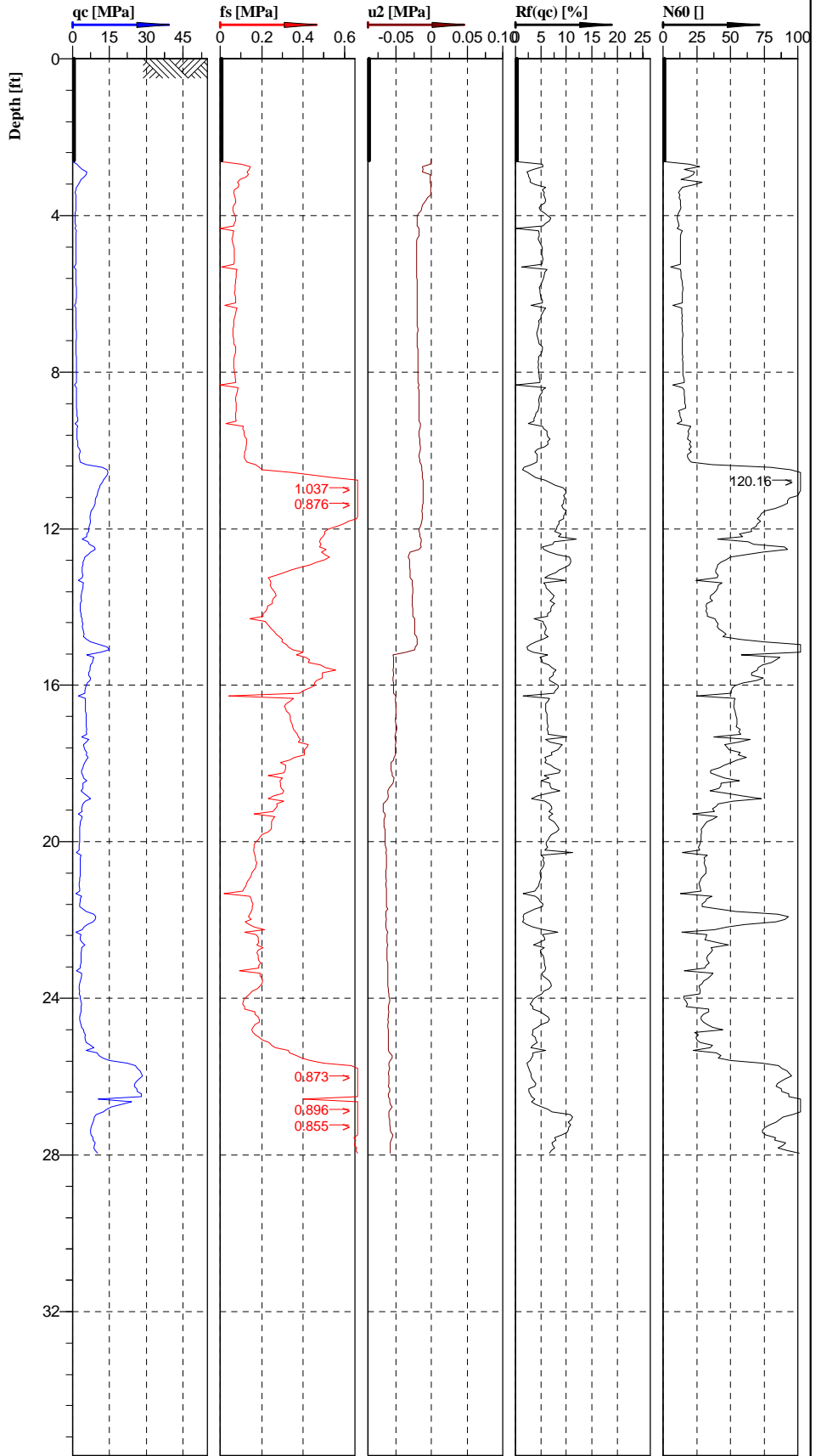
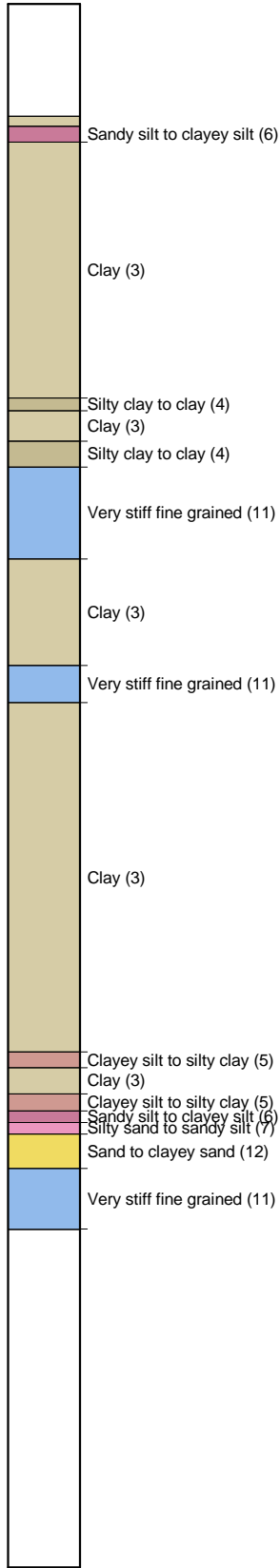
Classification by
Robertson 1986



Cone No: 4057
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: San leandro, Ca	Position: X: 0.00 ft, Y: 0.00 ft	Ground level: 0.00	Test no: CPT10
Project ID: G3988	Client: SOMA	Date: 1/9/2014	Scale: 1 : 100
Project: Freedom ave Gas staion		Page: 1/1	Fig:
		File: somafredomave10.cpt	

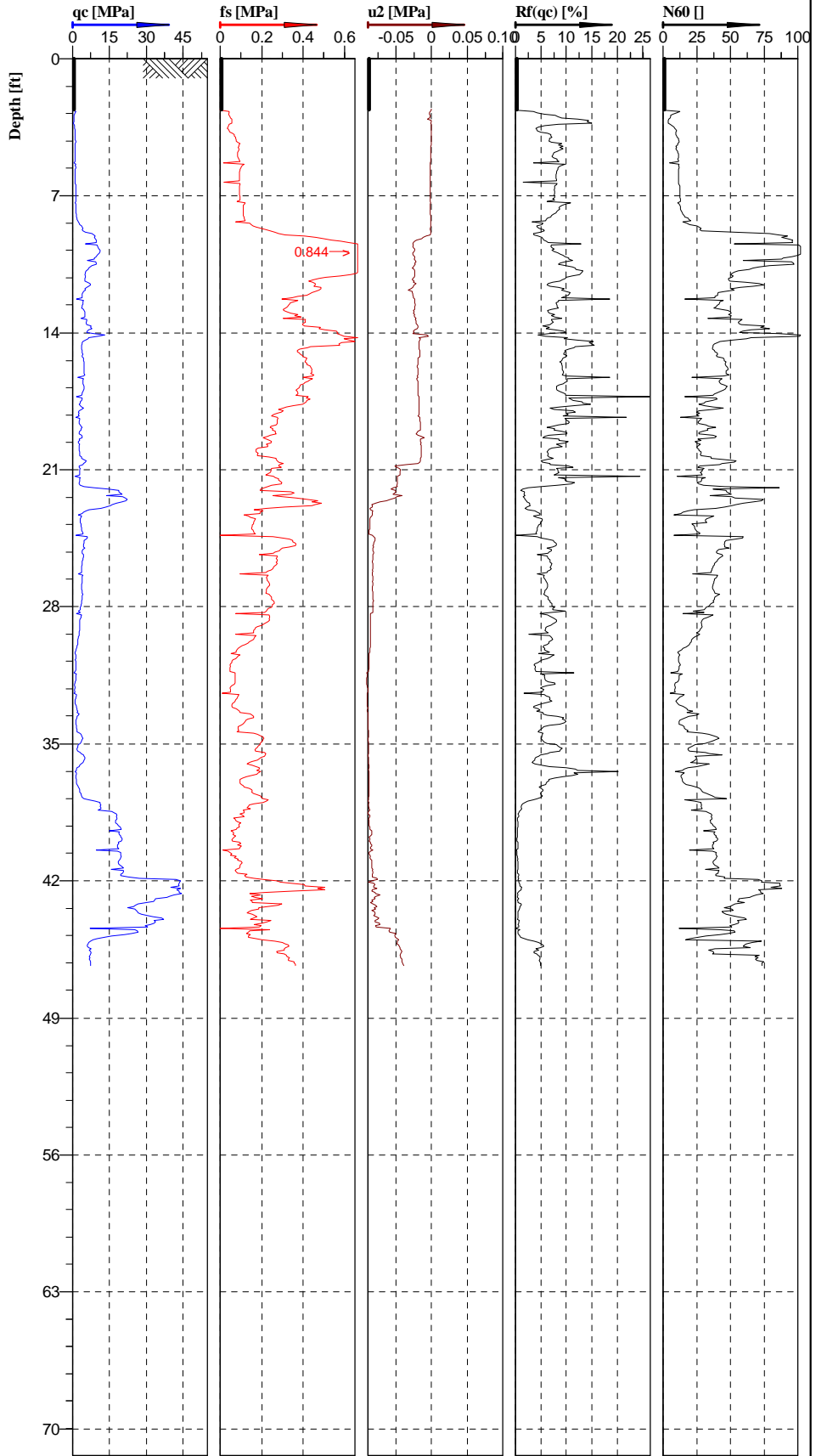
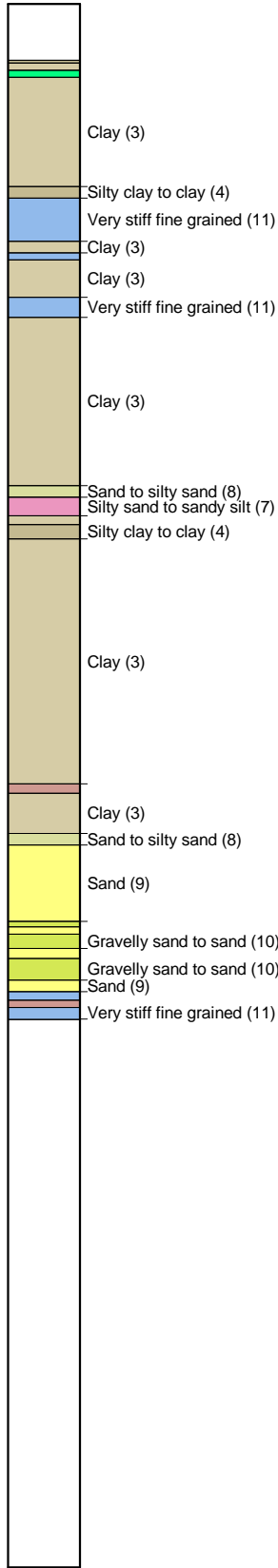
Classification by
Robertson 1986



Cone No: 4057
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location: San leandro, Ca	Position: X: 0.00 ft, Y: 0.00 ft	Ground level: 0.00	Test no: CPT11
Project ID: G3988	Client:	Date: 1/8/2014	Scale: 1 : 50
Project: Freedom ave gas station		Page: 1/1	Fig:
		File: somafredomave11.cpt	

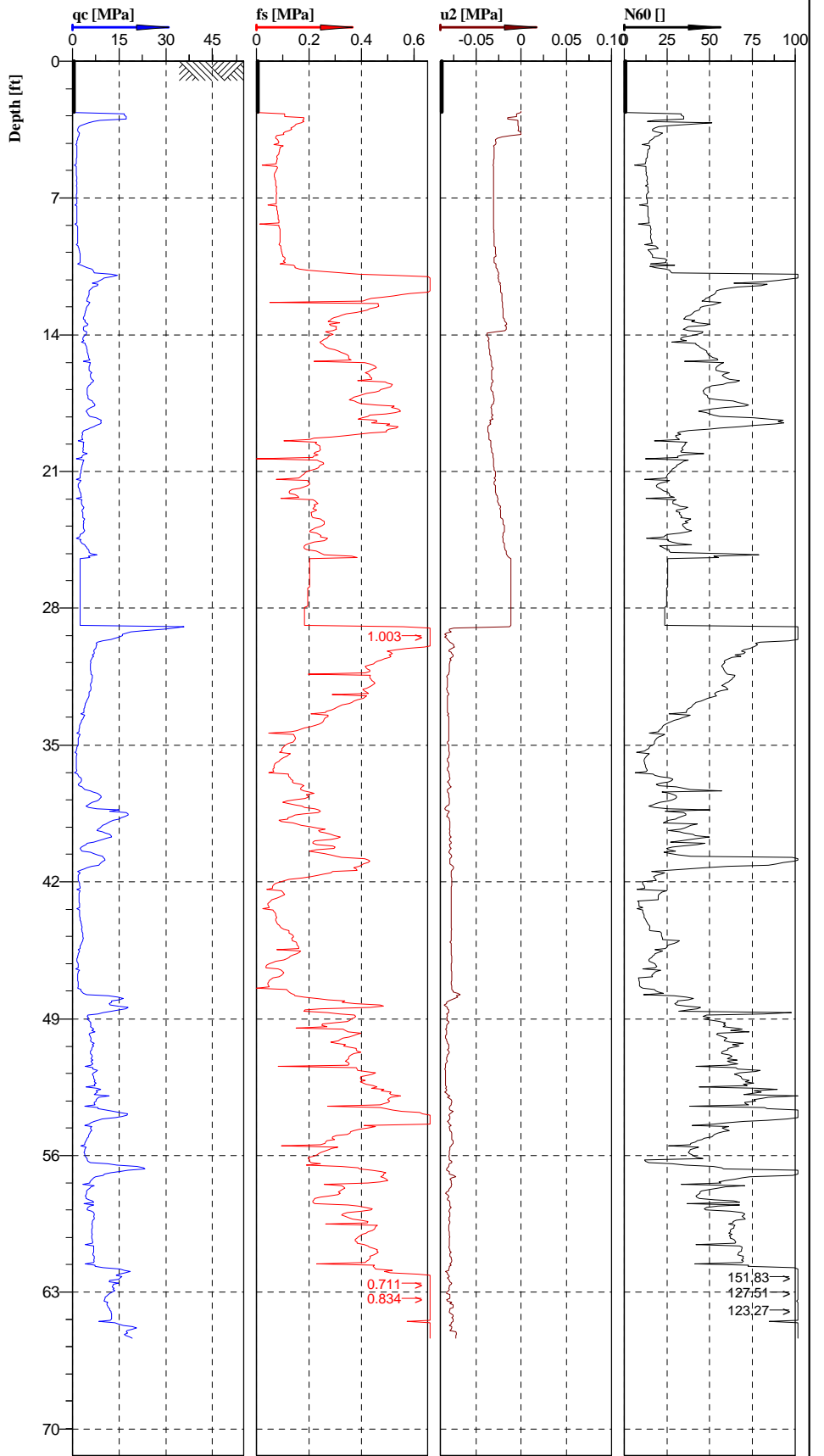
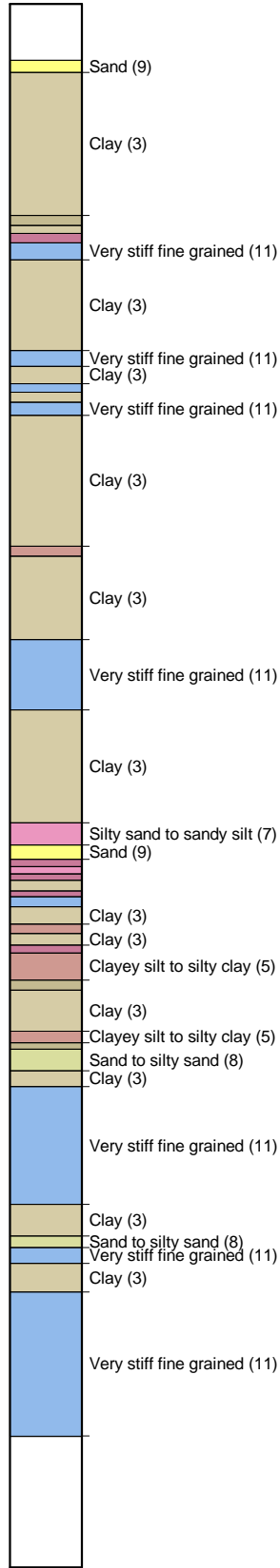
Classification by
Robertson 1986



Cone No: 4057
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: San leandro, Ca	Position: X: 0.00 ft, Y: 0.00 ft	Ground level: 0.00	Test no: CPT14
Project ID: G3988	Client: SOMA	Date: 1/9/2014	Scale: 1 : 100
Project: Freedom ave gas station		Page: 1/1	Fig:
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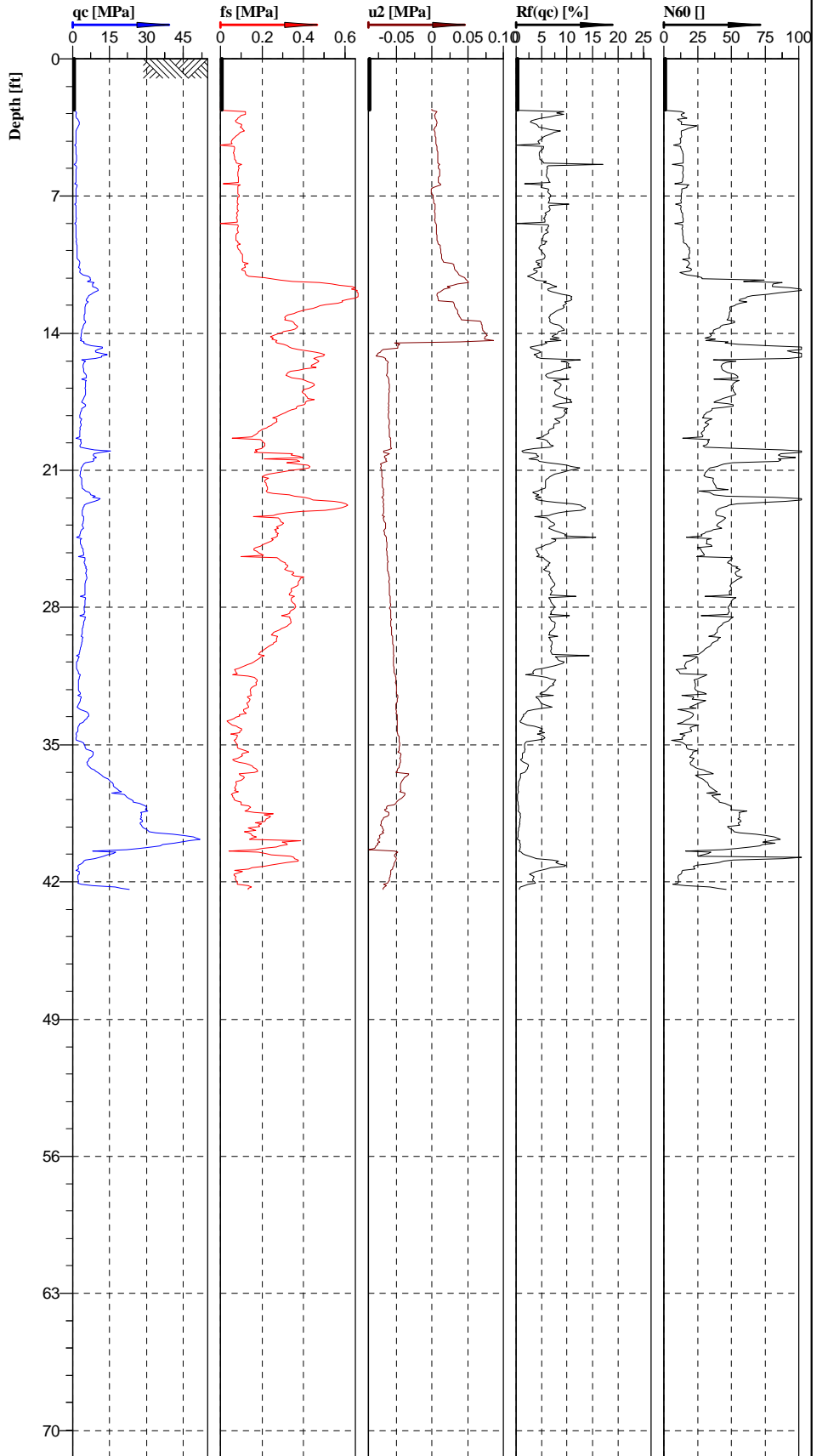
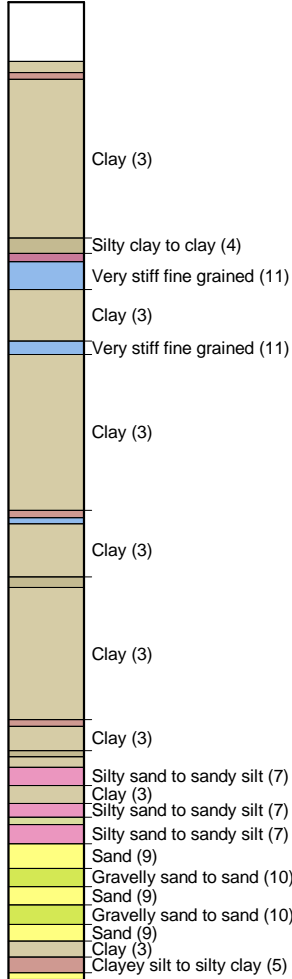
Classification by
Robertson 1986



Cone No: 4057
Tip area [cm²]: 10
Sleeve area [cm²]: 150

Location: San leandro, ca	Position: X: 0.00 ft, Y: 0.00 ft	Ground level: 0.00	Test no: CPT15
Project ID: G3988	Client: SOMA	Date: 1/8/2014	Scale: 1 : 100
Project: Freedom ave Gas station		Page: 1/1	Fig:
		File: somafredomave15.cpd	

Classification by
Robertson 1986


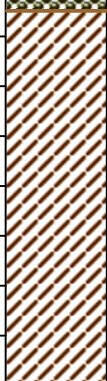







Cone No: 4057
Tip area [cm2]: 10
Sleeve area [cm2]: 150

Location: San leandro, Ca	Position: X: 0.00 ft, Y: 0.00 ft	Ground level: 0.00	Test no: CPT17
Project ID: G3988	Client: SOMA	Date: 1/8/2014	Scale: 1 : 100
Project: Freedom ave gas station		Page: 1/1	Fig:
		File: somafredomave17.cpt	

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 15, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 39 ft
 Stabilized GW: 1st WBZ: 18 ft, 2nd WBZ: 20 ft
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; high plasticity; no PHC odor.					
	10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor. Sand is fine- to coarse-grained at 10 feet					
	15		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; high plasticity; no PHC odor.					
	15		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel. As above, greenish-brown, very moist and slight PHC odor begins at 17 feet					
	20		SC	CLAYEY SAND: Brown, very moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.					
	25		CL	SANDY LEAN CLAY: Brown, very moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, PHC odor, some gravel.					

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 15, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 39 ft
Stablized GW: 1st WBZ: 18 ft, 2nd WBZ: 20 ft

DRILLING METHOD: Direct Push





T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.					
	30		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.			X		
	35								
	40		SW	WELL-GRADED SAND: Brown, fine- to medium-grained sand, wet, no PHC odor. As above, wet to saturated, no PHC odor			▽		
	45		CL/ML	SILTY CLAY: Orange brown, moist, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, CaCO3 nodules with HCl reaction, very hard, no PHC odor.					
	50								

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 15, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 39 ft
Stablized GW: 1st WBZ: 18 ft, 2nd WBZ: 20 ft

DRILLING METHOD: Direct Push


T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

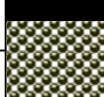
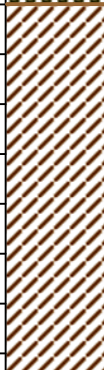




APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	SAMPLED CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	55		CL/ML	SILTY CLAY: Orange brown, wet to saturated, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, no HCl reaction, hard, no PHC odor. As above, wet, no PHC odor.					
	60								
	65								
	70								
	75								

COMMENTS:

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 17, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 38 ft
 Stabilized GW: 1st WBZ: 19.5 ft, 2nd WBZ: 19 ft
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor.					
	10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor. Sand is fine- to coarse-grained at 10 feet					
	15		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor, some gravel at 15 feet.					
	20		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.					
	25		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel. Greenish-gray color and PHC odor begin at 20 feet. Very moist to wet at 22 feet. As above, greenish-brown, very moist to wet, slight PHC odor.			X		

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 17, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 38 ft
Stablized GW: 1st WBZ: 19.5 ft, 2nd WBZ: 19 ft

DRILLING METHOD: Direct Push





T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.					
	30		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.			X		
	35								
	40		SW	WELL-GRADED SAND: Brown, fine- to medium-grained sand, wet, no PHC odor. As above, wet to saturated, no PHC odor			▽		
	45		CL/ML	SILTY CLAY: Orange brown, moist, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, CaCO3 nodules with HCl reaction, very hard, no PHC odor.					
	50								

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 17, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 38 ft
Stablized GW: 1st WBZ: 19.5 ft, 2nd WBZ: 19 ft

DRILLING METHOD: Direct Push


T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

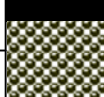
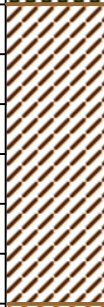


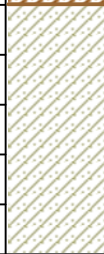
APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	55		CL/ML	SILTY CLAY: Orange brown, wet to saturated, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, no HCl reaction, hard, no PHC odor.					
	60			As above, wet, no PHC odor.		X			
	65								
	70								
	75								

COMMENTS:

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 20, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 21 ft, 2nd WBZ: 38 ft
 Stabilized GW: 1st WBZ: 19 ft, 2nd WBZ: 22 ft
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Ashphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor.					
	10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor. Sand is fine- to coarse-grained at 10 feet					
	15			As above, moist, no PHC odor.					
	20		SC	CLAYEY SAND: Greenish-gray, very moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, PHC odor, some gravel.		X	▼ ▼ ▼		

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 20, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 21 ft, 2nd WBZ: 38 ft
Stablized GW: 1st WBZ: 19 ft, 2nd WBZ: 22 ft

DRILLING METHOD: Direct Push





T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.					
	30		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.			X		
	35								
	40		SW	WELL-GRADED SAND: Brown, fine- to medium-grained sand, wet, no PHC odor. As above, wet to saturated, no PHC odor			▽		
	45		CL/ML	SILTY CLAY: Orange brown, moist, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, CaCO3 nodules with HCl reaction, very hard, no PHC odor.					
	50								

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 20, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 21 ft, 2nd WBZ: 38 ft

Stablized GW: 1st WBZ: 19 ft, 2nd WBZ: 22 ft

DRILLING METHOD: Direct Push


T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

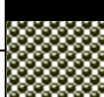
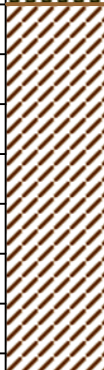




APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	55		CL/ML	SILTY CLAY: Orange brown, wet to saturated, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, no HCl reaction, hard, no PHC odor.					
	60			As above, wet, no PHC odor.		X			
	65								
	70								
	75								

COMMENTS:

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 16, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 39 ft
 Stabilized GW: 1st WBZ: 15.5 ft, 2nd WBZ: 17.8 ft
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor.					
	10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor. Sand is fine- to coarse-grained at 10 feet					
	15		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor, some gravel at 15 feet.			▼		
	20		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.			▼		
	25		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel. Greenish-gray color and PHC odor begin at 20 feet. Very moist to wet at 22 feet. As above, greenish-brown, very moist to wet, slight PHC odor.		X	▼		

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 16, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 37 ft
Stablized GW: 1st WBZ: 15.5 ft, 2nd WBZ: 17.8 ft

DRILLING METHOD: Direct Push





T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.					
	30		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.			X		
	35								
	40		SW	WELL-GRADED SAND: Brown, fine- to medium-grained sand, wet, no PHC odor. As above, wet to saturated, no PHC odor			▽		
	45		CL/ML	SILTY CLAY: Orange brown, moist, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, CaCO3 nodules with HCl reaction, very hard, no PHC odor.					
	50						X		

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 16, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 22 ft, 2nd WBZ: 37 ft
Stablized GW: 1st WBZ: 15.5 ft, 2nd WBZ: 17.8 ft

DRILLING METHOD: Direct Push


T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

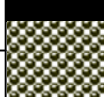

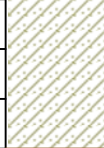

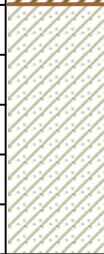
APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	55		CL/ML	SILTY CLAY: Orange brown, wet to saturated, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, no HCl reaction, hard, no PHC odor.					
	60			As above, wet, no PHC odor.					
	65								
	70								
	75								

COMMENTS:

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 17 & 20, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 20 ft, 2nd WBZ: 36 ft
 Stabilized GW: 1st WBZ: 14.5 ft, 2nd WBZ: 18 ft
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor. As above, moist, no PHC odor.					
	10		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor, some gravel at 15 feet.					
	15		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor. As above, moist, no PHC odor.			▼		
	20		SC	CLAYEY SAND: Greenish-gray, very moist to wet, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, PHC odor, some gravel.			▼		
	25				X	X			

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 17 & 20, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 20 ft, 2nd WBZ: 36 ft
Stablized GW: 1st WBZ: 14.5 ft, 2nd WBZ: 18 ft

DRILLING METHOD: Direct Push






T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

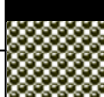








APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.					
	30		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.					
	35		SW	WELL-GRADED SAND: Brown, fine- to medium-grained sand, wet, no PHC odor. As above, wet to saturated, no PHC odor			▽		
	40		CL/ML	SILTY CLAY: Orange brown, moist, ~40% silt, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, with some medium-grained gravel, CaCO3 nodules with HCl reaction, very hard, no PHC odor.					
	45						X		
	50								

COMMENTS: Refusal at 48 feet

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 21 & 28, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 28 ft, 2nd WBZ: NA
 Stabilized GW: 1st WBZ: 23.1 ft, 2nd WBZ: NA
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor.					
			CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor.					
	10		SP	POORLY GRADED SAND: Brown, moist, fine- to coarse-grained sand, no PHC odor.					
			SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor, some gravel at 15 feet.					
	15		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.					
			SP	POORLY GRADED SAND: Brown, moist, fine- to coarse-grained sand, no PHC odor.					
	20		SC	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.					
	25								

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 21 & 28, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 28 ft, 2nd WBZ: NA

Stablized GW: 1st WBZ: 23.1 ft, 2nd WBZ: NA

DRILLING METHOD: Direct Push



T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower


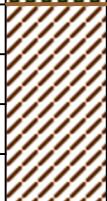





APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON	SAMPLED CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	30		SC	CLAYEY SAND: Brown, very moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel. As above, very moist to wet at 28 feet.			X		
	35		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.					
	40			As above, moist, very hard, no PHC odor.					
	45						X		
	50								

COMMENTS: Refusal at 46 feet

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 21, 2014
 CASING ELEVATION: NA
 First Encountered GW: 1st WBZ: 28 ft, 2nd WBZ: NA
 Stabilized GW: 1st WBZ: 22 ft, 2nd WBZ: NA
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			AC	Hand Auger to 5 feet bgs Asphalt and base rock					
	5		CL	LEAN CLAY: Dark brown, moist, soft, high dry strength, medium toughness, no dilatancy, no HCl reaction; medium to high plasticity; no PHC odor.					
	10		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor.					
	15		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor, some gravel at 15 feet.					
	20		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel.					
	25								

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 21, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 1st WBZ: 28 ft, 2nd WBZ: NA

Stablized GW: 1st WBZ: 22 ft, 2nd WBZ: NA

DRILLING METHOD: Direct Push



T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower







APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	30		SC	CLAYEY SAND: Brown, very moist to wet, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, slight PHC odor, some gravel.		X	▽		
	35		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, CaCO3 nodules with HCl reaction, no PHC odor. As above, moist, very hard, no PHC odor.		X			
	40								
	45								
	50								

COMMENTS: Refusal at 39 feet

PROJECT: 2552
 SITE LOCATION: 15101 Freedom Ave., San Leandro, CA
 DRILLER: Fisch Drilling
 DRILLING METHOD: Direct Push
 BORING DIAMETER: 3-inches
 LOGGED BY: E. Hightower

DATE DRILLED: January 28, 2014
 CASING ELEVATION: NA
 First Encountered GW: 24 feet
 Stablized GW: 20.30 feet
 T.O.C. TO SCREEN: NA
 SCREEN LENGTH: NA
 APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	0.2			Hand Auger to 5 feet bgs CLAYEY SAND: Brown, moist, ~75% fine- to medium-grained sand, ~25% clay with high dry strength, medium toughness, no dilatancy, no HCl reaction, high plasticity, no PHC odor				
	5		CL	SANDY LEAN CLAY: Light brown, moist, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm, no HCl reaction, no PHC odor. As above, moist, brown, no PHC odor.				
	10		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor. ~6-inch sandy lens at 13.5 feet As above, very moist, no PHC odor.				
	15		CL	SANDY LEAN CLAY: Brown, moist, ~30% fine- to medium-grained sand, ~70% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor.				
	20		SC	CLAYEY SAND: Brown, moist, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel. Greenish-gray color and PHC odor begin at 21 feet.		▼		
43.9 380	25			As above, very moist to wet, slight PHC odor.	X	▼		

COMMENTS:

PROJECT: 2552

DATE DRILLED: January 28, 2014

SITE LOCATION: 15101 Freedom Ave., San Leandro, CA

CASING ELEVATION: NA

DRILLER: Fisch Drilling

First Encountered GW: 24 feet

Stablized GW: 20.30 feet

DRILLING METHOD: Direct Push


T.O.C. TO SCREEN: NA

BORING DIAMETER: 3-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
0.7	2.7		SC	CLAYEY SAND: Brown, very moist to wet, ~65% fine- to medium-grained sand, ~35% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, firm to soft, no HCl reaction, slight PHC odor, some gravel.					
				As above, wet.		X			
	30								
	35								
	40								
	45								
	50								

COMMENTS:



BORING LOCATION

SEE SITE MAP

PROJECT: 2552
 SITE LOCATION: Intersection of 152-nd
 and Liberty St.
 DRILLING METHOD: HSA
 DRILLER: Gregg Drilling & Testing. (Jason)
 LOGGED BY: E Jennings

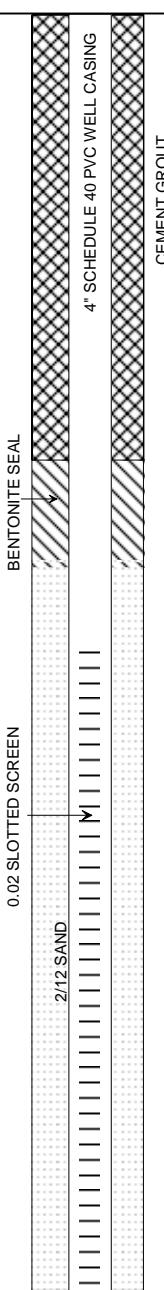
DATE DRILLED: August 25, 2004
 CASING ELEVATION: NA
 DEPTH TO 1ST GW: 16 ft bgs
 APPROVED BY: R. Papler R.G.

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED		BLOWCOUNTS	GW LEVEL	WELL DIAGRAM
					core	split spoon			
				6-7" Asphalt over 15" Baserock					
	5		CL	SILTY CLAY: dark gray becoming medium dark brownish gray w/ depth, med. stiff to stiff, moist, high plasticity; Low estimated permeability (LEK). Slight petroleum hydrocarbon (PHC) odor.					<p>4" SCHEDULE 40 PVC WELL CASING BENTONITE SEAL 0.02 SLOTTED SCREEN 2/12 SAND CEMENT GROUT</p>
0			CL	SILTY CLAY with some Sand and Gravel: light gray brown becoming gray brown below 8', stiff, damp, becoming moist below 8'; <15% very fine sand and gravel with some caliche; Low estimated permeability (LEK). No petroleum hydrocarbon (PHC) odor.					
0	10		SP/SW	SAND interbedded with GRAVELLY SAND: olive gray, med dense; moist to very moist becoming wet below 16'; fine to coarse sand with < 20% subangular to subrounded gravel to 1"; High estimated permeability (HEK). No PHC odor.					
10	15			As above with moderate PHC odor.					
307	20		CL/SC	SANDY CLAY/ CLAYEY SAND w/ some Gravel: olive gray, med. stiff, very moist; 40-60% very fine to fine sand w/ <15% subangular to subrounded gravel to 1 1/2"; MEK-HEK. Moderate to strong PHC odor.					
442	20		SW	SAND w/ some Gravel: olive gray, med. dense, moist becoming wet, fine to coarse sand w/ < 10% subrounded gravel to 3/4"; HEK. Strong PHC odor.					
255	25								

HAND AUGERED TO 5'

No recov.

0.02 SLOTTED SCREEN
 2/12 SAND




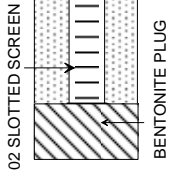



BORING LOCATION

SEE SITE MAP

PROJECT: 2552
 SITE LOCATION: Intersection of 152-nd and Liberty St.
 DRILLING METHOD: HSA
 DRILLER: Gregg Drilling & Testing. (Jason)
 LOGGED BY: E Jennings

DATE DRILLED: August 25, 2004
 CASING ELEVATION: NA
 DEPTH TO 1ST GW: 16 ft bgs
 APPROVED BY: R. Papler R.G.

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED		BLOWCOUNTS	GW LEVEL	WELL DIAGRAM
					core	split spoon			
653			GW	SANDY GRAVEL: gray, med. dense, wet, fine to coarse; HEK. Strong PHC odor.				 <p>0.02 SLOTTED SCREEN BENTONITE PLUG</p>	
			CL	SILTY CLAY: olive gray and gray brown, very stiff to hard, damp to moist, high plasticity; LEK. Slight PHC odor.					
	30			Total depth: 28 ft bgs Borehole plugged to 27'					
	35			Groundwater first encountered at 16 ft bgs then 20 ft bgs and later stabilized at 17.64 ft below toc (21 September 2004).					
	40								
	45								
	50								



ENVIRONMENTAL ENGINEERING, INC.
8620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401

FIELD REPORT

Site Address: 15101 Freedom Ave, San Leandro Proj. No: 2552
Job Performing: Setting up vapor sample under house. Date: Jan. 21, 2014 +
Arrival Time: _____ Departure Time: _____ Jan. 22, 2014

Travel Time to Site & Back: _____

Staff Geol/Eng Signature: _____

1/21/14

Time: 14:10 Opened up entrance to crawl space, got equipment together.

14:30 went inside crawl space under house, set up vapor sampling

Time: cannister, located as far into crawl space as possible.

Starting volume: 30" Hg

Time: 1/22/14

14:30 onsite to retrieve cannister ending volume: 3" Hg

Time: _____

Time: _____

Time: _____

APPENDIX D

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address		Freedom Gas & Food 15101 Freedom Ave. San Leandro CA		SOMA ENVY
4. Generator's Phone ()	5. Transporter 1 Company Name		6. US EPA ID Number	A. State Transporter's ID
	In SHOOT Inc			B. Transporter 1 Phone 374-3834
	7. Transporter 2 Company Name		8. US EPA ID Number	C. State Transporter's ID
				D. Transporter 2 Phone
9. Designated Facility Name and Site Address		10. US EPA ID Number		E. State Facility's ID
INSTRAL, INC. 1105 GARFORD RD. FID VISTA, CA 94571				F. Facility's Phone (707) 374-8004
11. WASTE DESCRIPTION			12. Containers	13. Total Quantity
			No.	Type
a.			—	—
b. Non-HAZARDOUS Soil			2	DRM 1000'
c.				
d.				
14. Unit Wt./Vol.				lbs
G. Additional Descriptions for Materials Listed Above			H. Handling Codes for Wastes Listed Above	
Color - Brown ODOR - Ø Solids - Dry				
15. Special Handling Instructions and Additional Information				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name			Signature	
17. Transporter 1 Acknowledgement of Receipt of Materials			Date	
Printed/Typed Name			Signature	
Mark M'Hughli			P. Mhu	
18. Transporter 2 Acknowledgement of Receipt of Materials			Date	
Printed/Typed Name			Signature	
19. Discrepancy Indication Space				
20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name			Signature	
MICHAEL WHITEHEAD			Michael Whitehead	
			Date	
			Month Day Year	
			2 14 14	

NON-HAZARDOUS WASTE

GENERATOR
TRANSPORTER
FACILITY



APPENDIX E

Photographic Documentation



Plate 1. Fisch Drilling setting up on CPT/MIP-11



Plate 2. Fisch Drilling driving down for CPT/MIP-15



Plate 3. Fisch Drilling on CPT/MIP-10



Plate 4. Fisch drilling on CPT/MIP-16



Plate 5. Fisch Drilling set up on CPT/MIP-9



Plate 6. Fisch Drilling drilling on CPT-MIP-17



Plate 7. Fisch Drilling set up on CPT/MIP-14



Plate 8. Pressure gauge on air sample canister prior to sampling



Plate 9. Pressure gauge on air sample canister post sampling

APPENDIX F

Laboratory Analytical Report



Laboratory Job Number 252284
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue, San Leandro
Level : II

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers like CPT/MIP-11@23FT and their corresponding Lab IDs such as 252284-001.

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 NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: [Handwritten Signature]
Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 01/22/2014

CASE NARRATIVE

Laboratory number: 252284
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue, San Leandro
Request Date: 01/15/14
Samples Received: 01/15/14

This data package contains sample and QC results for eleven soil samples and nine water samples, requested for the above referenced project on 01/15/14. The samples were received cold and intact.

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

Matrix spikes QC724402, QC724403 (batch 207161) were not reported because the parent sample was reanalyzed in another batch. No other analytical problems were encountered.

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

CPT/MIP-14-1 (lab # 252284-018) had multiple vials combined due to sediment. No other analytical problems were encountered.

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

CPT/MIP-11@23FT (lab # 252284-001), CPT/MIP-14@21FT (lab # 252284-006), and CPT/MIP-10@21FT (lab # 252284-009) were diluted due to high hydrocarbons. No other analytical problems were encountered.

CHAIN OF CUSTODY



2232 Fifth Street
 Berkeley, CA 94710

Phone (510) 486-0900
 Fax (510) 486-0532

C&T LOGIN # 252204

Project No: 2552

Sampler: Lizzie Hightower

Project Name: 1501 Freedom Ave., San Leandro

Report To: Jayce Bobek

Project P. O. No: _____

Company: SOMA Environmental

EDD Format: Report Level II III IV

Telephone: 925-734-6400

Turnaround Time: RUSH

Standard

Email: jbobek@somaenv.com

ANALYTICAL REQUEST												
Lab No.	Sample ID.	SAMPLING		MATRIX		# of Containers	CHEMICAL PRESERVATIVE					TPH-g, BTEX 826B Gas OX + Lead Scavengers Naphthalene
		Date Collected	Time Collected	Water	Solid		HCl	H2SO4	HNO3	NaOH	None	
1	CPT/MIP-11@23ft	1/13/14	09:19	X		1						X
2	CPT/MIP-11@24ft	1/13/14	09:32	X		1						X
3	CPT/MIP-15@32ft	1/13/14	14:31	X		1						X
4	CPT/MIP-15@42ft	1/13/14	15:23	X		1						X
5	CPT/MIP-17@30ft	1/14/14	09:55	X		1						X
6	CPT/MIP-14@21ft	1/14/14	13:09	X		1						X
7	CPT/MIP-14@30ft	1/14/14	13:51	X		1						X
8	CPT/MIP-14@52ft	1/14/14	16:20	X		1						X
9	CPT/MIP-10@21ft	1/15/14	11:00	X		1						X
10	CPT/MIP-10@24ft	1/15/14	11:06	X		1						X
11	CPT/MIP-10@33ft	1/15/14	11:38	X		1						X

Notes: EDF Output Required
 Gas OX + Lead Scavengers:
 MBE, TBA, ETBE, DIPE,
 TAME, 1,2-DCA, EDB,
 Ethanol
 TVN by 8015
 Soil 15

SAMPLE RECEIPT
 Intact
 Cold
 On Ice
 Ambient

RELINQUISHED BY:
[Signature]
 DATE: 1/15/14 TIME: 14:02
 DATE: TIME:
 DATE: TIME:

RECEIVED BY:
[Signature]
 DATE: 1/15/14 TIME: 14:02
 DATE: TIME:
 DATE: TIME:

3 of 50

CHAIN OF CUSTODY



Chain of Custody # _____

2323 Fifth Street
 Berkeley, CA 94710

Phone (510) 486-0900
 Fax (510) 486-0532

C&T LOGIN # 252284

Project No: 2552

Sampler: Lizzie Hightower

Project Name: 1501 Freedom Ave, Leandro

Report To: Joye Bobek

Project P. O. No: _____

Company: SOMA Environmental

EDD Format: Report Level II III IV

Telephone: 925-734-6400

Turnaround Time: RUSH Standard

Email: jbobek@somaenv.com

ANALYTICAL REQUEST											
Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid	# of Containers	HCl	H2SO4	HNO3	NaOH	None
12	CPT/MIP-11-1	1/13/14	09:40	X		4	X				
13	CPT/MIP-11-2	1 1/13/14	12:04	X		4	X				
14	CPT/MIP-15-1	1/13/14	14:38	X		4	X				
15	CPT/MIP-15-2	1/13/14	15:50	X		4	X				
16	CPT/MIP- 17 -1	1/14/13	10:05	X		4	X				
17	CPT/MIP-17-2	1/14/13	11:13	X		4	X				
18	CPT/MIP-14-1	1/14/13	14:15	X		4	X				
19	CPT/MIP- 17 -2	1/15/13	09:15	X		4	X				
20	CPT/MIP-10-1	1/15/13	12:09	X		4	X				

TPH-g, BTEX 8260B
 Gas Ox & Lead Scavengers 8260B
 Naphthalene 8260B

Notes: EDD Output Required
Gas Ox & Lead Scavengers:
 MTBE, TBA, ETBE, DIPE,
 TAME, 1,2-DCA, EDB,
 Ethanol

SAMPLE RECEIPT
 In fact
 Cold
 On Ice
 Ambient

TKH by 8015
Soil

RELINQUISHED BY:
E. Hightower DATE: 1/15/14 TIME: 14:02

DATE: _____ TIME: _____

DATE: _____ TIME: _____

RECEIVED BY:
Joye Bobek DATE: 1/15/14 TIME: 14:02

DATE: _____ TIME: _____

DATE: _____ TIME: _____

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 252284 Date Received 11/5/14 Number of coolers 1
 Client SOMA Project 255Z

Date Opened 1/15 By (print) MG (sign) [Signature]
 Date Logged in 3 By (print) TR (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: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 4.7

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

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

21. Was the client contacted concerning this sample delivery? _____ YES NO
 If YES, Who was called? _____ By _____ Date: _____

COMMENTS

20 - 003 1 of 4 VOAs rec'd w/ bubbles

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	01/15/14

Field ID:	CPT/MIP-11@23FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/13/14
Lab ID:	252284-001	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	29 Y	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	67-137

Field ID:	CPT/MIP-11@24FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/13/14
Lab ID:	252284-002	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	67-137

Field ID:	CPT/MIP-15@32FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/13/14
Lab ID:	252284-003	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Field ID:	CPT/MIP-15@42FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/13/14
Lab ID:	252284-004	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

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

Total Volatile Hydrocarbons		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8015B
Matrix:	Soil	Basis: as received
Units:	mg/Kg	Received: 01/15/14

Field ID:	CPT/MIP-17@30FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/14/14
Lab ID:	252284-005	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Field ID:	CPT/MIP-14@21FT	Batch#:	207201
Type:	SAMPLE	Sampled:	01/14/14
Lab ID:	252284-006	Analyzed:	01/17/14
Diln Fac:	33.33		

Analyte	Result	RL
Gasoline C7-C12	54 Y	6.7

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	118	67-137

Field ID:	CPT/MIP-14@30FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/14/14
Lab ID:	252284-007	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.95

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Field ID:	CPT/MIP-14@52FT	Batch#:	207157
Type:	SAMPLE	Sampled:	01/14/14
Lab ID:	252284-008	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

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

Total Volatile Hydrocarbons		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8015B
Matrix:	Soil	Basis: as received
Units:	mg/Kg	Received: 01/15/14

Field ID:	CPT/MIP-10@21FT	Batch#:	207201
Type:	SAMPLE	Sampled:	01/15/14
Lab ID:	252284-009	Analyzed:	01/17/14
Diln Fac:	100.0		

Analyte	Result	RL
Gasoline C7-C12	200	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	67-137

Field ID:	CPT/MIP-10@24FT	Batch#:	207161
Type:	SAMPLE	Sampled:	01/15/14
Lab ID:	252284-010	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-137

Field ID:	CPT/MIP-10@33FT	Batch#:	207161
Type:	SAMPLE	Sampled:	01/15/14
Lab ID:	252284-011	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-137

Type:	BLANK	Batch#:	207157
Lab ID:	QC724384	Analyzed:	01/16/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	67-137

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

Total Volatile Hydrocarbons		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8015B
Matrix:	Soil	Basis: as received
Units:	mg/Kg	Received: 01/15/14

Type:	BLANK	Batch#:	207161
Lab ID:	QC724401	Analyzed:	01/16/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	67-137

Type:	BLANK	Batch#:	207201
Lab ID:	QC724548	Analyzed:	01/17/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

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

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724383	Batch#:	207157
Matrix:	Soil	Analyzed:	01/16/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9477	95	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	CPT/MIP-14@52FT	Diln Fac:	1.000
MSS Lab ID:	252284-008	Batch#:	207157
Matrix:	Soil	Sampled:	01/14/14
Units:	mg/Kg	Received:	01/15/14
Basis:	as received	Analyzed:	01/17/14

Type: MS Lab ID: QC724385

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.05433	10.42	8.492	81	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Type: MSD Lab ID: QC724386

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.75	8.959	83	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

RPD= Relative Percent Difference

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724400	Batch#:	207161
Matrix:	Soil	Analyzed:	01/16/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9934	99	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724547	Batch#:	207201
Matrix:	Soil	Analyzed:	01/17/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.040	104	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	252300-010	Batch#:	207201
Matrix:	Soil	Sampled:	01/15/14
Units:	mg/Kg	Received:	01/16/14
Basis:	as received	Analyzed:	01/17/14

Type: MS Lab ID: QC724549

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.2420	9.259	8.464	89	42-120

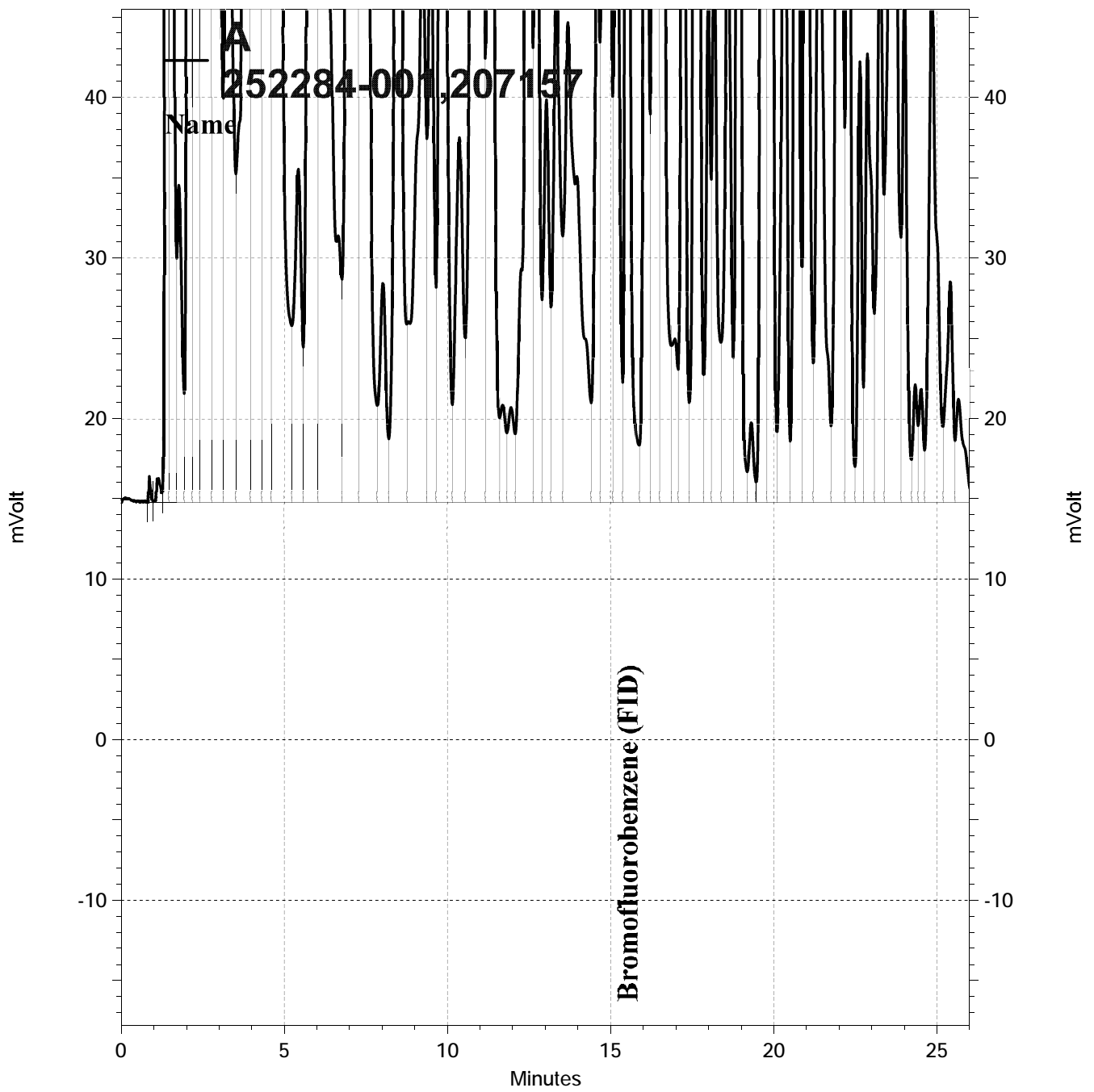
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	67-137

Type: MSD Lab ID: QC724550

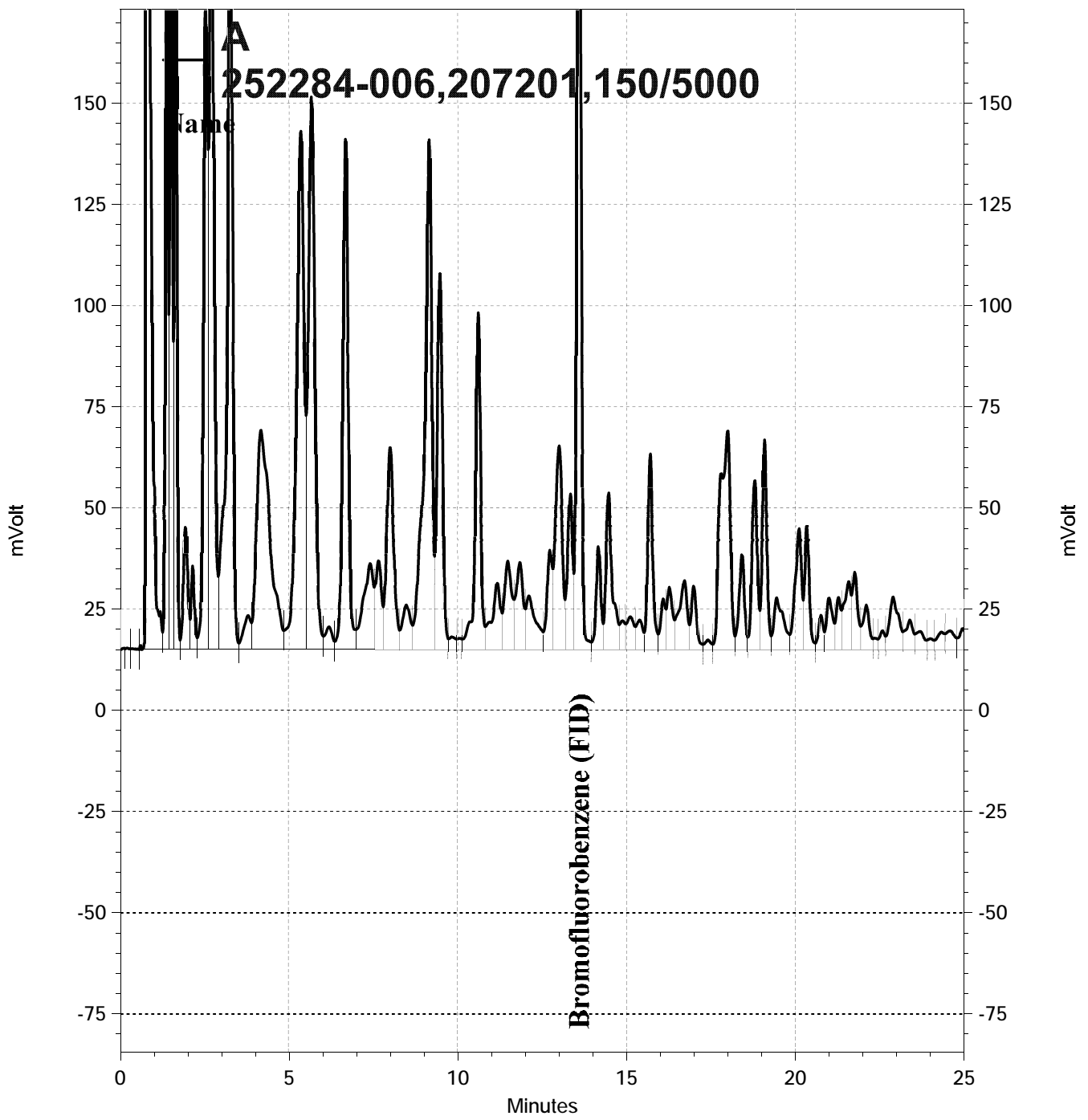
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.10	9.271	89	42-120	1	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	67-137

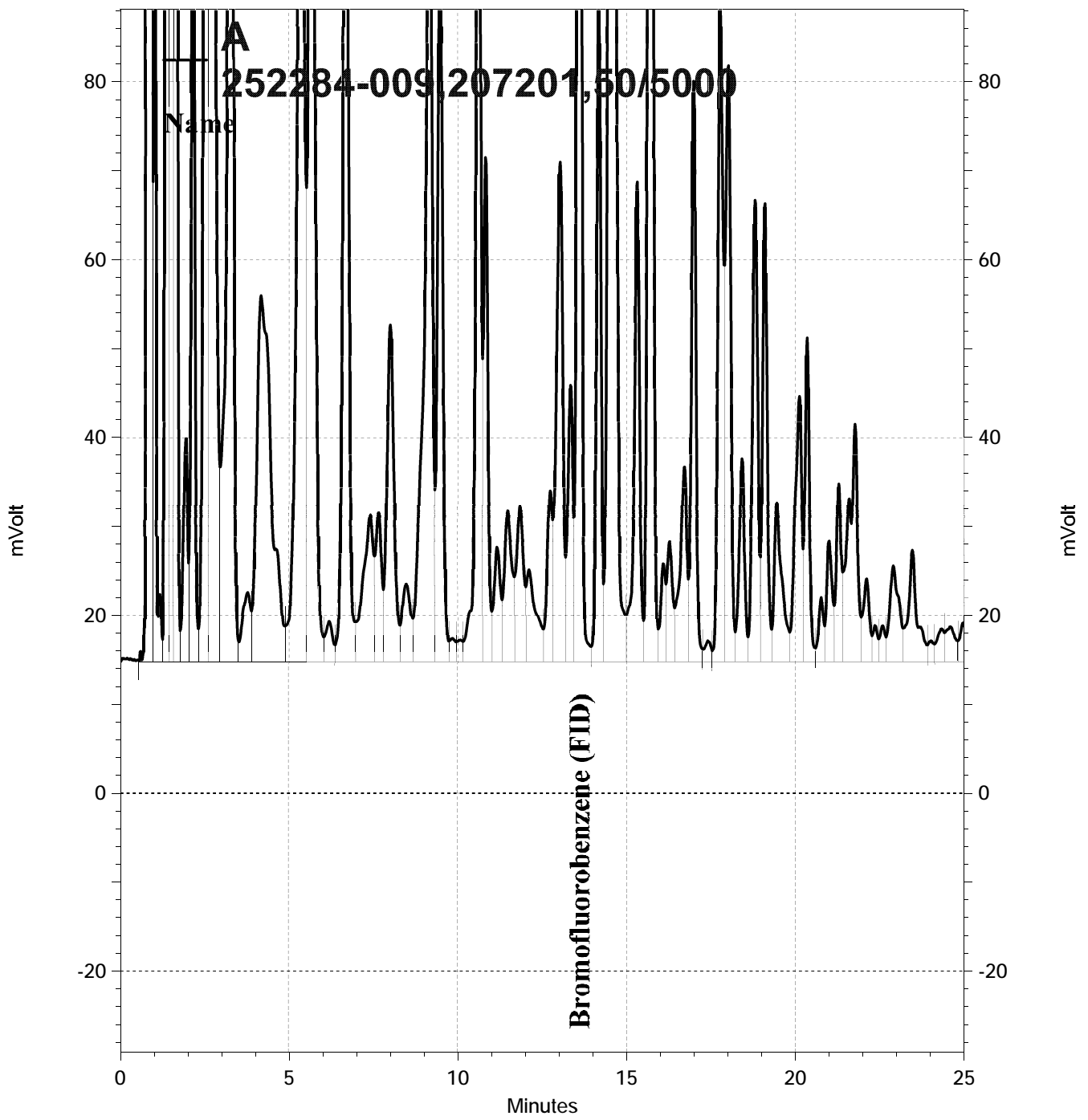
RPD= Relative Percent Difference



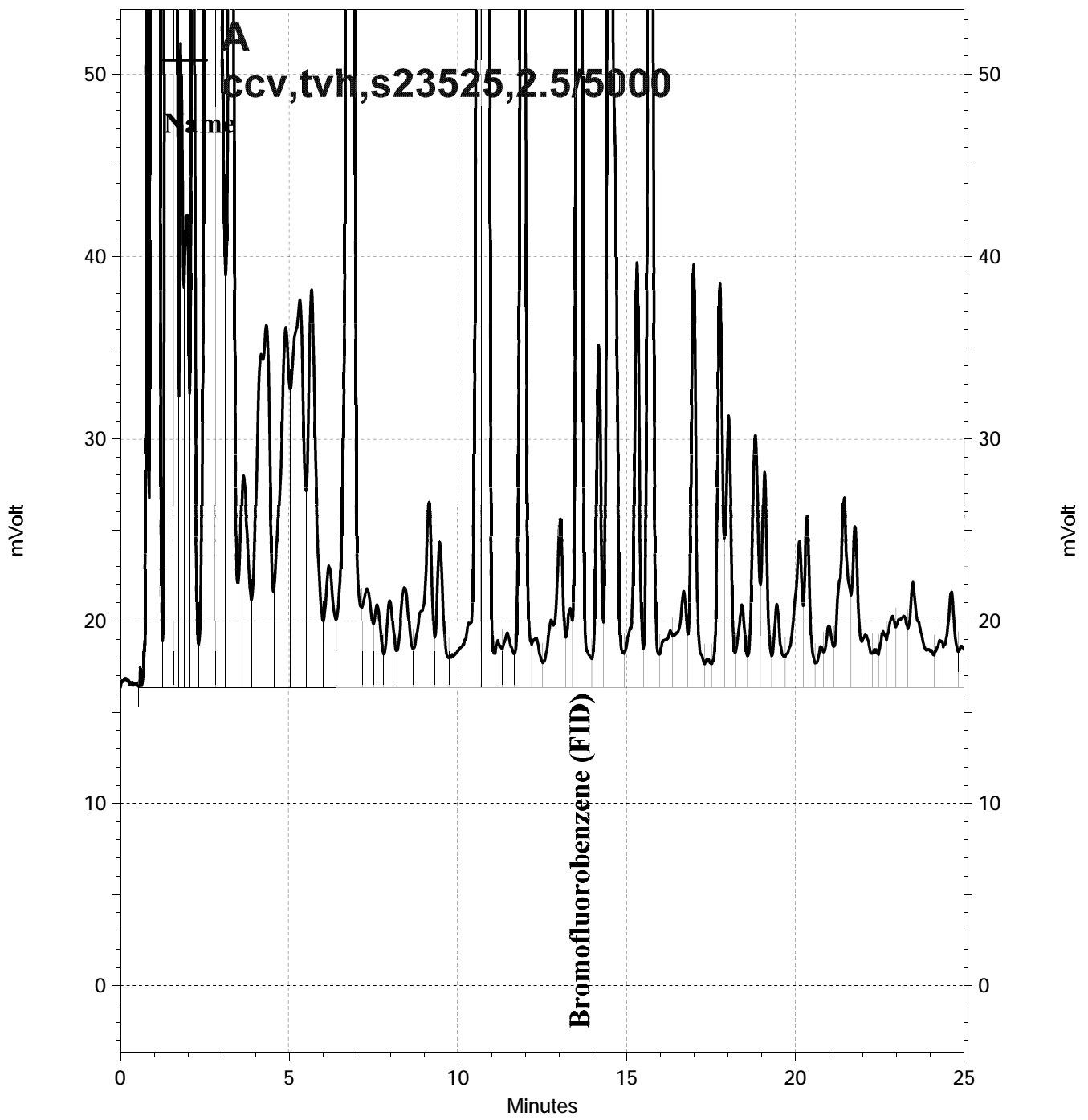
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— \\Lims\gdrive\ezchrom\Projects\GC05\Data\017-017, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\017-015, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\017-003, A

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-11-1	Batch#: 207141
Lab ID: 252284-012	Sampled: 01/13/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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)	5.2	0.50
Ethanol	ND	1,000
MTBE	58	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	87	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-11-2	Batch#: 207141
Lab ID: 252284-013	Sampled: 01/13/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	63	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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	1.1	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.6	0.50
m,p-Xylenes	1.8	0.50
o-Xylene	0.75	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-136
1,2-Dichloroethane-d4	87	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-15-1	Batch#: 207141
Lab ID: 252284-014	Sampled: 01/13/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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
Ethanol	ND	1,000
MTBE	5.8	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	88	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-15-2	Batch#: 207141
Lab ID: 252284-015	Sampled: 01/13/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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
Ethanol	ND	1,000
MTBE	1.4	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.57	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-136
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-17-1	Batch#: 207141
Lab ID: 252284-016	Sampled: 01/14/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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)	0.77	0.50
Ethanol	ND	1,000
MTBE	10	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	91	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-17-2	Batch#: 207141
Lab ID: 252284-017	Sampled: 01/14/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	1.2	0.50
Toluene	0.57	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-136
1,2-Dichloroethane-d4	88	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-14-1	Batch#: 207141
Lab ID: 252284-018	Sampled: 01/14/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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)	0.53	0.50
Ethanol	ND	1,000
MTBE	9.2	0.50
1,2-Dichloroethane	0.69	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	89	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-14-2	Batch#: 207141
Lab ID: 252284-019	Sampled: 01/15/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
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
Ethanol	ND	1,000
MTBE	0.95	0.50
1,2-Dichloroethane	3.2	0.50
Benzene	0.71	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	94	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-10-1	Batch#: 207141
Lab ID: 252284-020	Sampled: 01/15/14
Matrix: Water	Received: 01/15/14
Units: ug/L	Analyzed: 01/16/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	76	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)	0.51	0.50
Ethanol	ND	1,000
MTBE	5.4	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	3.9	0.50
m,p-Xylenes	4.4	0.50
o-Xylene	2.0	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	93	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207141
Units:	ug/L	Analyzed:	01/16/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724314

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	101.3	81	37-151
Isopropyl Ether (DIPE)	25.00	23.40	94	56-124
Ethyl tert-Butyl Ether (ETBE)	25.00	22.95	92	61-122
Methyl tert-Amyl Ether (TAME)	25.00	21.80	87	65-120
MTBE	25.00	21.22	85	64-121
1,2-Dichloroethane	25.00	21.58	86	77-137
Benzene	25.00	26.14	105	80-124
Toluene	25.00	26.50	106	80-122
1,2-Dibromoethane	25.00	26.46	106	80-120
Ethylbenzene	25.00	27.11	108	80-124
m,p-Xylenes	50.00	55.96	112	80-122
o-Xylene	25.00	29.30	117	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	83	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC724315

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	121.6	97	37-151	18	30
Isopropyl Ether (DIPE)	25.00	22.57	90	56-124	4	20
Ethyl tert-Butyl Ether (ETBE)	25.00	22.81	91	61-122	1	22
Methyl tert-Amyl Ether (TAME)	25.00	22.91	92	65-120	5	22
MTBE	25.00	22.48	90	64-121	6	20
1,2-Dichloroethane	25.00	21.29	85	77-137	1	20
Benzene	25.00	24.72	99	80-124	6	20
Toluene	25.00	25.42	102	80-122	4	20
1,2-Dibromoethane	25.00	27.86	111	80-120	5	20
Ethylbenzene	25.00	26.35	105	80-124	3	20
m,p-Xylenes	50.00	54.25	108	80-122	3	20
o-Xylene	25.00	28.22	113	77-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-136
1,2-Dichloroethane-d4	85	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC724316	Batch#: 207141
Matrix:	Water	Analyzed: 01/16/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-136
1,2-Dichloroethane-d4	87	75-139
Toluene-d8	94	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207141
Units:	ug/L	Analyzed:	01/16/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724317

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	943.4	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	84	75-139
Toluene-d8	95	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC724318

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	892.5	89	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-136
1,2-Dichloroethane-d4	85	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	97	80-120

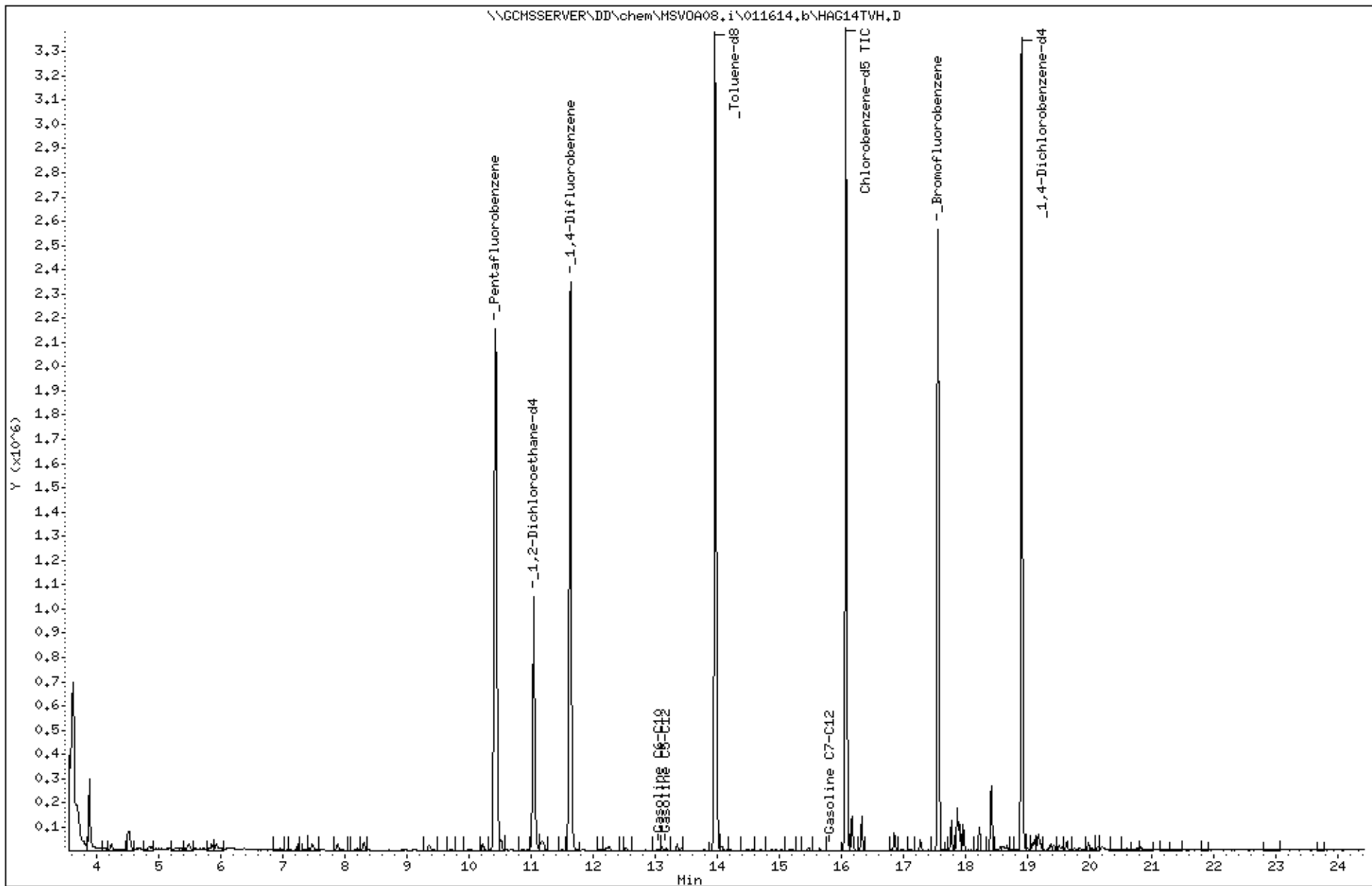
RPD= Relative Percent Difference

Date : 16-JAN-2014 16:18
Client ID: DYNA P&T
Sample Info: S,252284-013

Instrument: MSV0A08.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 16-JAN-2014 19:48

Client ID: DYNA P&T

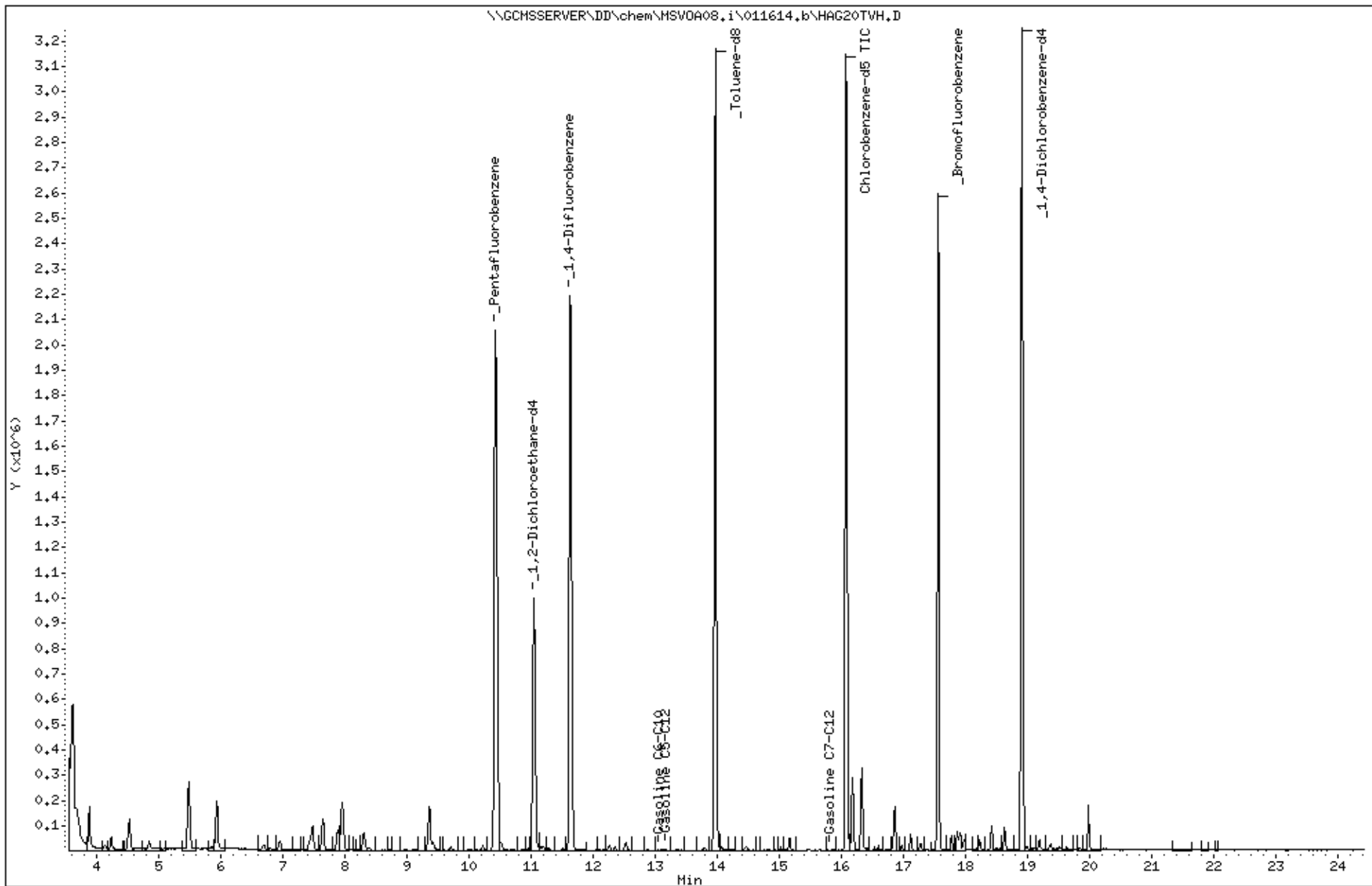
Sample Info: S,252284-020

Instrument: MSV0A08.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 16-JAN-2014 12:49

Client ID: DYNA P&T

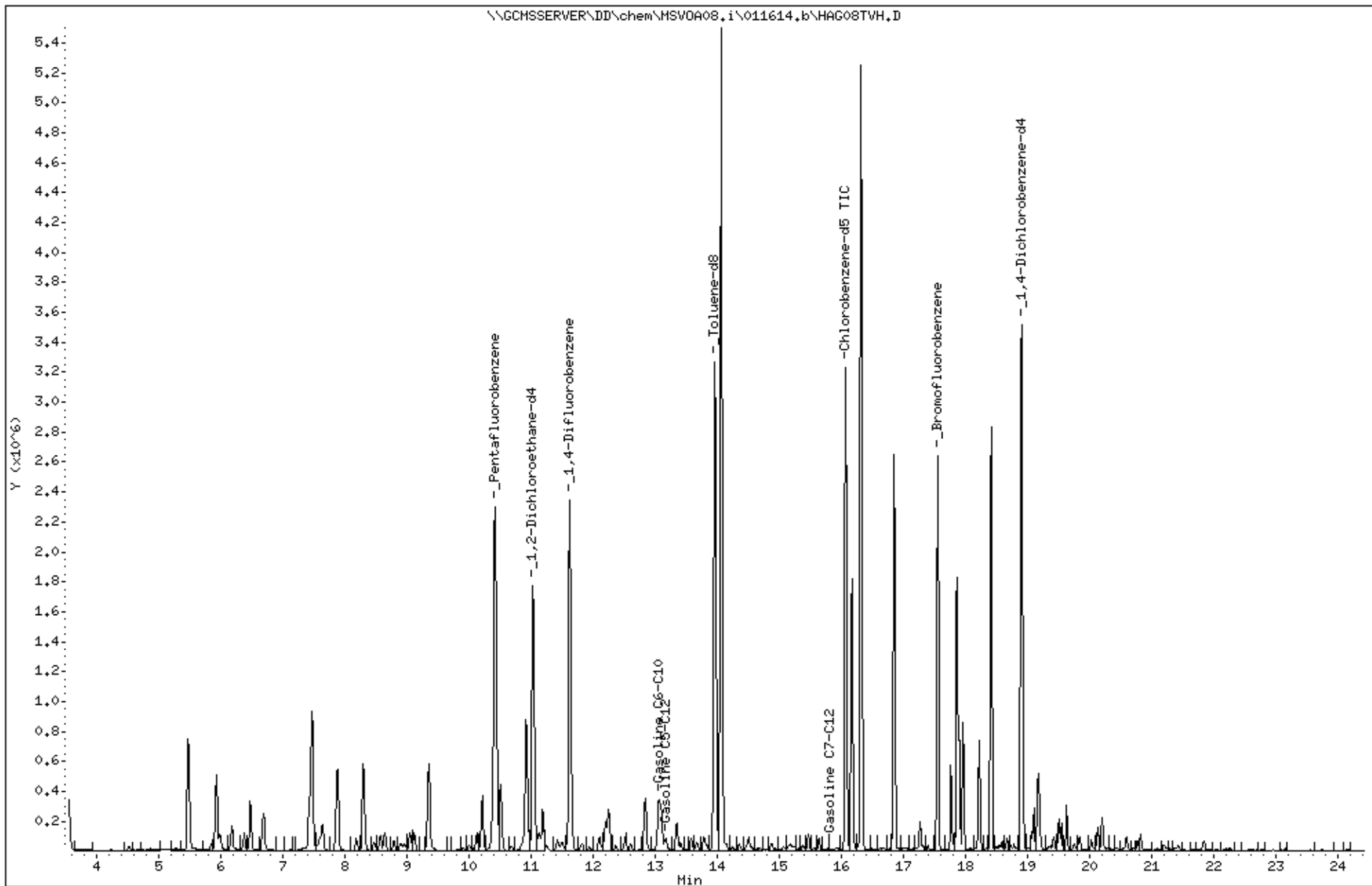
Sample Info: CCV/BS, QC724317, 207141, S23229, .01/100

Instrument: MSV0A08.i

Operator: VOC

Column diameter: 2.00

Column phase:



BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-11@23FT	Diln Fac: 50.00
Lab ID:	252284-001	Batch#: 207230
Matrix:	Soil	Sampled: 01/13/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/20/14

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
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	460	250
m,p-Xylenes	460	250
o-Xylene	ND	250
Naphthalene	ND	250

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	95	79-128
Trifluorotoluene (MeOH)	101	50-137

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-11@24FT	Diln Fac: 0.9901
Lab ID:	252284-002	Batch#: 207134
Matrix:	Soil	Sampled: 01/13/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	990
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	8.6	5.0
m,p-Xylenes	6.8	5.0
o-Xylene	ND	5.0
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	94	80-120
Bromofluorobenzene	99	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-15@32FT	Diln Fac: 0.9671
Lab ID:	252284-003	Batch#: 207134
Matrix:	Soil	Sampled: 01/13/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	970
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	99	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-15@42FT	Diln Fac: 0.9597
Lab ID:	252284-004	Batch#: 207134
Matrix:	Soil	Sampled: 01/13/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	960
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-17@30FT	Diln Fac: 0.9506
Lab ID:	252284-005	Batch#: 207134
Matrix:	Soil	Sampled: 01/14/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	950
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-14@21FT	Diln Fac: 50.00
Lab ID:	252284-006	Batch#: 207230
Matrix:	Soil	Sampled: 01/14/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/20/14

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
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	ND	250
m,p-Xylenes	ND	250
o-Xylene	ND	250
Naphthalene	ND	250

Surrogate	%REC	Limits
Dibromofluoromethane	90	76-128
1,2-Dichloroethane-d4	86	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	79-128
Trifluorotoluene (MeOH)	100	50-137

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-14@30FT	Diln Fac: 0.9488
Lab ID:	252284-007	Batch#: 207134
Matrix:	Soil	Sampled: 01/14/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	950
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
Naphthalene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	101	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-14@52FT	Diln Fac: 0.9690
Lab ID:	252284-008	Batch#: 207134
Matrix:	Soil	Sampled: 01/14/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	970
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	101	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-10@21FT	Diln Fac: 50.00
Lab ID:	252284-009	Batch#: 207230
Matrix:	Soil	Sampled: 01/15/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/20/14

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
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	2,000	250
m,p-Xylenes	2,500	250
o-Xylene	ND	250
Naphthalene	720	250

Surrogate	%REC	Limits
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	95	79-128
Trifluorotoluene (MeOH)	100	50-137

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-10@24FT	Diln Fac: 0.9881
Lab ID:	252284-010	Batch#: 207134
Matrix:	Soil	Sampled: 01/15/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	990
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	20	4.9
m,p-Xylenes	32	4.9
o-Xylene	ND	4.9
Naphthalene	7.9	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Field ID:	CPT/MIP-10@33FT	Diln Fac: 0.9671
Lab ID:	252284-011	Batch#: 207134
Matrix:	Soil	Sampled: 01/15/14
Units:	ug/Kg	Received: 01/15/14
Basis:	as received	Analyzed: 01/16/14

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
Ethanol	ND	970
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	34	4.8
o-Xylene	ND	4.8
Naphthalene	5.2	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC724280	Batch#: 207134
Matrix:	Soil	Analyzed: 01/16/14
Units:	ug/Kg	

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	127.9	102	46-146
MTBE	25.00	26.07	104	64-126
Isopropyl Ether (DIPE)	25.00	23.03	92	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	24.61	98	66-123
1,2-Dichloroethane	25.00	25.94	104	73-139
Benzene	25.00	26.84	107	80-127
Methyl tert-Amyl Ether (TAME)	25.00	26.63	107	69-120
Toluene	25.00	27.02	108	79-125
1,2-Dibromoethane	25.00	27.68	111	77-122
Ethylbenzene	25.00	27.50	110	80-127
m,p-Xylenes	50.00	58.35	117	78-126
o-Xylene	25.00	28.11	112	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	96	79-128

Batch QC Report

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC724281	Batch#: 207134
Matrix:	Soil	Analyzed: 01/16/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	101	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates		
Lab #: 252284	Location: 15101 Freedom Avenue, San Leandro	
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B	
Project#: 2552	Analysis: EPA 8260B	
Field ID: CPT/MIP-15@42FT	Batch#: 207134	
MSS Lab ID: 252284-004	Sampled: 01/13/14	
Matrix: Soil	Received: 01/15/14	
Units: ug/Kg	Analyzed: 01/16/14	
Basis: as received		

Type: MS Diln Fac: 0.9653
 Lab ID: QC724331

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.311	241.3	182.0	75	38-134
MTBE	<0.4645	48.26	39.07	81	47-123
Isopropyl Ether (DIPE)	<0.5424	48.26	35.16	73	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5462	48.26	37.56	78	47-122
1,2-Dichloroethane	<0.5993	48.26	39.68	82	48-129
Benzene	<0.6694	48.26	45.05	93	51-125
Methyl tert-Amyl Ether (TAME)	<0.4659	48.26	40.25	83	50-120
Toluene	<0.7332	48.26	45.19	94	45-123
1,2-Dibromoethane	<0.4924	48.26	42.78	89	47-120
Ethylbenzene	<0.6847	48.26	46.60	97	40-124
m,p-Xylenes	<1.324	96.53	97.32	101	37-122
o-Xylene	<0.5713	48.26	47.87	99	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	98	79-128

Type: MSD Diln Fac: 0.9766
 Lab ID: QC724332

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	244.1	204.9	84	38-134	11	55
MTBE	48.83	38.55	79	47-123	3	46
Isopropyl Ether (DIPE)	48.83	33.24	68	44-123	7	45
Ethyl tert-Butyl Ether (ETBE)	48.83	36.03	74	47-122	5	46
1,2-Dichloroethane	48.83	40.67	83	48-129	1	43
Benzene	48.83	45.55	93	51-125	0	46
Methyl tert-Amyl Ether (TAME)	48.83	38.84	80	50-120	5	45
Toluene	48.83	46.14	94	45-123	1	59
1,2-Dibromoethane	48.83	44.83	92	47-120	4	47
Ethylbenzene	48.83	47.03	96	40-124	0	54
m,p-Xylenes	97.66	97.89	100	37-122	1	54
o-Xylene	48.83	48.54	99	37-120	0	52

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	98	79-128

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC724656	Batch#: 207230
Matrix:	Soil	Analyzed: 01/20/14
Units:	ug/Kg	

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	123.2	99	46-146
MTBE	25.00	24.42	98	64-126
Isopropyl Ether (DIPE)	25.00	20.98	84	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	22.73	91	66-123
1,2-Dichloroethane	25.00	23.71	95	73-139
Benzene	25.00	24.77	99	80-127
Methyl tert-Amyl Ether (TAME)	25.00	25.52	102	69-120
Toluene	25.00	27.04	108	79-125
1,2-Dibromoethane	25.00	27.82	111	77-122
Ethylbenzene	25.00	27.34	109	80-127
m,p-Xylenes	50.00	58.50	117	78-126
o-Xylene	25.00	28.39	114	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	99	79-128

Batch QC Report

BTXE & Oxygenates		
Lab #:	252284	Location: 15101 Freedom Avenue, San Leandro
Client:	SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#:	2552	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC724657	Batch#: 207230
Matrix:	Soil	Analyzed: 01/20/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	101	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates					
Lab #:	252284	Location:	15101 Freedom Avenue, San Leandro		
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B		
Project#:	2552	Analysis:	EPA 8260B		
Field ID:	CPT/MIP-13@31FT	Batch#:	207230		
MSS Lab ID:	252341-002	Sampled:	01/16/14		
Matrix:	Soil	Received:	01/17/14		
Units:	ug/Kg	Analyzed:	01/20/14		
Basis:	as received				

Type: MS
Lab ID: QC724677

Diln Fac: 0.9579

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.523	239.5	163.8	68	38-134
MTBE	<0.4764	47.89	35.36	74	47-123
Isopropyl Ether (DIPE)	<0.5563	47.89	31.22	65	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5601	47.89	33.38	70	47-122
1,2-Dichloroethane	<0.6147	47.89	37.35	78	48-129
Benzene	<0.6865	47.89	41.62	87	51-125
Methyl tert-Amyl Ether (TAME)	<0.4778	47.89	36.73	77	50-120
Toluene	<0.7520	47.89	43.44	91	45-123
1,2-Dibromoethane	<0.5050	47.89	42.05	88	47-120
Ethylbenzene	<0.7023	47.89	44.84	94	40-124
m,p-Xylenes	<1.357	95.79	93.82	98	37-122
o-Xylene	<0.5859	47.89	46.63	97	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	98	79-128

Type: MSD
Lab ID: QC724678

Diln Fac: 0.9524

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	238.1	167.5	70	38-134	3	55
MTBE	47.62	35.77	75	47-123	2	46
Isopropyl Ether (DIPE)	47.62	30.76	65	44-123	1	45
Ethyl tert-Butyl Ether (ETBE)	47.62	33.57	71	47-122	1	46
1,2-Dichloroethane	47.62	37.29	78	48-129	0	43
Benzene	47.62	42.12	88	51-125	2	46
Methyl tert-Amyl Ether (TAME)	47.62	37.36	78	50-120	2	45
Toluene	47.62	44.37	93	45-123	3	59
1,2-Dibromoethane	47.62	44.92	94	47-120	7	47
Ethylbenzene	47.62	44.96	94	40-124	1	54
m,p-Xylenes	95.24	94.99	100	37-122	2	54
o-Xylene	47.62	47.06	99	37-120	1	52

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	79-128

RPD= Relative Percent Difference



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

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

Laboratory Job Number 252341
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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: Tracy Babjar
Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 01/24/2014

CASE NARRATIVE

Laboratory number: 252341
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 01/17/14
Samples Received: 01/17/14

This data package contains sample and QC results for eight soil samples and six water samples, requested for the above referenced project on 01/17/14. The samples were received cold and intact.

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

No analytical problems were encountered.

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

No analytical problems were encountered.

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

CPT/MIP-13@21FT (lab # 252341-001) was diluted due to high non-target analytes. No other analytical problems were encountered.

CHAIN OF CUSTODY



2323 Fifth Street
Berkeley, CA 94710

Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

Project No: 2552

Sampler: Lizze Hightower

Project Name: 1501 Freedom Ave., San Leandro

Report To: Joyce Bobek

Project P. O. No.:

Company: SOMA Environmental

EDD Format: Report Level II III IV

Telephone: 925-734-6400

Turnaround Time: RUSH Standard

Email: jbobek@somaenv.com

ANALYTICAL REQUEST											
Lab No.	Sample ID.	Date Collected	Time Collected	Water	Solid	# of Containers	HCl	H2SO4	HNO3	NaOH	None
1	CPT/MIP-13@ 21ft	1/16/14	09:18	X		1					X
2	CPT/MIP-13@ 31ft	1/16/14	09:40	X		1					X
3	CPT/MIP-13@ 50ft	1/16/14	11:49	X		1					X
4	CPT/MIP-10@ 50ft	1/16/14	14:36	X		1					X
5	CPT/MIP-9@ 21ft	1/17/14	09:12	X		1					X
6	CPT/MIP-9@ 31ft	1/17/14	09:54	X		1					X
7	CPT/MIP-9@ 24ft	1/17/14	09:20	X		1					X
8	CPT/MIP-9@ 52ft	1/17/14	12:00	X		1					X
9	CPT/MIP-16@ 21ft	1/17/14	14:20	X		1					X
10	CPT/MIP-16@ 22ft	1/17/14	14:34	X		1					X

TPH-g 8015
 BTEX 8260
 Gas OX + lead scavengers 800
 Naphthalene 8260

(Hold)
(Hold)

Notes: EDF output Required
Gas OX + Lead Scavengers:
M&BE, TBA, ETBE, DiPE,
TAME, 1,2-DCA, EDB,
Ethanol

SAMPLE RECEIPT
 Intact
 Cold
 On Ice
 Ambient

RELINQUISHED BY:

S. Angelo
DATE: 1/17/14 TIME: 16:47

DATE: TIME:
DATE: TIME:

RECEIVED BY:

Whit
DATE: 1/17/14 TIME: 16:47

DATE: TIME:
DATE: TIME:

CHAIN OF CUSTODY

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2323 Fifth Street
 Berkeley, CA 94710

Phone (510) 486-0900
 Fax (510) 486-0532

C&T LOGIN # 252341

Project No: 2552

Sampler: Lizzie Hightower

Project Name: 1501 Freedom Ave., ^{San} Leandro

Report To: Jaye Bobek

Project P. O. No:

Company: SOMA Environmental

EDD Format: Report Level II III IV

Telephone: 925-734-6400

Turnaround Time: RUSH Standard.

Email: jbobek@somaenv.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE								
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None				
	<u>CPT/MIP-9-1</u>	<u>1/17/14</u>	<u>10:00</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								
	<u>CPT/MIP-9-2</u>	<u>1/17/14</u>	<u>12:00</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								
	<u>CPT/MIP-16-1</u>	<u>1/17/14</u>	<u>14:41</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								
	<u>CPT/MIP-13-1</u>	<u>1/16/14</u>	<u>10:10</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								
	<u>CPT/MIP-13-2</u>	<u>1/16/14</u>	<u>12:17</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								
	<u>CPT/MIP-10-2</u>	<u>1/16/14</u>	<u>15:04</u>	<input checked="" type="checkbox"/>			<u>4</u>	<input checked="" type="checkbox"/>								

ANALYTICAL REQUEST											
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

Notes: EDF Output Required
Gas OX + Lead Scavengers:
MTBE, TSA, ETBE, DPE,
TAME, 1,2-DCA, EDB
Ethanol

SAMPLE RECEIPT
 Intact
 Cold
 On Ice
 Ambient

RELINQUISHED BY:

[Signature] 1/17/14 16:47
 DATE: TIME:

DATE: TIME:

DATE: TIME:

RECEIVED BY:

[Signature] 1/17/14 16:47
 DATE: TIME:

DATE: TIME:

DATE: TIME:

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 252341 Date Received 11/7/14 Number of coolers 1
 Client SOMA Project 2552

Date Opened 11/7 By (print) S. M. (sign) [Signature]
 Date Logged in 6 By (print) S (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO

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: * Notify PM if temperature exceeds 6°C
 Type of ice used: Wet Blue/Gel None Temp(°C) 5.7

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES NO

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

12. Are sample labels present, in good condition and complete? _____ YES NO 11/7

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

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

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

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Total Volatile Hydrocarbons			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	01/17/14

Field ID: CPT/MIP-13@21FT Batch#: 207255
 Type: SAMPLE Sampled: 01/16/14
 Lab ID: 252341-001 Analyzed: 01/20/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	25 Y	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	67-137

Field ID: CPT/MIP-13@31FT Batch#: 207255
 Type: SAMPLE Sampled: 01/16/14
 Lab ID: 252341-002 Analyzed: 01/20/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

Field ID: CPT/MIP-13@50FT Batch#: 207255
 Type: SAMPLE Sampled: 01/16/14
 Lab ID: 252341-003 Analyzed: 01/20/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Field ID: CPT/MIP-10@50FT Batch#: 207255
 Type: SAMPLE Sampled: 01/16/14
 Lab ID: 252341-004 Analyzed: 01/20/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	0.92

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

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

Total Volatile Hydrocarbons			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	01/17/14

Field ID:	CPT/MIP-9@21FT	Batch#:	207273
Type:	SAMPLE	Sampled:	01/17/14
Lab ID:	252341-005	Analyzed:	01/21/14
Diln Fac:	100.0		

Analyte	Result	RL
Gasoline C7-C12	180	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	67-137

Field ID:	CPT/MIP-9@31FT	Batch#:	207255
Type:	SAMPLE	Sampled:	01/17/14
Lab ID:	252341-006	Analyzed:	01/20/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	67-137

Field ID:	CPT/MIP-9@52FT	Batch#:	207255
Type:	SAMPLE	Sampled:	01/17/14
Lab ID:	252341-008	Analyzed:	01/21/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	67-137

Field ID:	CPT/MIP-16@21FT	Batch#:	207255
Type:	SAMPLE	Sampled:	01/17/14
Lab ID:	252341-009	Analyzed:	01/21/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

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

Total Volatile Hydrocarbons

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8015B
Matrix: Soil	Basis: as received
Units: mg/Kg	Received: 01/17/14

Type: BLANK	Batch#: 207255
Lab ID: QC724757	Analyzed: 01/20/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	67-137

Type: BLANK	Batch#: 207273
Lab ID: QC724825	Analyzed: 01/21/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-137

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

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724756	Batch#:	207255
Matrix:	Soil	Analyzed:	01/20/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9111	91	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724824	Batch#:	207273
Matrix:	Soil	Analyzed:	01/21/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.8868	89	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	252362-003	Batch#:	207273
Matrix:	Soil	Sampled:	01/20/14
Units:	mg/Kg	Received:	01/20/14
Basis:	as received	Analyzed:	01/21/14

Type: MS Lab ID: QC724826

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09452	10.99	9.425	85	42-120

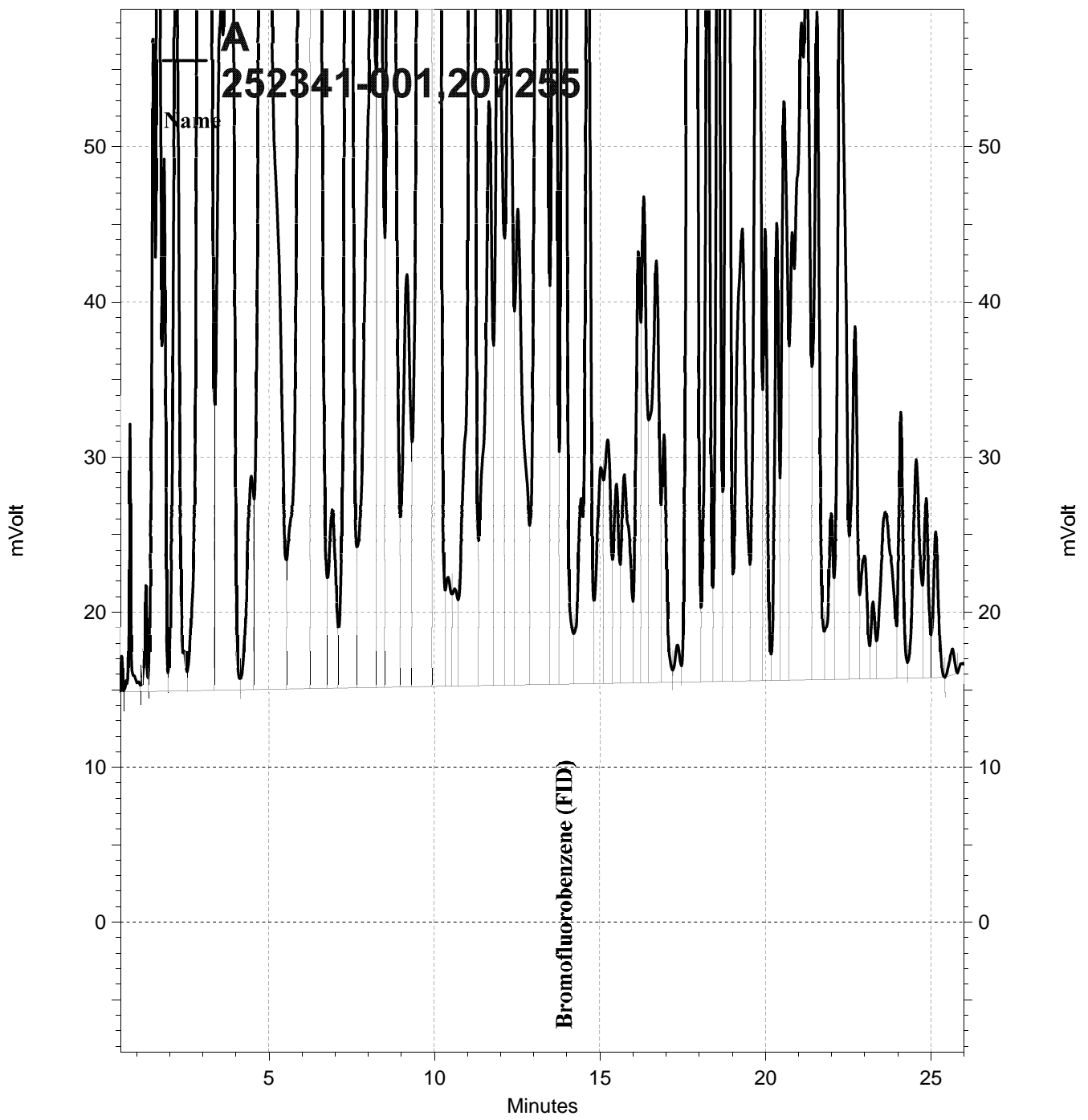
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	67-137

Type: MSD Lab ID: QC724827

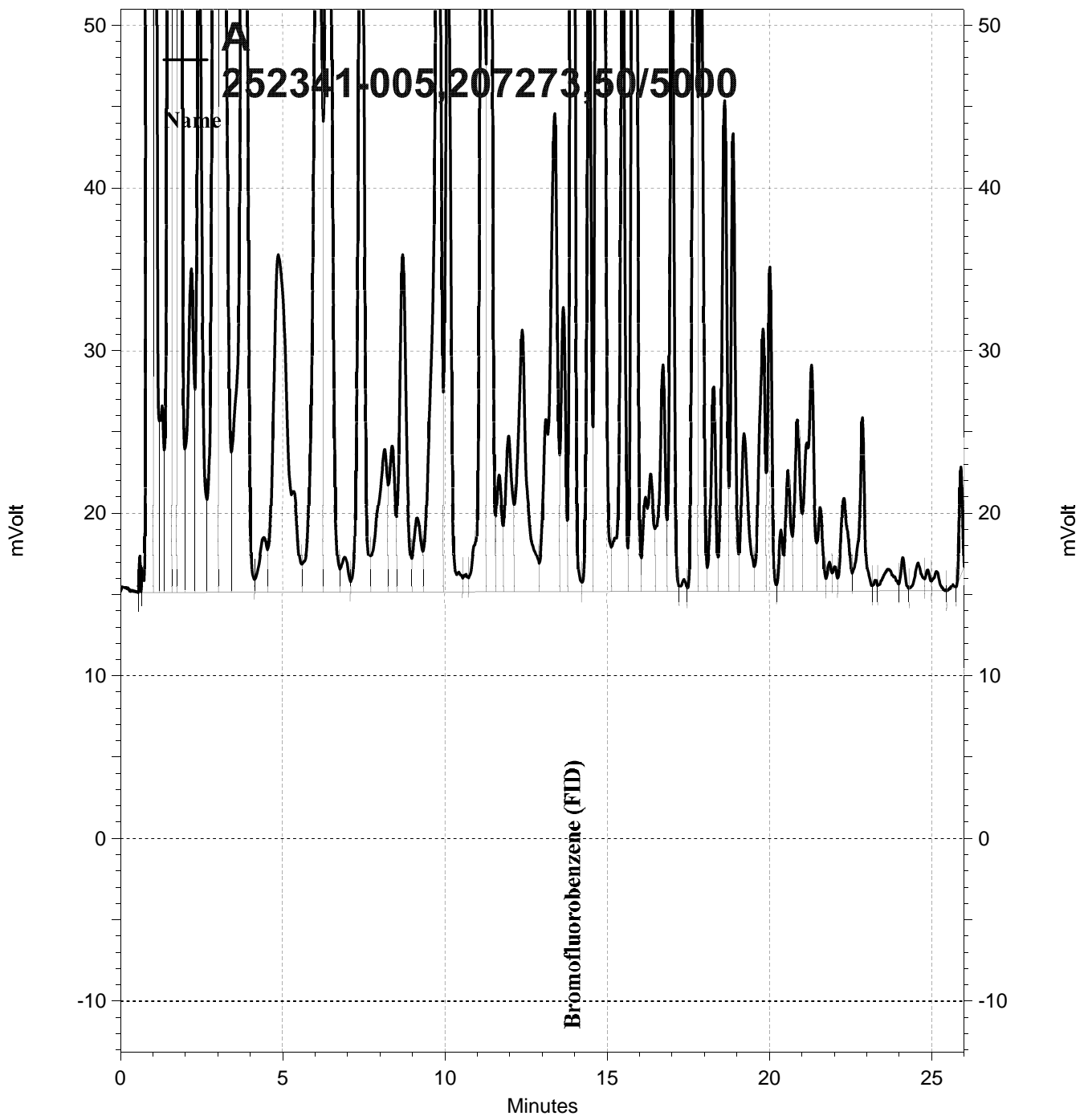
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.64	9.318	87	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-137

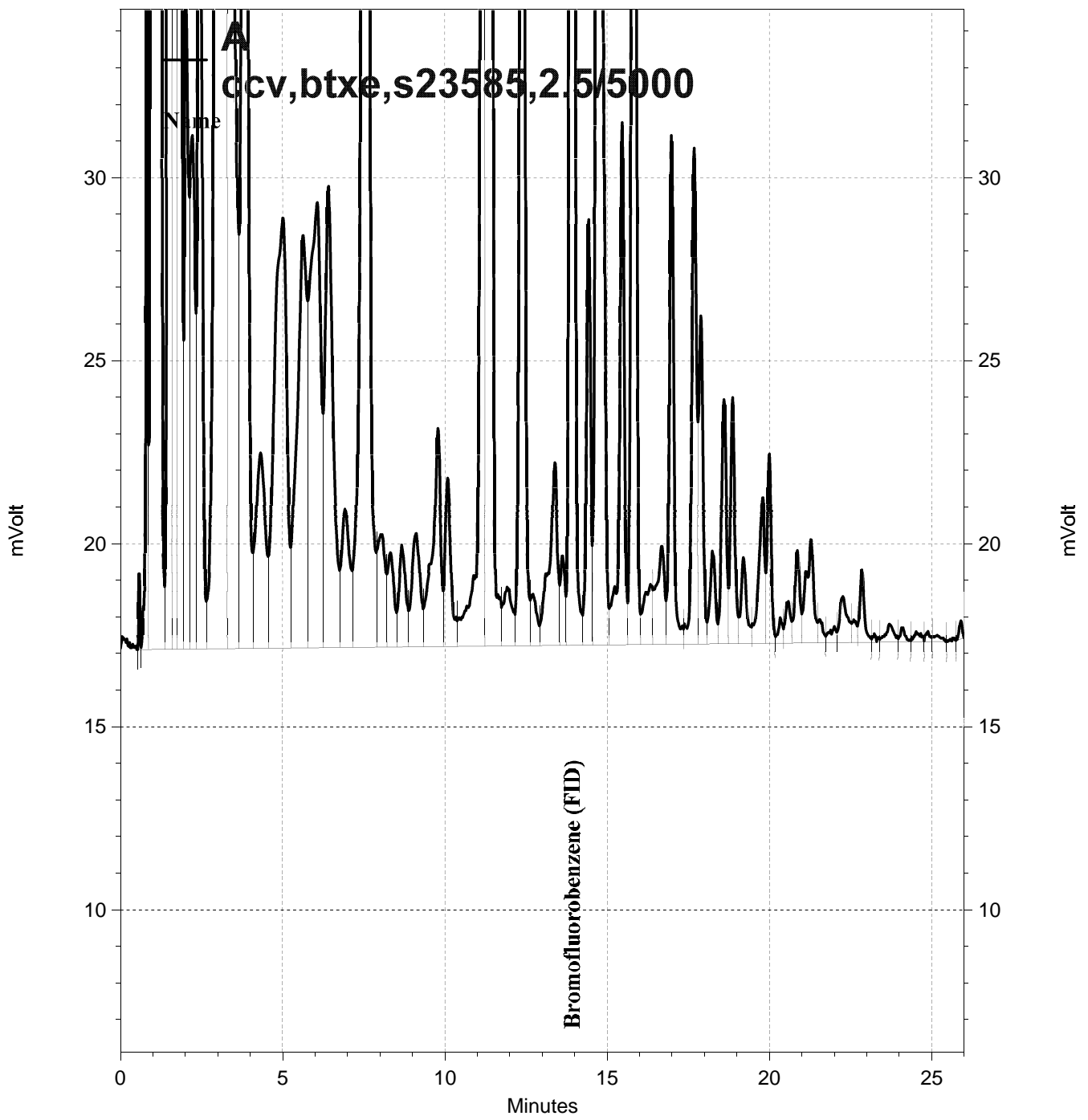
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC19\Data\020-010, A



— \\Lims\gdrive\ezchrom\Projects\GC19\Data\021-010, A



— \\Lims\gdrive\ezchrom\Projects\GC19\Data\020-002, A

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-9-1	Batch#: 207309
Lab ID: 252341-011	Sampled: 01/17/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	84	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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.58	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	0.88	0.50
m,p-Xylenes	4.8	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-9-2	Batch#: 207309
Lab ID: 252341-012	Sampled: 01/17/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	160	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
Ethanol	ND	1,000
MTBE	1.3	0.50
1,2-Dichloroethane	8.9	0.50
Benzene	0.88	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	2.1	0.50
m,p-Xylenes	4.7	0.50
o-Xylene	0.54	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-16-1	Batch#: 207309
Lab ID: 252341-013	Sampled: 01/17/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	980	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
Ethanol	ND	1,000
MTBE	0.64	0.50
1,2-Dichloroethane	ND	0.50
Benzene	1.8	0.50
Toluene	0.65	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	0.55	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-13-1	Batch#: 207309
Lab ID: 252341-014	Sampled: 01/16/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
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
Ethanol	ND	1,000
MTBE	3.9	0.50
1,2-Dichloroethane	ND	0.50
Benzene	0.75	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-13-2	Batch#: 207309
Lab ID: 252341-015	Sampled: 01/16/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	96	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
Ethanol	ND	1,000
MTBE	1.1	0.50
1,2-Dichloroethane	1.4	0.50
Benzene	1.7	0.50
Toluene	0.69	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	1.7	0.50
m,p-Xylenes	1.0	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-136
1,2-Dichloroethane-d4	102	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252341	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-10-2	Batch#: 207309
Lab ID: 252341-016	Sampled: 01/16/14
Matrix: Water	Received: 01/17/14
Units: ug/L	Analyzed: 01/22/14
Diln Fac: 1.000	

Analyte	Result	RL
Gasoline C7-C12	110	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
Ethanol	ND	1,000
MTBE	3.8	0.50
1,2-Dichloroethane	9.1	0.50
Benzene	0.61	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	4.5	0.50
m,p-Xylenes	6.0	0.50
o-Xylene	2.8	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-136
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724951	Batch#:	207309
Matrix:	Water	Analyzed:	01/22/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207309
Units:	ug/L	Analyzed:	01/22/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724952

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	95.75	96	37-151
Isopropyl Ether (DIPE)	20.00	19.70	99	56-124
Ethyl tert-Butyl Ether (ETBE)	20.00	18.97	95	61-122
Methyl tert-Amyl Ether (TAME)	20.00	20.19	101	65-120
MTBE	20.00	18.84	94	64-121
1,2-Dichloroethane	20.00	18.45	92	77-137
Benzene	20.00	20.20	101	80-124
Toluene	20.00	20.68	103	80-122
1,2-Dibromoethane	20.00	20.59	103	80-120
Ethylbenzene	20.00	21.52	108	80-124
m,p-Xylenes	40.00	44.10	110	80-122
o-Xylene	20.00	22.56	113	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC724953

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	95.09	95	37-151	1	30
Isopropyl Ether (DIPE)	20.00	18.96	95	56-124	4	20
Ethyl tert-Butyl Ether (ETBE)	20.00	18.87	94	61-122	1	22
Methyl tert-Amyl Ether (TAME)	20.00	19.08	95	65-120	6	22
MTBE	20.00	18.97	95	64-121	1	20
1,2-Dichloroethane	20.00	17.66	88	77-137	4	20
Benzene	20.00	18.72	94	80-124	8	20
Toluene	20.00	19.70	99	80-122	5	20
1,2-Dibromoethane	20.00	20.23	101	80-120	2	20
Ethylbenzene	20.00	20.40	102	80-124	5	20
m,p-Xylenes	40.00	43.41	109	80-122	2	20
o-Xylene	20.00	20.77	104	77-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	89	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207309
Units:	ug/L	Analyzed:	01/22/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724954

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	918.8	115	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC724955

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	879.0	110	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-120

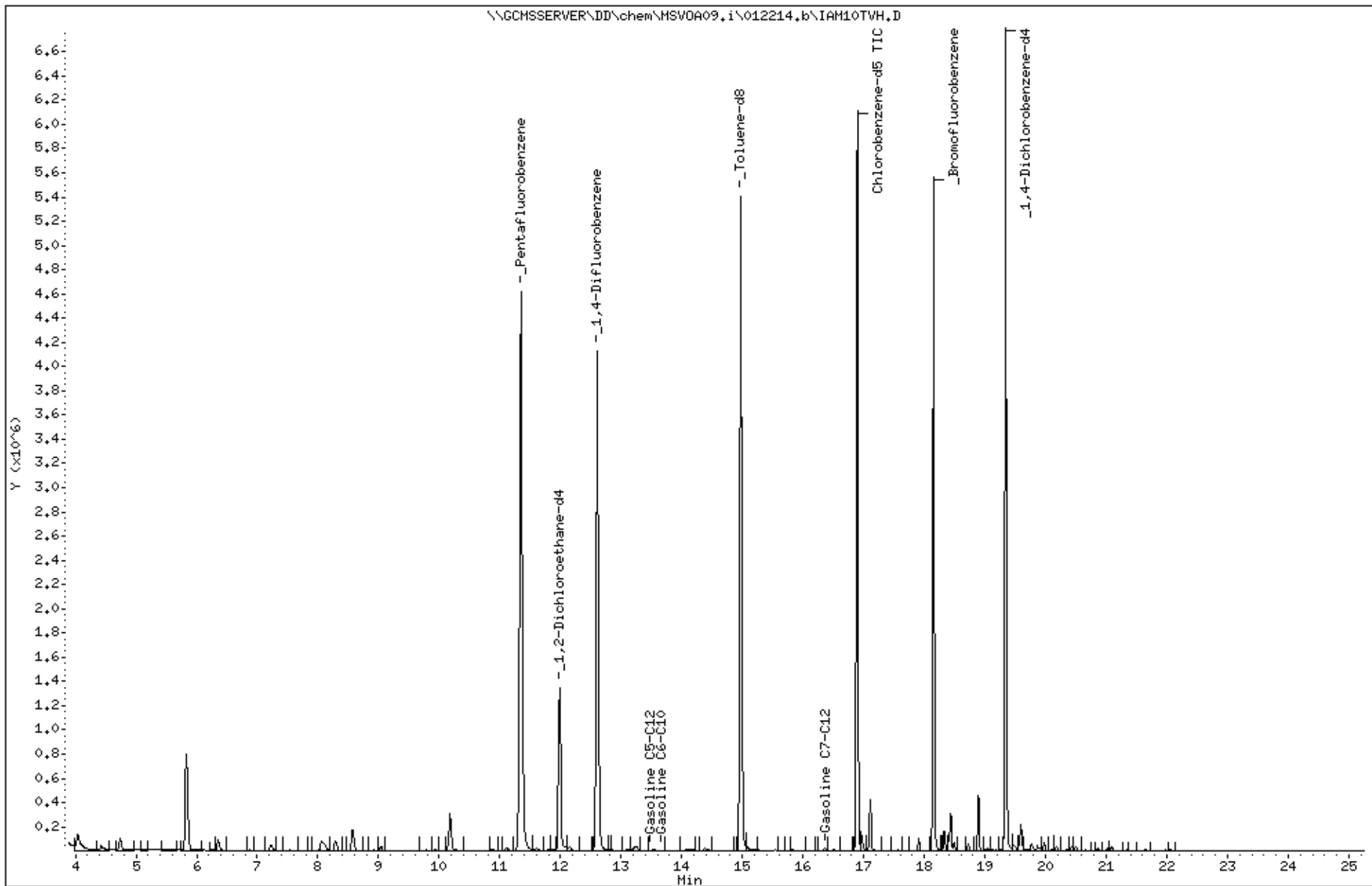
RPD= Relative Percent Difference

Date : 22-JAN-2014 17:27
Client ID: DYNA P&T
Sample Info: S,252341-011

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 22-JAN-2014 18:01

Client ID: DYNA P&T

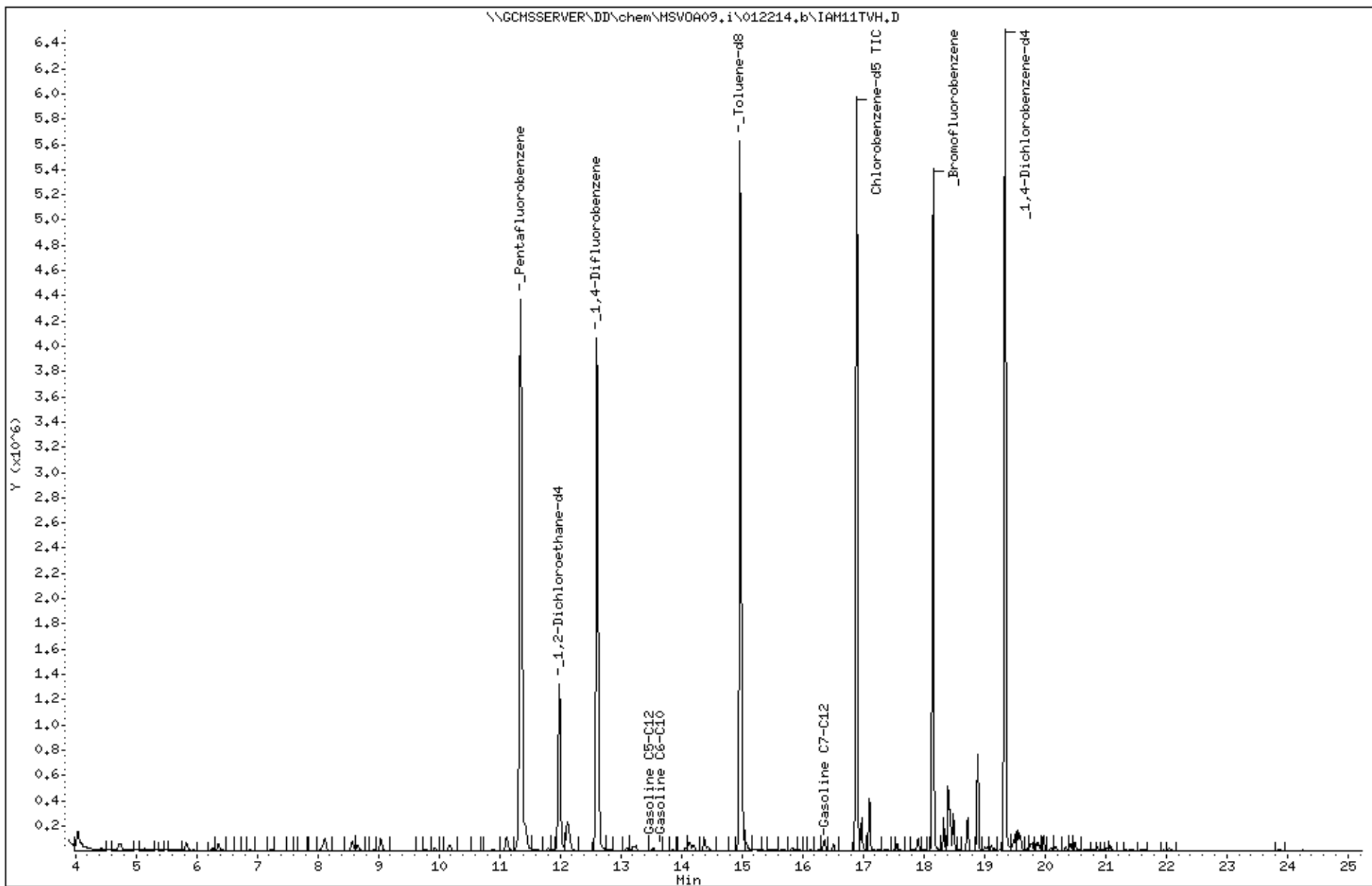
Sample Info: S,252341-012

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:

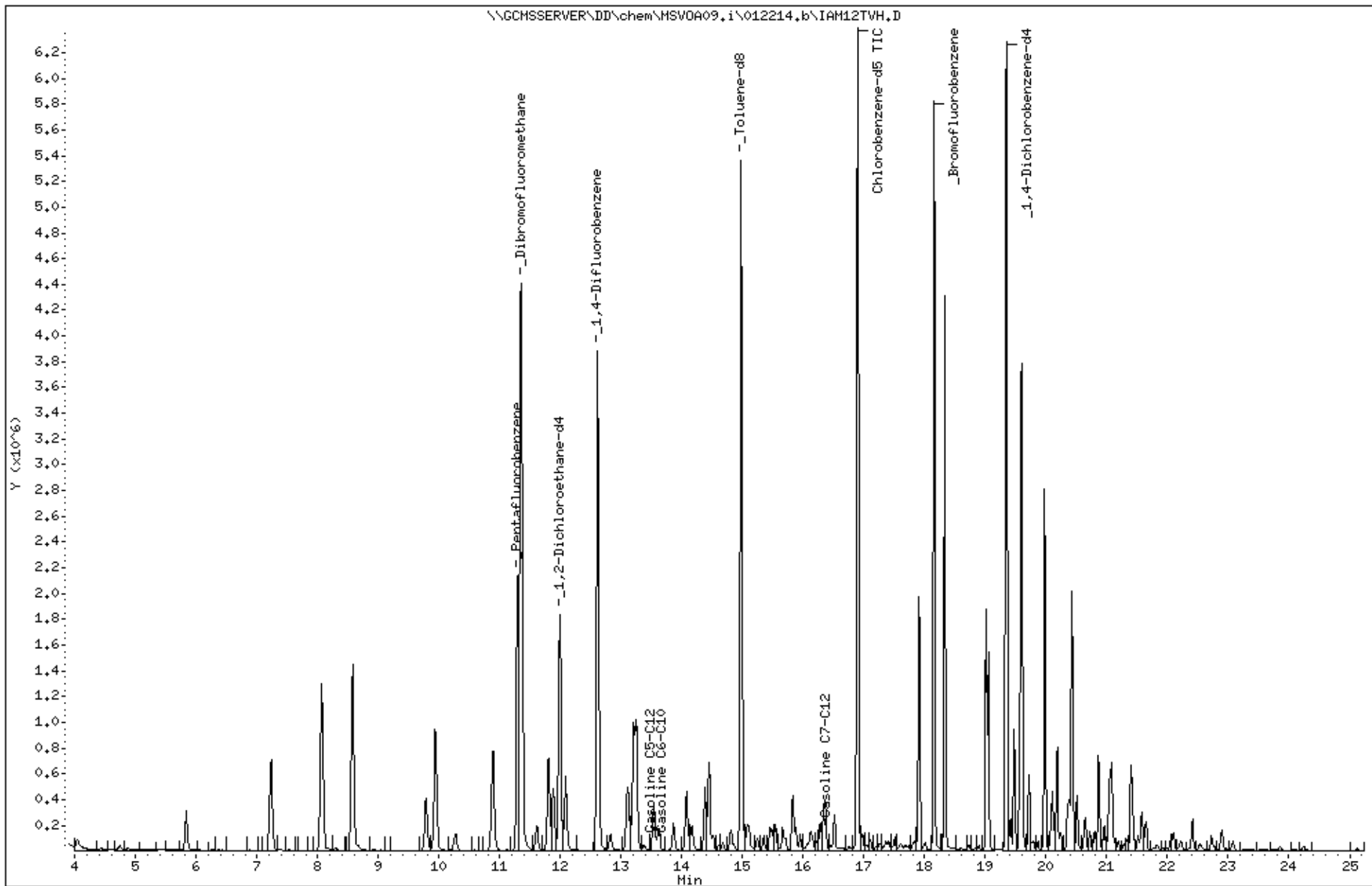


Date : 22-JAN-2014 18:35
Client ID: DYNA P&T
Sample Info: S,252341-013

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 22-JAN-2014 19:43

Client ID: DYNA P&T

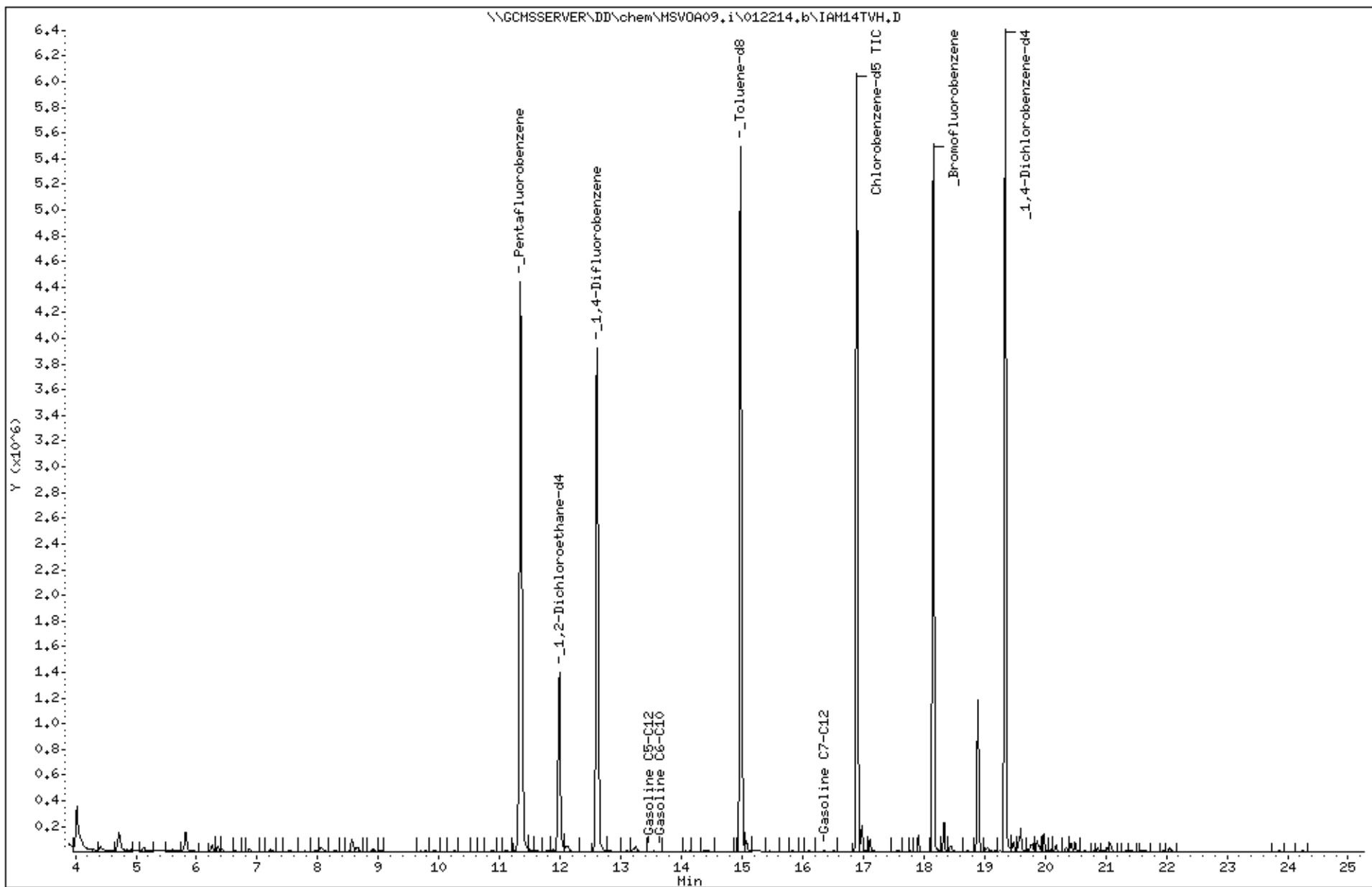
Sample Info: S.252341-015

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:

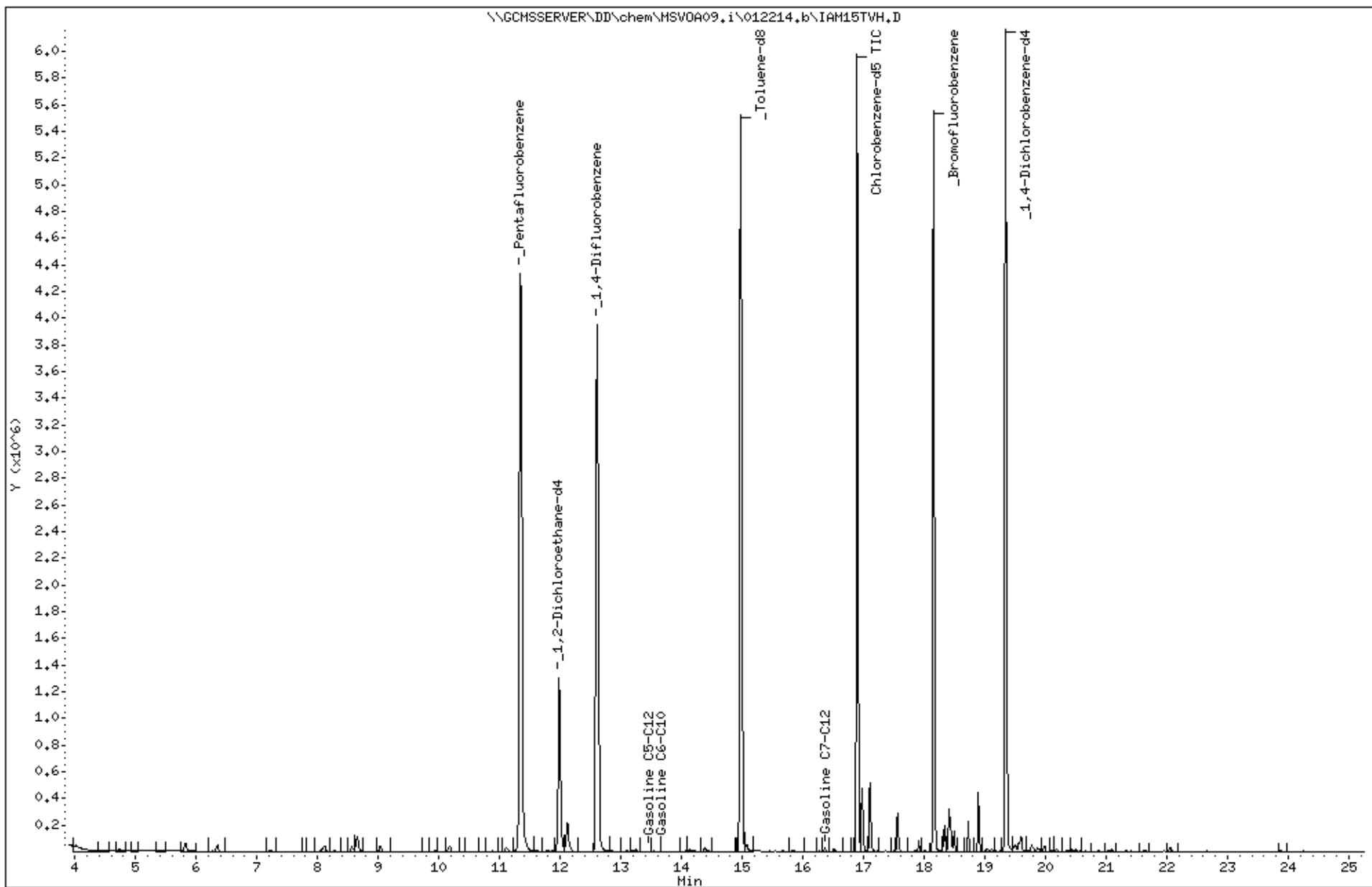


Date : 22-JAN-2014 20:17
Client ID: DYNA P&T
Sample Info: S,252341-016

Instrument: MSV0A09.i

Operator: VOC
Column diameter: 2.00

Column phase:



Date : 22-JAN-2014 14:38

Client ID: DYNA P&T

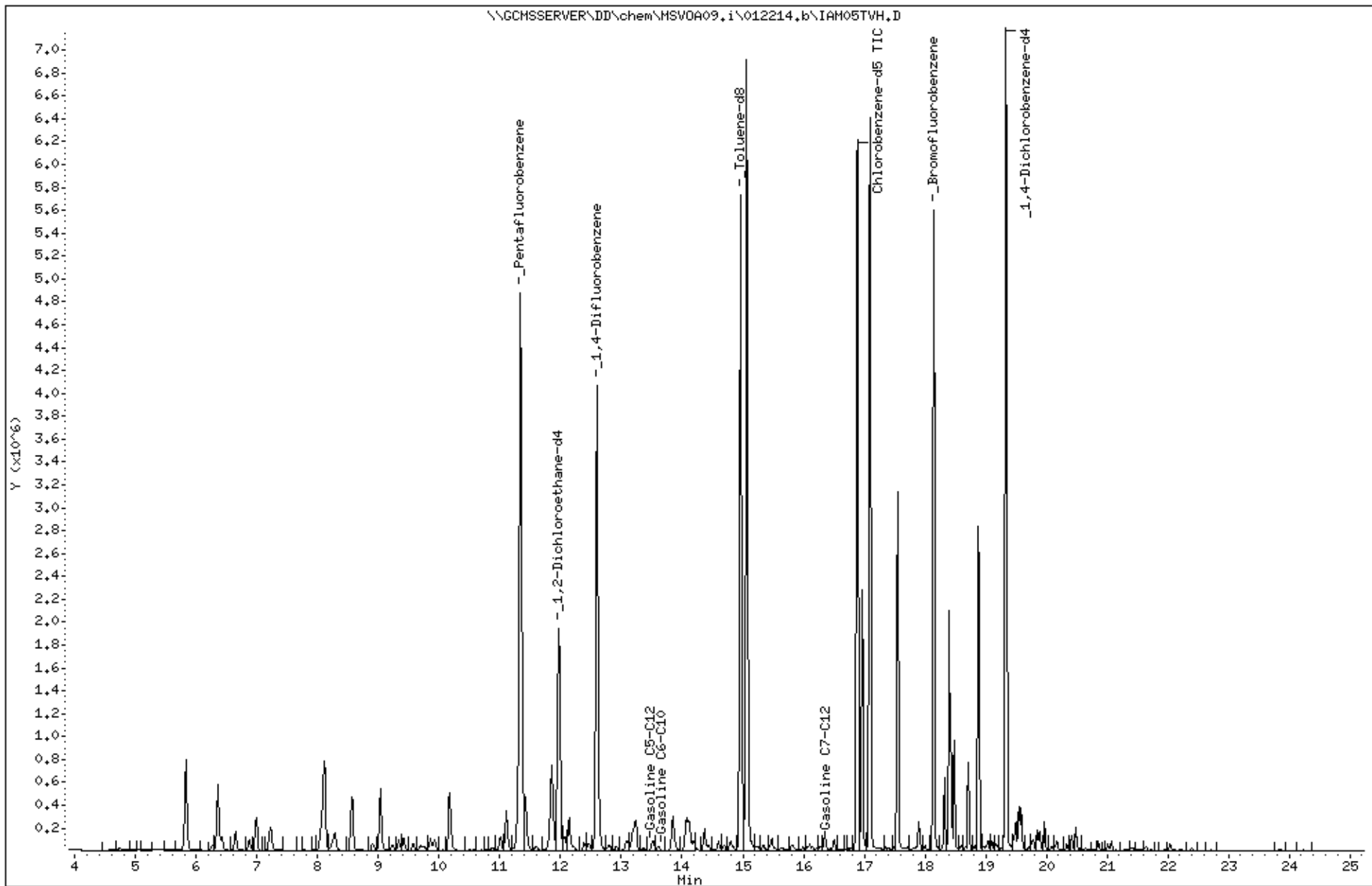
Sample Info: CCV/BS, QC724954, 207309, S23229, .008/100

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-13@21FT	Diln Fac:	2.008
Lab ID:	252341-001	Batch#:	207264
Matrix:	Soil	Sampled:	01/16/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/21/14

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	200
MTBE	ND	10
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
1,2-Dichloroethane	ND	10
Benzene	ND	10
Methyl tert-Amyl Ether (TAME)	ND	10
Ethanol	ND	2,000
Toluene	ND	10
1,2-Dibromoethane	ND	10
Ethylbenzene	ND	10
m,p-Xylenes	ND	10
o-Xylene	ND	10
Naphthalene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	96	76-128
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	95	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-13@31FT	Diln Fac:	0.9843
Lab ID:	252341-002	Batch#:	207230
Matrix:	Soil	Sampled:	01/16/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	980
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
Naphthalene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-13@50FT	Diln Fac:	0.9416
Lab ID:	252341-003	Batch#:	207230
Matrix:	Soil	Sampled:	01/16/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	940
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
Naphthalene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	96	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-10@50FT	Diln Fac:	1.000
Lab ID:	252341-004	Batch#:	207230
Matrix:	Soil	Sampled:	01/16/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-9@21FT	Diln Fac:	50.00
Lab ID:	252341-005	Batch#:	207230
Matrix:	Soil	Sampled:	01/17/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	5,200	250
m,p-Xylenes	16,000	250
o-Xylene	1,900	250
Naphthalene	1,900	250

Surrogate	%REC	Limits
Dibromofluoromethane	92	76-128
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	93	79-128
Trifluorotoluene (MeOH)	101	50-137

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-9@31FT	Diln Fac:	0.9862
Lab ID:	252341-006	Batch#:	207230
Matrix:	Soil	Sampled:	01/17/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	990
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
Naphthalene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-9@52FT	Diln Fac:	0.9597
Lab ID:	252341-008	Batch#:	207230
Matrix:	Soil	Sampled:	01/17/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/20/14

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
Ethanol	ND	960
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-16@21FT	Diln Fac:	0.9766
Lab ID:	252341-009	Batch#:	207264
Matrix:	Soil	Sampled:	01/17/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/21/14

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
Ethanol	ND	980
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
Naphthalene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	102	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724656	Batch#:	207230
Matrix:	Soil	Analyzed:	01/20/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	123.2	99	46-146
MTBE	25.00	24.42	98	64-126
Isopropyl Ether (DIPE)	25.00	20.98	84	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	22.73	91	66-123
1,2-Dichloroethane	25.00	23.71	95	73-139
Benzene	25.00	24.77	99	80-127
Methyl tert-Amyl Ether (TAME)	25.00	25.52	102	69-120
Toluene	25.00	27.04	108	79-125
1,2-Dibromoethane	25.00	27.82	111	77-122
Ethylbenzene	25.00	27.34	109	80-127
m,p-Xylenes	50.00	58.50	117	78-126
o-Xylene	25.00	28.39	114	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	99	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724657	Batch#:	207230
Matrix:	Soil	Analyzed:	01/20/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	101	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-13@31FT	Batch#:	207230
MSS Lab ID:	252341-002	Sampled:	01/16/14
Matrix:	Soil	Received:	01/17/14
Units:	ug/Kg	Analyzed:	01/20/14
Basis:	as received		

Type: MS
Lab ID: QC724677

Diln Fac: 0.9579

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.523	239.5	163.8	68	38-134
MTBE	<0.4764	47.89	35.36	74	47-123
Isopropyl Ether (DIPE)	<0.5563	47.89	31.22	65	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5601	47.89	33.38	70	47-122
1,2-Dichloroethane	<0.6147	47.89	37.35	78	48-129
Benzene	<0.6865	47.89	41.62	87	51-125
Methyl tert-Amyl Ether (TAME)	<0.4778	47.89	36.73	77	50-120
Toluene	<0.7520	47.89	43.44	91	45-123
1,2-Dibromoethane	<0.5050	47.89	42.05	88	47-120
Ethylbenzene	<0.7023	47.89	44.84	94	40-124
m,p-Xylenes	<1.357	95.79	93.82	98	37-122
o-Xylene	<0.5859	47.89	46.63	97	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	92	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	98	79-128

Type: MSD
Lab ID: QC724678

Diln Fac: 0.9524

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	238.1	167.5	70	38-134	3	55
MTBE	47.62	35.77	75	47-123	2	46
Isopropyl Ether (DIPE)	47.62	30.76	65	44-123	1	45
Ethyl tert-Butyl Ether (ETBE)	47.62	33.57	71	47-122	1	46
1,2-Dichloroethane	47.62	37.29	78	48-129	0	43
Benzene	47.62	42.12	88	51-125	2	46
Methyl tert-Amyl Ether (TAME)	47.62	37.36	78	50-120	2	45
Toluene	47.62	44.37	93	45-123	3	59
1,2-Dibromoethane	47.62	44.92	94	47-120	7	47
Ethylbenzene	47.62	44.96	94	40-124	1	54
m,p-Xylenes	95.24	94.99	100	37-122	2	54
o-Xylene	47.62	47.06	99	37-120	1	52

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	88	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	79-128

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724790	Batch#:	207264
Matrix:	Soil	Analyzed:	01/21/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	115.6	93	46-146
MTBE	25.00	23.40	94	64-126
Isopropyl Ether (DIPE)	25.00	20.75	83	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	22.23	89	66-123
1,2-Dichloroethane	25.00	23.28	93	73-139
Benzene	25.00	24.54	98	80-127
Methyl tert-Amyl Ether (TAME)	25.00	24.54	98	69-120
Toluene	25.00	26.09	104	79-125
1,2-Dibromoethane	25.00	26.74	107	77-122
Ethylbenzene	25.00	26.53	106	80-127
m,p-Xylenes	50.00	56.75	114	78-126
o-Xylene	25.00	27.37	109	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	76-128
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	97	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724791	Batch#:	207264
Matrix:	Soil	Analyzed:	01/21/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	100	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252341	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207264
MSS Lab ID:	252361-004	Sampled:	01/20/14
Matrix:	Soil	Received:	01/20/14
Units:	ug/Kg	Analyzed:	01/21/14
Basis:	as received		

Type: MS
Lab ID: QC724807

Diln Fac: 0.9901

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.078	247.5	246.6	100	38-134
MTBE	<0.4515	49.50	46.88	95	47-123
Isopropyl Ether (DIPE)	<0.5272	49.50	40.81	82	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5309	49.50	43.80	88	47-122
1,2-Dichloroethane	<0.5826	49.50	43.84	89	48-129
Benzene	<0.6506	49.50	45.78	92	51-125
Methyl tert-Amyl Ether (TAME)	<0.4529	49.50	48.45	98	50-120
Toluene	<0.7127	49.50	46.62	94	45-123
1,2-Dibromoethane	<0.4786	49.50	49.19	99	47-120
Ethylbenzene	<0.6656	49.50	46.84	95	40-124
m,p-Xylenes	<1.286	99.01	98.01	99	37-122
o-Xylene	<0.5553	49.50	48.50	98	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	98	79-128

Type: MSD
Lab ID: QC724808

Diln Fac: 0.9881

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	247.0	194.7	79	38-134	23	55
MTBE	49.41	42.76	87	47-123	9	46
Isopropyl Ether (DIPE)	49.41	38.45	78	44-123	6	45
Ethyl tert-Butyl Ether (ETBE)	49.41	40.53	82	47-122	8	46
1,2-Dichloroethane	49.41	42.30	86	48-129	3	43
Benzene	49.41	44.84	91	51-125	2	46
Methyl tert-Amyl Ether (TAME)	49.41	44.30	90	50-120	9	45
Toluene	49.41	45.25	92	45-123	3	59
1,2-Dibromoethane	49.41	46.07	93	47-120	6	47
Ethylbenzene	49.41	45.02	91	40-124	4	54
m,p-Xylenes	98.81	93.58	95	37-122	4	54
o-Xylene	49.41	46.07	93	37-120	5	52

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	99	79-128

RPD= Relative Percent Difference



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

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

Laboratory Job Number 252382
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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: [Handwritten Signature]
Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 01/28/2014

CASE NARRATIVE

Laboratory number: 252382
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 01/21/14
Samples Received: 01/21/14

This data package contains sample and QC results for seven soil samples and four water samples, requested for the above referenced project on 01/21/14. The samples were received cold and intact.

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

No analytical problems were encountered.

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

No analytical problems were encountered.

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

CPT/MIP-19@27FT (lab # 252382-005) was diluted due to high hydrocarbons. No other analytical problems were encountered.

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 252382 Date Received 1/21/14 Number of coolers 1
 Client SOMA Project 15401 FREEDOM AVE. SAN LEANDRO (2552)
 Date Opened 1/21/14 By (print) JR (sign) Jana Rautkan
 Date Logged in 1 By (print) JR (sign) JR

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: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

MOST → 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 there any missing / extra samples? _____ YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ YES NO

21. Was the client contacted concerning this sample delivery? _____ YES NO
 If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Total Volatile Hydrocarbons			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	207357
Basis:	as received	Received:	01/21/14

Field ID: CPT/MIP-16@48FT Sampled: 01/20/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-001

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Field ID: CPT/MIP-12@20FT Sampled: 01/20/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-002

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Field ID: CPT/MIP-12@32FT Sampled: 01/20/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-003

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	67-137

Field ID: CPT/MIP-12@52FT Sampled: 01/20/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-004

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	67-137

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

Total Volatile Hydrocarbons			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	207357
Basis:	as received	Received:	01/21/14

Field ID: CPT/MIP-19@27FT Sampled: 01/21/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-005

Analyte	Result	RL
Gasoline C7-C12	26 Y	1.1
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	110	67-137

Field ID: CPT/MIP-19@38FT Sampled: 01/21/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-006

Analyte	Result	RL
Gasoline C7-C12	ND	1.0
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Field ID: CPT/MIP-18@26FT Sampled: 01/21/14
 Type: SAMPLE Analyzed: 01/24/14
 Lab ID: 252382-007

Analyte	Result	RL
Gasoline C7-C12	ND	1.0
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

Type: BLANK Analyzed: 01/23/14
 Lab ID: QC725170

Analyte	Result	RL
Gasoline C7-C12	ND	0.20
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	67-137

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

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC725169	Batch#:	207357
Matrix:	Soil	Analyzed:	01/23/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.8978	90	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	252392-016	Batch#:	207357
Matrix:	Soil	Sampled:	01/17/14
Units:	mg/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/23/14

Type: MS Lab ID: QC725171

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.07789	10.10	8.517	84	42-120

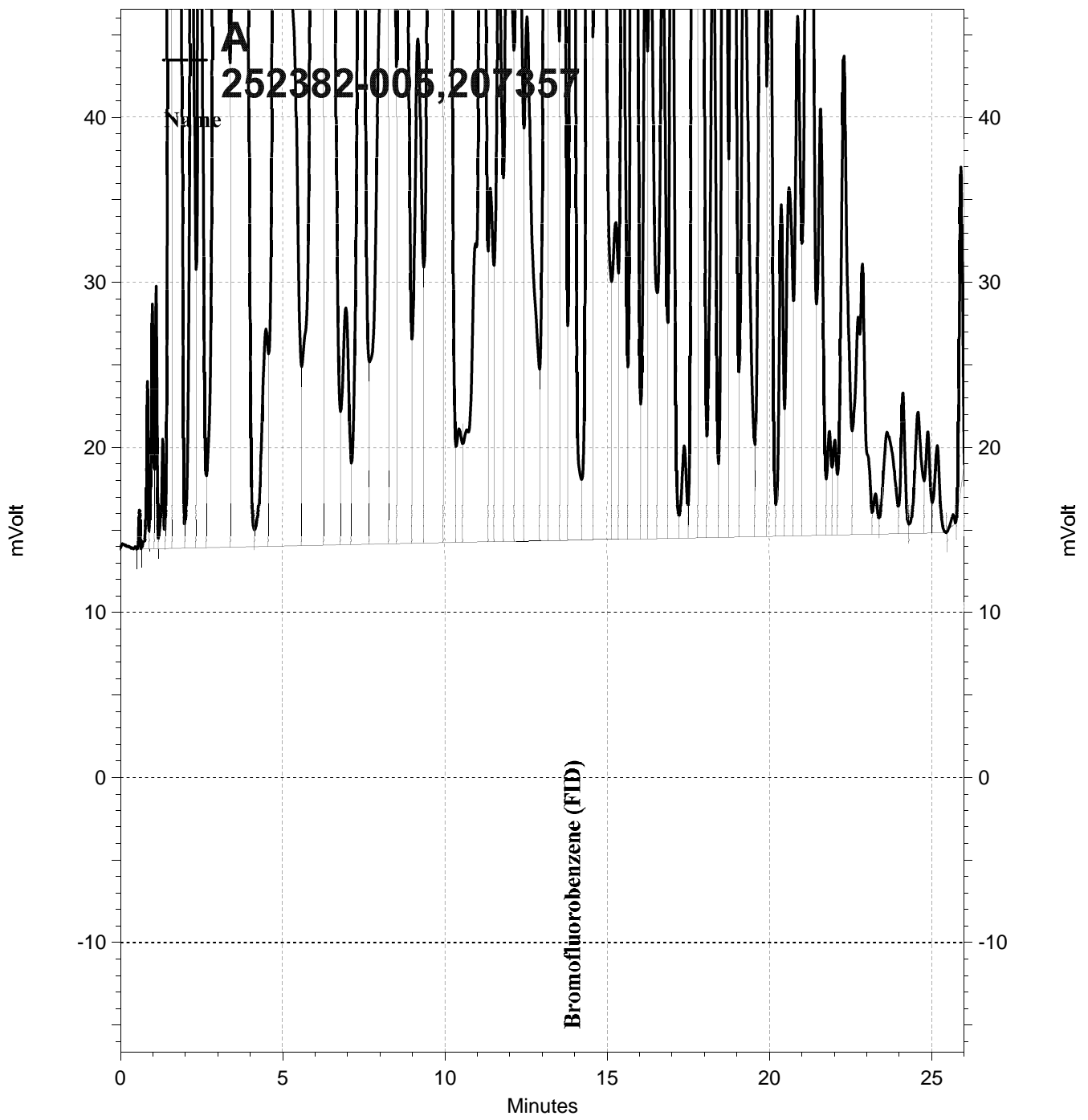
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	67-137

Type: MSD Lab ID: QC725172

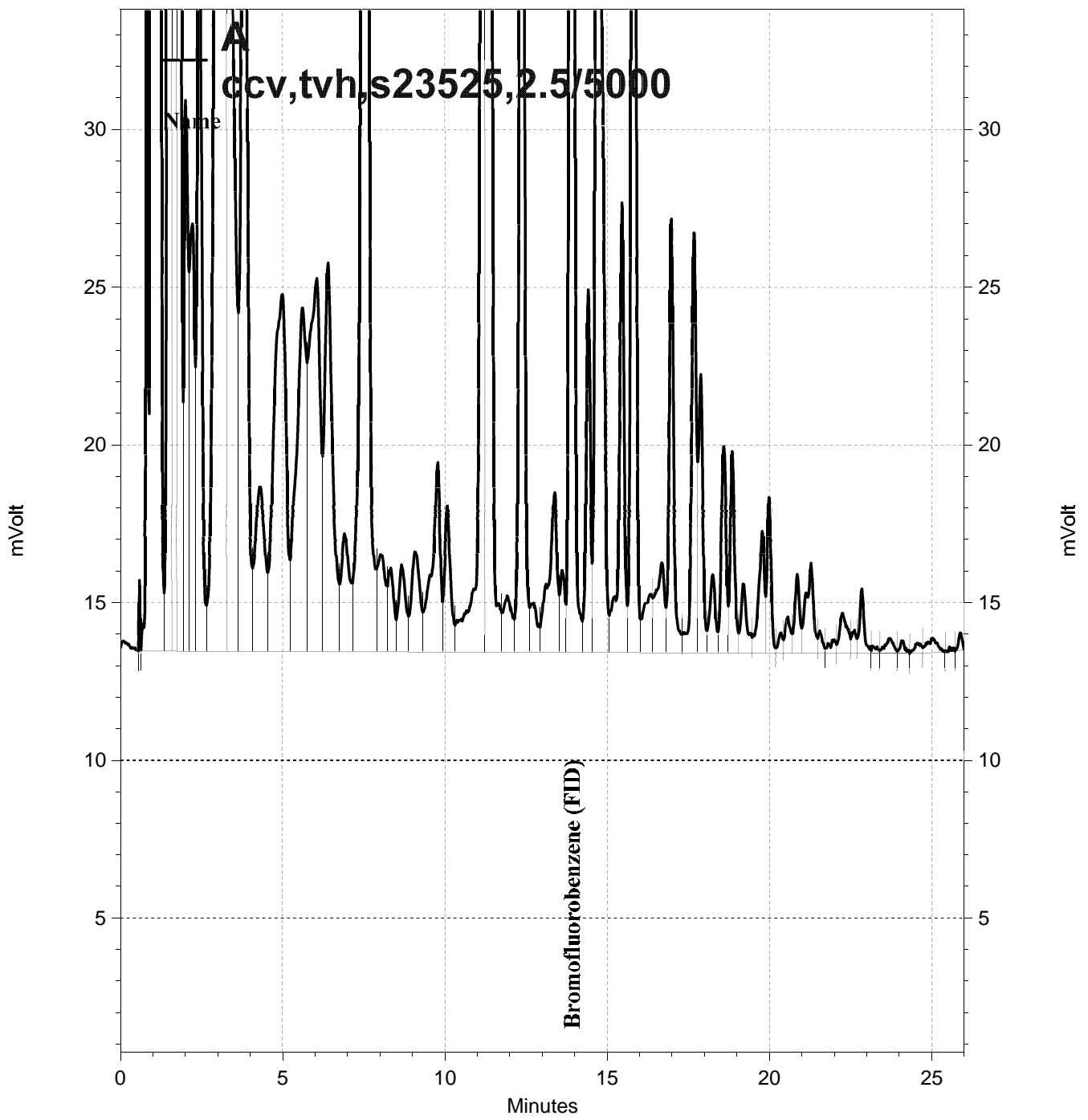
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.346	7.317	78	42-120	7	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	67-137

RPD= Relative Percent Difference



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— \\Lims\gdrive\ezchrom\Projects\GC19\Data\023-003, A

Purgeable Organics by GC/MS

Lab #: 252382	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-12-1	Batch#: 207309
Lab ID: 252382-008	Sampled: 01/20/14
Matrix: Water	Received: 01/21/14
Units: ug/L	Analyzed: 01/22/14
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
Ethanol	ND	1,000
MTBE	14	0.50
1,2-Dichloroethane	72	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252382	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-12-2	Batch#: 207309
Lab ID: 252382-009	Sampled: 01/20/14
Matrix: Water	Received: 01/21/14
Units: ug/L	Analyzed: 01/22/14
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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	3.4	0.50
Benzene	1.1	0.50
Toluene	0.51	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	102	77-136
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #: 252382	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-16-2	Batch#: 207309
Lab ID: 252382-010	Sampled: 01/20/14
Matrix: Water	Received: 01/21/14
Units: ug/L	Analyzed: 01/22/14
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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	1.0	0.50
Toluene	0.53	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-19-1	Batch#:	207309
Lab ID:	252382-011	Sampled:	01/21/14
Matrix:	Water	Received:	01/21/14
Units:	ug/L	Analyzed:	01/22/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	690	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
Ethanol	ND	1,000
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	7.7	0.50
m,p-Xylenes	6.0	0.50
o-Xylene	ND	0.50
Naphthalene	14	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	77-136
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724951	Batch#:	207309
Matrix:	Water	Analyzed:	01/22/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	95	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207309
Units:	ug/L	Analyzed:	01/22/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724952

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	95.75	96	37-151
Isopropyl Ether (DIPE)	20.00	19.70	99	56-124
Ethyl tert-Butyl Ether (ETBE)	20.00	18.97	95	61-122
Methyl tert-Amyl Ether (TAME)	20.00	20.19	101	65-120
MTBE	20.00	18.84	94	64-121
1,2-Dichloroethane	20.00	18.45	92	77-137
Benzene	20.00	20.20	101	80-124
Toluene	20.00	20.68	103	80-122
1,2-Dibromoethane	20.00	20.59	103	80-120
Ethylbenzene	20.00	21.52	108	80-124
m,p-Xylenes	40.00	44.10	110	80-122
o-Xylene	20.00	22.56	113	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC724953

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	95.09	95	37-151	1	30
Isopropyl Ether (DIPE)	20.00	18.96	95	56-124	4	20
Ethyl tert-Butyl Ether (ETBE)	20.00	18.87	94	61-122	1	22
Methyl tert-Amyl Ether (TAME)	20.00	19.08	95	65-120	6	22
MTBE	20.00	18.97	95	64-121	1	20
1,2-Dichloroethane	20.00	17.66	88	77-137	4	20
Benzene	20.00	18.72	94	80-124	8	20
Toluene	20.00	19.70	99	80-122	5	20
1,2-Dibromoethane	20.00	20.23	101	80-120	2	20
Ethylbenzene	20.00	20.40	102	80-124	5	20
m,p-Xylenes	40.00	43.41	109	80-122	2	20
o-Xylene	20.00	20.77	104	77-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	89	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207309
Units:	ug/L	Analyzed:	01/22/14
Diln Fac:	1.000		

Type: BS Lab ID: QC724954

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	918.8	115	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	77-136
1,2-Dichloroethane-d4	92	75-139
Toluene-d8	96	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC724955

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	879.0	110	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	90	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Date : 22-JAN-2014 22:34

Client ID: DYNA P&T

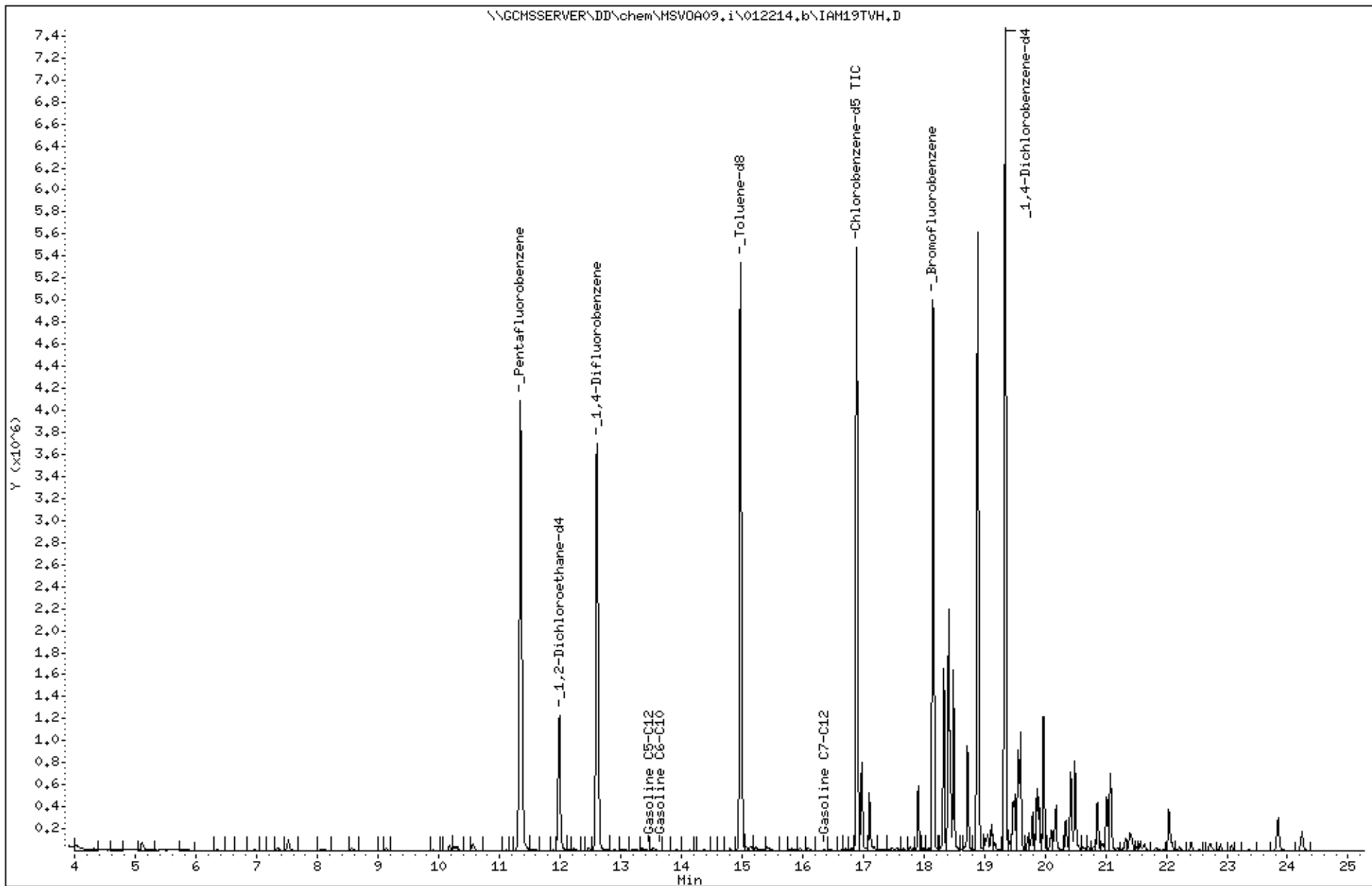
Sample Info: S,252382-011

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 22-JAN-2014 14:38

Client ID: DYNA P&T

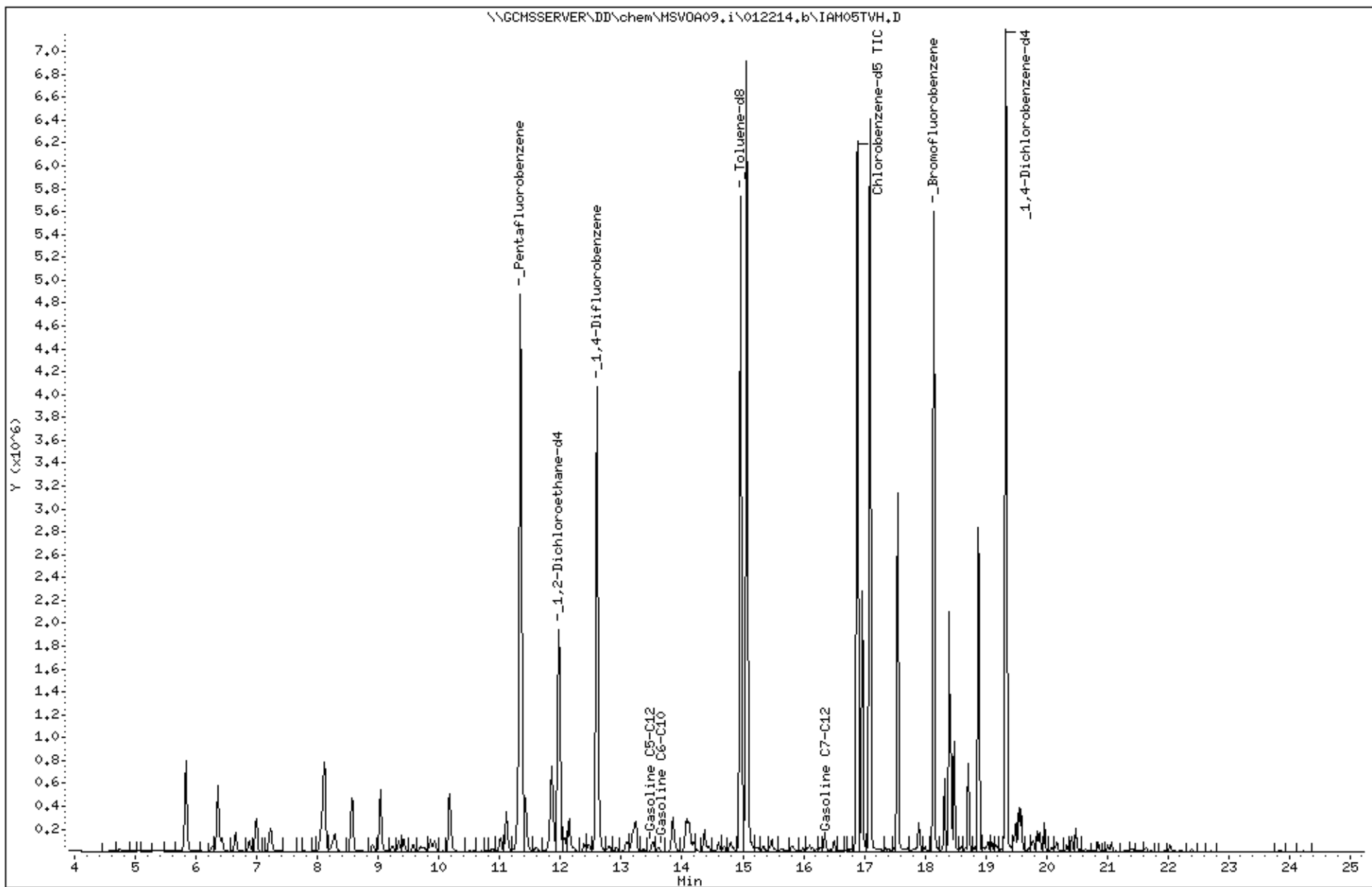
Sample Info: CCV/BS, QC724954, 207309, S23229, .008/100

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-16@48FT	Diln Fac:	1.000
Lab ID:	252382-001	Batch#:	207291
Matrix:	Soil	Sampled:	01/20/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	108	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-12@20FT	Diln Fac:	0.9901
Lab ID:	252382-002	Batch#:	207291
Matrix:	Soil	Sampled:	01/20/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

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
Ethanol	ND	990
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	109	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-12@32FT	Diln Fac:	0.9862
Lab ID:	252382-003	Batch#:	207291
Matrix:	Soil	Sampled:	01/20/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	99
MTBE	10	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
Ethanol	ND	990
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
Naphthalene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	108	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	96	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-12@52FT	Diln Fac:	0.9542
Lab ID:	252382-004	Batch#:	207304
Matrix:	Soil	Sampled:	01/20/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

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
Ethanol	ND	950
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	105	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-19@27FT	Diln Fac:	9.615
Lab ID:	252382-005	Batch#:	207304
Matrix:	Soil	Sampled:	01/21/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	960
MTBE	ND	48
Isopropyl Ether (DIPE)	ND	48
Ethyl tert-Butyl Ether (ETBE)	ND	48
1,2-Dichloroethane	ND	48
Benzene	ND	48
Methyl tert-Amyl Ether (TAME)	ND	48
Ethanol	ND	9,600
Toluene	ND	48
1,2-Dibromoethane	ND	48
Ethylbenzene	120	48
m,p-Xylenes	78	48
o-Xylene	ND	48
Naphthalene	190	48

Surrogate	%REC	Limits
Dibromofluoromethane	95	76-128
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	105	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-19@38FT	Diln Fac:	0.9398
Lab ID:	252382-006	Batch#:	207304
Matrix:	Soil	Sampled:	01/21/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

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
Ethanol	ND	940
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
Naphthalene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	107	76-128
1,2-Dichloroethane-d4	107	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	104	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-18@26FT	Diln Fac:	0.9328
Lab ID:	252382-007	Batch#:	207304
Matrix:	Soil	Sampled:	01/21/14
Units:	ug/Kg	Received:	01/21/14
Basis:	as received	Analyzed:	01/22/14

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
Ethanol	ND	930
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
Naphthalene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	104	76-128
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	102	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724886	Batch#:	207291
Matrix:	Soil	Analyzed:	01/22/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	118.6	95	46-146
MTBE	25.00	24.16	97	64-126
Isopropyl Ether (DIPE)	25.00	21.77	87	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	22.65	91	66-123
1,2-Dichloroethane	25.00	23.58	94	73-139
Benzene	25.00	24.16	97	80-127
Methyl tert-Amyl Ether (TAME)	25.00	24.91	100	69-120
Toluene	25.00	25.27	101	79-125
1,2-Dibromoethane	25.00	27.06	108	77-122
Ethylbenzene	25.00	25.47	102	80-127
m,p-Xylenes	50.00	54.09	108	78-126
o-Xylene	25.00	26.12	104	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	97	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724887	Batch#:	207291
Matrix:	Soil	Analyzed:	01/22/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	99	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207291
MSS Lab ID:	252392-008	Sampled:	01/17/14
Matrix:	Soil	Received:	01/21/14
Units:	ug/Kg	Analyzed:	01/22/14
Basis:	as received		

Type: MS Diln Fac: 0.9960
 Lab ID: QC724931

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.185	249.0	167.0	67	38-134
MTBE	<0.4575	49.80	42.59	86	47-123
Isopropyl Ether (DIPE)	<0.5342	49.80	39.52	79	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5379	49.80	40.72	82	47-122
1,2-Dichloroethane	<0.5903	49.80	42.35	85	48-129
Benzene	<0.6593	49.80	46.43	93	51-125
Methyl tert-Amyl Ether (TAME)	<0.4589	49.80	44.56	89	50-120
Toluene	<0.7221	49.80	46.83	94	45-123
1,2-Dibromoethane	<0.4850	49.80	45.80	92	47-120
Ethylbenzene	<0.6744	49.80	47.12	95	40-124
m,p-Xylenes	<1.303	99.60	99.37	100	37-122
o-Xylene	<0.5626	49.80	48.54	97	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	96	79-128

Type: MSD Diln Fac: 0.9709
 Lab ID: QC724932

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	242.7	187.1	77	38-134	14	55
MTBE	48.54	42.76	88	47-123	3	46
Isopropyl Ether (DIPE)	48.54	39.31	81	44-123	2	45
Ethyl tert-Butyl Ether (ETBE)	48.54	40.63	84	47-122	2	46
1,2-Dichloroethane	48.54	41.63	86	48-129	1	43
Benzene	48.54	45.47	94	51-125	0	46
Methyl tert-Amyl Ether (TAME)	48.54	44.56	92	50-120	3	45
Toluene	48.54	45.63	94	45-123	0	59
1,2-Dibromoethane	48.54	45.45	94	47-120	2	47
Ethylbenzene	48.54	45.61	94	40-124	1	54
m,p-Xylenes	97.09	95.64	99	37-122	1	54
o-Xylene	48.54	46.90	97	37-120	1	52

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	97	79-128

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC724933	Batch#:	207304
Matrix:	Soil	Analyzed:	01/22/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	98	76-128
1,2-Dichloroethane-d4	99	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	107	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC724934	Batch#:	207304
Matrix:	Soil	Analyzed:	01/22/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	118.8	108.4	91	46-146
MTBE	23.75	22.53	95	64-126
Isopropyl Ether (DIPE)	23.75	22.54	95	61-126
Ethyl tert-Butyl Ether (ETBE)	23.75	23.58	99	66-123
1,2-Dichloroethane	23.75	26.09	110	73-139
Benzene	23.75	22.78	96	80-127
Methyl tert-Amyl Ether (TAME)	23.75	23.35	98	69-120
Toluene	23.75	25.37	107	79-125
1,2-Dibromoethane	23.75	25.13	106	77-122
Ethylbenzene	23.75	26.14	110	80-127
m,p-Xylenes	47.50	54.25	114	78-126
o-Xylene	23.75	26.65	112	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	76-128
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	108	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	252382	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207304
MSS Lab ID:	252381-004	Sampled:	01/21/14
Matrix:	Soil	Received:	01/21/14
Units:	ug/Kg	Analyzed:	01/22/14
Basis:	as received		

Type: MS Diln Fac: 0.9709
 Lab ID: QC724935

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<13.01	242.7	229.9	95	38-134
MTBE	<0.9826	48.54	41.25	85	47-123
Isopropyl Ether (DIPE)	<0.8549	48.54	40.49	83	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.7198	48.54	42.58	88	47-122
1,2-Dichloroethane	<0.9099	48.54	44.50	92	48-129
Benzene	<0.8863	48.54	41.41	85	51-125
Methyl tert-Amyl Ether (TAME)	<0.5591	48.54	42.28	87	50-120
Toluene	<0.6987	48.54	46.83	96	45-123
1,2-Dibromoethane	<0.6386	48.54	47.82	99	47-120
Ethylbenzene	<0.6668	48.54	47.40	98	40-124
m,p-Xylenes	<1.229	97.09	94.89	98	37-122
o-Xylene	<0.6150	48.54	49.43	102	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	76-128
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	102	79-128

Type: MSD Diln Fac: 0.9940
 Lab ID: QC724936

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	248.5	216.9	87	38-134	8	55
MTBE	49.70	38.69	78	47-123	9	46
Isopropyl Ether (DIPE)	49.70	37.71	76	44-123	9	45
Ethyl tert-Butyl Ether (ETBE)	49.70	38.96	78	47-122	11	46
1,2-Dichloroethane	49.70	40.32	81	48-129	12	43
Benzene	49.70	37.62	76	51-125	12	46
Methyl tert-Amyl Ether (TAME)	49.70	39.71	80	50-120	9	45
Toluene	49.70	40.73	82	45-123	16	59
1,2-Dibromoethane	49.70	42.41	85	47-120	14	47
Ethylbenzene	49.70	41.19	83	40-124	16	54
m,p-Xylenes	99.40	82.36	83	37-122	16	54
o-Xylene	49.70	42.05	85	37-120	18	52

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	97	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	108	79-128

RPD= Relative Percent Difference



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

**Laboratory Job Number 252692
ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Sample ID
CPT/MIP-9@24FT

Lab ID
252692-001

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 NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 02/04/2014

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 252692
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 01/29/14
Samples Received: 01/17/14

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 01/29/14. The sample was received cold and intact.

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

No analytical problems were encountered.

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

No analytical problems were encountered.

CT # 252692

Subject: RE: 2552 - C&T Data (252341)
From: "Ruchi Mathur" <rmathur@somaenv.com>
Date: 1/29/2014 1:14 PM
To: <tracy.babjar@ctberk.com>

Hi Tracy,

Can you please have them analyze the 'hold' sample No. 007 (CPT/MIP-9@24 ft) on this job? These samples should still be within hold time.

Thanks,
Ruchi Mathur
Staff Engineer
SOMA Environmental Engineering, Inc.
Phone: 925-734-6400
FAX : 925-734-6401

From: Tracy Babjar [mailto:tracy.babjar@ctberk.com]
Sent: Friday, January 24, 2014 11:37 AM
To: Rmathur@somaenv.com
Subject: 2552 - C&T Data (252341)

Hi Ruchi,

Happy Friday!

Tracy :)

Please find attached the following files:

- Invoice
- PDF Deliverable
- EDF EDD (252341_edf.zip)

You may also access this data at <https://labline.ctberk.com/>
Email was also sent to: jbobek@somaenv.com

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COOLER RECEIPT CHECKLIST



Login # 252341 Date Received 11/7/14 Number of coolers 1
 Client SOMA Project 2552

Date Opened 11/7 By (print) [Signature] (sign) [Signature]
 Date Logged in 11/7 By (print) [Signature] (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: * Notify PM if temperature exceeds 6°C
 Type of ice used: Wet Blue/Gel None Temp(°C) 5.7
 Samples Received on ice & cold without a temperature blank; temp. taken with IR gun
 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 there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? _____ YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
 If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Total Volatile Hydrocarbons			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	CPT/MIP-9@24FT	Batch#:	207532
Matrix:	Soil	Sampled:	01/17/14
Units:	mg/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/29/14
Diln Fac:	1.000		

Type: SAMPLE Lab ID: 252692-001

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	67-137

Type: BLANK Lab ID: QC725874

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC725873	Batch#:	207532
Matrix:	Soil	Analyzed:	01/29/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.050	105	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	CPT/MIP-9@24FT	Diln Fac:	1.000
MSS Lab ID:	252692-001	Batch#:	207532
Matrix:	Soil	Sampled:	01/17/14
Units:	mg/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/29/14

Type: MS Lab ID: QC725875

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1384	10.64	10.02	93	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	117	67-137

Type: MSD Lab ID: QC725876

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.10	9.543	93	42-120	0	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	120	67-137

RPD= Relative Percent Difference

BTXE & Oxygenates			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	CPT/MIP-9@24FT	Diln Fac:	0.9960
Lab ID:	252692-001	Batch#:	207550
Matrix:	Soil	Sampled:	01/17/14
Units:	ug/Kg	Received:	01/17/14
Basis:	as received	Analyzed:	01/30/14

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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	108	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	94	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC725942	Batch#:	207550
Matrix:	Soil	Analyzed:	01/30/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	89	80-137
Toluene-d8	100	80-120
Bromofluorobenzene	98	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC725946	Batch#:	207550
Matrix:	Soil	Analyzed:	01/30/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	119.1	95	46-146
MTBE	25.00	22.02	88	64-126
Isopropyl Ether (DIPE)	25.00	20.65	83	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	21.14	85	66-123
1,2-Dichloroethane	25.00	23.11	92	73-139
Benzene	25.00	26.29	105	80-127
Methyl tert-Amyl Ether (TAME)	25.00	23.64	95	69-120
Toluene	25.00	26.38	106	79-125
1,2-Dibromoethane	25.00	27.02	108	77-122
Ethylbenzene	25.00	26.46	106	80-127
m,p-Xylenes	50.00	53.36	107	78-126
o-Xylene	25.00	23.68	95	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	96	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	252692	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207550
MSS Lab ID:	252701-007	Sampled:	01/28/14
Matrix:	Soil	Received:	01/29/14
Units:	ug/Kg	Analyzed:	01/30/14
Basis:	as received		

Type: MS
Lab ID: QC725999

Diln Fac: 0.9804

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.343	245.1	206.6	84	38-134
MTBE	<0.4663	49.02	39.50	81	47-123
Isopropyl Ether (DIPE)	<0.5445	49.02	36.88	75	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5483	49.02	37.72	77	47-122
1,2-Dichloroethane	<0.6016	49.02	43.18	88	48-129
Benzene	<0.6720	49.02	49.11	100	51-125
Methyl tert-Amyl Ether (TAME)	<0.4677	49.02	42.46	87	50-120
Toluene	<0.7360	49.02	46.86	96	45-123
1,2-Dibromoethane	<0.4943	49.02	48.55	99	47-120
Ethylbenzene	<0.6874	49.02	47.00	96	40-124
m,p-Xylenes	<1.329	98.04	93.29	95	37-122
o-Xylene	<0.5735	49.02	42.88	87	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	95	79-128

Type: MSD
Lab ID: QC726000

Diln Fac: 0.9823

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	245.6	194.9	79	38-134	6	55
MTBE	49.12	36.85	75	47-123	7	46
Isopropyl Ether (DIPE)	49.12	33.08	67	44-123	11	45
Ethyl tert-Butyl Ether (ETBE)	49.12	34.46	70	47-122	9	46
1,2-Dichloroethane	49.12	42.01	86	48-129	3	43
Benzene	49.12	47.76	97	51-125	3	46
Methyl tert-Amyl Ether (TAME)	49.12	39.51	80	50-120	7	45
Toluene	49.12	46.02	94	45-123	2	59
1,2-Dibromoethane	49.12	47.02	96	47-120	3	47
Ethylbenzene	49.12	46.10	94	40-124	2	54
m,p-Xylenes	98.23	92.30	94	37-122	1	54
o-Xylene	49.12	42.45	86	37-120	1	52

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	95	79-128

RPD= Relative Percent Difference



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

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

Laboratory Job Number 252740
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
CPT/MIP-18@44FT	252740-001
DP-6@21FT	252740-002
DP-6@28FT	252740-003
CPT/MIP-18-1	252740-004
DP-6	252740-005

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: _____

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 02/06/2014

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 252740
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 01/30/14
Samples Received: 01/30/14

This data package contains sample and QC results for two soil samples and two water samples, requested for the above referenced project on 01/30/14. The samples were received cold and intact.

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

No analytical problems were encountered.

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

High recoveries were observed for a number of analytes in the MS/MSD for batch 207603; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPDs were within limits. High recovery was observed for MTBE in the BSD for batch 207653; the associated RPD was within limits, and the high recovery was not associated with any reported results. DP-6 (lab # 252740-005) had pH greater than 2. No other analytical problems were encountered.

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

No analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd
 Analytical Laboratory Since 1878
 2323 Fifth Street
 Berkeley, CA 94710
 (510)486-0900 Phone
 (510)486-0532 Fax

LOGIN # 252740

Sampler: Lizzie Hightower

Project No: 2552

Report To: Joyce Bobek

Project Name: 15101 Freedom Ave., San Leandro Company: SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Analyses

Lab No.	Sample ID.	Sampling Date Time	Matrix			# of Containers	Preservative			
			Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE
	CPT/MIP-18@44ft	1/28/14 14:08	*			6" Sleeve				*
	DP-6@21ft	1/28/14 16:06	*			6" Sleeve				*
	DP-6@28ft	1/28/14 16:29	*			6" Sleeve				*
	CPT/MIP-18-1	1/28/14 13:10	*			4 VOAS	*			*
	DP-6	1/28/14 16:52	*			4 VOAS	*			*

TPHg EPA 8015	Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol	BTEX, MtBE 8260B	Naphthalene	TPH-g, BTEX, MtBE 8260B	Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol	Naphthalene 8260
*	*	*	*	(*Hold*)		
*	*	*	*			
*	*	*	*			
				*	*	*
				*	*	*

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:		RECEIVED BY:	
<i>E. High</i>	1/30/14 08:30 DATE/TIME	<i>Joyce Bobek</i>	1/30/14 11:30 DATE/TIME
<i>[Signature]</i>	1/30/14 16:55 DATE/TIME	<i>[Signature]</i>	1/30/14 16:55 DATE/TIME
	DATE/TIME		DATE/TIME

what could be

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 252740 Date Received 11/30/14 Number of coolers 1
 Client SCMA Project 2552

Date Opened 1/20 By (print) ML (sign) [Signature]
 Date Logged in 5 By (print) [Signature] (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: * Notify PM if temperature exceeds 6°C
 Type of ice used: Wet Blue/Gel None Temp(°C) 2.4

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

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

21. Was the client contacted concerning this sample delivery? _____ YES NO
 If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Total Volatile Hydrocarbons			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	01/28/14
Units:	mg/Kg	Received:	01/30/14
Basis:	as received		

Field ID: DP-6@21FT Diln Fac: 25.00
 Type: SAMPLE Batch#: 207707
 Lab ID: 252740-002 Analyzed: 02/04/14

Analyte	Result	RL
Gasoline C7-C12	24 Y	5.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	112	67-137

Field ID: DP-6@28FT Diln Fac: 1.000
 Type: SAMPLE Batch#: 207605
 Lab ID: 252740-003 Analyzed: 01/31/14

Analyte	Result	RL
Gasoline C7-C12	ND	0.97

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	67-137

Type: BLANK Batch#: 207605
 Lab ID: QC726147 Analyzed: 01/31/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

Type: BLANK Batch#: 207707
 Lab ID: QC726601 Analyzed: 02/04/14
 Diln Fac: 1.000

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	67-137

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

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC726146	Batch#:	207605
Matrix:	Soil	Analyzed:	01/31/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.037	104	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	111	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	252730-001	Batch#:	207605
Matrix:	Soil	Sampled:	01/30/14
Units:	mg/Kg	Received:	01/30/14
Basis:	as received	Analyzed:	01/31/14

Type: MS Lab ID: QC726148

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1582	10.31	8.900	85	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	114	67-137

Type: MSD Lab ID: QC726149

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.091	7.685	83	42-120	2	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	67-137

RPD= Relative Percent Difference

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC726600	Batch#:	207707
Matrix:	Soil	Analyzed:	02/04/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9917	99	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	252868-001	Batch#:	207707
Matrix:	Soil	Sampled:	02/04/14
Units:	mg/Kg	Received:	02/04/14
Basis:	as received	Analyzed:	02/04/14

Type: MS Lab ID: QC726602

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.09615	10.20	8.639	84	42-120

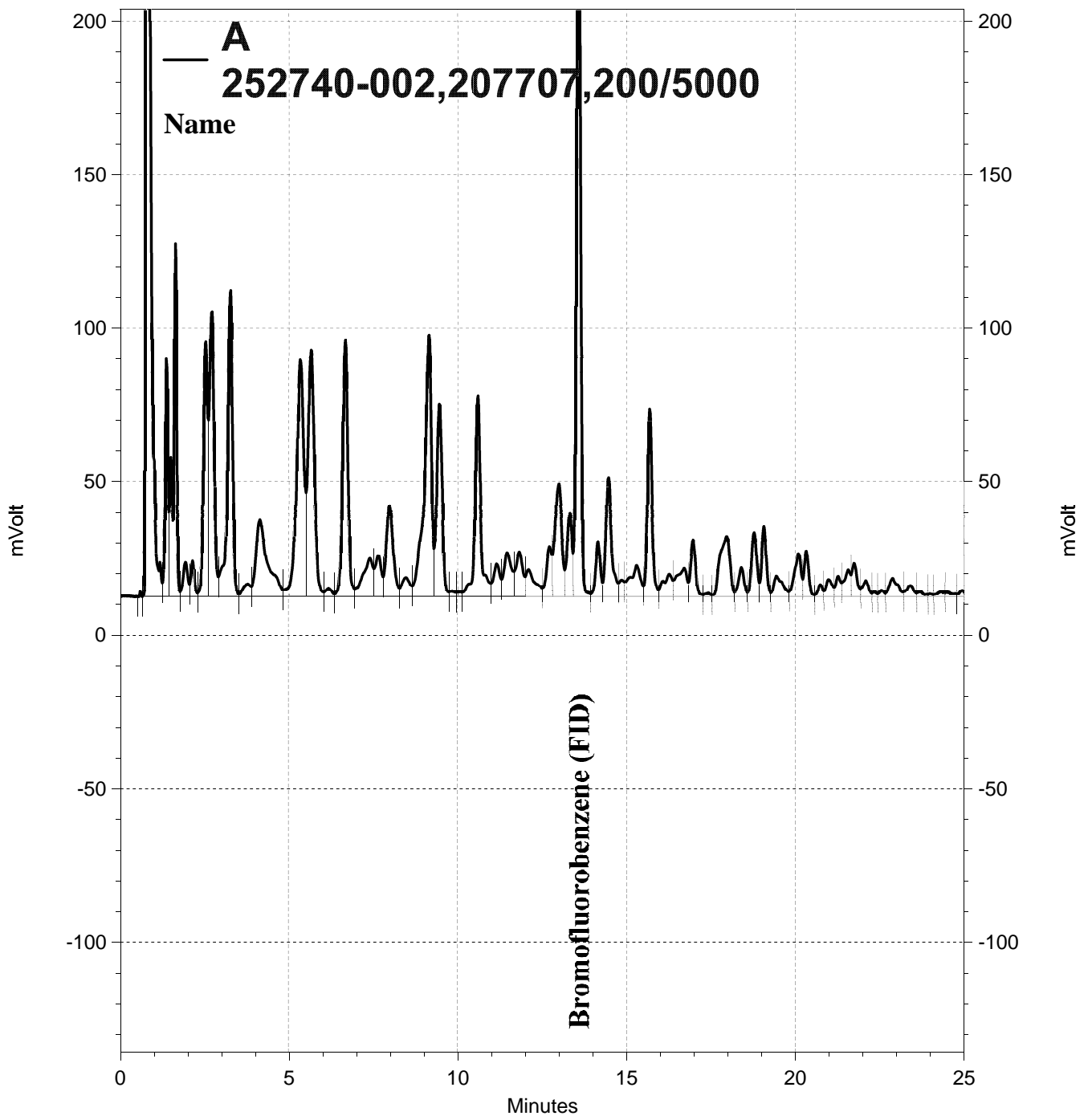
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	115	67-137

Type: MSD Lab ID: QC726603

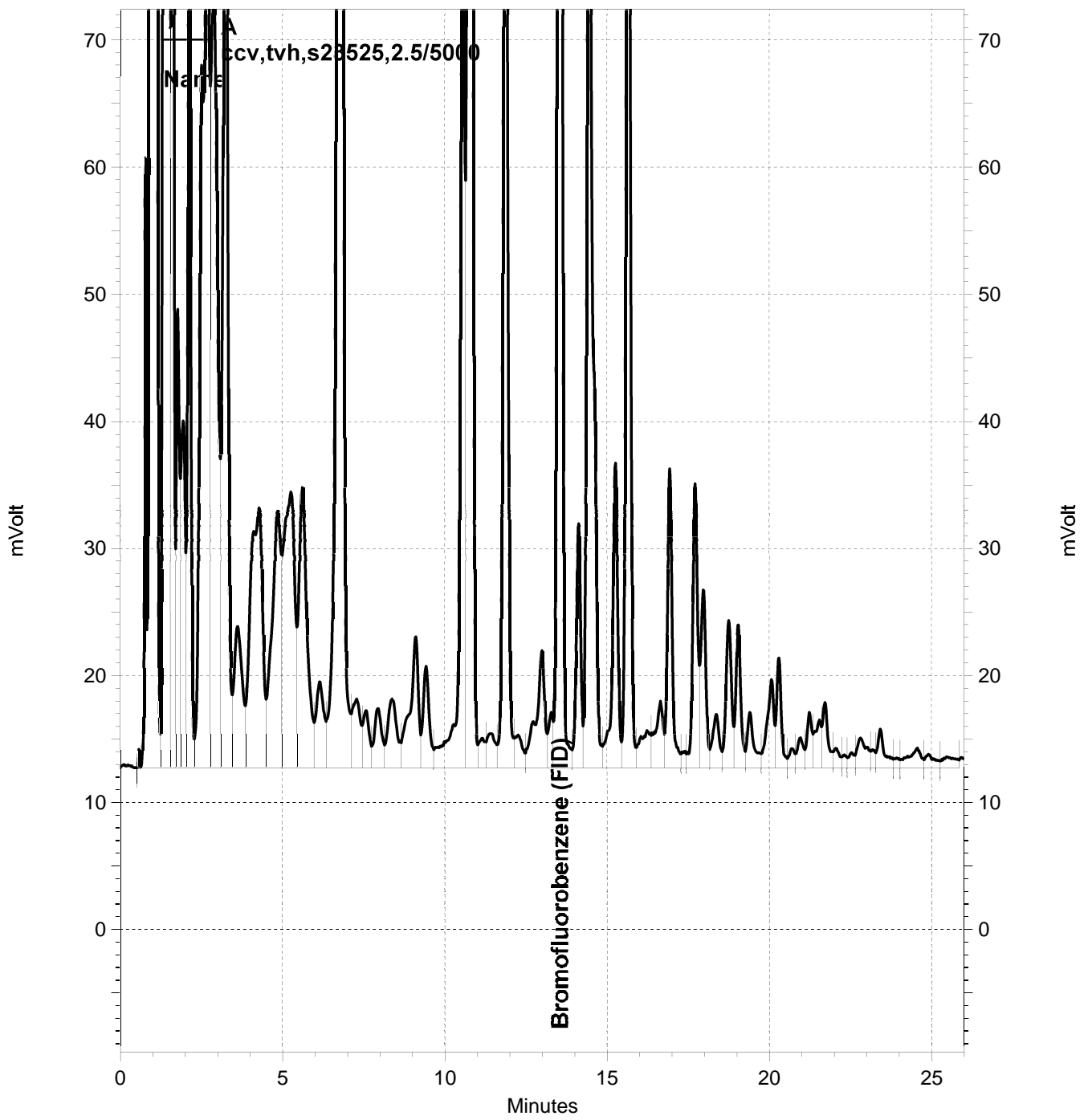
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.901	8.452	84	42-120	1	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	113	67-137

RPD= Relative Percent Difference



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Purgeable Organics by GC/MS

Lab #: 252740	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: EPA 5030B
Project#: 2552	Analysis: EPA 8260B
Field ID: CPT/MIP-18-1	Batch#: 207603
Lab ID: 252740-004	Sampled: 01/28/14
Matrix: Water	Received: 01/30/14
Units: ug/L	Analyzed: 01/31/14
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
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	1.1	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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	112	77-136
1,2-Dichloroethane-d4	120	75-139
Toluene-d8	108	80-120
Bromofluorobenzene	111	80-120

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-6	Units:	ug/L
Lab ID:	252740-005	Sampled:	01/28/14
Matrix:	Water	Received:	01/30/14

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	3,900	170	3.333	207653	02/03/14
tert-Butyl Alcohol (TBA)	760	33	3.333	207653	02/03/14
Isopropyl Ether (DIPE)	ND	1.7	3.333	207653	02/03/14
Ethyl tert-Butyl Ether (ETBE)	20	1.7	3.333	207653	02/03/14
Methyl tert-Amyl Ether (TAME)	ND	1.7	3.333	207653	02/03/14
Ethanol	ND	3,300	3.333	207653	02/03/14
MTBE	220	8.3	16.67	207603	01/31/14
1,2-Dichloroethane	ND	1.7	3.333	207653	02/03/14
Benzene	3.1	1.7	3.333	207653	02/03/14
Toluene	ND	1.7	3.333	207653	02/03/14
1,2-Dibromoethane	ND	1.7	3.333	207653	02/03/14
Ethylbenzene	130	1.7	3.333	207653	02/03/14
m,p-Xylenes	220	1.7	3.333	207653	02/03/14
o-Xylene	15	1.7	3.333	207653	02/03/14
Naphthalene	35	6.7	3.333	207653	02/03/14

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	95	77-136	3.333	207653	02/03/14
1,2-Dichloroethane-d4	138	75-139	3.333	207653	02/03/14
Toluene-d8	97	80-120	3.333	207653	02/03/14
Bromofluorobenzene	100	80-120	3.333	207653	02/03/14

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207603
Units:	ug/L	Analyzed:	01/31/14
Diln Fac:	1.000		

Type: BS Lab ID: QC726135

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	78.58	126	37-151
Isopropyl Ether (DIPE)	12.50	13.33	107	56-124
Ethyl tert-Butyl Ether (ETBE)	12.50	13.41	107	61-122
Methyl tert-Amyl Ether (TAME)	12.50	12.89	103	65-120
MTBE	12.50	12.58	101	64-121
1,2-Dichloroethane	12.50	14.20	114	77-137
Benzene	12.50	14.30	114	80-124
Toluene	12.50	13.80	110	80-122
1,2-Dibromoethane	12.50	13.21	106	80-120
Ethylbenzene	12.50	14.24	114	80-124
m,p-Xylenes	25.00	27.05	108	80-122
o-Xylene	12.50	13.72	110	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	107	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC726136

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	72.28	116	37-151	8	30
Isopropyl Ether (DIPE)	12.50	14.98	120	56-124	12	20
Ethyl tert-Butyl Ether (ETBE)	12.50	14.53	116	61-122	8	22
Methyl tert-Amyl Ether (TAME)	12.50	14.52	116	65-120	12	22
MTBE	12.50	14.23	114	64-121	12	20
1,2-Dichloroethane	12.50	14.44	116	77-137	2	20
Benzene	12.50	14.14	113	80-124	1	20
Toluene	12.50	13.47	108	80-122	2	20
1,2-Dibromoethane	12.50	13.34	107	80-120	1	20
Ethylbenzene	12.50	13.36	107	80-124	6	20
m,p-Xylenes	25.00	26.06	104	80-122	4	20
o-Xylene	12.50	13.11	105	77-120	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	105	80-120
Bromofluorobenzene	107	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207603
Units:	ug/L	Analyzed:	01/31/14
Diln Fac:	1.000		

Type: BS Lab ID: QC726137

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	943.4	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	77-136
1,2-Dichloroethane-d4	111	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	104	80-120

Type: BSD Lab ID: QC726138

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	923.5	92	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	110	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	107	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC726139	Batch#:	207603
Matrix:	Water	Analyzed:	01/31/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	108	77-136
1,2-Dichloroethane-d4	118	75-139
Toluene-d8	107	80-120
Bromofluorobenzene	114	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207603
MSS Lab ID:	252738-005	Sampled:	01/30/14
Matrix:	Water	Received:	01/30/14
Units:	ug/L	Analyzed:	01/31/14
Diln Fac:	1.000		

Type: MS Lab ID: QC726213

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.343	62.50	87.95	141	38-150
Isopropyl Ether (DIPE)	<0.1000	12.50	15.49	124 *	62-120
Ethyl tert-Butyl Ether (ETBE)	<0.1000	12.50	14.88	119	64-120
Methyl tert-Amyl Ether (TAME)	<0.1000	12.50	14.02	112	67-120
MTBE	<0.1000	12.50	15.72	126 *	66-120
1,2-Dichloroethane	<0.1000	12.50	14.80	118	80-136
Benzene	<0.1000	12.50	14.52	116	80-127
Toluene	<0.1000	12.50	13.90	111	80-123
1,2-Dibromoethane	<0.1000	12.50	14.01	112	80-120
Ethylbenzene	<0.1022	12.50	14.33	115	80-126
m,p-Xylenes	<0.1357	25.00	26.49	106	80-123
o-Xylene	<0.1322	12.50	12.91	103	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	77-136
1,2-Dichloroethane-d4	118	75-139
Toluene-d8	107	80-120
Bromofluorobenzene	105	80-120

Type: MSD Lab ID: QC726214

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	98.05	157 *	38-150	11	38
Isopropyl Ether (DIPE)	12.50	14.99	120	62-120	3	25
Ethyl tert-Butyl Ether (ETBE)	12.50	15.25	122 *	64-120	2	27
Methyl tert-Amyl Ether (TAME)	12.50	14.87	119	67-120	6	28
MTBE	12.50	14.91	119	66-120	5	27
1,2-Dichloroethane	12.50	15.61	125	80-136	5	23
Benzene	12.50	14.40	115	80-127	1	23
Toluene	12.50	13.70	110	80-123	1	22
1,2-Dibromoethane	12.50	14.56	116	80-120	4	23
Ethylbenzene	12.50	14.09	113	80-126	2	22
m,p-Xylenes	25.00	26.00	104	80-123	2	22
o-Xylene	12.50	13.10	105	76-120	1	23

Surrogate	%REC	Limits
Dibromofluoromethane	107	77-136
1,2-Dichloroethane-d4	119	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-120

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC726341	Batch#:	207653
Matrix:	Water	Analyzed:	02/03/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	94	77-136
1,2-Dichloroethane-d4	130	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207653
Units:	ug/L	Analyzed:	02/03/14
Diln Fac:	1.000		

Type: BS Lab ID: QC726342

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	120.4	120	37-151
Isopropyl Ether (DIPE)	20.00	20.10	100	56-124
Ethyl tert-Butyl Ether (ETBE)	20.00	22.61	113	61-122
Methyl tert-Amyl Ether (TAME)	20.00	23.06	115	65-120
MTBE	20.00	23.91	120	64-121
1,2-Dichloroethane	20.00	25.92	130	77-137
Benzene	20.00	21.60	108	80-124
Toluene	20.00	18.67	93	80-122
1,2-Dibromoethane	20.00	20.33	102	80-120
Ethylbenzene	20.00	20.81	104	80-124
m,p-Xylenes	40.00	42.72	107	80-122
o-Xylene	20.00	19.76	99	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	77-136
1,2-Dichloroethane-d4	125	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC726343

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	128.5	129	37-151	7	30
Isopropyl Ether (DIPE)	20.00	19.20	96	56-124	5	20
Ethyl tert-Butyl Ether (ETBE)	20.00	22.51	113	61-122	0	22
Methyl tert-Amyl Ether (TAME)	20.00	21.72	109	65-120	6	22
MTBE	20.00	24.40	122 *	64-121	2	20
1,2-Dichloroethane	20.00	25.32	127	77-137	2	20
Benzene	20.00	20.36	102	80-124	6	20
Toluene	20.00	18.99	95	80-122	2	20
1,2-Dibromoethane	20.00	19.99	100	80-120	2	20
Ethylbenzene	20.00	20.60	103	80-124	1	20
m,p-Xylenes	40.00	41.87	105	80-122	2	20
o-Xylene	20.00	19.89	99	77-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	77-136
1,2-Dichloroethane-d4	122	75-139
Toluene-d8	87	80-120
Bromofluorobenzene	91	80-120

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	207653
Units:	ug/L	Analyzed:	02/03/14
Diln Fac:	1.000		

Type: BS Lab ID: QC726344

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	796.8	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-136
1,2-Dichloroethane-d4	122	75-139
Toluene-d8	92	80-120
Bromofluorobenzene	95	80-120

Type: BSD Lab ID: QC726345

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	804.4	101	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	77-136
1,2-Dichloroethane-d4	121	75-139
Toluene-d8	89	80-120
Bromofluorobenzene	95	80-120

RPD= Relative Percent Difference

Date : 03-FEB-2014 23:37

Client ID: DYNA P&T

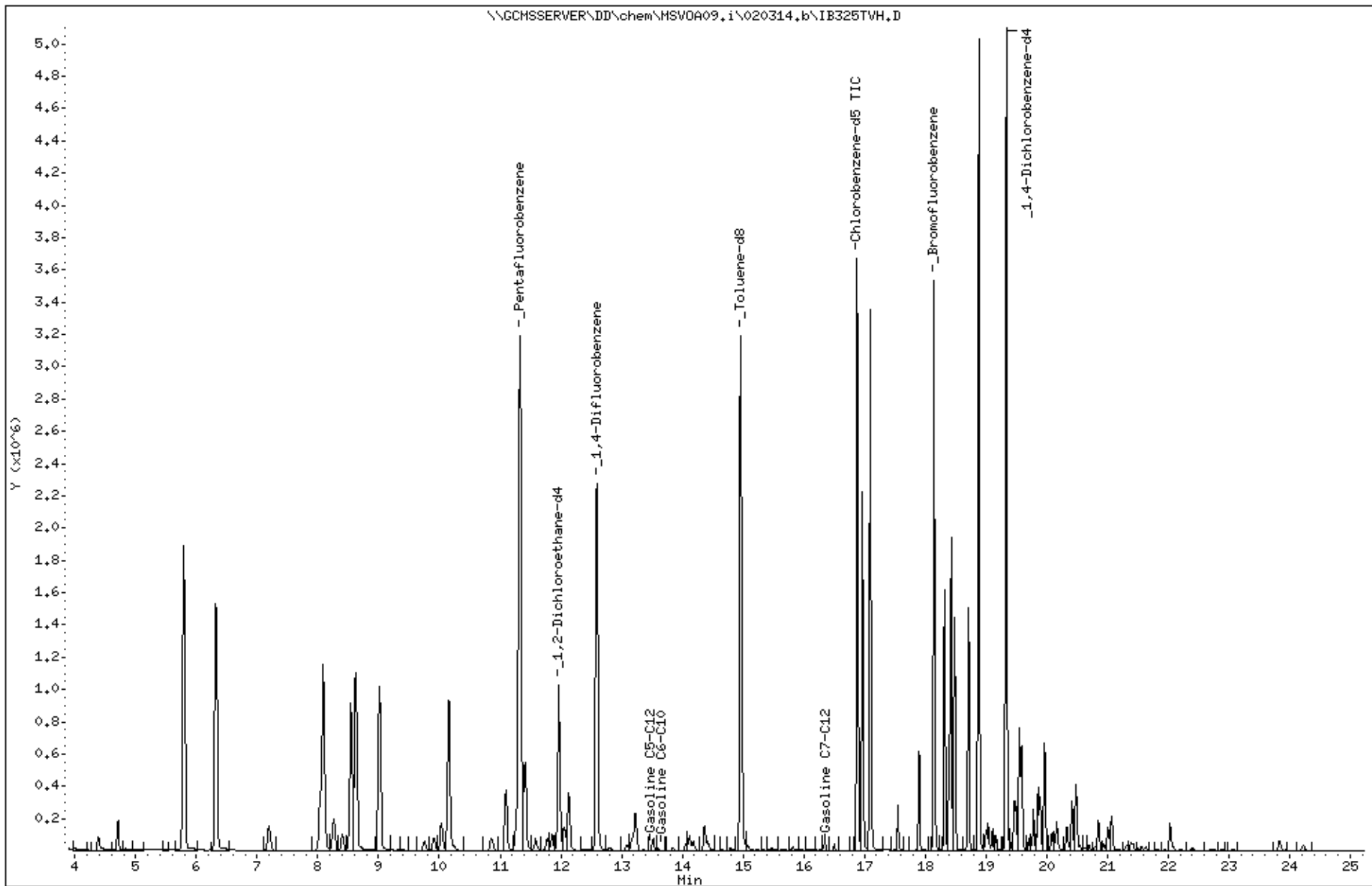
Sample Info: S,252740-005

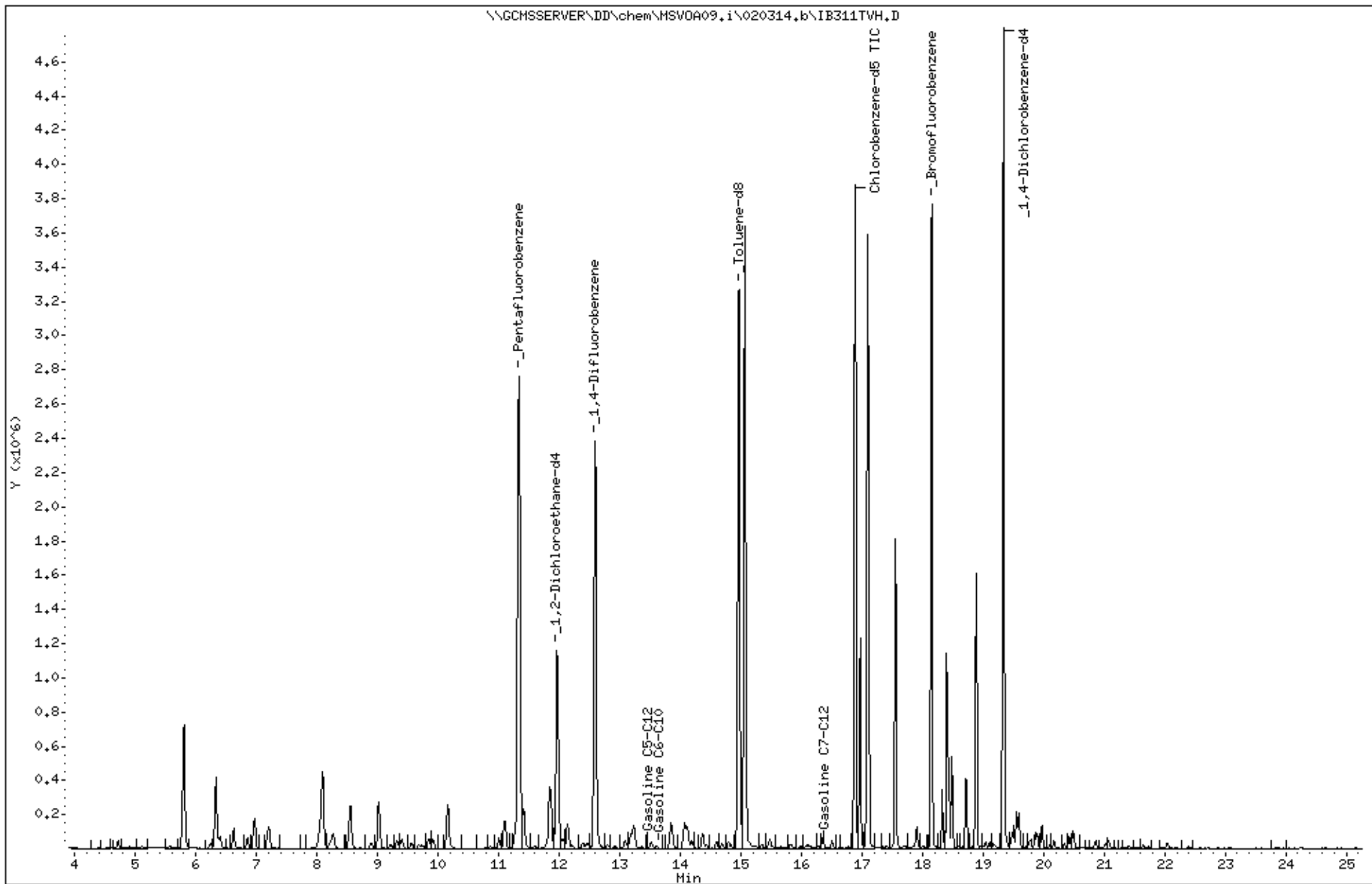
Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:





BTXE & Oxygenates			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-6@21FT	Diln Fac:	0.9560
Lab ID:	252740-002	Batch#:	207597
Matrix:	Soil	Sampled:	01/28/14
Units:	ug/Kg	Received:	01/30/14
Basis:	as received	Analyzed:	01/31/14

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
Ethanol	ND	960
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	150	4.8
m,p-Xylenes	210	4.8
o-Xylene	ND	4.8
Naphthalene	65	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	99	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	85	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-6@28FT	Diln Fac:	0.9843
Lab ID:	252740-003	Batch#:	207597
Matrix:	Soil	Sampled:	01/28/14
Units:	ug/Kg	Received:	01/30/14
Basis:	as received	Analyzed:	01/31/14

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
Ethanol	ND	980
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
Naphthalene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	106	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	95	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	207597
Units:	ug/Kg	Analyzed:	01/31/14
Diln Fac:	1.000		

Type: BS Lab ID: QC726115

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	91.65	73	46-146
MTBE	25.00	21.13	85	64-126
Isopropyl Ether (DIPE)	25.00	20.62	82	61-126
Ethyl tert-Butyl Ether (ETBE)	25.00	20.98	84	66-123
1,2-Dichloroethane	25.00	23.49	94	73-139
Benzene	25.00	26.82	107	80-127
Methyl tert-Amyl Ether (TAME)	25.00	23.20	93	69-120
Toluene	25.00	26.36	105	79-125
1,2-Dibromoethane	25.00	26.45	106	77-122
Ethylbenzene	25.00	26.77	107	80-127
m,p-Xylenes	50.00	54.23	108	78-126
o-Xylene	25.00	23.92	96	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	76-128
1,2-Dichloroethane-d4	91	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	95	79-128

Type: BSD Lab ID: QC726116

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	103.3	83	46-146	12	37
MTBE	25.00	21.40	86	64-126	1	28
Isopropyl Ether (DIPE)	25.00	20.72	83	61-126	0	24
Ethyl tert-Butyl Ether (ETBE)	25.00	20.95	84	66-123	0	25
1,2-Dichloroethane	25.00	23.21	93	73-139	1	23
Benzene	25.00	26.12	104	80-127	3	20
Methyl tert-Amyl Ether (TAME)	25.00	23.10	92	69-120	0	24
Toluene	25.00	25.72	103	79-125	2	23
1,2-Dibromoethane	25.00	26.41	106	77-122	0	21
Ethylbenzene	25.00	25.82	103	80-127	4	22
m,p-Xylenes	50.00	52.29	105	78-126	4	22
o-Xylene	25.00	23.39	94	73-120	2	21

Surrogate	%REC	Limits
Dibromofluoromethane	100	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	95	79-128

RPD= Relative Percent Difference

Batch QC Report

BTXE & Oxygenates			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC726117	Batch#:	207597
Matrix:	Soil	Analyzed:	01/31/14
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
Ethanol	ND	1,000
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	102	76-128
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	96	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	252740	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207597
MSS Lab ID:	252730-001	Sampled:	01/30/14
Matrix:	Soil	Received:	01/30/14
Units:	ug/Kg	Analyzed:	01/31/14
Basis:	as received		

Type: MS
Lab ID: QC726158

Diln Fac: 0.9671

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.170	241.8	171.5	71	38-134
MTBE	<0.4566	48.36	40.65	84	47-123
Isopropyl Ether (DIPE)	<0.5332	48.36	38.68	80	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5369	48.36	39.54	82	47-122
1,2-Dichloroethane	<0.5891	48.36	44.53	92	48-129
Benzene	<0.6580	48.36	50.24	104	51-125
Methyl tert-Amyl Ether (TAME)	<0.4580	48.36	43.35	90	50-120
Toluene	<0.7208	48.36	48.12	100	45-123
1,2-Dibromoethane	<0.4841	48.36	49.46	102	47-120
Ethylbenzene	<0.6731	48.36	48.61	101	40-124
m,p-Xylenes	<1.301	96.71	97.63	101	37-122
o-Xylene	<0.5616	48.36	44.48	92	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-128
1,2-Dichloroethane-d4	94	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	95	79-128

Type: MSD
Lab ID: QC726159

Diln Fac: 0.9843

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	246.1	184.6	75	38-134	6	55
MTBE	49.21	42.96	87	47-123	4	46
Isopropyl Ether (DIPE)	49.21	41.41	84	44-123	5	45
Ethyl tert-Butyl Ether (ETBE)	49.21	41.80	85	47-122	4	46
1,2-Dichloroethane	49.21	42.05	85	48-129	7	43
Benzene	49.21	47.76	97	51-125	7	46
Methyl tert-Amyl Ether (TAME)	49.21	45.92	93	50-120	4	45
Toluene	49.21	46.20	94	45-123	6	59
1,2-Dibromoethane	49.21	46.73	95	47-120	7	47
Ethylbenzene	49.21	45.99	93	40-124	7	54
m,p-Xylenes	98.43	92.48	94	37-122	7	54
o-Xylene	49.21	42.32	86	37-120	7	52

Surrogate	%REC	Limits
Dibromofluoromethane	102	76-128
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	96	79-128

RPD= Relative Percent Difference



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

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

Laboratory Job Number 253107
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DP-6-SO@3FT	253107-001
DP-6-SO@6FT	253107-002

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: _____

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 02/14/2014

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 253107
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 02/07/14
Samples Received: 02/07/14

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 02/07/14. The samples were received cold and intact.

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

High surrogate recoveries were observed for bromofluorobenzene (FID) in the MS/MSD for batch 207903; the parent sample was not a project sample. No other analytical problems were encountered.

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

No analytical problems were encountered.

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 253107 Date Received 2/7/11 Number of coolers 1
 Client SOMA Project 2552

Date Opened 2/7 By (print) ms (sign) [Signature]
 Date Logged in 2 By (print) ms (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: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 5.7

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

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

21. Was the client contacted concerning this sample delivery? _____ YES NO
 If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Total Volatile Hydrocarbons			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	207903
Units:	mg/Kg	Sampled:	02/06/14
Basis:	as received	Received:	02/07/14
Diln Fac:	1.000		

Field ID: DP-6-SO@3FT Lab ID: 253107-001
 Type: SAMPLE Analyzed: 02/11/14

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	67-137

Field ID: DP-6-SO@6FT Lab ID: 253107-002
 Type: SAMPLE Analyzed: 02/11/14

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	67-137

Type: BLANK Analyzed: 02/10/14
 Lab ID: QC727413

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC727412	Batch#:	207903
Matrix:	Soil	Analyzed:	02/10/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.013	101	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	67-137

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5035
Project#:	2552	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	25.00
MSS Lab ID:	253013-001	Batch#:	207903
Matrix:	Soil	Sampled:	02/05/14
Units:	mg/Kg	Received:	02/05/14
Basis:	as received		

Type: MS Analyzed: 02/10/14
 Lab ID: QC727414

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	130.5	50.00	156.5	52	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	166 *	67-137

Type: MSD Analyzed: 02/11/14
 Lab ID: QC727415

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	50.00	170.8	81	42-120	9	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	170 *	67-137

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

BTXE & Oxygenates			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-6-SO@3FT	Diln Fac:	0.9615
Lab ID:	253107-001	Batch#:	207918
Matrix:	Soil	Sampled:	02/06/14
Units:	ug/Kg	Received:	02/07/14
Basis:	as received	Analyzed:	02/11/14

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
Ethanol	ND	960
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	104	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	103	79-128

ND= Not Detected
 RL= Reporting Limit

BTXE & Oxygenates			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-6-SO@6FT	Diln Fac:	0.9615
Lab ID:	253107-002	Batch#:	207918
Matrix:	Soil	Sampled:	02/06/14
Units:	ug/Kg	Received:	02/07/14
Basis:	as received	Analyzed:	02/11/14

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
Ethanol	ND	960
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
Naphthalene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	103	79-128

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC727459	Batch#:	207918
Matrix:	Soil	Analyzed:	02/11/14
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	93.75	101.8	109	46-146
MTBE	18.75	19.90	106	64-126
Isopropyl Ether (DIPE)	18.75	19.60	105	61-126
Ethyl tert-Butyl Ether (ETBE)	18.75	19.55	104	66-123
1,2-Dichloroethane	18.75	18.21	97	73-139
Benzene	18.75	20.36	109	80-127
Methyl tert-Amyl Ether (TAME)	18.75	18.81	100	69-120
Toluene	18.75	19.94	106	79-125
1,2-Dibromoethane	18.75	20.49	109	77-122
Ethylbenzene	18.75	19.61	105	80-127
m,p-Xylenes	37.50	38.80	103	78-126
o-Xylene	18.75	17.92	96	73-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	76-128
1,2-Dichloroethane-d4	90	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	102	79-128

Batch QC Report

BTXE & Oxygenates			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC727460	Batch#:	207918
Matrix:	Soil	Analyzed:	02/11/14
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
Ethanol	ND	1,000
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
Naphthalene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	106	76-128
1,2-Dichloroethane-d4	87	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	103	79-128

ND= Not Detected

RL= Reporting Limit

Batch QC Report

BTXE & Oxygenates			
Lab #:	253107	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	207918
MSS Lab ID:	253118-001	Sampled:	02/07/14
Matrix:	Soil	Received:	02/07/14
Units:	ug/Kg	Analyzed:	02/11/14
Basis:	as received		

Type: MS
Lab ID: QC727470

Diln Fac: 0.9470

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.279	236.7	182.5	77	38-134
MTBE	<0.4627	47.35	43.00	91	47-123
Isopropyl Ether (DIPE)	<0.5403	47.35	43.08	91	44-123
Ethyl tert-Butyl Ether (ETBE)	<0.5441	47.35	42.66	90	47-122
1,2-Dichloroethane	<0.5970	47.35	36.98	78	48-129
Benzene	11.52	47.35	57.99	98	51-125
Methyl tert-Amyl Ether (TAME)	<0.4641	47.35	42.82	90	50-120
Toluene	4.842	47.35	48.24	92	45-123
1,2-Dibromoethane	<0.4905	47.35	41.08	87	47-120
Ethylbenzene	<0.6821	47.35	43.52	92	40-124
m,p-Xylenes	2.168	94.70	87.84	90	37-122
o-Xylene	0.8842	47.35	40.72	84	37-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	76-128
1,2-Dichloroethane-d4	85	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	101	79-128

Type: MSD
Lab ID: QC727471

Diln Fac: 0.9311

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	232.8	166.2	71	38-134	8	55
MTBE	46.55	40.51	87	47-123	4	46
Isopropyl Ether (DIPE)	46.55	41.54	89	44-123	2	45
Ethyl tert-Butyl Ether (ETBE)	46.55	41.04	88	47-122	2	46
1,2-Dichloroethane	46.55	37.14	80	48-129	2	43
Benzene	46.55	58.53	101	51-125	2	46
Methyl tert-Amyl Ether (TAME)	46.55	40.31	87	50-120	4	45
Toluene	46.55	49.71	96	45-123	5	59
1,2-Dibromoethane	46.55	41.90	90	47-120	4	47
Ethylbenzene	46.55	44.06	95	40-124	3	54
m,p-Xylenes	93.11	88.66	93	37-122	3	54
o-Xylene	46.55	41.16	87	37-120	3	52

Surrogate	%REC	Limits
Dibromofluoromethane	103	76-128
1,2-Dichloroethane-d4	84	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	100	79-128

RPD= Relative Percent Difference



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

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

**Laboratory Job Number 252454
ANALYTICAL REPORT**

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Sample ID
SV-1

Lab ID
252454-001

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 NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Tracy Babjar
Project Manager
tracy.babjar@ctberk.com
(510) 204-2226

Date: 01/31/2014

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 252454
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 01/23/14
Samples Received: 01/23/14

This data package contains sample and QC results for one air sample, requested for the above referenced project on 01/23/14. The sample was received intact.

Volatile Organics in Air by MS (EPA TO-15):

High ICAL percent RSD (relative standard deviation) was observed for naphthalene in the calibration analyzed 01/24/14 21:18; affected data was qualified with "b". High responses were observed for many analytes in the ICV analyzed 01/15/14 17:51; affected data was qualified with "b". High responses were observed for 2-hexanone and vinyl acetate in the CCV analyzed 01/28/14 16:35; affected data was qualified with "b". High responses were observed for many analytes in the CCV analyzed 01/29/14 18:29; affected data was qualified with "b". High recoveries were observed for 2-hexanone and vinyl acetate in the BS/BSD for batch 207490; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample. High recoveries were observed for many analytes in the BS/BSD for batch 207526; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 252454 Date Received 1/23/14 Number of coolers 1
Client SOMA Project 2532

Date Opened 1/23 By (print) me (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: * Notify PM if temperature exceeds 6°C
Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES NO

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

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

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

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

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

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

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

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

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Volatile Organics in Air

Lab #: 252454	Location: 15101 Freedom Avenue
Client: SOMA Environmental Engineering Inc.	Prep: METHOD
Project#: 2552	Analysis: EPA TO-15
Field ID: SV-1	Diln Fac: 1.670
Lab ID: 252454-001	Sampled: 01/22/14
Matrix: Air	Received: 01/23/14
Units (V): ppbv	Analyzed: 01/29/14
Units (M): ug/m3	

Analyte	Result (V)	RL	Result (M)	RL	Batch#
Freon 12	ND	0.84	ND	4.1	207490
Freon 114	ND	0.84	ND	5.8	207490
Chloromethane	ND	0.84	ND	1.7	207490
Vinyl Chloride	ND	0.84	ND	2.1	207490
1,3-Butadiene	ND	0.84	ND	1.8	207490
Bromomethane	ND	0.84	ND	3.2	207490
Chloroethane	ND	0.84	ND	2.2	207490
Trichlorofluoromethane	ND	0.84	ND	4.7	207490
Acrolein	ND	3.3	ND	7.7	207490
1,1-Dichloroethene	ND	0.84	ND	3.3	207490
Freon 113	ND	0.84	ND	6.4	207490
Acetone	ND	3.3	ND	7.9	207490
Carbon Disulfide	ND	0.84	ND	2.6	207490
Methylene Chloride	ND	0.84	ND	2.9	207490
trans-1,2-Dichloroethene	ND	0.84	ND	3.3	207490
MTBE	ND	0.84	ND	3.0	207490
n-Hexane	ND	0.84	ND	2.9	207490
1,1-Dichloroethane	ND	0.84	ND	3.4	207490
Vinyl Acetate	ND	0.84	ND	2.9	207490
cis-1,2-Dichloroethene	ND	0.84	ND	3.3	207490
2-Butanone	ND	0.84	ND	2.5	207490
Ethyl Acetate	ND	0.84	ND	3.0	207490
Tetrahydrofuran	ND	0.84	ND	2.5	207490
Chloroform	ND	0.84	ND	4.1	207490
1,1,1-Trichloroethane	ND	0.84	ND	4.6	207490
Cyclohexane	ND	0.84	ND	2.9	207490
Carbon Tetrachloride	ND	0.84	ND	5.3	207490
Benzene	0.86	0.84	2.7	2.7	207490
1,2-Dichloroethane	ND	0.84	ND	3.4	207490
n-Heptane	ND	0.84	ND	3.4	207490
Trichloroethene	ND	0.84	ND	4.5	207490
1,2-Dichloropropane	ND	0.84	ND	3.9	207490
Bromodichloromethane	ND	0.84	ND	5.6	207490
cis-1,3-Dichloropropene	ND	0.84	ND	3.8	207490
4-Methyl-2-Pentanone	ND	0.84	ND	3.4	207490

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Field ID:	SV-1	Diln Fac:	1.670
Lab ID:	252454-001	Sampled:	01/22/14
Matrix:	Air	Received:	01/23/14
Units (V):	ppbv	Analyzed:	01/29/14
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Batch#
Toluene	2.0	0.84	7.6	3.1	207490
trans-1,3-Dichloropropene	ND	0.84	ND	3.8	207490
1,1,2-Trichloroethane	ND	0.84	ND	4.6	207490
Tetrachloroethene	ND	0.84	ND	5.7	207490
2-Hexanone	ND	0.84	ND	3.4	207490
Dibromochloromethane	ND	0.84	ND	7.1	207490
1,2-Dibromoethane	ND	0.84	ND	6.4	207490
Chlorobenzene	ND	0.84	ND	3.8	207490
Ethylbenzene	ND	0.84	ND	3.6	207490
m,p-Xylenes	1.2	0.84	5.3	3.6	207490
o-Xylene	ND	0.84	ND	3.6	207490
Styrene	ND	0.84	ND	3.6	207490
Bromoform	ND	0.84	ND	8.6	207490
1,1,2,2-Tetrachloroethane	ND	0.84	ND	5.7	207490
4-Ethyltoluene	ND	0.84	ND	4.1	207490
1,3,5-Trimethylbenzene	ND	0.84	ND	4.1	207490
1,2,4-Trimethylbenzene	ND	0.84	ND	4.1	207490
1,3-Dichlorobenzene	ND	0.84	ND	5.0	207490
1,4-Dichlorobenzene	ND	0.84	ND	5.0	207490
Benzyl chloride	ND	0.84	ND	4.3	207490
1,2-Dichlorobenzene	ND	0.84	ND	5.0	207490
1,2,4-Trichlorobenzene	ND	0.84	ND	6.2	207490
Hexachlorobutadiene	ND	0.84	ND	8.9	207490
Naphthalene	ND	3.3	ND	18	207526

Surrogate	%REC	Limits	Batch#
Bromofluorobenzene	95	70-130	207490

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	207490
Units (V):	ppbv	Analyzed:	01/28/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
Bromodichloromethane	1.667	1.762	106	70-130
cis-1,3-Dichloropropene	1.667	1.921	115	70-130
4-Methyl-2-Pentanone	1.667	2.094	126	70-130
Toluene	1.667	1.941	116	70-130
trans-1,3-Dichloropropene	1.667	1.855	111	70-130
1,1,2-Trichloroethane	1.667	1.887	113	70-130
Tetrachloroethene	1.667	1.984	119	70-130
2-Hexanone	1.667	2.340 b	140 *	70-130
Dibromochloromethane	1.667	1.666	100	70-130
1,2-Dibromoethane	1.667	1.807	108	70-130
Chlorobenzene	1.667	1.939	116	70-130
Ethylbenzene	1.667	2.040	122	70-130
m,p-Xylenes	3.333	3.996	120	70-130
o-Xylene	1.667	1.939	116	70-130
Styrene	1.667	1.714	103	70-130
Bromoform	1.667	1.426	86	70-130
1,1,2,2-Tetrachloroethane	1.667	1.903	114	70-130
4-Ethyltoluene	1.667	2.010	121	70-130
1,3,5-Trimethylbenzene	1.667	1.943	117	70-130
1,2,4-Trimethylbenzene	1.667	1.994	120	70-130
1,3-Dichlorobenzene	1.667	1.797	108	70-130
1,4-Dichlorobenzene	1.667	1.808	108	70-130
Benzyl chloride	1.667	1.880	113	70-130
1,2-Dichlorobenzene	1.667	1.791	107	70-130
1,2,4-Trichlorobenzene	1.667	1.634	98	62-130
Hexachlorobutadiene	1.667	1.843	111	68-130
Naphthalene	1.667	1.809 b	109	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	98	70-130

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	207490
Units (V):	ppbv	Analyzed:	01/28/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Bromodichloromethane	1.667	1.764	106	70-130	0	20
cis-1,3-Dichloropropene	1.667	1.905	114	70-130	1	20
4-Methyl-2-Pentanone	1.667	2.095	126	70-130	0	20
Toluene	1.667	1.925	116	70-130	1	23
trans-1,3-Dichloropropene	1.667	1.840	110	70-130	1	20
1,1,2-Trichloroethane	1.667	1.907	114	70-130	1	20
Tetrachloroethene	1.667	1.971	118	70-130	1	20
2-Hexanone	1.667	2.323 b	139 *	70-130	1	21
Dibromochloromethane	1.667	1.644	99	70-130	1	20
1,2-Dibromoethane	1.667	1.759	106	70-130	3	20
Chlorobenzene	1.667	1.895	114	70-130	2	21
Ethylbenzene	1.667	2.018	121	70-130	1	20
m,p-Xylenes	3.333	4.010	120	70-130	0	20
o-Xylene	1.667	1.951	117	70-130	1	20
Styrene	1.667	1.693	102	70-130	1	21
Bromoform	1.667	1.401	84	70-130	2	20
1,1,2,2-Tetrachloroethane	1.667	1.868	112	70-130	2	24
4-Ethyltoluene	1.667	2.009	121	70-130	0	22
1,3,5-Trimethylbenzene	1.667	1.927	116	70-130	1	23
1,2,4-Trimethylbenzene	1.667	1.989	119	70-130	0	24
1,3-Dichlorobenzene	1.667	1.831	110	70-130	2	22
1,4-Dichlorobenzene	1.667	1.780	107	70-130	2	22
Benzyl chloride	1.667	1.866	112	70-130	1	21
1,2-Dichlorobenzene	1.667	1.806	108	70-130	1	22
1,2,4-Trichlorobenzene	1.667	1.595	96	62-130	2	28
Hexachlorobutadiene	1.667	1.856	111	68-130	1	27
Naphthalene	1.667	1.656 b	99	54-136	9	29

Surrogate	%REC	Limits
Bromofluorobenzene	96	70-130

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC725692	Diln Fac:	1.000
Matrix:	Air	Batch#:	207490
Units (V):	ppbv	Analyzed:	01/28/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC725692	Diln Fac:	1.000
Matrix:	Air	Batch#:	207490
Units (V):	ppbv	Analyzed:	01/28/14

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	85	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	207526
Units (V):	ppbv	Analyzed:	01/29/14
Diln Fac:	1.000		

Type: BS Lab ID: QC725841

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	1.667	2.390 b	143 *	70-130
Freon 114	1.667	2.170	130	70-130
Chloromethane	1.667	2.057	123	70-130
Vinyl Chloride	1.667	2.223 b	133 *	70-130
1,3-Butadiene	1.667	2.526 b	152 *	70-130
Bromomethane	1.667	2.249 b	135 *	70-130
Chloroethane	1.667	2.647 b	159 *	70-130
Trichlorofluoromethane	1.667	2.448 b	147 *	70-130
Acrolein	1.667	2.279 b	137 *	62-130
1,1-Dichloroethene	1.667	1.827	110	70-130
Freon 113	1.667	2.486 b	149 *	70-130
Acetone	1.667	2.438 b	146 *	67-130
Carbon Disulfide	1.667	2.246 b	135 *	70-130
Methylene Chloride	1.667	2.072	124	68-130
trans-1,2-Dichloroethene	1.667	2.507 b	150 *	70-130
MTBE	1.667	2.241 b	134 *	70-130
n-Hexane	1.667	2.310 b	139 *	70-130
1,1-Dichloroethane	1.667	2.309 b	139 *	70-130
Vinyl Acetate	1.667	2.603 b	156 *	70-130
cis-1,2-Dichloroethene	1.667	2.281 b	137 *	70-130
2-Butanone	1.667	1.981	119	70-130
Ethyl Acetate	1.667	2.174	130	70-130
Tetrahydrofuran	1.667	2.052	123	70-130
Chloroform	1.667	2.370 b	142 *	70-130
1,1,1-Trichloroethane	1.667	2.222 b	133 *	70-130
Cyclohexane	1.667	1.963	118	70-130
Carbon Tetrachloride	1.667	2.204 b	132 *	70-130
Benzene	1.667	2.072	124	70-130
1,2-Dichloroethane	1.667	2.005	120	70-130
n-Heptane	1.667	2.298 b	138 *	70-130
Trichloroethene	1.667	2.202 b	132 *	70-130
1,2-Dichloropropane	1.667	2.212 b	133 *	70-130

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	207526
Units (V):	ppbv	Analyzed:	01/29/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
Bromodichloromethane	1.667	2.069	124	70-130
cis-1,3-Dichloropropene	1.667	2.172	130	70-130
4-Methyl-2-Pentanone	1.667	2.489 b	149 *	70-130
Toluene	1.667	2.255 b	135 *	70-130
trans-1,3-Dichloropropene	1.667	2.149	129	70-130
1,1,2-Trichloroethane	1.667	2.205 b	132 *	70-130
Tetrachloroethene	1.667	2.237 b	134 *	70-130
2-Hexanone	1.667	2.387 b	143 *	70-130
Dibromochloromethane	1.667	2.213 b	133 *	70-130
1,2-Dibromoethane	1.667	2.134	128	70-130
Chlorobenzene	1.667	2.270 b	136 *	70-130
Ethylbenzene	1.667	2.367 b	142 *	70-130
m,p-Xylenes	3.333	4.653 b	140 *	70-130
o-Xylene	1.667	2.259 b	136 *	70-130
Styrene	1.667	2.081 b	125	70-130
Bromoform	1.667	1.805 b	108	70-130
1,1,2,2-Tetrachloroethane	1.667	2.315 b	139 *	70-130
4-Ethyltoluene	1.667	2.435 b	146 *	70-130
1,3,5-Trimethylbenzene	1.667	2.339 b	140 *	70-130
1,2,4-Trimethylbenzene	1.667	2.328 b	140 *	70-130
1,3-Dichlorobenzene	1.667	2.342 b	141 *	70-130
1,4-Dichlorobenzene	1.667	2.260 b	136 *	70-130
Benzyl chloride	1.667	2.351 b	141 *	70-130
1,2-Dichlorobenzene	1.667	2.266 b	136 *	70-130
1,2,4-Trichlorobenzene	1.667	2.357 b	141 *	62-130
Hexachlorobutadiene	1.667	2.301 b	138 *	68-130
Naphthalene	1.667	2.334 b	140 *	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	112	70-130

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	207526
Units (V):	ppbv	Analyzed:	01/29/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Bromodichloromethane	1.667	2.080	125	70-130	1	20
cis-1,3-Dichloropropene	1.667	2.212	133 *	70-130	2	20
4-Methyl-2-Pentanone	1.667	2.481 b	149 *	70-130	0	20
Toluene	1.667	2.486 b	149 *	70-130	10	23
trans-1,3-Dichloropropene	1.667	2.102	126	70-130	2	20
1,1,2-Trichloroethane	1.667	2.568 b	154 *	70-130	15	20
Tetrachloroethene	1.667	2.535 b	152 *	70-130	12	20
2-Hexanone	1.667	2.731 b	164 *	70-130	13	21
Dibromochloromethane	1.667	2.484 b	149 *	70-130	12	20
1,2-Dibromoethane	1.667	2.432	146 *	70-130	13	20
Chlorobenzene	1.667	2.548 b	153 *	70-130	12	21
Ethylbenzene	1.667	2.692 b	162 *	70-130	13	20
m,p-Xylenes	3.333	5.225 b	157 *	70-130	12	20
o-Xylene	1.667	2.570 b	154 *	70-130	13	20
Styrene	1.667	2.391 b	143 *	70-130	14	21
Bromoform	1.667	2.056 b	123	70-130	13	20
1,1,2,2-Tetrachloroethane	1.667	2.592 b	156 *	70-130	11	24
4-Ethyltoluene	1.667	2.754 b	165 *	70-130	12	22
1,3,5-Trimethylbenzene	1.667	2.627 b	158 *	70-130	12	23
1,2,4-Trimethylbenzene	1.667	2.617 b	157 *	70-130	12	24
1,3-Dichlorobenzene	1.667	2.739 b	164 *	70-130	16	22
1,4-Dichlorobenzene	1.667	2.621 b	157 *	70-130	15	22
Benzyl chloride	1.667	2.666 b	160 *	70-130	13	21
1,2-Dichlorobenzene	1.667	2.576 b	155 *	70-130	13	22
1,2,4-Trichlorobenzene	1.667	3.044 b	183 *	62-130	25	28
Hexachlorobutadiene	1.667	2.610 b	157 *	68-130	13	27
Naphthalene	1.667	3.061 b	184 *	54-136	27	29

Surrogate	%REC	Limits
Bromofluorobenzene	94	70-130

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC725843	Diln Fac:	1.000
Matrix:	Air	Batch#:	207526
Units (V):	ppbv	Analyzed:	01/29/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC725843	Diln Fac:	1.000
Matrix:	Air	Batch#:	207526
Units (V):	ppbv	Analyzed:	01/29/14

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	1.7	ND	17
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	91	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Fixed Gas Analysis			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	ASTM D1946
Field ID:	SV-1	Batch#:	207445
Matrix:	Air	Sampled:	01/22/14
Units:	ppmv	Received:	01/23/14
Units (Mol %):	MOL %	Analyzed:	01/27/14

Type: SAMPLE Diln Fac: 1.670
 Lab ID: 252454-001

Analyte	Result	RL	Result (Mol %)	RL
Carbon Dioxide	ND	1,700	ND	0.17
Oxygen	190,000	1,700	19	0.17
Nitrogen	690,000	1,700	69	0.17

Type: BLANK Diln Fac: 1.000
 Lab ID: QC725534

Analyte	Result	RL	Result (Mol %)	RL
Carbon Dioxide	ND	1,000	ND	0.10
Oxygen	ND	1,000	ND	0.10
Nitrogen	ND	1,000	ND	0.10

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Aromatic / Petroleum Hydrocarbons in Air

Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Batch#:	207487
Field ID:	SV-1	Sampled:	01/22/14
Matrix:	Air	Received:	01/23/14
Units (V):	ppbv	Analyzed:	01/28/14
Units (M):	ug/m3		

Type	Lab ID	Result (V)	RL	MDL	Result (M)	RL	MDL	Diln Fac
SAMPLE	252454-001	22 J	42	9.3	90 J	170	38	1.670
BLANK	QC725683	ND	25	5.6	ND	100	23	1.000

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Fixed Gas Analysis			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC725533	Batch#:	207445
Matrix:	Air	Analyzed:	01/27/14
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits
Carbon Dioxide	2,000	1,468	73	70-130
Oxygen	2,000	1,920	96	70-130
Nitrogen	990,000	790,700	80	70-130

Batch QC Report

Fixed Gas Analysis			
Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	ASTM D1946
Field ID:	SV-1	Units (Mol %):	MOL %
Type:	SDUP	Diln Fac:	1.670
MSS Lab ID:	252454-001	Batch#:	207445
Lab ID:	QC725535	Sampled:	01/22/14
Matrix:	Air	Received:	01/23/14
Units:	ppmv	Analyzed:	01/27/14

Analyte	MSS Result	Result	RL	Result (Mol %)	RL	RPD	Lim
Carbon Dioxide	<1,670	ND	1,670	ND	0.1670	NC	30
Oxygen	193,000	193,300	1,670	19.33	0.1670	0	30
Nitrogen	687,300	686,700	1,670	68.67	0.1670	0	30

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

RPD= Relative Percent Difference

Result Mol %= Result in Mole Percent

Batch QC Report

Aromatic / Petroleum Hydrocarbons in Air

Lab #:	252454	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	METHOD
Project#:	2552	Analysis:	EPA TO-3
Analyte:	Gasoline Range Organics C6-C12	Diln Fac:	1.000
Matrix:	Air	Batch#:	207487
Units (V):	ppbv	Analyzed:	01/28/14

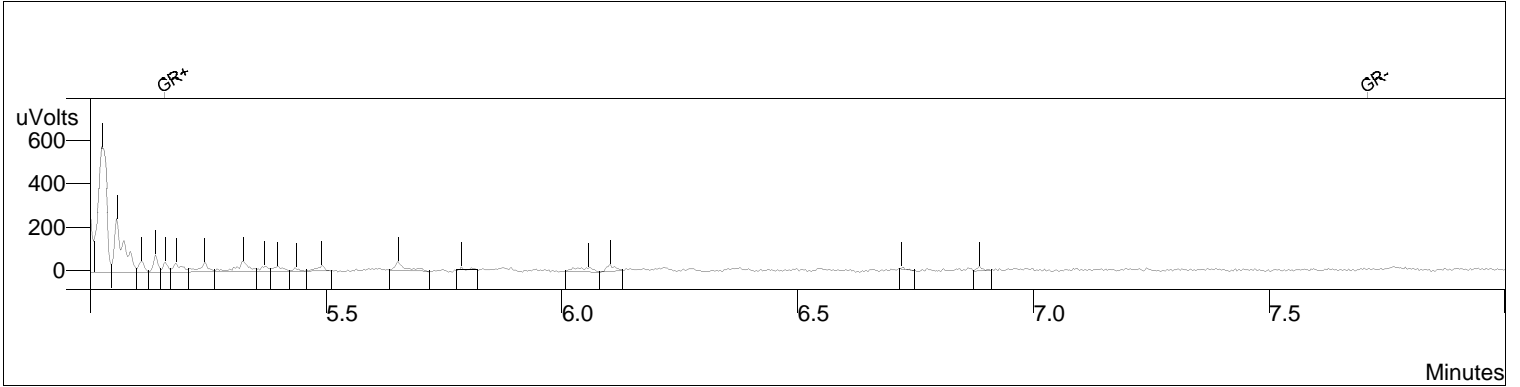
Type	Lab ID	Spiked	Result (V)	%REC	Limits	RPD	Lim
BS	QC725681	2,100	1,864	89	70-130		
BSD	QC725682	2,100	1,767	84	70-130	5	25

RPD= Relative Percent Difference

Result V= Result in volume units

GRO by TO-3

Sample ID: 252454-001,207487
Data File: c:\varianws\data\012814\028_003.run
Sample List: c:\varianws\012814.smp
Method: c:\varianws\to3_081811.mth
Acquisition Date: 01/28/2014 16:03:53
Calculation Date: 01/28/2014 16:15:55
Instrument ID: MSAIR03 Operator: TO-3
Injection Notes: 1.67x,c00218
Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.432	GRO:6-12	488	13.124
Totals			488	13.124

Integration Parameters

Initial Tangent %: 0
Initial Peak Width (sec): 4
Initial Peak Reject Value: 50.000
Initial S/N Ratio: 3

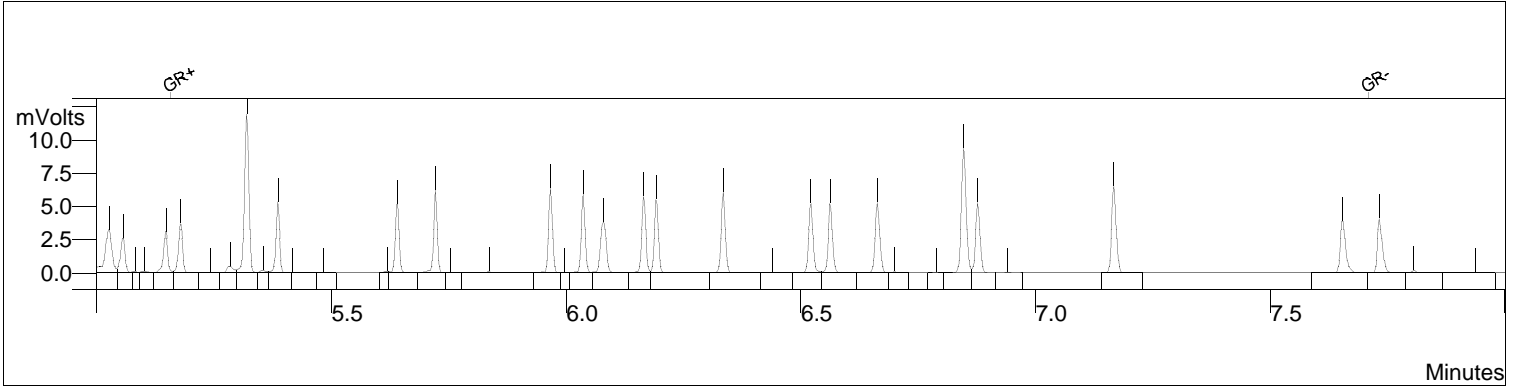
Data Handling Time Events

Time
(min) Event

0.009 II on
4.801 II off
5.157 GR on
7.708 GR off

GRO by TO-3

Sample ID: ccv/bs,qc725681
Data File: c:\varianws\data\012814\028_run
Sample List: c:\varianws\012814.smp
Method: c:\varianws\to3_081811.mth
Acquisition Date: 01/28/2014 15:17:29
Calculation Date: 01/28/2014 15:29:31
Instrument ID: MSAIR03 Operator: TO-3
Injection Notes: 207487,s23990,1x
Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.432	GRO:6-12	69360	1864.335
Totals			69360	1864.335

Integration Parameters

Initial Tangent %: 0
Initial Peak Width (sec): 4
Initial Peak Reject Value: 50.000
Initial S/N Ratio: 3

Data Handling Time Events

Time (min) Event

0.009 II on
4.801 II off
5.157 GR on
7.708 GR off



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

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

Laboratory Job Number 249810
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Sample ID
MW-6

Lab ID
249810-001

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 NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

John Goyette
Senior Program Manager
goyette@ctberk.com
(510) 204-2233

Date: 01/23/2014

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 249810
Client: SOMA Environmental Engineering Inc.
Project: 2552
Location: 15101 Freedom Avenue
Request Date: 10/11/13
Samples Received: 10/11/13

This data package contains sample and QC results for one oil sample, requested for the above referenced project on 10/11/13. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC:

Sample MW-6 (oil fraction) was diluted in methanol and analyzed for TPH-purgeables by purge and trap and GC-FID (EPA Methods 5030/8015B). The chromatographic pattern for this sample included a wide range of peaks through the C6 through C12 range. However, this pattern did not resemble that of gasoline or of any of the other light-end distillates for which we have standards, including aviation gas, mineral spirits and JP-4 jet fuel. Chromatograms for the sample and the gasoline standard are attached. No analytical problems were encountered.

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 249810 Date Received 10/11/13 Number of coolers 1
 Client SOMA Project 15101 FREEDOM AVE., SAN LEANDRO (255a)
 Date Opened 10/11/13 By (print) TR (sign) Tina Ranka
 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: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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 there any missing / extra samples? _____ YES (NO)

11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO

12. Are sample labels present, in good condition and complete? _____ (YES) NO

13. Do the sample labels agree with custody papers? _____ (YES) NO

14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO

15. Are the samples appropriately preserved? _____ YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)

17. Did you document your preservative check? _____ YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ (YES) NO (N/A) TR

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? _____ YES (NO) (N/A)

21. Was the client contacted concerning this sample delivery? _____ YES (NO)

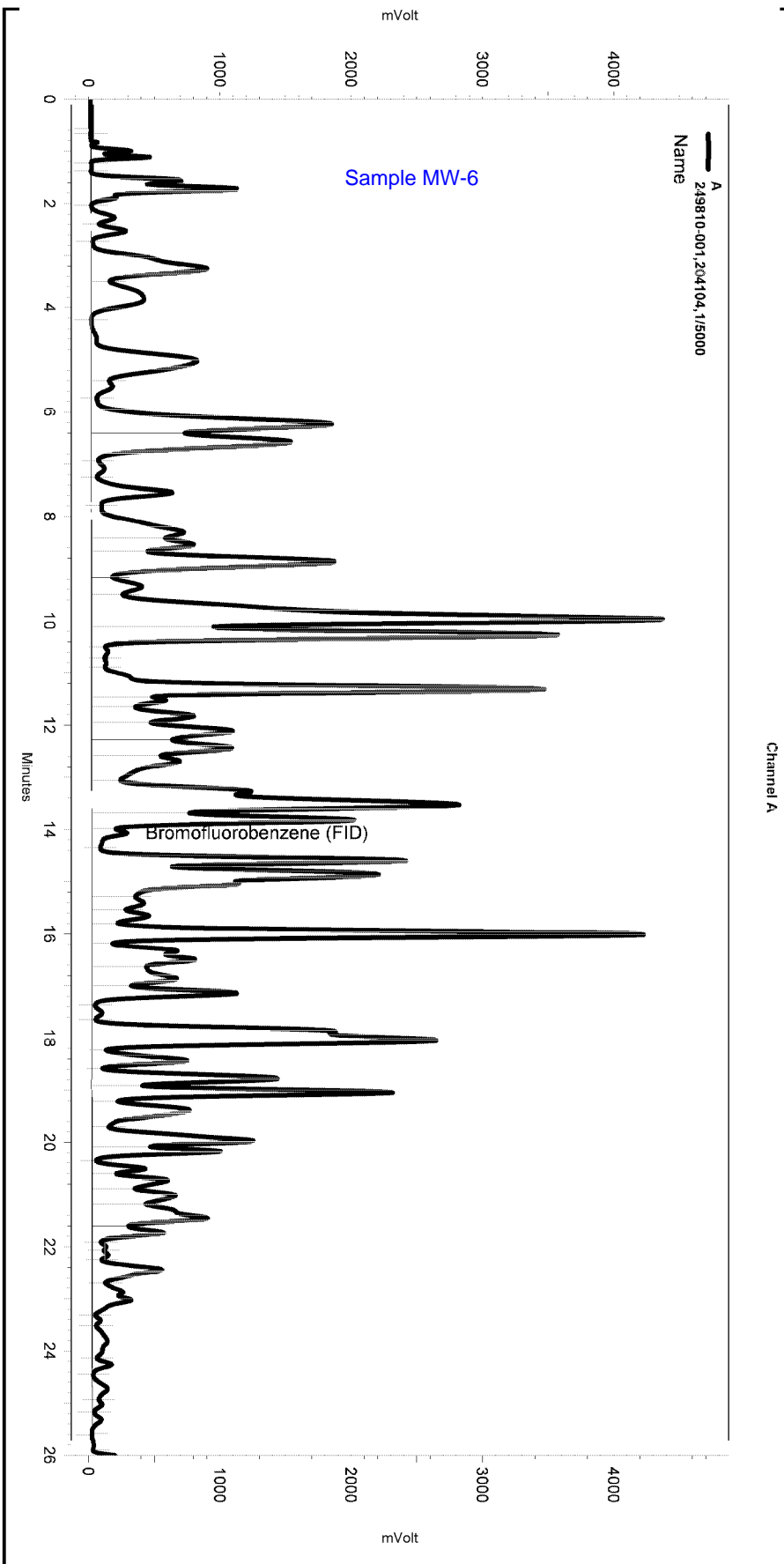
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

#20.) R samp # -001 (1 of 2) has bubble > 6 mm

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\289.seq
 Sample Name: 249810-001,204104,1/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\289-027
 Instrument: GC19 (Offline) Vial: N/A Operator: tvh analyst (lims2k3\tvh)
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\vhbtxe281.met

Software Version 3.1.7
 Run Date: 10/17/2013 2:44:53 AM
 Analysis Date: 10/17/2013 11:04:13 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 (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

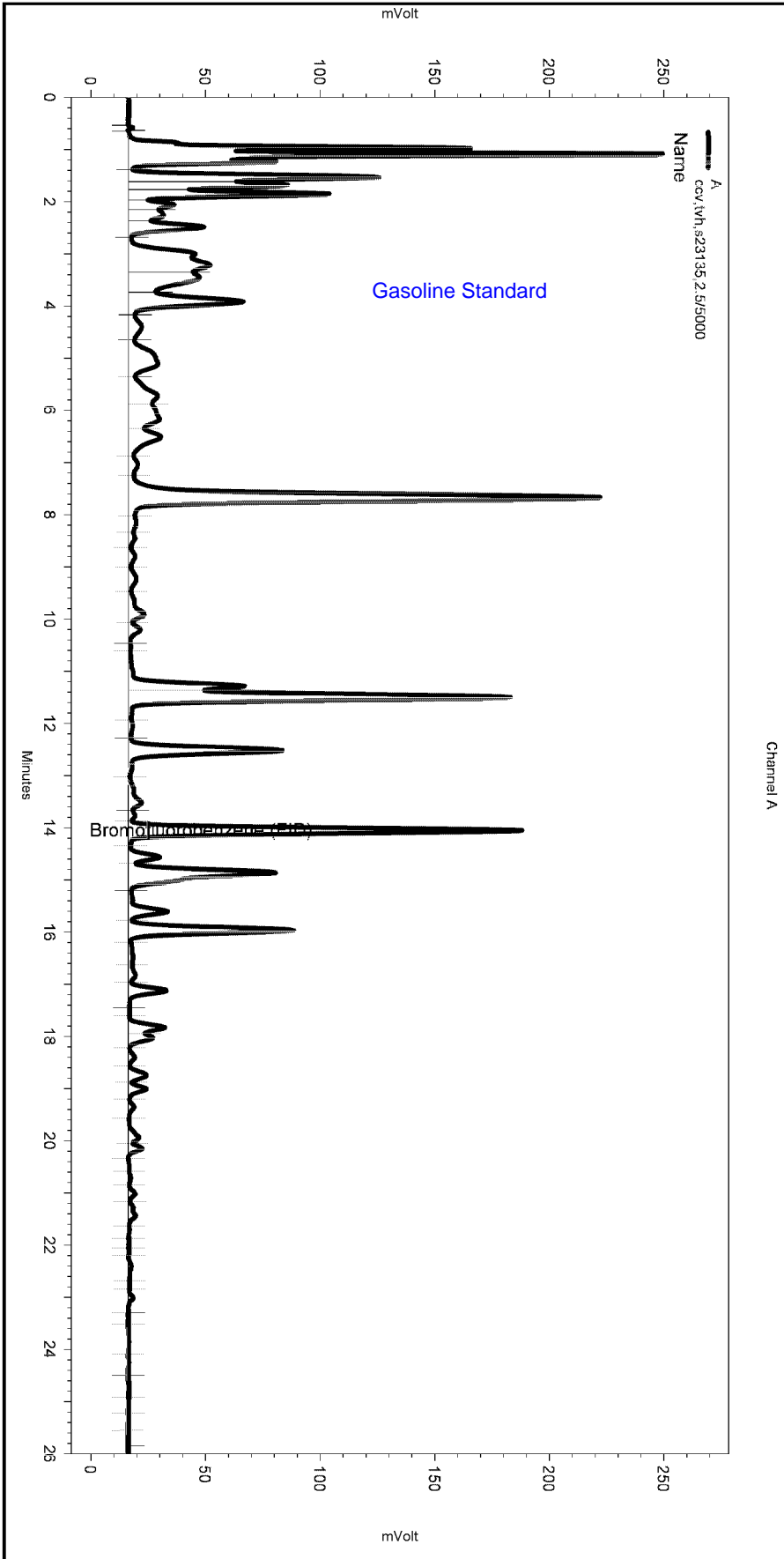
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\289-027

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC19\Sequence\289.seq
 Sample Name: ccv,tvh,s23135,2.5/5000
 Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\289-002
 Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
 Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe281.met

Software Version 3.1.7
 Run Date: 10/16/2013 9:51:38 AM
 Analysis Date: 10/16/2013 10:20:44 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 (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.10050\289-002_F419.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				