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Alameda County  
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July 3, 2008

Mr. Paresh Khatri  
Alameda County Health Care Services Agency  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**RE: Second Quarter 2008 - Groundwater Monitoring Report**

**SITE: 1532 Peralta Street, Oakland, California**  
**ACHCSA Fuel Leak Case Site No. RO0000177**  
**GGTR Project 8757**

Dear Mr. Khatri:

On behalf of Mr. James Tracy, Golden Gate Tank Removal, Inc. (GGTR) is pleased to submit the enclosed Second Quarter 2008 *Groundwater Monitoring Report* presenting the findings and conclusions of the June 12, 2008, quarterly groundwater monitoring and sampling activities performed at 1532 Peralta Street in Oakland, California. GGTR uploaded an electronic copy of the report to the State Water Resources Control Board's GeoTracker Database System.

Should you have any questions, please contact us at your earliest convenience at (415) 512-1555. In my absence from the office, I may be reached by cellular service at (415) 686-8846.

Sincerely,  
*Golden Gate Tank Removal, Inc.*

Brent A. Wheeler  
Project Manager

Enclosure/1

cc: Mr. James Tracy, 878 Hayden Court, Alpine, UT 84004



## GROUNDWATER MONITORING REPORT

Automobile Repair Garage  
1532 Peralta Street  
Oakland, California

ACHCSA Fuel Leak Case No. RO0000177

Prepared For:

Mr. James Tracy  
878 Hayden Court  
Alpine, UT 84004

GGTR Project No. 8757  
Sampling Date: June 12, 2008  
Report Date: July 3, 2008

Brent Wheeler  
Project Manager



Eugenio Diaz, P.G.  
Project Geologist

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# GROUNDWATER MONITORING REPORT

1532 Peralta Street, Oakland, California

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- 4 Groundwater Analytical data Diagram
- 5 Groundwater MTBE Isoconcentration Map

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Historical Groundwater Monitoring & Analytical Results

## ATTACHMENT

- A Fluid-Level Monitoring Data Form  
Well Purging/Sampling Data Sheets
- B Laboratory certificate of Analysis  
Chain of Custody Form  
GeoTracker Upload Confirmation Forms

# **GROUNDWATER MONITORING REPORT**

**Automobile Repair Garage**  
1532 Peralta Street, Oakland, California

## **INTRODUCTION**

This report presents the results and findings of the June 12, 2008 quarterly groundwater monitoring and sampling activities conducted by Golden Gate Tank Removal, Inc. (GGTR) at the commercial property located at 1532 Peralta Street in Oakland, California (the Site). The Alameda County Health Care Services Agency (ACHCSA) designated the Site as Fuel Leak Case No RO0000117.

This monitoring event (Second Quarter 2008) represents the tenth consecutive quarterly monitoring event for the six on Site monitoring wells, MW-1 through MW-6, since the well installation and initial sampling event in February/March 2004. Figure 1 "*Site Location Map*" depicts the location of the Site. Figure 2 "*Site Map*" depicts the approximate location of the former underground fuel storage tanks (USTs), the approximate limits of UST over excavation, historical soil borings, and existing groundwater monitoring wells. Figure 3 "*Groundwater Potentiometric Map*" shows the approximate groundwater flow direction and hydraulic gradient across the Site. Figure 4 "*Groundwater Analytical Data Diagram*" presents a summary of the groundwater samples analytical results. Figure 5 "*Groundwater MTBE Isoconcentration Map*" depicts the concentration and approximate horizontal extent of the methyl tertiary-butyl ether (MTBE) plume. The attached Table presents a summary of the historical groundwater fluid level monitoring data and laboratory analytical results.

## **SITE DESCRIPTION**

The Site is located at the southeast corner of Peralta Street and 16th Street in Oakland, California (Alameda County). The Site lies approximately one mile south of the San Francisco Bay. The elevation of the Site is approximately 13 feet above Mean Sea Level (MSL, Figure 1) occupying 6,356 square feet (0.15 acre) in area. Mr. Orobo Osagie previously owned the Site from May 1998 to early 2006, at which time Mr. James Tracy of Alpine Rentals took claim as the new responsible party for the Site (Alameda County Assessor Parcel 5-370-1). The Site is currently leased to LBJ's Automotive Repair for the service of automobiles. The Site operated as a gasoline service station prior to 1998. The nearby property, located to the northeast, across 16th Street (1600 Peralta Street), was a former gasoline service station and car repair garage (Figure 2).

The Site is relatively flat with the topographic relief generally directed towards the northwest in the general direction of the San Francisco Bay (Figure 1). A single-story divided structure, approximately 1,175 square feet in area, lies on the southeast side of

the Site and is currently used as an automobile service garage. The flooring in the service garage and office space is paved with concrete. The majority of the Site is paved throughout with asphalt.

Soil beneath the Site described during the February 2004 soil boring/well installation, was predominately clayey, silty, fine-grained sand to a total depth of 16 feet below ground surface (bgs). Granulometric analysis of the soil collected during the soil boring activities was not performed. The geologic map also indicates that the Site is situated approximately 4 miles southwest and 14 miles northeast of the Hayward and San Andreas Fault Zones, respectively. The Site is located within the East Bay Plain Groundwater Basin that contains a significant drinking water resource. However, groundwater at the Site is apparently designated as "other groundwater" considered not used for drinking water.

The regional groundwater flow direction in the vicinity of the Site is approximately toward the north-northwest, in the general direction of the San Francisco Bay and decreasing topographic relief. The nearest surface water body is the Oakland Outer Harbor of the San Francisco Bay, located approximately 1.03 miles northwest of the subject property (Figure 1). The groundwater flow direction calculated from groundwater elevations in the onsite monitoring wells has been consistent and is directed northward.

## **PROJECT HISTORY**

**Underground Tank Removal - December 1999:** In December 1999, GGTR removed five USTs from the Site at the locations shown in Figure 2. The following table presents a summary of the tank designations, size, type of construction, and contents:

Designation	Construction	Diameter (Feet)	Length (Feet)	Volume (Gallons)	Contents
UST #1	Steel	6	10	2,000	diesel
UST #2	Steel	4	7	675	gasoline
UST #3	Steel	4	7	675	gasoline
UST #4	Steel	5	7	1,000	gasoline
UST #5	Steel	5	7	1,000	diesel

GGTR subsequently collected soil samples from each excavation between 7 and 12.5 feet below grade surface (bgs). These samples contained maximum concentrations of TPH-G (TPH-G 2,600 milligrams per kilogram [mg/kg; parts per million]), TPH as diesel (TPH-D 8,100 mg/kg), and benzene (9.1 mg/kg). UST removal and sampling activities were conducted under the supervision of Mr. Hernan Gomez of the City of Oakland Fire Prevention Bureau (OFPB). Laboratory results of the soil samples collected after the tank removal are presented in the report entitled *Tank Closure Report, GGTR December 15, 1999 and Site Characterization and Groundwater Monitoring Report, GGTR September 14, 2006*. Following sampling, the excavations were backfilled with the excavated soil stockpiles. The volume of the USTs was replaced with imported soil. Based on

analytical results of the excavation soil sample analysis, Mr. Gomez requested a work plan of over-excavation activities to assess the extent of hydrocarbon-affected soil and potential impact to groundwater in the vicinity of the former USTs.

**Over-Excavation & Disposal - January and February 2000:** On January 3, 2000, GGTR submitted the requested work plan, which was approved by the OFPB in a letter dated January 25, 2000. In January and February 2000, in accordance with the proposed work plan activities, GGTR over-excavated the former UST cavities up to approximately 11 ft bgs, and to the approximate lateral limits shown in Figure 2. GGTR collected soil samples from the sidewalls (7.5 ft bgs.) and from the bottom (12 ft bgs.) of the over-excavated cavities. Groundwater accumulated within the excavations and was subsequently purged prior to sampling.

After groundwater stabilized within each excavation at approximately 8 ft bgs, GGTR collected a groundwater sample from each excavation. GGTR performed the sampling activities under the direction of Mr. Gomez of the OFPB. Approximately 194 tons of petroleum hydrocarbon impacted soil were excavated from the Site and disposed of at Forward, Inc. in Manteca, California. The excavation was subsequently backfilled and the pavement was replaced with concrete and asphalt, respectively. Significant concentrations of TPH-G, TPH-D, benzene, and MTBE (in groundwater only) were reported for each sample. Sampling activities and soil and groundwater laboratory results are presented in the document entitled *Remedial Activity Report*, GGTR March 8, 2000.

**Remedial Activity Plan - October 2000 to May 2002:** Following review of the Remedial Activity Report, the ACHCSA, in letters dated May 19 and May 25, 2000, identified elevated levels of residual gasoline and diesel-range hydrocarbons in the soil and groundwater in the vicinity of the former USTs and requested a work plan to evaluate the lateral and vertical extent of contamination at the Site.

On October 6, 2000, DECON Environmental Services, Inc. (DECON) of Hayward, California prepared the requested work plan (*Remedial Activity Plan, October 2000*), which was subsequently approved by Mr. Larry Seto of the ACHCSA. After further review of DECON's work plan, representatives of both the ACHCSA and State Water Resources Control Board UST Cleanup Fund concurred that the work plan required additional content and requested that it be revised and resubmitted to the ACHCSA for review and approval. In February 2002, GGTR prepared the revised work plan for soil and groundwater investigation activities at the subject property.

**Preliminary Soil Sampling / Monitoring Well Installation (MW-1 through MW-6): February 2004** - In February 2004 and in collaboration with Gregg Drilling, Inc., GGTR advanced eleven direct-push soil borings (B1 through B11) to a depth of 12 to 16 feet bgs. Six of the borings, B2, B4, B6, B9, B10, and B11, were converted to pre-packed ¾"-diameter monitoring wells MW-1 through MW-6, respectively. Groundwater was encountered between 2 and 4 feet bgs and stabilized in the wells at approximately 2 to 3 feet bgs. The investigation objective was to define the extent of petroleum hydrocarbon

impact to soil and groundwater. On April 13, 2006, Virgil Chavez Land Surveying of Vallejo California, surveyed the top of casings of all six monitoring wells at the Site. Permits, boring logs, well sampling field sheets, and the laboratory analytical reports for soil and groundwater are presented in the report entitled *Site Characterization and Groundwater Monitoring Report, GGTR September 14, 2006*.

**Work Plan / Site Conceptual Model – January to March 2007:** Based upon review of the September 2006 Site Characterization and Groundwater Monitoring Report, the ACHCSA in their letter dated November 29, 2006, concurred that a work plan including a conduit survey, historical research and initial Site conceptual model be prepared for the fuel leak investigation at the subject property. On January 31, 2007, GGTR prepared its Soil and Water Delineation Work Plan. The ACHCSA, in their letter dated February 15, 2007, requested an addendum to address additional investigation of suspect conduits and other issues. On March 20, 2007, GGTR submitted the Addendum to the Soil and Water Delineation Work Plan; the purpose of this addendum is to modify procedures in the submitted work plan and propose additional investigation activities for delineating the lateral extent of soil and water contamination in the vicinity of the Site. To date, the addendum has not been approved by the ACHCSA. On May 1, 2008, the ACHCSA conditionally approved the subject work plan and addendum.

**Groundwater Monitoring (MW-1 to MW-6) - March 2006 to Present:** GGTR has conducted quarterly groundwater monitoring and sampling events at the Site on a consecutive basis since March 2006. Sample analytical results and associated fluid level monitoring data for each event are summarized in the attached Table. Details of each event are provided in respective Groundwater Monitoring Reports prepared by GGTR. The results of the Second Quarter 2008 monitoring and sampling event are presented in the following sections.

### **GROUNDWATER MONITORING & SAMPLING: June 2008**

The scope of work covered in this report includes the following:

- Monitoring, purging and sampling six monitoring wells (MW-1 to MW-6)
- Laboratory analysis of groundwater samples
- Waste Management
- Data interpretation and report preparation
- GeoTracker Upload

**Groundwater Sampling Field Procedures:** GGTR conducted the Second Quarter 2008 groundwater monitoring and sampling activities at the Site on June 12, 2008. Prior to purging and sampling each of the six monitoring wells, GGTR measured and recorded the depth to groundwater using an electronic interface water/oil level meter. Groundwater levels were measured to the nearest 0.01 foot. Attachment A includes a copy of the *Fluid-Level Monitoring Data Form*.

GGTR then purged groundwater from each well using a low-flow peristaltic pump and disposable polyethylene tubing. Purge rates varied in each well between 300 to 400 milliliters per minute (ml/min), minimizing drawdown of the groundwater table. The wells were purged until three consecutive parameter readings of pH, temperature and specific conductivity varied by less than 0.1, 10%, and 3%, respectively, in general accordance with ASTM Designation D6771-02 (*Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Groundwater Quality Investigations*). The purge water was transferred directly to a 55-gallon D.O.T.- approved steel drum. After purging the wells, GGTR collected a groundwater sample from each well using a peristaltic pump and clean dedicated polyethylene tubing. Each sample was collected at a significantly lower pumping rate, with the sample intake just below the water level in each well casing. Each sample was transferred directly into the appropriate laboratory sample containers. All volatile organic analysis (VOA) vials were sealed with a threaded cap, inverted, and checked to ensure that no entrapped air was present. Attachment A includes a copy of the *Well Purging/Sampling Data Sheets*.

Following sampling activities, the groundwater samples were labeled and immediately stored in a cooler chilled to 4° centigrade. GGTR submitted the samples to a California-Certified analytical laboratory under formal chain-of-custody protocol. Between each well location, all downhole monitoring and purging equipment were decontaminated using an Alconox wash solution and double rinsed with clean, potable water. GGTR transferred the wash and rinse water to a 55-gallon D.O.T. approved steel drum, which was labeled and temporarily stored onsite in a secure area pending final disposal at a licensed facility.

**Groundwater Sample Analysis:** On June 13, 2008, GGTR submitted the groundwater samples under formal chain of custody command to Curtis & Tompkins Analytical Labs, Ltd. (CA ELAP #01107) in Berkeley, California for laboratory analysis of the following constituents:

- TPH-D by EPA Method 8015B(M)
- TPH-G by EPA Method 8260B
- Volatile Organic Compounds (VOC) by EPA Method 8260B

Curtis & Tompkins performed all volatile analyses in conformance with the maximum 14-day holding time for these analyses. Attachment B includes a copy of the Laboratory Certificate of Analysis and associated Chain of Custody form.

**GeoTracker Electronic Submittal:** GGTR directed Curtis & Tompkins to submit all analytical data in electronic deliverable format (EDF) via the Internet. GGTR uploaded the analytical data as well as the Fluid-Level Monitoring Data (GEO\_WELL) to the State Water Resources Control Board's GeoTracker Database System. GGTR also uploaded a copy of this report in Portable Data Format (PDF) to the GeoTracker Database. Attachment B includes a copy of each associated GeoTracker Upload Confirmation Form.



**Groundwater Waste Management:** The well purge water and equipment wash and rinse water generated during the June 12, 2008 monitoring event (approximately 26 gallons), was transferred to a 55-gallon D.O.T.-approved steel drum, appropriately labeled and temporarily stored onsite in a secure area for use with future monitoring event(s).

## **RESULTS**

**Results of Groundwater Measurements:** The groundwater levels measured in wells MW-1, MW-2 and MW-3 during the June 12, 2008 monitoring event were used to calculate the groundwater elevation relative to the MSL. GGTR used the groundwater elevation to determine the groundwater flow direction and hydraulic gradient across the Site. Figure 3 depicts the groundwater equipotential contour lines, flow direction and hydraulic gradient. The attached Table presents the historical groundwater elevation data for the Site since installation of the six existing groundwater monitoring wells. Documentation of the monitoring, purging and sampling activities performed during this event is presented in Attachment A.

The groundwater elevation, flow direction and hydraulic gradient calculated during the June 2008 monitoring event are generally similar to those from the March 2008 monitoring event. The June 12, 2008 measurements indicate that the general groundwater flow direction beneath the Site is 30 degrees towards the northeast (N30°E) under an hydraulic gradient of 0.005 ft/ft. The groundwater elevations calculated during this monitoring event ranged from 5.02 feet above MSL in well MW-2, to 5.33 feet above MSL in MW-4. The June 2008 measurements represent late spring weather conditions with the mean groundwater elevation at 0.83 feet lower than that measured in March 2008 during late winter weather conditions.

**Results of Groundwater Sampling and Laboratory Analysis:** The attached Table presents a summary of the groundwater fluid levels monitoring data and laboratory analytical results of monitoring wells MW-1 to MW-6. Attachment A includes copies of the field documentation of the monitoring, purging and sampling activities performed during this event. Attachment B includes a copy of the Laboratory Certificate of Analysis and the associated Chain-of-Custody Form.

Again, the maximum TPH-G and benzene concentrations were detected in groundwater samples collected from monitoring well MW-6, at 1,800 ug/l and 290 ug/l, respectively. Both of these values were above their respective Environmental Screening Level (ESL). However, the laboratory report indicates that the TPH-G concentration in the sample exhibits chromatographic pattern that does not resemble the standard. TPH-G concentrations have fluctuated in this well since March 2004, ranging between 2,200 ug/l in September 2007 and 8,400 ug/l in December 2006, and benzene has also fluctuated in this well with concentrations ranging between 240 ug/l in June 2007 and 2,600 ug/l in December 2006. TPH-G was also detected above its ESL in monitoring wells MW-1 and

MW-4 at concentrations of 350 and 820 ug/l, respectively. The laboratory report however indicates that the concentration of TPH-G in these wells exhibits chromatographic pattern that does not resemble the standard. TPH-G was not detected in the sample collected from MW-5, but the laboratory reporting limit was significantly higher than its ESL. TPH-G was again not detected in the groundwater sample collected from monitoring wells MW-2 and MW-3, which is consistent with a general decreasing trend in concentration for these wells. Benzene continues to significantly exceed its ESL in wells MW-5 (120 ug/l) and MW-6 (290 ug/l), both located in the direct proximity of the former gasoline UST #'s 2 to 4 (Figure 2). Concentrations of benzene were not detected in monitoring wells MW-1 to MW-4 during this event.

MTBE concentrations exceeding its applicable ESL were detected in the groundwater samples collected from MW-1, MW-4, MW-5 and MW-6 at levels of 21 ug/l, 9.4 ug/l, 700 ug/l and 820 ug/l, respectively. Concentrations of MTBE were detected below its ESL in monitoring wells MW-2 and MW-3. Tert-butanol (TBA) was detected in the groundwater samples collected MW-4 and MW-6 at 18 ug/l and 55 ug/l, respectively. According to the new ESL standards released in November 2007, the ESL for TBA has been removed and it is assumed as not established. The compound Methyl tert-Amyl Ether (TAME) was detected in well MW-1 at 1.3 ug/l (the ESL for TAME has not yet been established). A concentration of 1,2-Dichloroethane (DCA) was detected in MW-6 at 1.1 ug/l, which is slightly higher than its ESL of 0.5 ug/l. This is the first time that the compounds TAME and 1,2-DCA have been detected in any of the sampled wells at the Site.

Concentrations of TPH-D were detected above its ESL in groundwater samples collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6 at 870 ug/l, 140 ug/l, 470 ug/l, 6,400 ug/l, 10,000 ug/l, and 9,500 ug/l, respectively. However, the laboratory report indicated that the concentrations of TPH-D in MW-1, MW-2, and MW-3 exhibit chromatographic patterns that do not resemble the standard.

The results of historical groundwater monitoring and laboratory analyses performed to date are summarized on the attached Table. Figure 4 presents the TPH-G, TPH-D, BTEX, and MTBE concentrations detected in each well during this sampling event. Figure 5 depicts a *Groundwater MTBE Isoconcentration Map*, estimating the residual extent of MTBE in groundwater at the Site. Attachment B includes copies of the Laboratory Certificate of Analysis and the associated Chain-of-Custody Form.

## **RECOMMENDATIONS**

Based on the results of the Second Quarter 2008 Groundwater Monitoring and Sampling Event, GGTR recommends continuing the groundwater monitoring and sampling program at the Site. Because TPH, BTEX, and MTBE sample concentrations have been non-detect or insignificant in monitoring well MW-3 since March 2006, GGTR recommends that the sampling frequency for this well be decreased to a semi-annual basis. Although similar gasoline-range hydrocarbons have also been non-detect or

insignificant in MW-2 since March 2006, it should continue to be sampled on a quarterly basis; this well is located generally down-gradient of the former USTs and MW-6.

Groundwater samples collected from monitoring wells MW-1 to MW-6 should continue to be analyzed for TPH-G by EPA Method 8260B, TPH-D by EPA Method 8015B, and VOC by EPA Method 8260B. The Third Quarter 2008 groundwater sampling activities are tentatively scheduled at the Site in September 2008.

## **REPORT DISTRIBUTION**

A copy of this quarterly groundwater monitoring report is submitted to the following Site representatives:

Alameda County Health Care Services Agency  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577  
*Attn: Mr. Paresh Khatri*

*(1 Electronic Copy via ACGOV FTP)  
(1 Electronic Copy via GeoTracker)*

Mr. James Tracy  
878 W. Hayden Court  
Alpine, Utah 84004

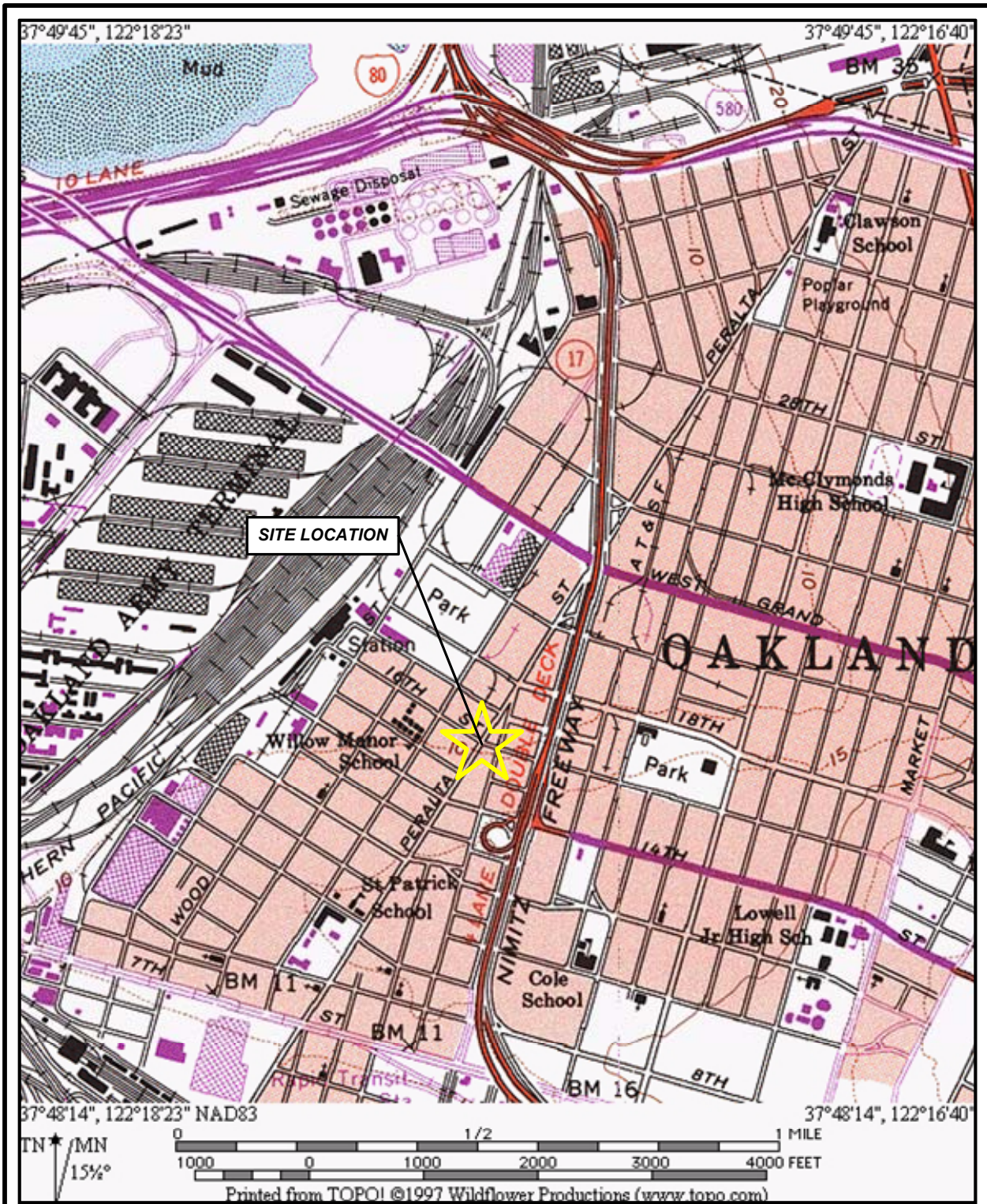
*(1 Copy; Bound)*

## **LIMITATIONS**

This report has been prepared in accordance with generally accepted environmental practices exercised by professional geologists, scientists, and engineers. No warranty, either expressed or implied, is made as to the professional advice presented herein. The findings contained in this report are based upon information contained in previous reports of corrective action activities performed at the subject property and based upon Site conditions, as they existed at the time of the investigation, and are subject to change.

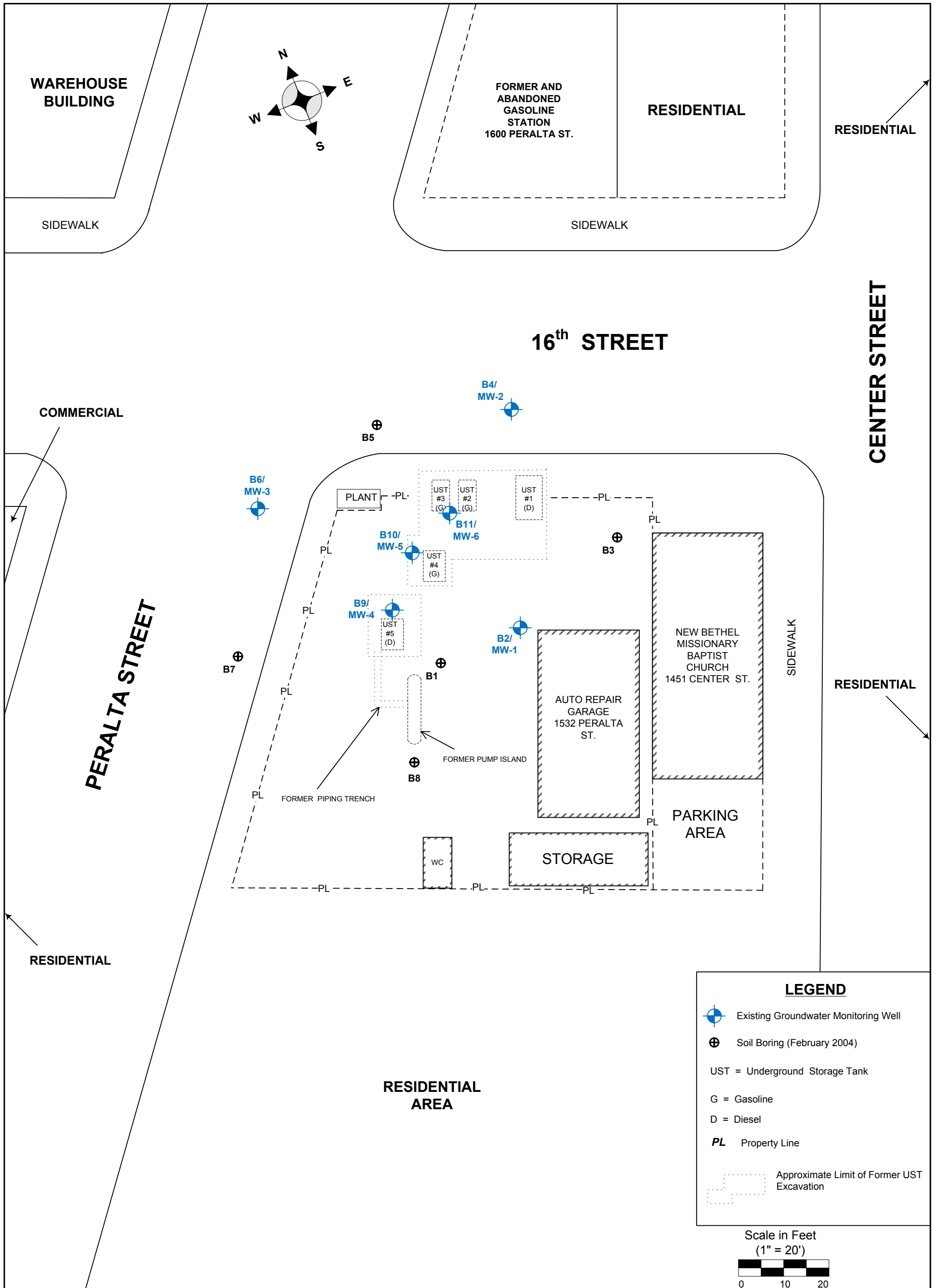
The scope of services conducted in execution of this phase of investigation may not be appropriate to satisfy the needs of other users and any use or reuse of this document and any of its information presented herein is at the sole risk of said user.

**Golden Gate Tank Removal, Inc.**



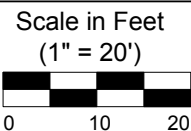
**GOLDEN GATE TANK REMOVAL**  
 3730 Mission Street, San Francisco, CA 94110  
 Ph (415) 512-1555 Fx (415) 512-0964

**SITE LOCATION MAP**  
 1532 Peralta Street  
 Oakland, California

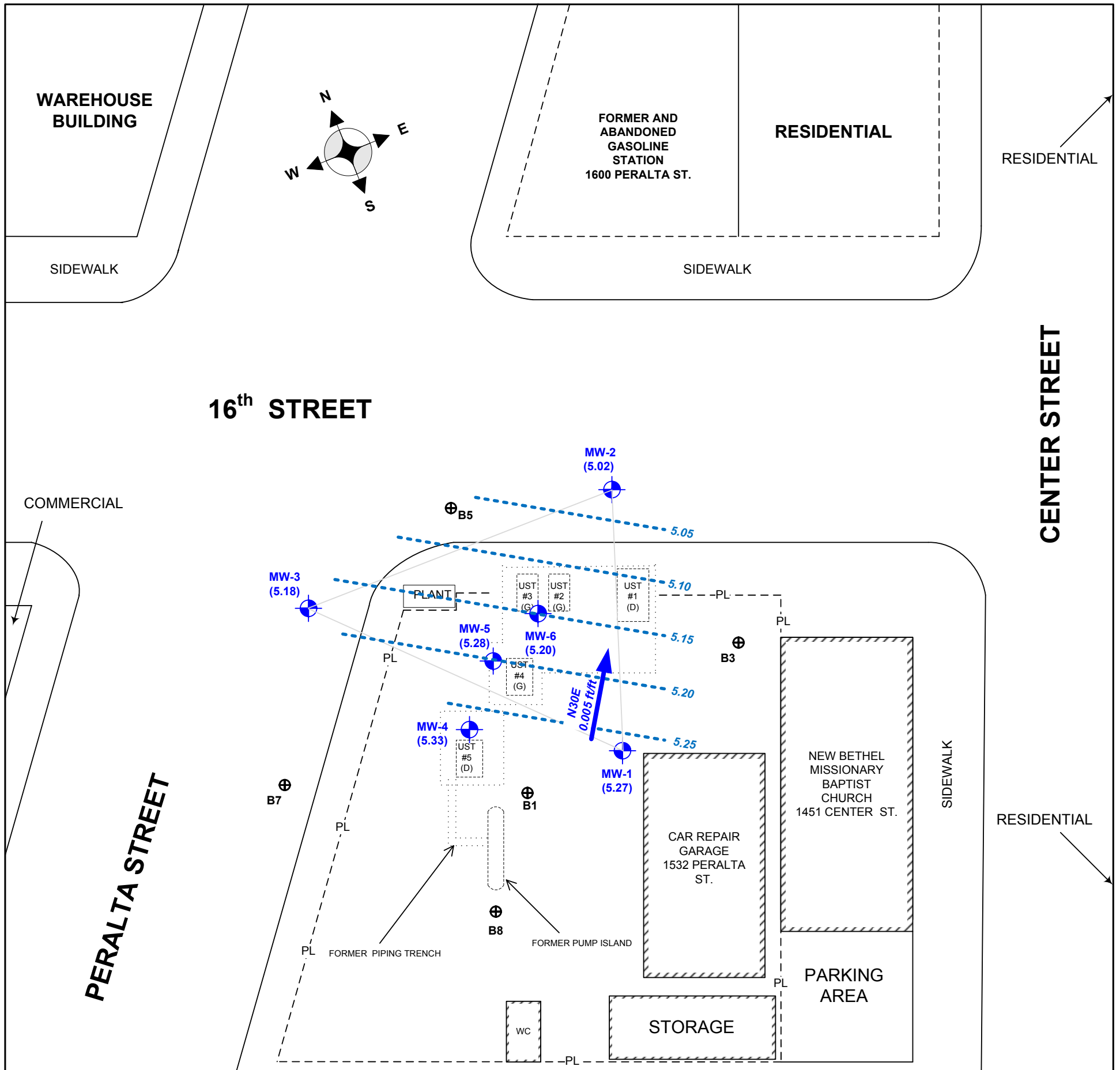


**LEGEND**






- Existing Groundwater Monitoring Well
- Soil Boring (February 2004)
- UST = Underground Storage Tank
- G = Gasoline
- D = Diesel
- PL** Property Line
- Approximate Limit of Former UST Excavation

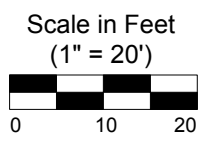


<b>GOLDEN GATE TANK REMOVAL, INC.</b> 3730 Mission Street, San Francisco, CA 94110 Ph (415) 512-1555 Fx (415) 512-0964		<b>SITE MAP</b> 1532 Peralta Street Oakland, California	
GGTR Project No. 8757	Fn: 8757_2Q08GWM_F2	Figure By: ed	Figure 2

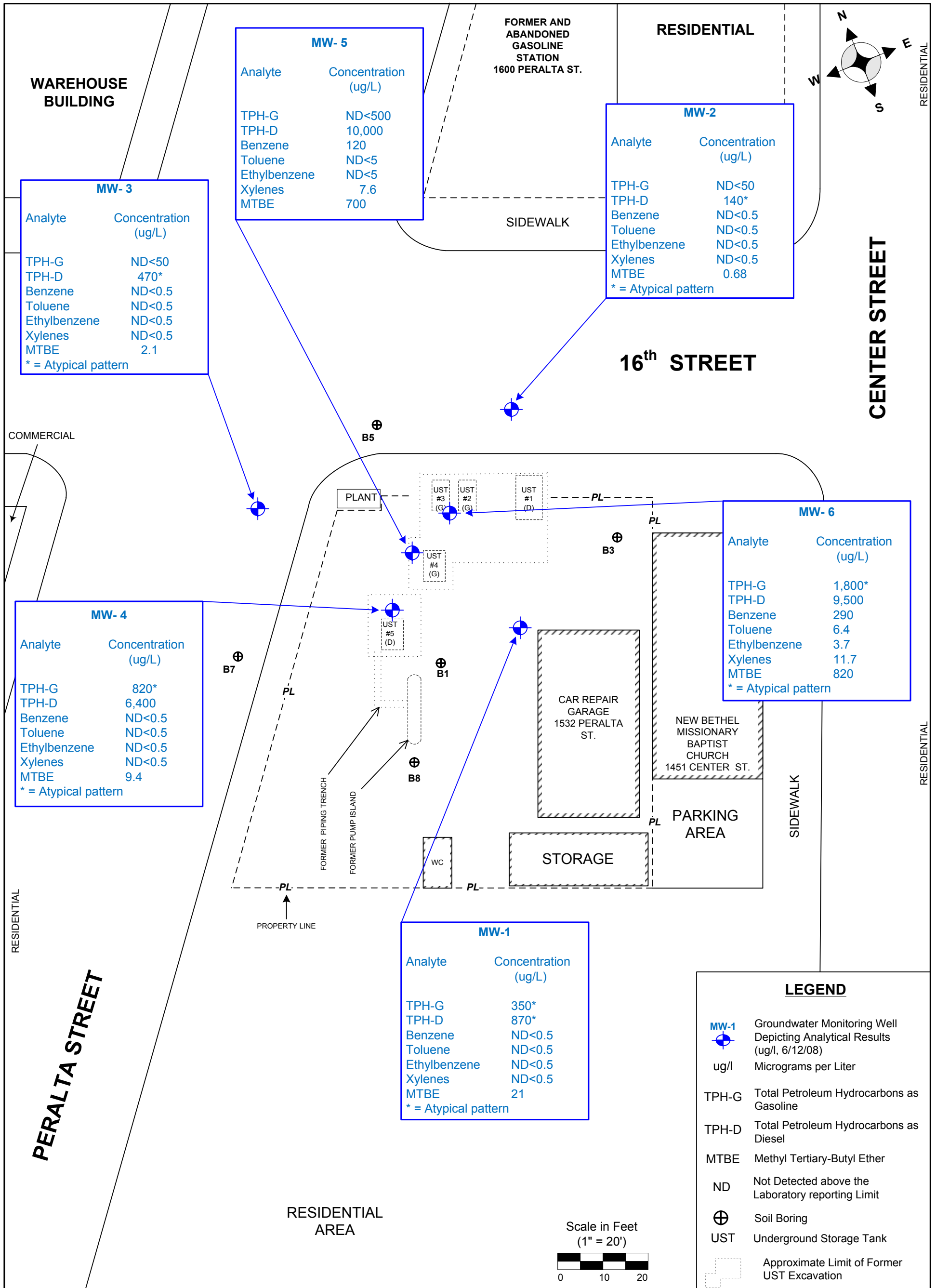


**LEGEND**

-  Groundwater Monitoring Well & Elevation (ft, MSL, 6/12/08)
-  Groundwater Equipotential Contour Line (ft, MSL) Based on MW-1, MW-2 & MW-3 (6/12/08)
-  Approximate Groundwater Flow Direction and Hydraulic Gradient (6/12/08)
-  Soil Boring
- ft, MSL Feet Above Mean Sea Level
- UST Underground Storage Tank
- G Gasoline
- D Diesel
- PL Property Line
-  Approximate Limit of Former UST Excavation

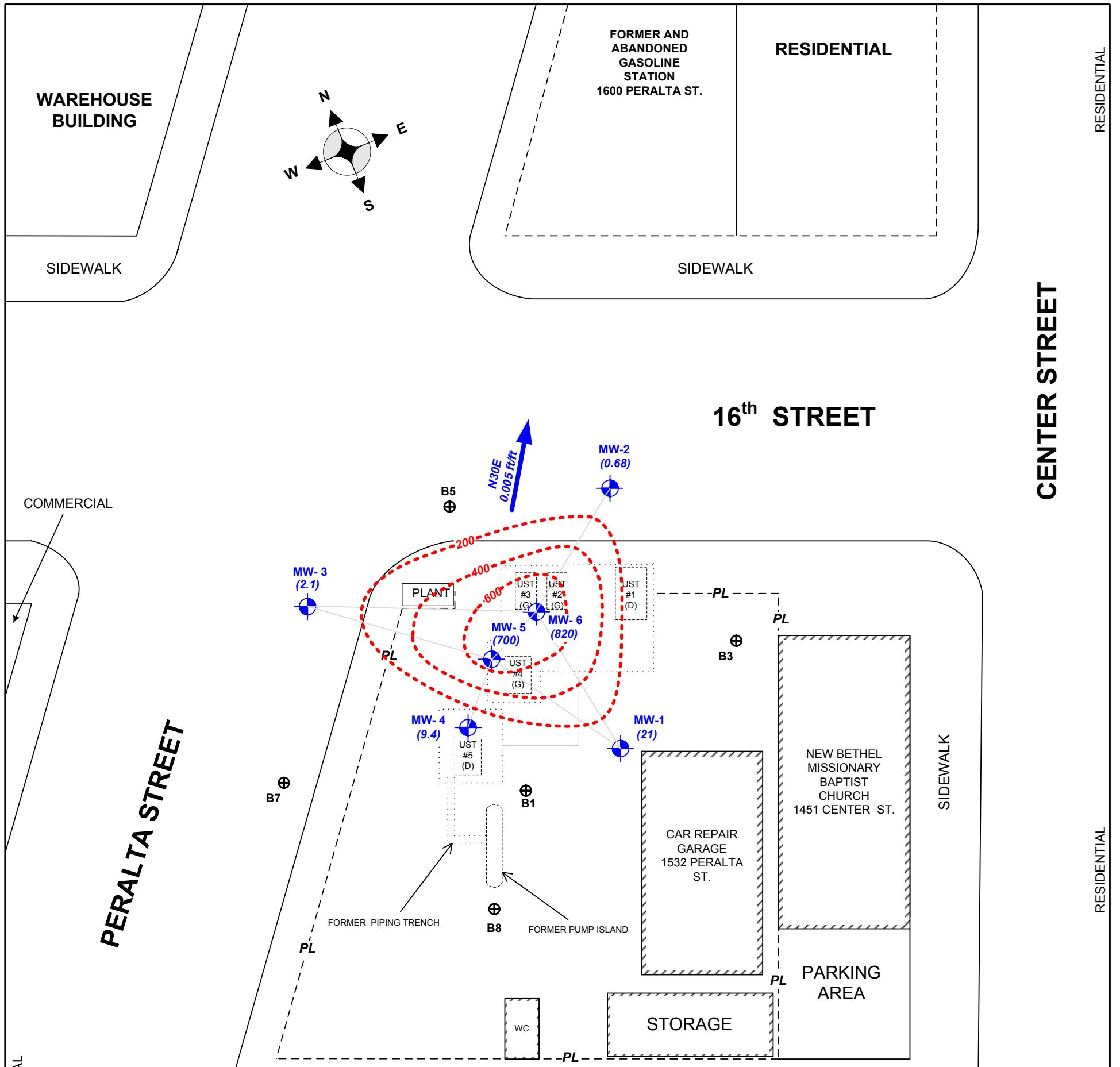


<p><b>GOLDEN GATE TANK REMOVAL, INC.</b> 3730 Mission Street, San Francisco, CA 94110 Ph (415) 512-1555 Fx (415) 512-0964</p>	<p><b>GROUNDWATER POTENTIOMETRIC MAP</b> 1532 Peralta Street Oakland, California</p>		
GGTR Project No. 8757	Fn:8757_2Q08GWM_F3	Figure By: ed	Figure 3



**GOLDEN GATE TANK REMOVAL, INC.**  
 3730 Mission Street, San Francisco, CA 94110  
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**GROUNDWATER ANALYTICAL DATA DIAGRAM**  
 1532 Peralta Street  
 Oakland, California



LEGEND	
	Groundwater Monitoring Well & MTBE Concentration in ug/l (6/12/08)
	MTBE Isoconcentration Contour Line (6/12/08)
	Approximate Groundwater Flow Direction and Hydraulic Gradient (6/12/08)
	Soil Boring
MTBE	Methyl Tertiary-Butyl Ether
G	Gasoline
D	Diesel
ug/l	Micrograms per liter
UST	Underground Storage Tank
PL	Property Line
	Approximate Limit of Former UST Excavation



<b>GOLDEN GATE TANK REMOVAL, INC.</b> 3730 Mission Street, San Francisco, CA 94110 Ph (415) 512-1555 Fx (415) 512-0964		<b>GROUNDWATER MTBE ISOCONCENTRATION MAP</b> 1532 Peralta Street Oakland, California	
GGTR Project No. 8757	Fn:8757_2Q08GWM_F5	Figure By: ed	Figure 5



**TABLE**  
**HISTORICAL GROUNDWATER MONITORING & ANALYTICAL RESULTS**  
*1532 Peralta Street, Oakland, CA*

Well ID	Sample Date	TOC Elevation (ft MSL)	Depth to GW (ft BTOC)	GW Elevation (ft MSL)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Other Fuel Oxygenates (ug/l)
<b>MW-1</b>	03/05/04	9.87	3.18	6.69	571	220	4.1	1.6	0.6	5.8	53.2	NA
	03/27/06		2.72	7.15	520	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	61	11(TBA)
	06/22/06		3.53	6.34	790	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27	11(TBA)
	09/25/06		4.54	5.33	500	ND<50	2.4	ND<0.5	ND<0.5	ND<0.5	31	17(TBA)
	12/21/06		4.05	5.82	90	ND<46	1.6	ND<0.5	ND<0.5	ND<0.5	28	15(TBA)
	03/12/07		3.51	6.36	350	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	47	19(TBA)
	06/28/07		4.37	5.50	420	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	43	ND<10(TBA)
	09/25/07		5.23	4.64	190	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	29	ND<10(TBA)
	12/17/07		4.92	4.95	130	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	ND<10 (TBA)
	03/11/08		3.69	6.18	240	50 <sup>1</sup>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	33	ND<10 (TBA)
<b>06/12/08</b>	<b>4.60</b>	<b>5.27</b>	<b>350<sup>2</sup></b>	<b>870<sup>2</sup></b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>21</b>	<b>1.3 (TAME)</b>		
<b>MW-2</b>	03/05/04	8.66	2.73	5.93	109	ND<50	3.9	ND<0.5	ND<0.5	ND<1.0	6.9	NA
	03/27/06		2.11	6.55	30	ND<62	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2	ND
	06/22/06		2.73	5.93	ND<25	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND
	09/25/06		3.60	5.06	ND<25	ND<50	0.9	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	12/21/06		3.16	5.50	ND<25	ND<46	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	03/12/07		2.76	5.90	ND<25	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	06/28/07		3.46	5.20	ND<25	ND<50	ND<0.5	0.76	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	09/25/07		4.24	4.42	ND<25	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	12/17/07		3.92	4.74	ND<25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	03/11/08		2.90	5.76	ND<25	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
<b>06/12/08</b>	<b>3.64</b>	<b>5.02</b>	<b>ND&lt;50</b>	<b>140<sup>2</sup></b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>0.68</b>	<b>ND&lt;10 (TBA)</b>		
<b>MW-3</b>	03/05/04	8.29	2.10	6.19	185	200	1	1	ND<0.5	1.3	2.5	NA
	03/27/06		1.74	6.55	ND<25	ND<72	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND
	06/22/06		2.38	5.91	ND<25	NA	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND
	09/25/06		3.12	5.17	44	ND<50	1.4	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10 (TBA)
	12/21/06		2.71	5.58	ND>25	ND<46	3.2	ND<0.5	ND<0.5	ND<0.5	1.2	ND<10 (TBA)
	03/12/07		2.51	5.78	ND<25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	ND<10 (TBA)
	06/28/07		2.95	5.34	ND<25	ND<50	ND<0.5	0.64	ND<0.5	ND<0.5	1.8	ND<10 (TBA)
	09/25/07		3.80	4.49	ND<25	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<10 (TBA)
	12/17/07		3.40	4.89	ND<25	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.1	ND<10 (TBA)
	03/11/08		2.48	5.81	ND<25	ND<48	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<10 (TBA)
<b>06/12/08</b>	<b>3.11</b>	<b>5.18</b>	<b>ND&lt;50</b>	<b>470<sup>2</sup></b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>2.1</b>	<b>ND&lt;10 (TBA)</b>		
<b>CRWQCB ESL, November 2007</b>					<b>100</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5</b>	<b>TBA &amp; TAME = NE</b>

Notes in following page:

**TABLE (Continued)**  
**HISTORICAL GROUNDWATER MONITORING & ANALYTICAL RESULTS**  
 1532 Peralta Street, Oakland, CA

Well ID	Sample Date	TOC Elevation (ft MSL)	Depth to GW (ft BTOC)	GW Elevation (ft MSL)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	Other Fuel Oxygenates (ug/l)
MW-4	03/05/04	9.74	2.85	6.89	1,110	370	3.2	3.9	1	3.3	8.5	NA
	03/27/06		2.64	7.10	2,000	ND<50	ND<1.0	1	ND<1.0	1.1	9.3	33(TBA)
	06/22/06		3.43	6.31	430	NA	ND<1.0	1	ND<0.5	1.3	11	28(TBA)
	09/25/06		4.38	5.36	700	ND<50	ND<1.0	ND<0.5	ND<0.5	ND<0.5	12	34(TBA)
	12/21/06		4.09	5.65	1,300	ND<47	1.7	ND<1.0	ND<1.0	ND<1.0	9.8	33(TBA)
	03/12/07		3.47	6.27	1,200	ND<50	1.2	ND<1.0	ND<1.0	ND<1.0	9.8	27(TBA)
	06/28/07		4.20	5.54	900	570 <sup>1</sup>	ND<1.0	ND<1.0	ND<1.0	ND<1.0	14	28(TBA)
	09/25/07		5.00	4.74	850	ND<48 <sup>1</sup>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	45(TBA)
	12/17/07		4.71	5.03	630	300 <sup>1</sup>	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.9	27 (TBA)
	03/11/08		3.39	6.35	940	490 <sup>1</sup>	3.3	ND<0.5	0.52	ND<0.5	8.3	13 (TBA)
<b>06/12/08</b>	<b>4.41</b>	<b>5.33</b>	<b>820<sup>2</sup></b>	<b>6,400</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>ND&lt;0.5</b>	<b>9.4</b>	<b>18 (TBA)</b>		
MW-5	03/05/04	9.40	2.83	6.57	1,660	NA	650	7.6	1.6	7.1	2,250	NA
	03/27/06		2.41	6.99	1,600	ND<50	89	5.6	ND<5.0	8.7	1,200	170(TBA)
	06/22/06		3.17	6.23	2,000	NA	240	11	ND<10	ND<10	1,100	ND<200 (TBA)
	09/25/06		4.14	5.26	2,200	ND<50	160	ND<10	ND<10	ND<10	1,200	ND<200 (TBA)
	12/21/06		3.79	5.61	1,700	ND<47	120	ND<10	ND<10	ND<10	1,000	ND<200 (TBA)
	03/12/07		3.22	6.18	1,300	ND<48	99	5.3	ND<5.0	ND<5.0	770	ND<100 (TBA)
	06/28/07		4.96	4.44	1,900	470 <sup>1</sup>	230	11	ND<10	ND<10	1,400	ND<200 (TBA)
	09/25/07		4.74	4.66	1,200	ND<48 <sup>1</sup>	90	ND<10	ND<10	ND<10	840	ND<200 (TBA)
	12/17/07		4.50	4.90	2,000	540 <sup>1</sup>	170	ND<10	ND<10	11	920	ND<200 (TBA)
	03/11/08		3.28	6.12	2,300	440 <sup>1</sup>	140	ND<10	ND<10	10	930	ND<200 (TBA)
<b>06/12/08</b>	<b>4.12</b>	<b>5.28</b>	<b>ND&lt;500</b>	<b>10,000</b>	<b>120</b>	<b>ND&lt;5</b>	<b>ND&lt;5</b>	<b>7.6</b>	<b>700</b>	<b>ND&lt;100 (TBA)</b>		
MW-6	03/05/04	9.02	2.50	6.52	6,450	800	1,950	29.6	52.7	54.6	1,440	NA
	03/27/06		2.08	6.94	4,800	ND<50	820	14	12	22	1,100	180(TBA)
	06/22/06		2.85	6.17	5,200	NA	630	12	14	13	1,100	ND<200 (TBA)
	09/25/06		3.79	5.23	3,700	ND<50	430	ND<10	ND<10	ND<10	920	ND<200 (TBA)
	12/21/06		3.41	5.61	8,400	ND<250	2,600	ND<25	32	ND<25	550	ND<500 (TBA)
	03/12/07		2.82	6.20	7,400	ND<49	1,200	17	23	13	680	ND<200 (TBA)
	06/28/07		3.59	5.43	3,600	1,300 <sup>1</sup>	240	8.6	ND<5.0	10	890	ND<100 (TBA)
	09/25/07		4.40	4.62	2,200	ND<48 <sup>1</sup>	430	7.7	6.6	5.2	580	ND<100 (TBA)
	12/17/07		4.21	4.81	2,400	950 <sup>1</sup>	440	9.0	6.5	8.6	450	ND<100 (TBA)
	03/11/08		2.96	6.06	4,700	1,300 <sup>1</sup>	690	13.0	7.6	19	740	ND<100 (TBA)
<b>06/12/08</b>	<b>3.82</b>	<b>5.20</b>	<b>1,800<sup>2</sup></b>	<b>9,500</b>	<b>290</b>	<b>6.4</b>	<b>3.7</b>	<b>11.7</b>	<b>820</b>	<b>55 (TBA), 1.1 (1,2-DCA)</b>		
<b>CRWQCB ESL, November 2007</b>					<b>100</b>	<b>100</b>	<b>1</b>	<b>40</b>	<b>30</b>	<b>20</b>	<b>5</b>	<b>TBA = NE, 1,2-DCA = 0.5</b>

Notes in following page:

**TABLE (continued)**  
**HISTORICAL GROUNDWATER MONITORING & ANALYTICAL RESULTS**  
*1532 Peralta Street, Oakland, CA*

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**NOTES**

TOC = Top of Casing

ft MSL = Feet Above Mean Sea Level

ft BTOC = Feet Below Top Of Casing

GW = Groundwater

TPH-G = Total Petroleum Hydrocarbons as Gasoline

TPH-D = Total Petroleum Hydrocarbons as Diesel

B, T, E, X = Benzene, Toluene, Ethylbenzene, and Total Xylenes

MTBE = Methyl Tertiary-Butyl Ether

ug/l = micrograms per Liter or parts per billion (ppb)

TBA = tert-Butanol

TAME = Methyl tert-Amyl Ether

1,2-DCA = 1,2-Dichloroethane

ND = Not Detected or less than the laboratory reporting limit

NA = Not analyzed

<sup>1</sup> = Atypical Diesel pattern. Higher boiling gasoline compounds in the Diesel range.

<sup>2</sup> = Sample exhibits chromatographic pattern which does not resemble standard.

NE = Not Established

CRWQCB ESL = California Regional Water Quality Control Board - Environmental Screening Levels

CRWQCB ESL = November 2007 Interim Final CRWQCB Tier 1 ESL where groundwater **IS** a current or potential source of drinking water.

# **ATTACHMENT A**

## **FLUID - LEVEL MONITORING DATA FORM WELL PURGING / SAMPLING DATA SHEETS**

# Golden Gate Tank Removal, Inc.

## FLUID-LEVEL MONITORING DATA

Project No: 8757 Date: 6/12/08

Project/Site Location: 1532 Peralte St. Oakland

Technician: ST Instrument: Oil/water Interface meter

Boring/Well	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Total Well Depth (feet)	Comments
Mw-1	4.60	ND	ND	14.40	09:15
Mw-2	3.64	ND	ND	13.90	07:10 well dries after 1 sampling volume
Mw-3	3.11	ND	ND	13.90	07:12 well dries after 1 sampling volume
Mw-4	4.41	ND	ND	11.00	09:16
Mw-5	4.12	ND	ND	5.20	09:17
Mw-6	3.82	ND	ND	14:30	09:18

# Golden Gate Tank Removal, Inc.

## WELL PURGING/SAMPLING DATA

Project Number: 8757 Date: 6/12/08

Project / Site Location: 1532 Peralte St. Oakland - CA

Sampler/Technician: ED

Casing/Borehole Diameter (inches)	0.75/1.75	2/8	4/8	4/10	6/10	6/12
Casing/Borehole Volumes (gallons/foot)	0.02/0.13	0.2/0.9	0.7/1.2	0.7/1.6	1.5/2.2	1.5/3.1

Well No. MW-1

A. Total Well Depth 14.40 Ft.(toc)  
 B. Depth To Water 4.60 Ft.  
 C. Water Height (A-B) 9.8 Ft.  
 D. Well Casing Diameter 1 In.  
 E. Casing Volume Constant (from above table) 0.05  
 F. Three (3) Casing or Borehole Volumes (CxEx3) 1.5 Gals.  
 G. 80% Recharge Level [B+(ExC)] 5.1 Ft.

Purge Event #1  
 Start Time: 0935  
 Finish Time: 10:00  
 Purge Volume: 1.3 gallons

Recharge #1  
 Depth to Water: 6.8 → 5.8  
 Time Measured: 10:05 → 10:07

Purge Event #2  
 Start Time:  
 Finish Time:  
 Purge Volume:

Recharge #2  
 Depth to Water:  
 Time Measured:

Well Fluid Parameters:  
 (Casing or Borehole Volumes)

	0	0.5	1	1.5	2	2.5	3
Time	0935	0938	0941	0944	0957	1000	
pH	4.01	4.01	4.00	4.00	4.00	4.00	
T (°F)	21.9	20.3	20.8	20.5	20.2	20.1	
Cond.	25.3	61.5	56.2	51.2	48.9	48.7	

DO  
 ORP

Summary Data:  
 Total Gallons Purged: 1.3 gallons  
 Purge Rate (Liters/Min.): 350  
 Purge device: Peristaltic Intake Depth: 14.00  
 Sampling Device: Peristaltic  
 Sample Collection Time: 10:30  
 Sample Appearance: light prof. No odor, No stain

Drums Remaining Onsite: 1 Total Volume: 26 Gals. (Show Location on Site Plan)

Well No. MW-2

A. Total Well Depth 13.90 Ft.(toc)  
 B. Depth To Water 3.64 Ft.  
 C. Water Height (A-B) 10.26 Ft.  
 D. Well Casing Diameter 1 In.  
 E. Casing Volume Constant (from above table) 0.05  
 F. Three (3) Casing or Borehole Volumes (CxEx3) 1.5 Gals.  
 G. 80% Recharge Level [B+(ExC)] 4.1 Ft.

Purge Event #1  
 Start Time: 0743 400 ml/min  
 Finish Time: 0800  
 Purge Volume: 1.5 pls.

Recharge #1  
 Depth to Water: 9.6 → 9.0  
 Time Measured: 08:02 → 08:05

Purge Event #2  
 Start Time:  
 Finish Time:  
 Purge Volume:

Recharge #2  
 Depth to Water:  
 Time Measured:

Well Fluid Parameters:  
 (Casing or Borehole Volumes)

	0	0.5	1	1.5	2	2.5	3
Time	0747	0749	07:51	07:54	07:57	0800	
pH	5.17	4.54	4.70	4.71	4.69	4.63	
T (°F)	20.1	20.5	20.0	20.0	19.8	19.8	
Cond.	61.4	54.6	52.3	51.6	51.2	51.0	

DO  
 ORP

Summary Data:  
 Total Gallons Purged: 1.5  
 Purge Rate (Liters/Min.): 400 ml/min  
 Purge device: Peristaltic Intake Depth: 13.00  
 Sampling Device: Peristaltic  
 Sample Collection Time: 08:15  
 Sample Appearance: Clean to light brown, No odor, No stain

# Golden Gate Tank Removal, Inc.

## WELL PURGING/SAMPLING DATA

Project Number: 8757 Date: 6/12/08

Project / Site Location: 1532 Peralta St. Oakland - CA

Sampler/Technician: 2)

Casing/Borehole Diameter (inches)	0.75/1.75	2/8	4/8	4/10	6/10	6/12
Casing/Borehole Volumes (gallons/foot)	0.02/0.13	0.2/0.9	0.7/1.2	0.7/1.6	1.5/2.2	1.5/3.1

**Well No. NW-3**

A. Total Well Depth 13.90 Ft.(toc)  
 B. Depth To Water 3.11 Ft.  
 C. Water Height (A-B) 10.79 Ft.  
 D. Well Casing Diameter 1 In.  
 E. Casing Volume Constant (from above table) 0.05  
 F. Three (3) Casing or Borehole Volumes (CxEx3) 1.6 Gals.  
 G. 80% Recharge Level [B+(ExC)] 3.65 Ft.

Purge Event #1  
 Start Time: 08:31  
 Finish Time: 08:50  
 Purge Volume: 1 gallon

Recharge #1  
 Depth to Water: 5.60 → 5.00  
 Time Measured: 08:55 → 08:58

Purge Event #2  
 Start Time:  
 Finish Time:  
 Purge Volume:

Recharge #2  
 Depth to Water:  
 Time Measured:

**Well Fluid Parameters:**  
(Casing or Borehole Volumes)

	0	0.5	1	1.5	2	2.5	3
Time	08:31	08:35	08:38	08:45	08:50		
pH	4.24	4.06	4.00	4.01	4.01		
T (°F)	22.6	23.2	19.3	19.2	19.2		
Cond.	66.3	66.0	60.0	57.7	57.6		

DO  
 ORP  
**Summary Data:**  
 Total Gallons Purged: 1 gallon  
 Purge Rate (Liters/Min.): 300 ml/min  
 Purge device: Constaltic Intake Depth: 13.50  
 Sampling Device: Constaltic  
 Sample Collection Time: 09:00  
 Sample Appearance: Clear No odor No stain

Drums Remaining Onsite: 1 Total Volume: 2.6 Gals. (Show Location on Site Plan)

**Well No. NW-4**

A. Total Well Depth 11.00 Ft.(toc)  
 B. Depth To Water 4.41 Ft.  
 C. Water Height (A-B) 6.59 Ft.  
 D. Well Casing Diameter 1 In.  
 E. Casing Volume Constant (from above table) 0.05  
 F. Three (3) Casing or Borehole Volumes (CxEx3) 1 Gals.  
 G. 80% Recharge Level [B+(ExC)] 4.74 Ft.

Purge Event #1  
 Start Time: 11:00  
 Finish Time: 11:15  
 Purge Volume: 1 gallon

Recharge #1  
 Depth to Water: 4.40  
 Time Measured: 11:20

Purge Event #2  
 Start Time:  
 Finish Time:  
 Purge Volume:

Recharge #2  
 Depth to Water:  
 Time Measured:

**Well Fluid Parameters:**  
(Casing or Borehole Volumes)

	0	0.5	1	1.5	2	2.5	3
Time	11:00	11:02	11:04	11:07	11:10	11:12	11:15
pH	4.08	4.06	4.00	4.00	4.00	4.0	4.0
T (°F)	20.4	20.5	19.9	19.7	19.8	19.7	19.7
Cond.	91.9	86.8	75.4	70.4	61.8	52.7	46.6

DO  
 ORP  
**Summary Data:**  
 Total Gallons Purged: 1  
 Purge Rate (Liters/Min.): 350  
 Purge device: Constaltic Intake Depth: 10.5  
 Sampling Device: Constaltic  
 Sample Collection Time: 11:30  
 Sample Appearance: Clear No odor No stain

Drums Remaining Onsite: 1 Total Volume: 2.6 Gals. (Show Location on Site Plan)

# Golden Gate Tank Removal, Inc.

## WELL PURGING/SAMPLING DATA

Project Number: 8757 Date: 6/12/08

Project / Site Location: 1532 Petaluma St. - Oakland - CA

Sampler/Technician: E.D

Casing/Borehole Diameter (inches)	0.75/1.75	2/8	4/8	4/10	6/10	6/12
Casing/Borehole Volumes (gallons/foot)	0.02/0.13	0.2/0.9	0.7/1.2	0.7/1.6	1.5/2.2	1.5/3.1

Well No. <u>MW-5</u>	Well No. <u>MW-6</u>																																																																																
A. Total Well Depth <u>5.20</u> Ft.(toc)	A. Total Well Depth <u>14.30</u> Ft.(toc)																																																																																
B. Depth To Water <u>4.12</u> Ft.	B. Depth To Water <u>3.82</u> Ft.																																																																																
C. Water Height (A-B) <u>1.08</u> Ft.	C. Water Height (A-B) <u>10.48</u> Ft.																																																																																
D. Well Casing Diameter <u>1</u> In.	D. Well Casing Diameter <u>1</u> In.																																																																																
E. Casing Volume Constant (from above table) <u>0.05</u>	E. Casing Volume Constant (from above table) <u>0.05</u>																																																																																
F. Three (3) Casing or Borehole Volumes (CxEx3) <u>0.2</u> Gals.	F. Three (3) Casing or Borehole Volumes (CxEx3) <u>1.6</u> Gals.																																																																																
G. 80% Recharge Level [B+(ExC)] <u>4.2</u> Ft.	G. 80% Recharge Level [B+(ExC)] <u>4.34</u> Ft.																																																																																
<u>Purge Event #1</u>	<u>Purge Event #1</u>																																																																																
Start Time: <u>12:00</u>	Start Time: <u>13:00</u>																																																																																
Finish Time: <u>12:14</u>	Finish Time: <u>13:15</u>																																																																																
Purge Volume: <u>0.5</u> gallons	Purge Volume: <u>1.6</u> gals																																																																																
<u>Recharge #1</u>	<u>Recharge #1</u>																																																																																
Depth to Water: <u>4.15</u> → <u>4.14</u>	Depth to Water: <u>4.24</u> → <u>4.00</u>																																																																																
Time Measured: <u>12:16</u> <u>12:17</u>	Time Measured: <u>13:20</u> <u>13:22</u>																																																																																
<u>Purge Event #2</u>	<u>Purge Event #2</u>																																																																																
Start Time:	Start Time:																																																																																
Finish Time:	Finish Time:																																																																																
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Time Measured:	Time Measured:																																																																																
<b>Well Fluid Parameters:</b> (Casing or Borehole Volumes)	<b>Well Fluid Parameters:</b> (Casing or Borehole Volumes)																																																																																
<table border="1" style="font-size: small;"> <tr><th>Time</th><th>0</th><th>0.5</th><th>1</th><th>1.5</th><th>2</th><th>2.5</th><th>3</th></tr> <tr><td>12:00</td><td>202</td><td>204</td><td>206</td><td>208</td><td>210</td><td>212</td><td>212</td></tr> <tr><td>pH</td><td>4.33</td><td>4.51</td><td>4.53</td><td>4.42</td><td>4.46</td><td>4.47</td><td>4.44</td></tr> <tr><td>T (°F)</td><td>20.8</td><td>20.7</td><td>21.0</td><td>21.2</td><td>21.4</td><td>21.7</td><td>21.3</td></tr> <tr><td>Cond.</td><td>164.2</td><td>173.3</td><td>170.2</td><td>175.3</td><td>172.7</td><td>176.8</td><td>173.1</td></tr> </table>	Time	0	0.5	1	1.5	2	2.5	3	12:00	202	204	206	208	210	212	212	pH	4.33	4.51	4.53	4.42	4.46	4.47	4.44	T (°F)	20.8	20.7	21.0	21.2	21.4	21.7	21.3	Cond.	164.2	173.3	170.2	175.3	172.7	176.8	173.1	<table border="1" style="font-size: small;"> <tr><th>Time</th><th>0</th><th>0.5</th><th>1</th><th>1.5</th><th>2</th><th>2.5</th><th>3</th></tr> <tr><td>13:00</td><td>1302</td><td>1304</td><td>1306</td><td>1309</td><td>1312</td><td>1315</td><td>1315</td></tr> <tr><td>pH</td><td>4.18</td><td>4.21</td><td>4.38</td><td>4.36</td><td>4.38</td><td>4.36</td><td>4.40</td></tr> <tr><td>T (°F)</td><td>22.7</td><td>23.0</td><td>22.9</td><td>23.1</td><td>23.0</td><td>23.3</td><td>23.0</td></tr> <tr><td>Cond.</td><td>167.5</td><td>173.3</td><td>173.2</td><td>102.0</td><td>97.9</td><td>92.9</td><td>88.9</td></tr> </table>	Time	0	0.5	1	1.5	2	2.5	3	13:00	1302	1304	1306	1309	1312	1315	1315	pH	4.18	4.21	4.38	4.36	4.38	4.36	4.40	T (°F)	22.7	23.0	22.9	23.1	23.0	23.3	23.0	Cond.	167.5	173.3	173.2	102.0	97.9	92.9	88.9
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ORP	ORP																																																																																
<b>Summary Data:</b>	<b>Summary Data:</b>																																																																																
Total Gallons Purged: <u>0.5</u>	Total Gallons Purged: <u>1.6</u>																																																																																
Purge Rate (Liters/Min.): <u>300</u>	Purge Rate (Liters/Min.): <u>400</u>																																																																																
Purge device: <u>Peristaltic</u> Intake Depth: <u>4.8</u>	Purge device: <u>Peristaltic</u> Intake Depth: <u>14.00</u>																																																																																
Sampling Device: <u>Peristaltic</u>	Sampling Device: <u>Peristaltic</u>																																																																																
Sample Collection Time: <u>12:30</u>	Sample Collection Time: <u>13:40</u>																																																																																
Sample Appearance: <u>clear, no sherry odor</u>	Sample Appearance: <u>clear, sherry, odor</u>																																																																																
Drums Remaining Onsite: <u>1</u> Total Volume: <u>2.6</u> Gals. (Show Location on Site Plan)																																																																																	



# **ATTACHMENT B**

**LABORATORY CERTIFICATES OF ANALYSIS  
CHAIN OF CUSTODY RECORD  
GEOTRACKER UPLOAD CONFIRMATION FORMS**



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

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

Laboratory Job Number 203982  
ANALYTICAL REPORT

Golden Gate Tank Removal  
3730 Mission Street  
San Francisco, CA 94110

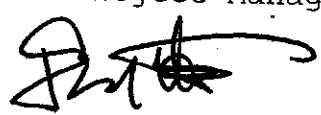
Project : 8757  
Location : 1532 Peralta St. Osagie Property  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	203982-001
MW-2	203982-002
MW-3	203982-003
MW-4	203982-004
MW-5	203982-005
MW-6	203982-006

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

Signature:   
Project Manager

Date: 06/23/2008

Signature:   
Senior Program Manager

Date: 06/26/2008

### CASE NARRATIVE

Laboratory number: 203982  
Client: Golden Gate Tank Removal  
Project: 8757  
Location: 1532 Peralta St. Osage Property  
Request Date: 06/13/08  
Samples Received: 06/13/08

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 06/13/08. The samples were received cold and intact.

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

No analytical problems were encountered.

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

Low recoveries were observed for isopropyl ether (DIPE) in the MS/MSD for batch 139327; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. High recoveries were observed for 1,2-dichloroethane; the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

**Total Extractable Hydrocarbons**

Lab #:	203982	Location:	1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep:	EPA 3520C
Project#:	8757	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/12/08
Units:	ug/L	Received:	06/13/08
Diln Fac:	1.000	Prepared:	06/16/08
Batch#:	139314	Analyzed:	06/18/08

Field ID: MW-1    Lab ID: 203982-001  
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	870 Y	50

Surrogate	%REC	Limits
Hexacosane	98	63-130

Field ID: MW-2    Lab ID: 203982-002  
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	140 Y	50

Surrogate	%REC	Limits
Hexacosane	104	63-130

Field ID: MW-3    Lab ID: 203982-003  
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	470 Y	50

Surrogate	%REC	Limits
Hexacosane	106	63-130

Field ID: MW-4    Lab ID: 203982-004  
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	6,400	50

Surrogate	%REC	Limits
Hexacosane	103	63-130

Field ID: MW-5    Lab ID: 203982-005  
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	10,000	50

Surrogate	%REC	Limits
Hexacosane	98	63-130

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

### Total Extractable Hydrocarbons

Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 3520C
Project#:	8757	Analysis: EPA 8015B
Matrix:	Water	Sampled: 06/12/08
Units:	ug/L	Received: 06/13/08
Diln Fac:	1.000	Prepared: 06/16/08
Batch#:	139314	Analyzed: 06/18/08

Field ID: MW-6  
Type: SAMPLE

Lab ID: 203982-006

Analyte	Result	RL
Diesel C10-C24	9,500	50

Surrogate	%REC	Limits
Hexacosane	99	63-130

Type: BLANK

Lab ID: QC446719

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	93	63-130

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

## Batch QC Report

Total Extractable Hydrocarbons		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 3520C
Project#:	8757	Analysis: EPA 8015B
Matrix:	Water	Batch#: 139314
Units:	ug/L	Prepared: 06/16/08
Diln Fac:	1.000	Analyzed: 06/18/08

Type: BS Lab ID: QC446720

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,658	66	61-120

Surrogate	%REC	Limits
Hexacosane	104	63-130

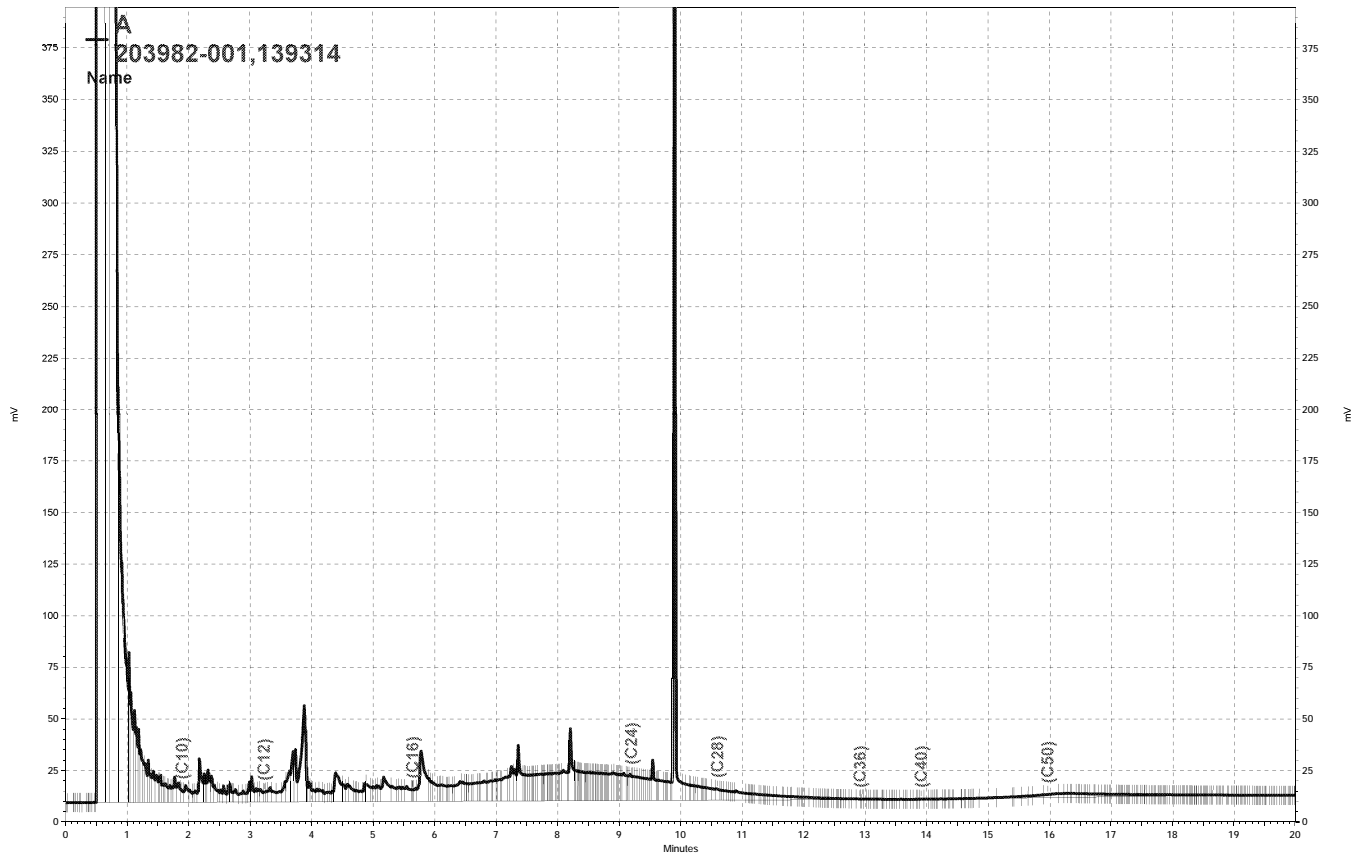
Type: BSD Lab ID: QC446721

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,592	64	61-120	4	29

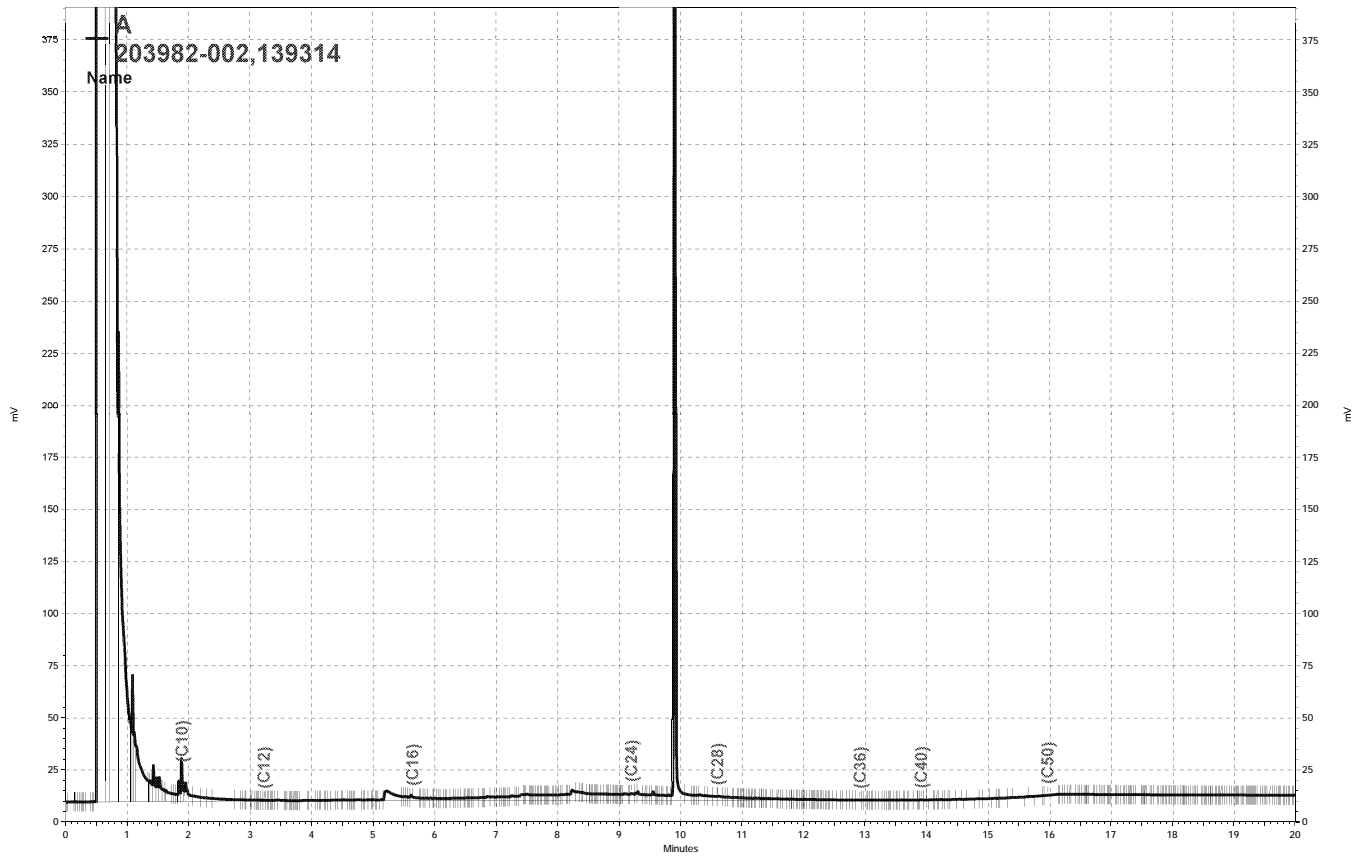
  

Surrogate	%REC	Limits
Hexacosane	107	63-130

RPD= Relative Percent Difference

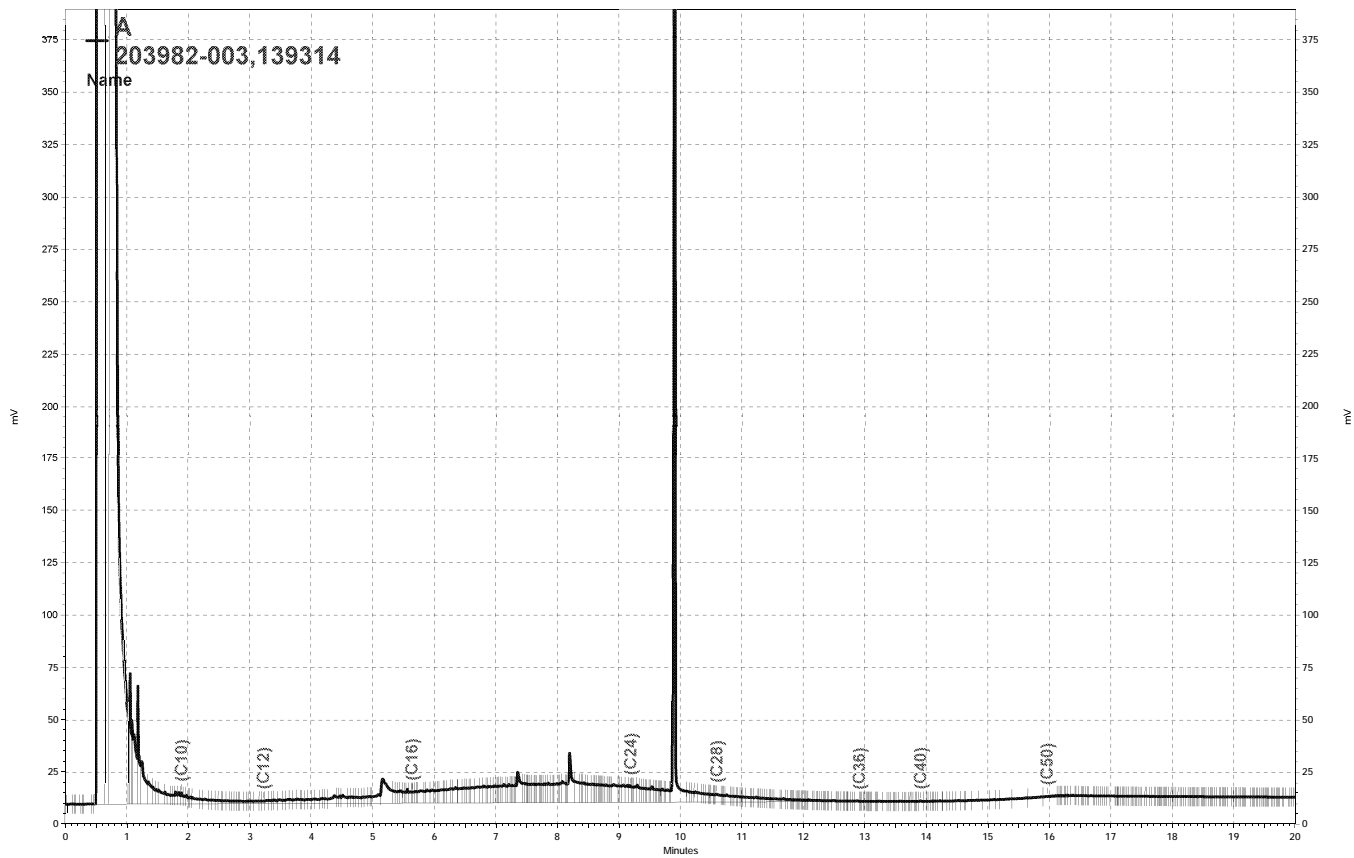


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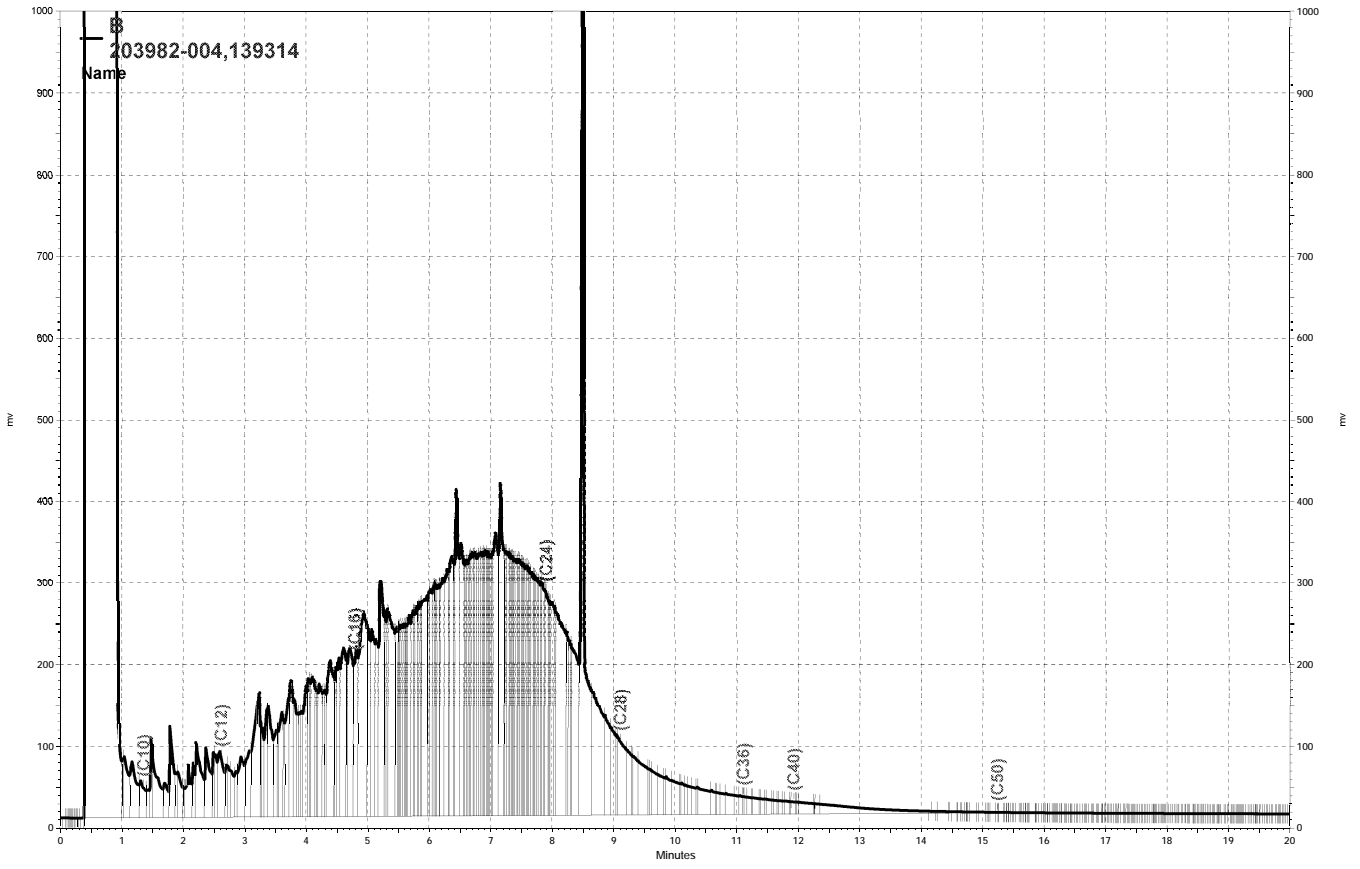


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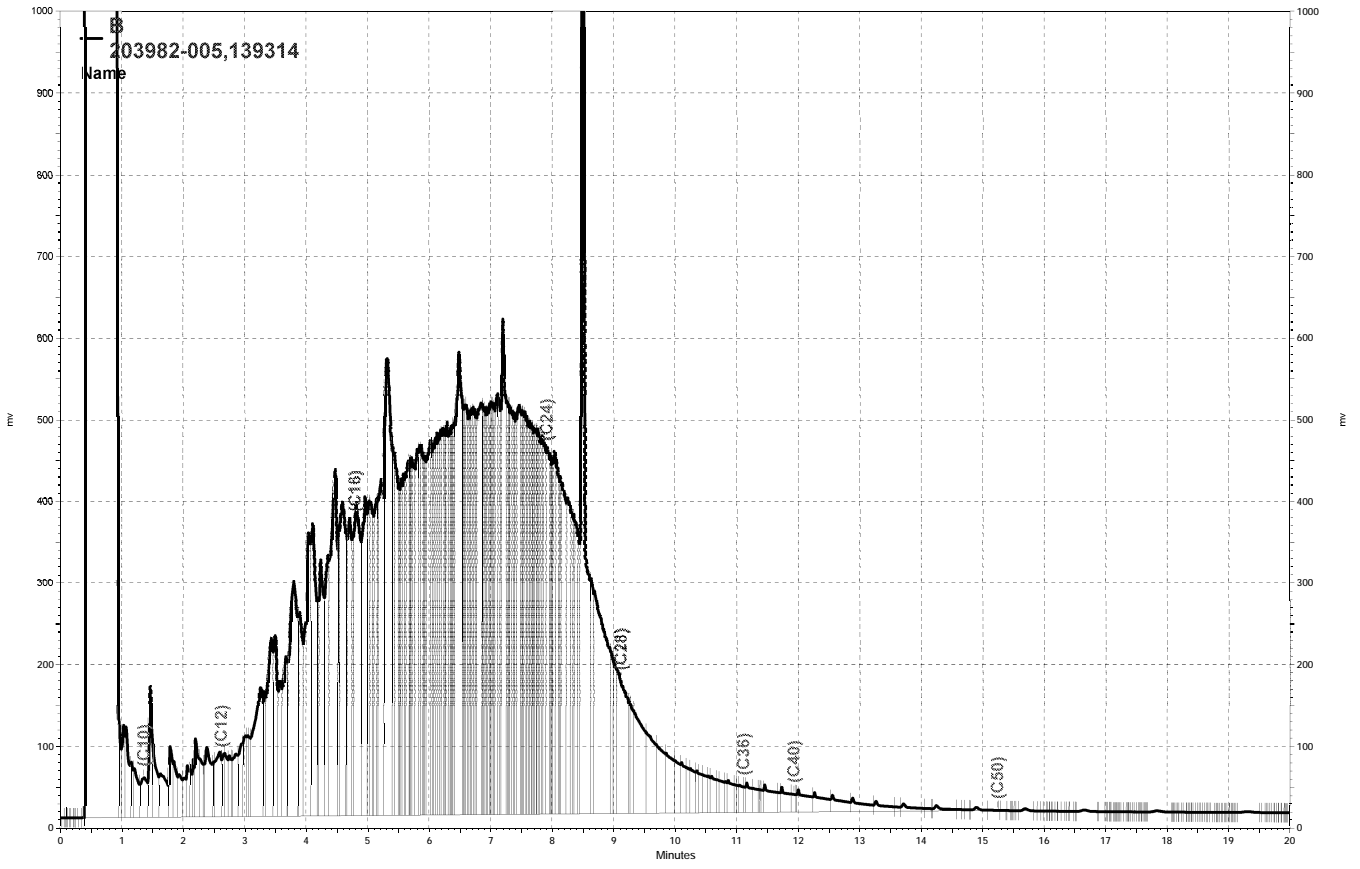




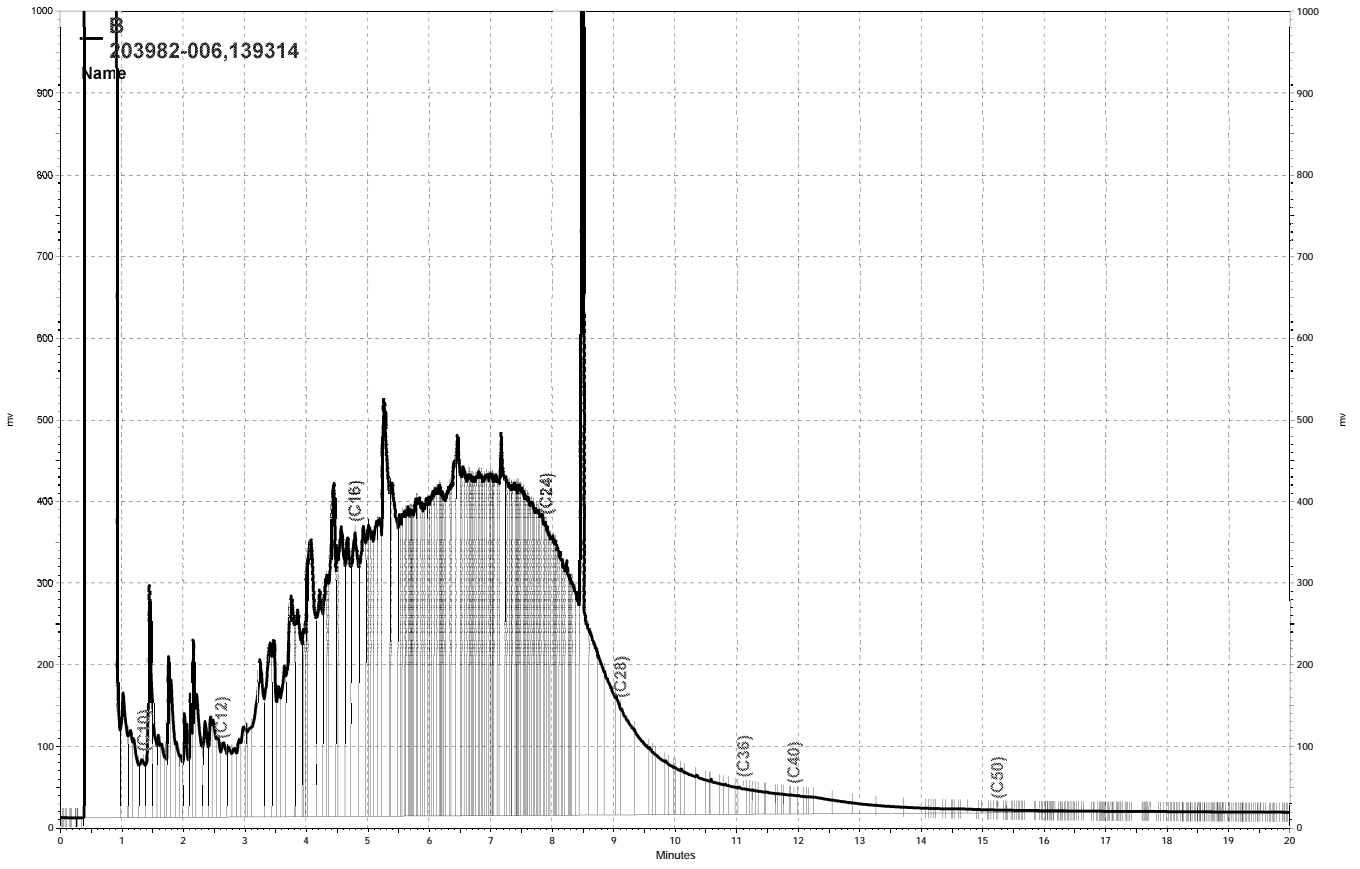
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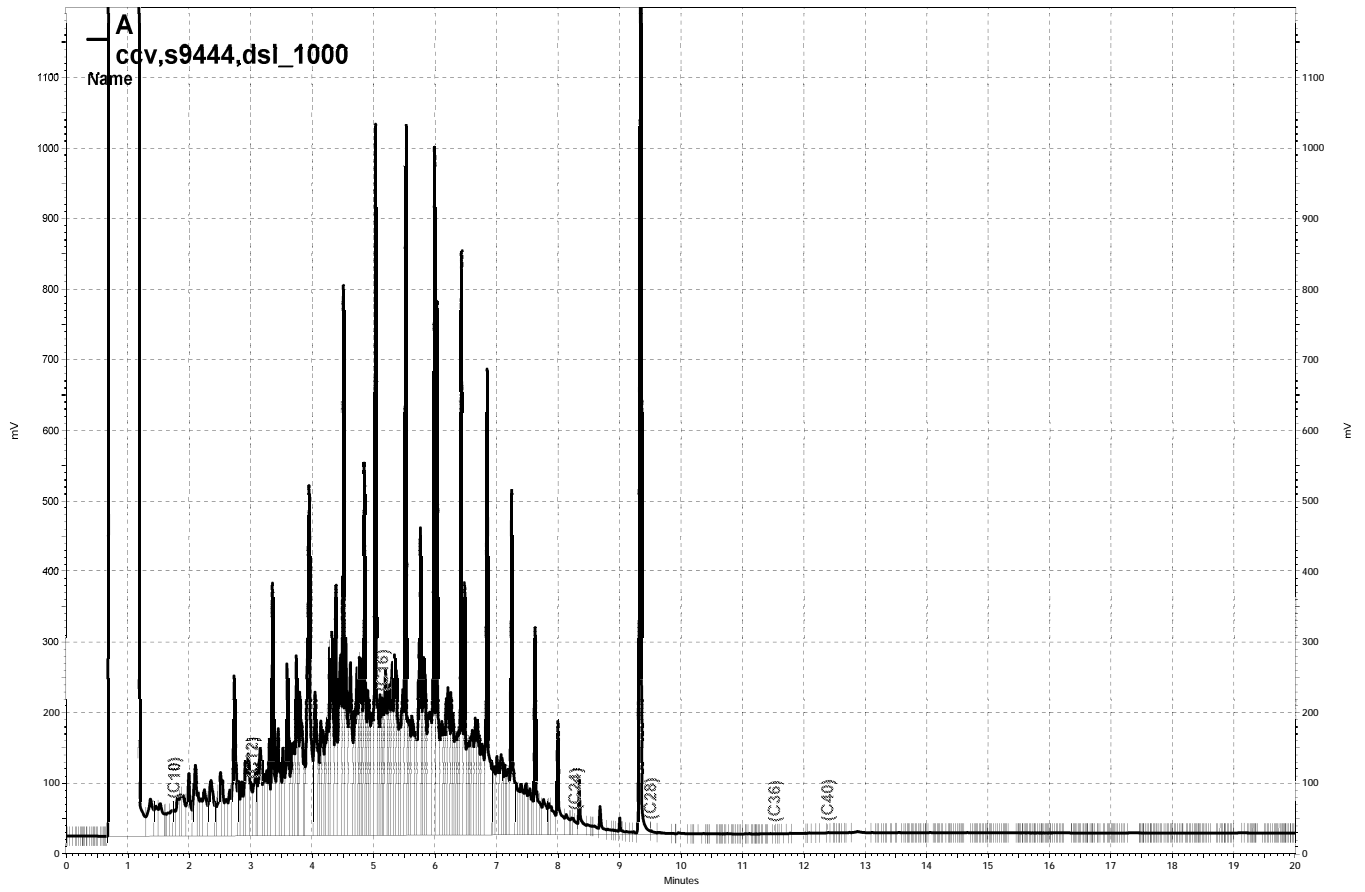
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Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-1	Batch#: 139327
Lab ID:	203982-001	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Analyte	Result	RL
Gasoline C7-C12	350 Y	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	1.3	0.50
MTBE	21	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-123
1,2-Dichloroethane-d4	107	76-138
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-2	Batch#: 139327
Lab ID:	203982-002	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	0.68	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	108	76-138
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected  
 RL= Reporting Limit

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-3	Batch#: 139327
Lab ID:	203982-003	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	2.1	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-123
1,2-Dichloroethane-d4	109	76-138
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected  
 RL= Reporting Limit



Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osagie Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-4	Batch#: 139327
Lab ID:	203982-004	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Analyte	Result	RL
Gasoline C7-C12	820 Y	50
tert-Butyl Alcohol (TBA)	18	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	9.4	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	111	76-138
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-120

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-5	Batch#: 139327
Lab ID:	203982-005	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	10.00	

Analyte	Result	RL
Gasoline C7-C12	ND	500
tert-Butyl Alcohol (TBA)	ND	100
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
MTBE	700	5.0
1,2-Dichloroethane	ND	5.0
Benzene	120	5.0
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	7.6	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	116	76-138
Toluene-d8	98	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected  
 RL= Reporting Limit

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osagie Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	MW-6	Units: ug/L
Lab ID:	203982-006	Sampled: 06/12/08
Matrix:	Water	Received: 06/13/08

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	1,800 Y	50	1.000	139327	06/17/08
tert-Butyl Alcohol (TBA)	55	10	1.000	139327	06/17/08
Isopropyl Ether (DIPE)	ND	0.50	1.000	139327	06/17/08
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	139327	06/17/08
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	139327	06/17/08
MTBE	820	5.0	10.00	139384	06/18/08
1,2-Dichloroethane	1.1	0.50	1.000	139327	06/17/08
Benzene	290	5.0	10.00	139384	06/18/08
Toluene	6.4	0.50	1.000	139327	06/17/08
1,2-Dibromoethane	ND	0.50	1.000	139327	06/17/08
Ethylbenzene	3.7	0.50	1.000	139327	06/17/08
m,p-Xylenes	9.4	0.50	1.000	139327	06/17/08
o-Xylene	2.3	0.50	1.000	139327	06/17/08

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	89	80-123	1.000	139327	06/17/08
1,2-Dichloroethane-d4	99	76-138	1.000	139327	06/17/08
Toluene-d8	96	80-120	1.000	139327	06/17/08
Bromofluorobenzene	99	80-120	1.000	139327	06/17/08

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Gasoline by GC/MS</b>		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC446755	Batch#: 139327
Matrix:	Water	Analyzed: 06/17/08
Units:	ug/L	

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
tert-Butyl Alcohol (TBA)	125.0	102.1	82	55-158
Isopropyl Ether (DIPE)	25.00	17.74	71	63-122
Ethyl tert-Butyl Ether (ETBE)	25.00	21.00	84	62-133
Methyl tert-Amyl Ether (TAME)	25.00	23.60	94	69-137
MTBE	25.00	21.87	87	60-136
1,2-Dichloroethane	25.00	30.52	122	77-125
Benzene	25.00	21.99	88	80-120
Toluene	25.00	22.94	92	80-121
1,2-Dibromoethane	25.00	23.97	96	80-120
Ethylbenzene	25.00	25.41	102	80-124
m,p-Xylenes	50.00	48.80	98	80-128
o-Xylene	25.00	24.40	98	80-123

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	103	76-138
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

**Batch QC Report**

<b>Gasoline by GC/MS</b>		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC446756	Batch#: 139327
Matrix:	Water	Analyzed: 06/17/08
Units:	ug/L	

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

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	89	80-123
1,2-Dichloroethane-d4	101	76-138
Toluene-d8	95	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Matrix:	Water	Batch#: 139327
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Type: BS Lab ID: QC446806

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,009	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-123
1,2-Dichloroethane-d4	103	76-138
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC446807

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	929.1	93	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-123
1,2-Dichloroethane-d4	99	76-138
Toluene-d8	96	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

**Batch QC Report**

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osagie Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#: 139327
MSS Lab ID:	203902-003	Sampled: 06/11/08
Matrix:	Water	Received: 06/11/08
Units:	ug/L	Analyzed: 06/17/08
Diln Fac:	1.000	

Type: MS Lab ID: QC446851

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.000	125.0	119.4	96	66-153
Isopropyl Ether (DIPE)	<0.1000	25.00	16.47	66 *	72-124
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	19.98	80	72-131
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	23.82	95	76-128
MTBE	<0.1000	25.00	22.04	88	72-129
1,2-Dichloroethane	<0.1000	25.00	32.91	132 *	80-129
Benzene	0.7856	25.00	21.36	82	80-122
Toluene	1.473	25.00	22.55	84	80-120
1,2-Dibromoethane	<0.1000	25.00	23.71	95	80-120
Ethylbenzene	0.2235	25.00	24.77	98	80-123
m,p-Xylenes	0.6283	50.00	45.73	90	80-126
o-Xylene	0.2794	25.00	23.25	92	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-123
1,2-Dichloroethane-d4	121	76-138
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC446852

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	118.9	95	66-153	0	23
Isopropyl Ether (DIPE)	25.00	16.78	67 *	72-124	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	20.71	83	72-131	4	20
Methyl tert-Amyl Ether (TAME)	25.00	24.01	96	76-128	1	20
MTBE	25.00	21.69	87	72-129	2	20
1,2-Dichloroethane	25.00	33.41	134 *	80-129	1	20
Benzene	25.00	22.05	85	80-122	3	20
Toluene	25.00	23.31	87	80-120	3	20
1,2-Dibromoethane	25.00	24.25	97	80-120	2	20
Ethylbenzene	25.00	25.08	99	80-123	1	20
m,p-Xylenes	50.00	47.89	95	80-126	5	20
o-Xylene	25.00	24.17	96	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-123
1,2-Dichloroethane-d4	119	76-138
Toluene-d8	97	80-120
Bromofluorobenzene	101	80-120

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

**Batch QC Report**

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osagie Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Matrix:	Water	Batch#: 139384
Units:	ug/L	Analyzed: 06/18/08
Diln Fac:	1.000	

Type: BS Lab ID: QC446985

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	124.4	99	55-158
Isopropyl Ether (DIPE)	25.00	24.44	98	63-122
Ethyl tert-Butyl Ether (ETBE)	25.00	25.17	101	62-133
Methyl tert-Amyl Ether (TAME)	25.00	24.83	99	69-137
MTBE	25.00	24.96	100	60-136
1,2-Dichloroethane	25.00	27.76	111	77-125
Benzene	25.00	25.07	100	80-120
Toluene	25.00	24.66	99	80-121
1,2-Dibromoethane	25.00	26.33	105	80-120
Ethylbenzene	25.00	22.97	92	80-124
m,p-Xylenes	50.00	45.31	91	80-128
o-Xylene	25.00	22.63	91	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	109	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC446986

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	121.2	97	55-158	3	20
Isopropyl Ether (DIPE)	25.00	22.96	92	63-122	6	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.00	96	62-133	5	20
Methyl tert-Amyl Ether (TAME)	25.00	24.13	97	69-137	3	20
MTBE	25.00	24.26	97	60-136	3	20
1,2-Dichloroethane	25.00	26.18	105	77-125	6	20
Benzene	25.00	23.71	95	80-120	6	20
Toluene	25.00	23.45	94	80-121	5	20
1,2-Dibromoethane	25.00	25.67	103	80-120	3	20
Ethylbenzene	25.00	22.11	88	80-124	4	20
m,p-Xylenes	50.00	43.58	87	80-128	4	20
o-Xylene	25.00	21.64	87	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	105	76-138
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference



**Batch QC Report**

<b>Gasoline by GC/MS</b>		
Lab #:	203982	Location: 1532 Peralta St. Osage Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Type:	BLANK	Diln Fac: 1.000
Lab ID:	QC446987	Batch#: 139384
Matrix:	Water	Analyzed: 06/18/08
Units:	ug/L	

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

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	103	80-123
1,2-Dichloroethane-d4	108	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-120

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

**Batch QC Report**

Gasoline by GC/MS		
Lab #:	203982	Location: 1532 Peralta St. Osagie Property
Client:	Golden Gate Tank Removal	Prep: EPA 5030B
Project#:	8757	Analysis: EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#: 139384
MSS Lab ID:	203923-007	Sampled: 06/11/08
Matrix:	Water	Received: 06/12/08
Units:	ug/L	Analyzed: 06/18/08
Diln Fac:	1.000	

Type: MS Lab ID: QC447020

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.621	125.0	127.0	102	66-153
Isopropyl Ether (DIPE)	<0.1000	25.00	27.00	108	72-124
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	27.64	111	72-131
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	26.51	106	76-128
MTBE	<0.1000	25.00	27.29	109	72-129
1,2-Dichloroethane	<0.1000	25.00	29.10	116	80-129
Benzene	<0.1000	25.00	26.76	107	80-122
Toluene	<0.1000	25.00	26.50	106	80-120
1,2-Dibromoethane	<0.1000	25.00	27.13	109	80-120
Ethylbenzene	<0.1000	25.00	25.59	102	80-123
m,p-Xylenes	<0.1044	50.00	50.61	101	80-126
o-Xylene	<0.1000	25.00	25.10	100	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-123
1,2-Dichloroethane-d4	110	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC447021

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	132.6	106	66-153	4	23
Isopropyl Ether (DIPE)	25.00	25.77	103	72-124	5	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.84	107	72-131	3	20
Methyl tert-Amyl Ether (TAME)	25.00	26.13	105	76-128	1	20
MTBE	25.00	26.95	108	72-129	1	20
1,2-Dichloroethane	25.00	27.85	111	80-129	4	20
Benzene	25.00	25.37	101	80-122	5	20
Toluene	25.00	25.47	102	80-120	4	20
1,2-Dibromoethane	25.00	27.14	109	80-120	0	20
Ethylbenzene	25.00	24.16	97	80-123	6	20
m,p-Xylenes	50.00	47.61	95	80-126	6	20
o-Xylene	25.00	23.71	95	80-122	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-123
1,2-Dichloroethane-d4	108	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

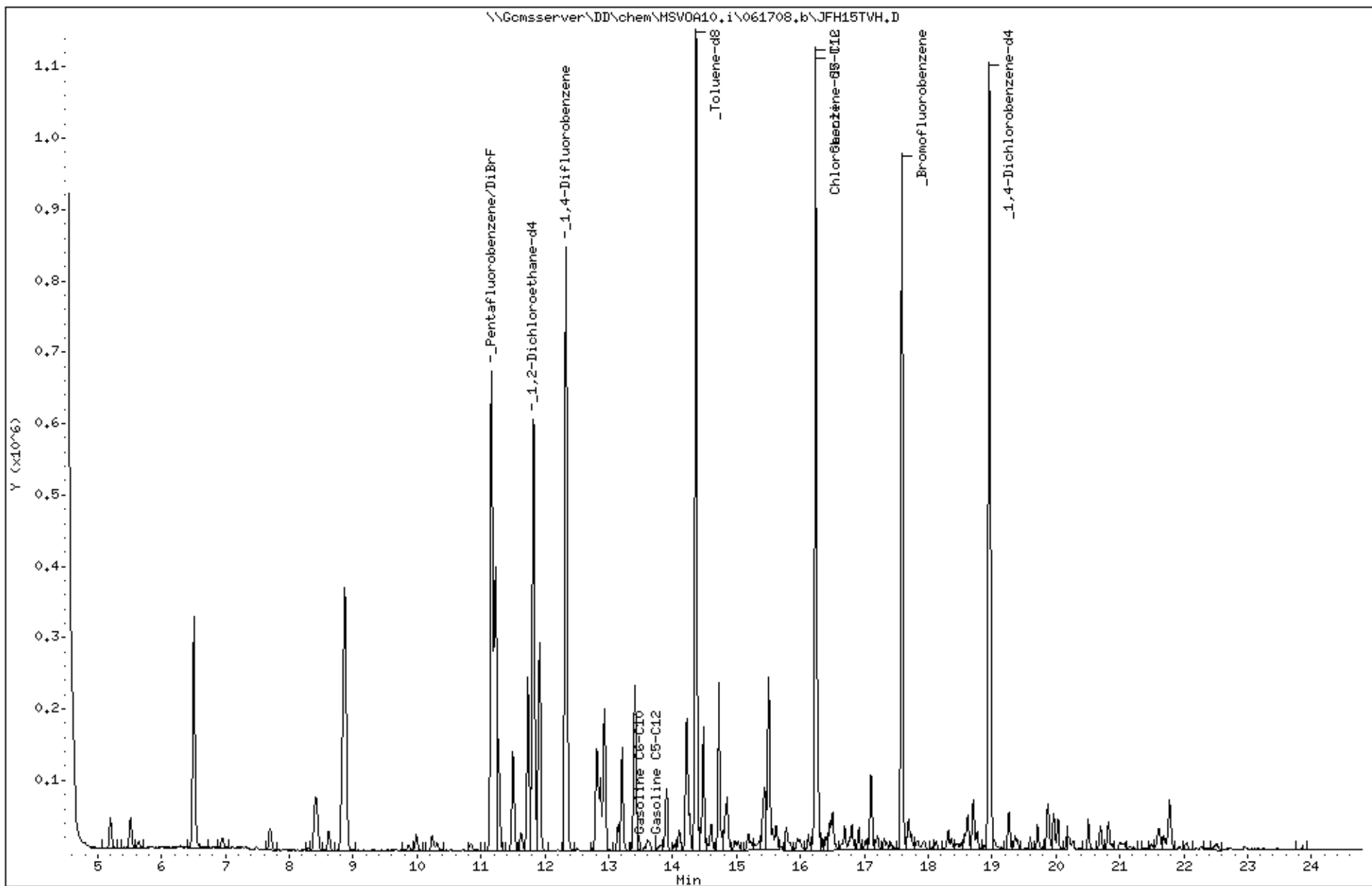
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Client ID: DYNA P&T  
Sample Info: S,203982-001

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



Date : 17-JUN-2008 17:01

Client ID: DYNA P&T

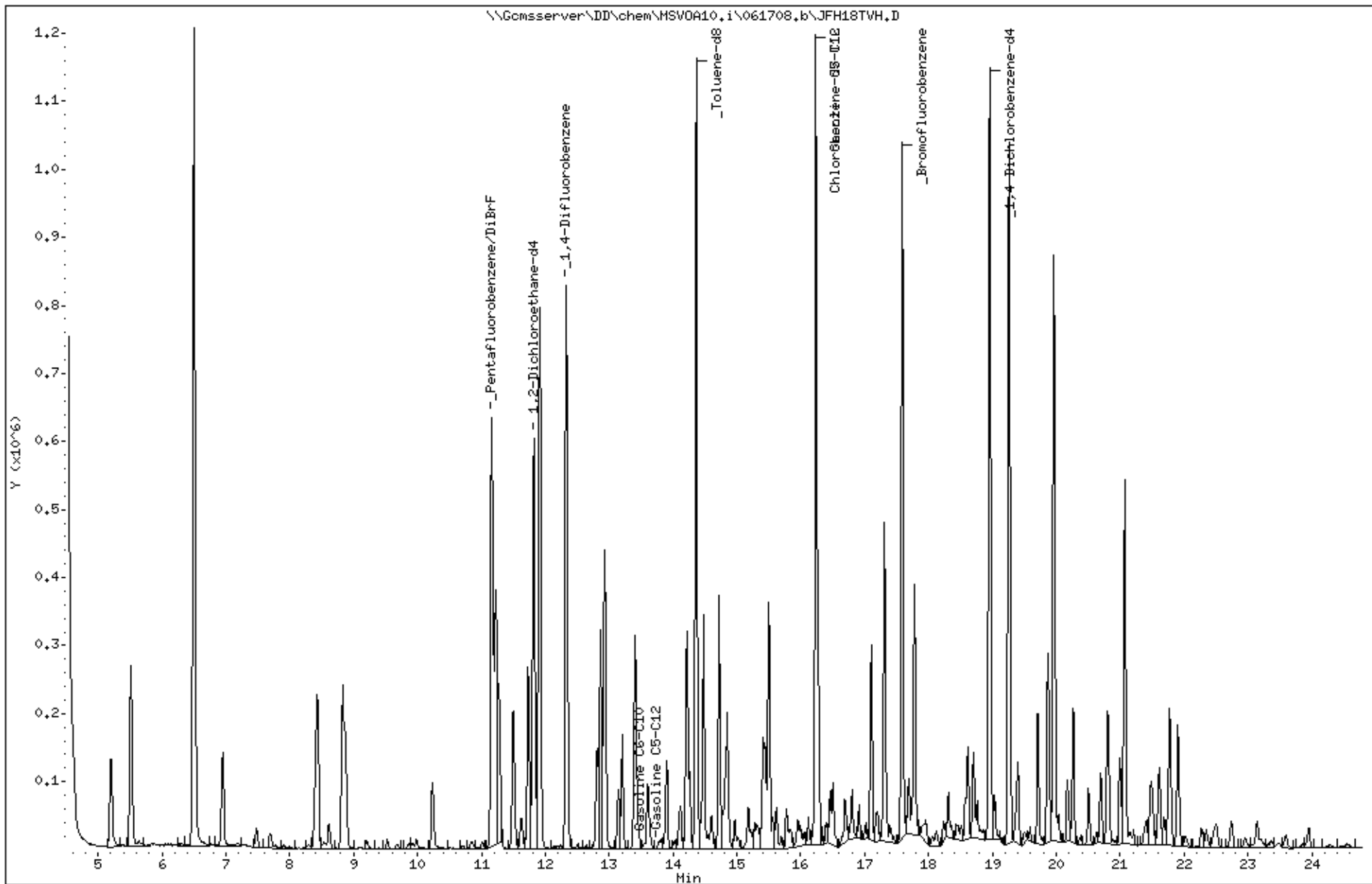
Sample Info: S,203982-004

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



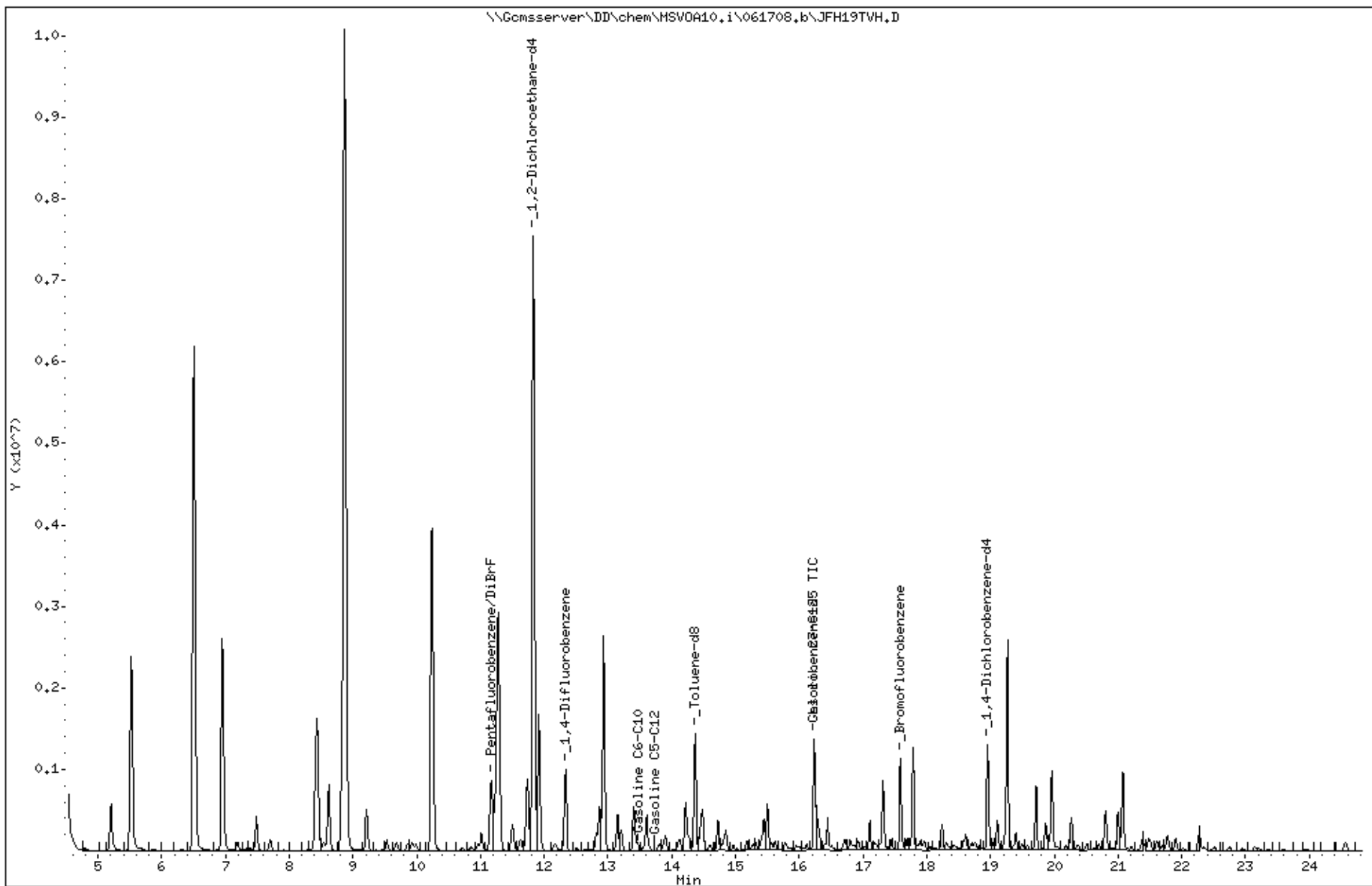
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Client ID: DYNA P&T  
Sample Info: S,203982-006

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



Date : 17-JUN-2008 12:17

Client ID: DYNA P&T

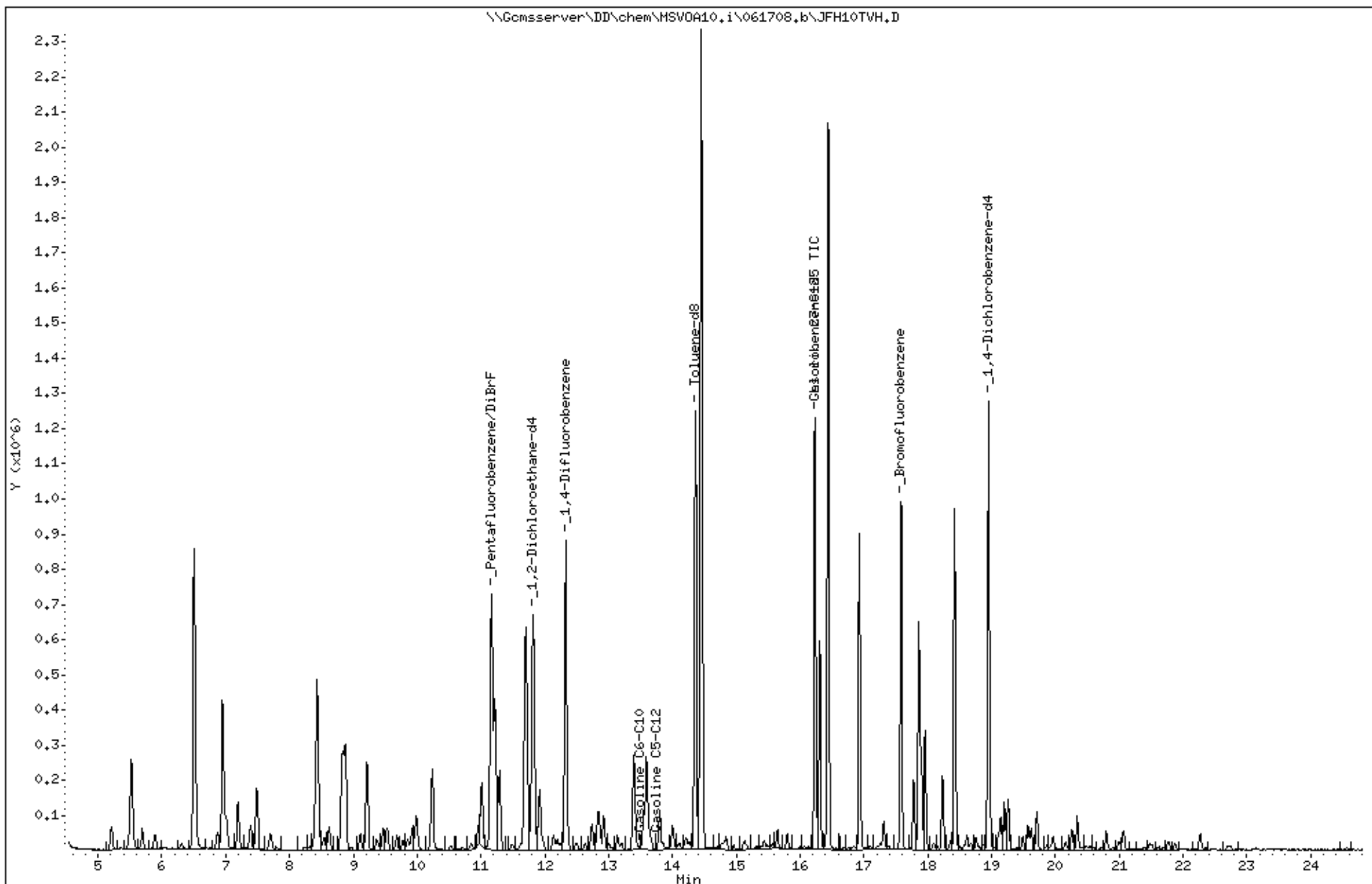
Sample Info: CCV/BS,QC446806,139327,S9460,0,01/100,

Instrument: MSV0A10,i

Operator: VOA

Column diameter: 2,00

Column phase:



**Curtis & Tompkins, Ltd.**

Analytical Laboratory Since 1878

2323 Fifth Street  
Berkeley, CA 94710  
(510) 486-0900 Phone  
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**CHAIN OF CUSTODY**

**Analysis**

C & T LOGIN #: 203982

Project No.: 8757

Sampler: E. Diaz

Project Name: 1532 PERALTA ST.

Report To: BRENT W. WHEELER

Project P.O.: OSAGIE PROPERTY

Company: Golden Gate Tank Removal

Turnaround Time: 5 days

Telephone: 415-512-1555

Fax: 415-512-0964

Global ID: T0600191668

Lab No.	Sample ID.	Sampling Date Time		Matrix			# of Containers	Preservative				
				Soil	Water	Waste		HCL	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	ICE	
1	MW-1	6/12/08	1030	X			3V+1A	X				
2	MW-2		0815	X			3V+14A	X				
3	MW-3		0900	X			3V+14A	X				
4	MW-4		1130	X			3V+14A	X				
5	MW-5		1230	X			3V+14A	X				
6	MW-6		1340	X			3V+14A	X				

TPH-DIESEL 8015																			
8260 Fuel Oxygenates only																			
(Includes BTEX, MTBE, TPH-G)																			

Notes: PROVIDE PDF and EDF Repts.

SAMPLE RECEIPT  
 Intact  Cold  
 On Ice  Ambient  
 Preservative Correct?  
 Yes  No  N/A

RELINQUISHED BY:  
EUGENIO DIAZ 6/13/08 1215  
 DATE / TIME  
 DATE / TIME  
 DATE / TIME

RECEIVED BY:  
[Signature] 6/13/08 1215  
 DATE / TIME  
 DATE / TIME  
 DATE / TIME

[Signature]  
SIGNATURE

**COOLER RECEIPT CHECKLIST**



Login # 203982 Date Received 6-13-08 Number of coolers 1  
 Client Golden Gate Tank Removal Project 1532 Peralta St  
 Date Opened 6-13-08 By (print) F Nichols (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. If required, was sufficient ice used? Samples should be < or = 6°C .....  YES NO N/A  
 Type of ice used:  Wet  Blue  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank  
 Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ..... YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

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

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

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

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

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

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

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

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

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

COMMENTS  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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**Confirmation Number:** 2776211380  
**Date/Time of Submittal:** 6/23/2008 2:28:41 PM  
**Facility Global ID:** T0600191668  
**Facility Name:** OSAGIE PROPERTY  
**Submittal Title:** 203982 - 2Q08 Groundwater Analytical Data (6/12/08)  
**Submittal Type:** GW Monitoring Report

Click [here](#) to view the detections report for this upload.

<b>OSAGIE PROPERTY</b> 1532 PERALTA OAKLAND, CA 94607	<b><u>Regional Board</u></b> SAN FRANCISCO BAY RWQCB (REGION 2) - (CCM) <b><u>Local Agency (lead agency) - Case #: RO0000117</u></b> ALAMEDA COUNTY LOP - (PK)
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<u>CONF #</u>	<u>TITLE</u>	<u>QUARTER</u>
2776211380	203982 - 2Q08 Groundwater Analytical Data (6/12/08)	Q2 2008
<u>SUBMITTED BY</u>	<u>SUBMIT DATE</u>	<u>STATUS</u>
Brent Wheeler	6/23/2008	PENDING REVIEW

### SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	6
# FIELD POINTS WITH DETECTIONS	6
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	6
SAMPLE MATRIX TYPES	WATER

### METHOD QA/QC REPORT

METHODS USED	CATPH-D,SW8260B
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- CATPH-D REQUIRES TPHC28C40 TO BE TESTED	
- CATPH-D REQUIRES TPHC10C28 TO BE TESTED	
- SW8260B REQUIRES XYLENES TO BE TESTED	
LAB NOTE DATA QUALIFIERS	Y

### QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y

- MATRIX SPIKE DUPLICATE Y
- BLANK SPIKE Y
- SURROGATE SPIKE Y

**WATER SAMPLES FOR 8021/8260 SERIES**

- MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% Y
- MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% Y
- SURROGATE SPIKES % RECOVERY BETWEEN 85-115% N
- BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% Y

**SOIL SAMPLES FOR 8021/8260 SERIES**

- MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% n/a
- MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% n/a
- SURROGATE SPIKES % RECOVERY BETWEEN 70-125% n/a
- BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as GGTR (AUTH\_RP)

CONTACT SITE ADMINISTRATOR.

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

<b><u>Submittal Title:</u></b>	<b>Groundwater - Level Monitoring Data (6/12/08)</b>
<b><u>Facility Global ID:</u></b>	<b>T0600191668</b>
<b><u>Facility Name:</u></b>	<b>OSAGIE PROPERTY</b>
<b><u>Submittal Date/Time:</u></b>	<b>6/23/2008 2:35:13 PM</b>
<b><u>Confirmation Number:</u></b>	<b>3933714926</b>

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