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June 1, 2015

Mr. Mark Detterman, P.G., C.E.G.
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: Groundwater Monitoring Report - 2nd Quarter 2015

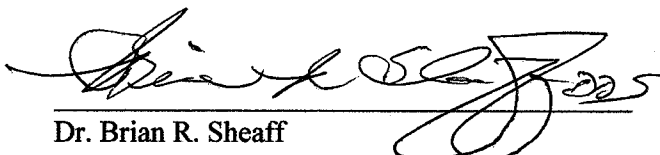
SITE: Sheaff's Garage
5930 College Avenue, Oakland, California
ACHCSA Fuel Leak Case No. RO0000377
GGTR Project 9497

Dear Mr. Detterman:

Upon my authorization, Golden Gate Tank Removal, Inc. has prepared the attached *Groundwater Monitoring Report* for the semi-annual groundwater monitoring and sampling activities conducted during the 2nd Quarter 2015 at the above-referenced property on May 13, 2015. GGTR has uploaded an electronic copy of the document to the State Water Resources Control Board's GeoTracker Database System, as well as the Alameda County Health Care Services Agency FTP Site. Should you have any questions, please contact Mr. Brent Wheeler, Project Engineer of Golden Gate Tank Removal, Inc. at (415) 512-1555 at your convenience.

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

Respectfully Submitted,



Dr. Brian R. Sheaff

William G. Sheaff & Patricia Warren Restated Living Trust U/D/T 2/14/89

TRUSTEE

Distribution: (1) Addressee



*Phase I & II Site Assessments
Vapor Intrusion Assessments
Soil & Groundwater Sampling
Soil Corrosion Testing
Site Remediation
UST Removal & Oversight
Hazardous Waste Management
UST Cleanup Fund Assistance*

**June 1, 2015
GGTR Project #9497**

William G. Sheaff & Patricia Warren Restated Living Trust U/D/T 2/14/89
Dr. Brian Sheaff
1945 Parkside Drive
Concord, CA 94519

RE: Groundwater Monitoring Report – 2nd Quarter 2015

**SITE: Former Sheaff's Garage
5930 College Avenue, Oakland, California
ACHCSA Fuel Leak Case No. RO0000377**

Dear Dr. Sheaff:

Golden Gate Tank Removal, Inc. (GGTR) is pleased to submit the enclosed copy of the *Groundwater Monitoring Report – 2nd Quarter 2015*, which discusses the activities and findings of the groundwater monitoring and sampling event conducted on May 13, 2015 at 5930 College Avenue in Oakland, California. GGTR uploaded an electronic copy of the report to the State Water Resources Control Board's GeoTracker Database System. Upon your approval, an electronic copy will be submitted to the attention of Mr. Mark Detterman via the Alameda County Environmental Cleanup Oversight Program's FTP site.

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

Respectfully Submitted,

Brent A. Wheeler
Golden Gate Tank Removal, Inc.

Enclosures (1)

Cc: Mr. Mark Detterman, ACHCSA – FTP Site
Mr. John Accacian - Email



GROUNDWATER MONITORING REPORT 2nd Quarter 2015

**Sheaff's Garage
5930 College Avenue
Oakland, CA 94618**

Alameda County Fuel Leak Case No. RO0000377

Prepared For:

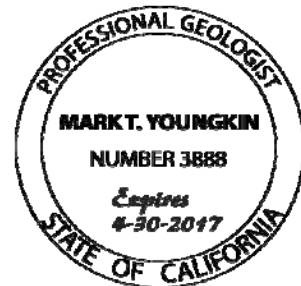
William G. Sheaff & Patricia Warren Restated Living Trust U/D/T 2/14/89
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1945 Parkside Drive
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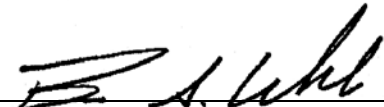
Prepared By:

Golden Gate Tank Removal, Inc.
1480 Carroll Avenue
San Francisco, California 94124


Project No. 9497

Sampling Date: May 13, 2015
Report Date: June 1, 2015





Brent Wheeler
Project Manager



Mark Youngkin
Professional Geologist No. 3888

**GROUNDWATER MONITORING REPORT
2nd Quarter 2015**

Sheaff's Garage, 5930 College Avenue, Oakland, CA

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2. Site Vicinity Map
3. Site Plan
4. Groundwater Data Diagram

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1. Historical Groundwater Levels & Hydrocarbon Analytical Results
2. Historical Groundwater VOC Analytical Results in PW-1

ATTACHMENTS

- A Fluid-Level Monitoring Data Sheets
- Well Purging/Sampling Data Sheets
- B Laboratory Certificate of Analysis
- Chain of Custody Record
- GeoTracker Upload Confirmation Sheets
- EPA On-Line Tools for Site Assessment Calculation Sheet

GROUNDWATER MONITORING REPORT

2nd Quarter 2015

Sheaff's Garage, 5930 College Avenue, Oakland, California

Introduction

Golden Gate Tank Removal, Inc. (GGTR) presents the results of the 2nd Quarter 2015 groundwater monitoring and sampling event conducted on May 13, 2015, at 5930 College Avenue in Oakland, California (the Site). The Alameda County Environmental Health (ACEH) Agency has designated the Site as Fuel Leak Case No. RO000377 and requires semi-annual groundwater monitoring and sampling as part of an ongoing Leaking Underground Storage Tank (LUST) cleanup investigation. Figure 1 presents a Site Location Map. Figure 2 titled Site Vicinity Map and Figure 3 titled Site Plan depict the pertinent features of the Site and adjacent properties along with the associated land use. Figure 4 titled Groundwater Data Diagram shows the groundwater flow direction for the October 20, 2014 event. Table 1 provides a tabulated summary of the laboratory results of historical groundwater sample analyses and fluid-level monitoring data at the Site. Table 2 provides a tabulated summary of sample analyses for Volatile Organic Compounds (VOCs) in piezometer PW-1. Documentation of the monitoring, sampling and laboratory procedures are presented in the attachments.

Site Location

The Site is a commercial property located at 5930 College Avenue along the east side of College Avenue between Harwood Street and Chabot Road in Oakland, California. The Site lies approximately 0.2 mile (1,000 feet) north of Highway 24 and about two miles east of Interstate 80 and the San Francisco Bay. The elevation of the Site is approximately 195 feet above Mean Sea Level. The property is relatively flat lying with the local topographic relief directed toward the west-southwest in the general direction of the San Francisco Bay as shown on Figure 1, Site Location Map. The topographic map of Figure 1 depicts the area of the subject property as dense urban development. Figure 2, Site Vicinity Map, shows the mixed-use commercial-residential character of the surrounding neighborhood. Commercial-retail corridors are located along main thoroughfares such as College Avenue with residential neighborhoods situated between the business corridors.

Site Description

The property is currently 100% occupied by Stauder Automotive Service for the maintenance and repair of automobiles. Figure 3, Site Plan, shows features of the subject property. The subject building is a small single-story industrial-style building constructed in 1952. The subject property is approximately 5,500 square feet in area with about 75% utilized by the garage building and 25% used as an exterior paved storage yard and parking lot. Two underground storage tanks (UST) were formerly located beneath the sidewalk at the southwest corner of the Site on the College Avenue frontage. One 675-gallon gasoline and one 340-gallon waste oil UST were removed in August 1996 from the sidewalk. Product piping was removed from beneath sidewalk and former dispenser location in late 2002. No active USTs, fuel storage, or fuel distribution system currently exist onsite. Most of the building consists of an open work area

with a small enclosed office. The property is completely paved with the building constructed on a concrete slab and surrounded by concrete sidewalk and asphalt-paved rear parking area.

A commercial-residential building is adjacent to the Site on the south with address of 5916-20 College Avenue. This building contains a parking garage and a retail store (T-Mobile) on the ground floor and 12 apartments on three upper floors. To the south and east of the Site is an older single-family residential neighborhood with residence backyards adjoining the Site's rear paved parking area. The surface channel of Harwood Branch creek is located within residential backyards about one block east and up-gradient of the Site. On the west, an Alameda County Flood Control District cutoff storm water conduit (90" diameter) associated with Harwood Branch creek is located beneath College Avenue. A church and retail shopping building occur across College Avenue to the west.

The adjacent property to the north was formerly occupied by Chevron Service Station #209339 from 1938 to 1968. Former station facilities consisted of four USTs, one dispenser island, station building and a garage-service building. The station was replaced by a parking lot until redeveloped with a multi-tenant commercial-retail structure in 1978-1979 named College Square. College Square is currently occupied by a restaurant (Barclays Restaurant & Pub) and office space (5940 College Avenue). This commercial development's ground floor retail space and parking garage are approximately 3-4 feet below the grade of the subject property. Conestoga-Rovers & Associates (CRA; Emeryville, CA) and Gettler-Ryan, Inc. (GR; Dublin, CA) conducted a separate groundwater investigation of the former Chevron Station utilizing two groundwater monitoring wells (GR-MW1 & GR-MW2) to evaluate the potential contamination in groundwater. Both wells were destroyed in October 2015 as a condition for case closure. Figures 2 and 3 show the location of each former CRA / Gettler-Ryan well relative to the monitor wells on the subject property.

Since April 8, 2002, CRA / Gettler-Ryan monitored and sampled each well on a biannual basis, performing their most recent monitoring and sampling event of GR-MW1 & GR-MW2 in October 2012. Golden Gate Tank Removal, Inc. and GGE conducted joint monitoring and sampling activities with CRA between October 2000 and October 2011. Chevron performed additional investigation and submitted data gap and case closure request documents in 2013-2014. In a letter dated June 13, 2014, the ACHCSA issued its *Public Participation Notification for Potential Case Closure* for the 5940 College Avenue property. Following completion of the public comment period and submittal of CRA's November 19, 2014 *Well Destruction Report*, the ACEH submitted its *Remedial Action Completion Certification & Case Closure Summary* for the adjoining site on December 12, 2014.

Groundwater Monitoring & Sampling: May 2015

The scope of work for the 2nd Quarter 2015 groundwater monitoring and sampling event included the following:

- Monitoring, purging and sampling of field points MW-1, MW-2, MW-3 and PW-1
- Laboratory analysis of groundwater samples
- Waste management
- Electronic data upload to GeoTracker Database System
- Data interpretation

On May 13, 2015, GGTR in conjunction with Dysert Environmental, Inc. (DEI) monitored and sampled wells MW-1, MW-2, MW-3 and piezometer PW-1.

Groundwater Monitoring and Sampling

Prior to purging and sampling, DEI removed the well cover and locking compression cap and allowed the water in each well column to stabilize for a minimum of 20 minutes. DEI then measured and recorded the depth to product/groundwater using a Keck electronic oil/water interface meter. Fluid levels were measured relative to the north side of the top of each well casing to the nearest 0.01 foot. No floating petroleum product was detected at the Site. A mild to strong odor of petroleum or gasoline was noted in wells MW-1 and MW-2 only. Groundwater depths ranged from 8.89 in well MW-3 to 10.48 feet below grade in well MW-2.

DEI subsequently purged groundwater from the monitor wells using a peristaltic pump (average flow rate @ 125 to 200 milliliters per minute), and simultaneously monitored and recorded the pH, temperature, and specific conductivity of the purged well water. DEI terminated well purging after evacuation of approximately 1.1 to 2.4 liters of water from each well and three successive readings of each parameter varied by less than 0.1, 10%, and 3%, respectively. DEI transferred the purge water directly to a 55-gallon, D.O.T.-approved steel drum.

After the groundwater in each well recharged sufficiently to allow sample collection (at least 80% of initial depth to water), DEI recovered a groundwater sample using a peristaltic pump with dedicated tubing lowered just below the last measured groundwater level. The groundwater sample was collected from the discharge end of the dedicated tubing into pre-cleaned, laboratory-provided sample containers. The sample containers were sealed with Teflon caps and all volatile organic analysis (VOA) vials were inverted and checked to insure that no entrapped air was present. The samples were properly labeled and stored in a cooler chilled to approximately 4°C. Attachment A contains a copy of the Fluid-Level Monitoring Data Form and Well Purging/Sampling Data Sheets for this event.

Waste Management

The well purge and equipment wash and rinse water generated during this event was transferred directly to a D.O.T.-approved, 55-gallon drum, appropriately labeled and sealed, and temporarily stored onsite in a secure area for use with future groundwater monitoring/investigation work.

Water Sample Analytical Methods

On May 14, 2015, DEI submitted all groundwater samples under formal chain of custody command to Torrent Laboratory, Inc., a State-certified analytical laboratory (CA ELAP #1991) in Milpitas, California, for laboratory analysis of the following fuel constituents:

- Total Petroleum Hydrocarbons (TPH) as Gasoline by Method 8260TPH
- TPH as Diesel/Motor Oil by Method SW8015B(M)
- Naphthalene by Method SW8260B
- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) by Method SW8260B
- Methyl Tertiary Butyl Ether (MTBE), Tertiary Butyl Alcohol (TBA), 1,2-Dibromoethane (EDB), 1,2-Dichloroethane (EDC) by Method SW8260B
- Poly-Aromatic Hydrocarbons (PAHs) by Method SW8270C
- Volatile Organic Compounds (Full List) by Method SW8260B (PW-1 only)

Tables 1 and 2 attached present a summary of the analytical results for the sampling event as well as previous monitoring/sampling events at the Site. Attachment B includes a copy of the Laboratory Certificate of Analysis and associated Chain of Custody Record for this event.

Torrent submitted their certified analytical report on May 21, 2015. Torrent completed all volatile organic analyses within the 14-day required time limit for analysis. Torrent reported that no issues were encountered with the receiving, preparation, analysis or reporting of the results associated with the submitted samples. GGTR directed Torrent to submit all analytical data in electronic deliverable format (EDF) in accordance with the State Water Resources Control Board's GeoTracker database system.

GeoTracker Electronic Submittal

Torrent submitted 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) for each event 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 Sheet.

Groundwater Monitoring Results

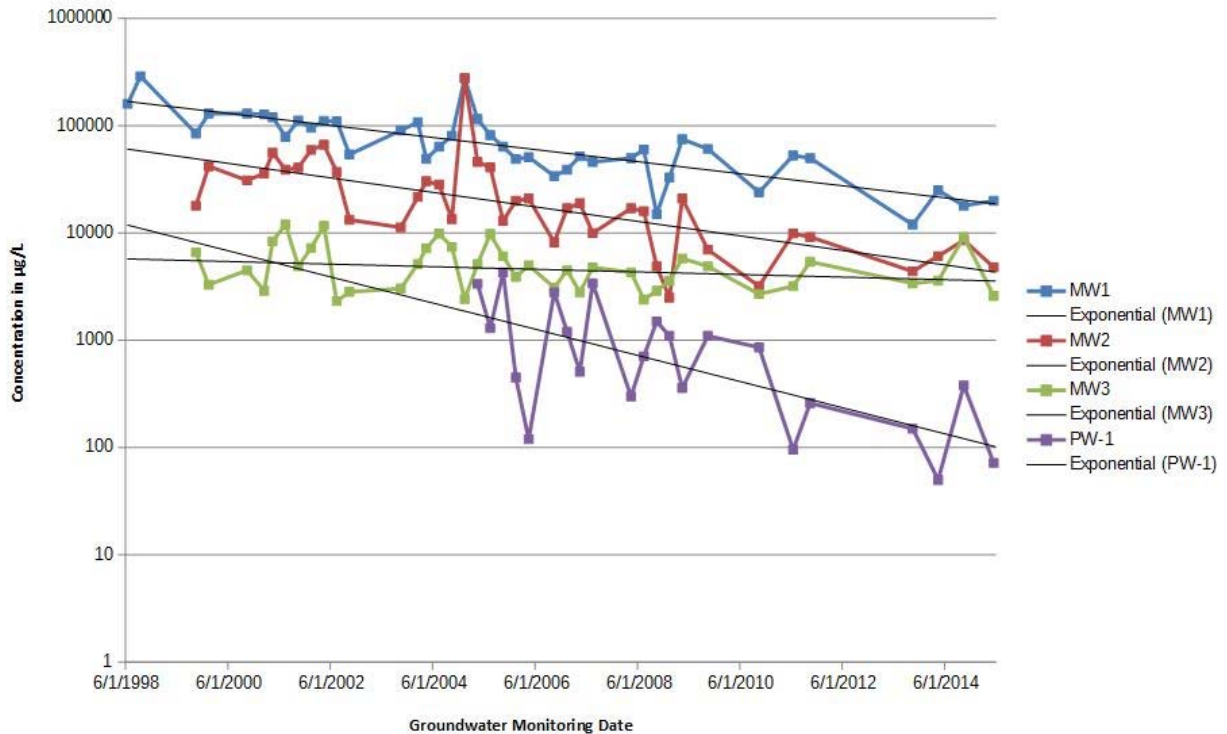
For the May 13, 2015 event, the groundwater elevations calculated relative to the top of well casing in wells MW-1, MW-3 and PW-1 ranged between 186.33 (MW-3) and 187.11 (PW-1) feet, as referenced to Mean Sea Level (MSL), a range of 0.78 feet. The groundwater elevation and coordinate data for each monitoring event was entered into the EPA On-Line Tools for Site Assessment Calculation, Hydraulic Gradient – Magnitude and Direction. This tool calculates gradient by a least-squares fitting of the data to a plane and used to calculate the approximate groundwater hydraulic gradient and flow direction across the Site. The attached Figure 4, titled Groundwater Data Diagram - May 2015 shows the groundwater data for the subject monitoring event. The EPA On-Line Tools for Site Assessment Calculation sheet is included in Attachment B.

During the May 13, 2015 monitoring event, the groundwater flow direction beneath the Site was estimated at South 26° West (206°) under a hydraulic gradient of approximately 0.007 ft/ft. The groundwater flow direction for the May 13, 2015 event shifted approximately 127° to the south, as compared to the October 2014 event, and is consistent with historical data for the Site with the flow direction ranging widely from south to northwest. The large variation in groundwater flow direction is inconsistent with previous studies at nearby former gasoline stations. The wide variation in flow direction data may be attributed to the subject monitor array consisting of few monitor wells arranged in a linear direction within the narrow site boundaries. One site well MW-2 has previously been excluded from flow direction calculations for obvious inconsistencies in groundwater elevation data.

Results of Groundwater Sampling and Laboratory Analysis

The attached Tables 1 & 2 include the historical groundwater analysis results for the May 2015 event and the associated laboratory report is included in Attachment B. As shown on Table 1, the laboratory reported concentrations of TPH as gasoline ranging from 72 µg/l in piezometer PW-1 to 20,000 µg/l in well MW-1 in groundwater samples collected during the May 2015 event. Benzene concentrations ranged between <0.5 µg/l in piezometer PW-1 to 2,700 µg/l in well MW-1. As compared with the October 2014 event, the gasoline constituent concentrations increased in well MW-1 from 18,000 to 20,000 µg/l; however, the Benzene concentration decreased from 5,600 to 2,700 µg/l. The TPH as gasoline measured in MW-2 decreased from 8,600 to 4,800 µg/l and in MW-3 from 9,200 to 2,600 µg/l.

The following chart plots gasoline concentrations in monitor wells versus time displaying an overall decreasing trend in contaminant concentrations following primary source removal in 1996. The recently measured concentrations appear consistent with the historical trend lines.



Per the most recent ACDEH Letters dated April 11, 2014 and April 9, 2015, samples collected from each monitoring well were to be additionally analyzed for Naphthalene, PAHs, and TPH as diesel and motor oil. During the May 2015 event, the laboratory reported Naphthalene at 360 µg/l in well MW-1, 30 µg/l in well MW-2, and ND<8.4 µg/l in well MW-3, with concentrations having slightly increased in MW-1 & MW-2 since the October 2014 event. TPH as diesel was detected in MW-1 to MW-3 and PW-1 at concentrations of 2600, 2300, 630 and <0.1 µg/l, respectively. The laboratory analytical report noted that for each TPH as diesel sample result, the chromatographic pattern does not resemble the typical diesel reference standard, and that unknown organics within the diesel range (lighter than diesel quantified as diesel) are present. TPH as motor oil was detected in MW-3 only, at 530 µg/l. Also, 2-Methylnaphthalene (PAH) was detected in MW-1 at 120 µg/l, slightly increasing from 110 µg/l measured in this well in October 2014.

PCE was detected in the groundwater sample collected in well PW-1 at a concentration of 93 µg/l, increasing from the 36 µg/l concentration measured during the October 2014 event. As shown on Table 2, the recently measured PCE concentration of 93 µg/l slightly exceeds its applicable San Francisco Bay Regional Water Quality Control Board Tank Removal Screening Level (63 µg/l), however below the historical high values for PCE of 120 and 110 µg/l reported in April 2009 and 2014, respectively. Since April 2005, PCE concentrations in well PW-1 continue to seasonally fluctuate between 25 and 120 µg/l. The PCE breakdown products of TCE and Cis-1,2-DCE were measured in well PW-1, each at a concentration of 2.6 µg/l during this event. Table 2 includes a summary of the historical groundwater VOC analysis results for the May 2015 event and the complete VOC laboratory report for well PW-1 is included in Attachment B.

Conclusions / Recommendations

Due to the elevated concentrations of TPH-G and Benzene remaining in monitor wells MW-1 to MW-3, GGTR, recommends continuing the groundwater monitoring and sampling program at the subject property on a semi-annual basis. Sampling should continue during the 2nd & 4th Quarters, in which historical groundwater contaminant concentrations in MW-1 to MW-3 have generally been the highest. The next semi-annual monitoring and sampling event is tentatively scheduled at the Site in October 2015.

Unless otherwise directed by the ACDEH, groundwater samples will continue to be analyzed for TPH as gasoline, BTEX, MTBE and Naphthalene by EPA Method SW8260B, TPH as diesel/motor oil by SW8015M, and PAHs by EPA Method SW8270C. Additionally, GGTR recommends continuing analysis of the groundwater sample from PW-1 for VOCs (full list) by EPA Method 8260B to further monitor the elevated concentrations of PCE in groundwater in the vicinity of this field point.

Upon receipt of all necessary permits, GGTR will implement the approved January 2015 *Data Gap Investigation Work Plan* drilling and sampling activities at the Site, and prepare a Site Investigation Report for ACDEH review.

Report Distribution

This report and future correspondence associated with GGTR Project 9497 will be submitted to:

Mr. Mark Detterman, P.G., C.E.G.
Alameda County Health Care Services Agency
Tank Removal Health Services
Tank Removal Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577 *(1Electronic Copy via ACHCSA FTP Site)*

Dr. Brian R. Sheaff, D.D.S.
1945 Parkside Drive
Concord, CA 94519 *(1 Copy; Bound)*

Limitations

It should be understood that all Tank Removal assessments are inherently limited in that conclusions are drawn and recommendations developed from information obtained from limited research and visual observations. Subsurface conditions change significantly with distance and time and may differ from the conditions implied by subsurface investigation. It must be noted that no investigation can absolutely rule out the existence of any hazardous materials at a given site. Existing hazardous materials and contaminants can escape detection using these methods. The work performed in conjunction with this assessment and the data developed are intended as a description of available information at the dates and location given.

GGTR's professional services have been performed, with findings obtained and recommendations prepared in accordance with customary principles and practices in the field of Tank Removal science, at the time of the assessment. This warranty is in lieu of all other warranties either expressed or implied. GGTR is not responsible for the accuracy of information reported by others or the independent conclusions, opinions or recommendations made by others based on the field exploration presented in this report. 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. No other party may rely on this report for any other purpose.

GROUNDWATER MONITORING REPORT
2nd Quarter 2015

Sheaff's Garage
5930 College Avenue
Oakland, CA 94618

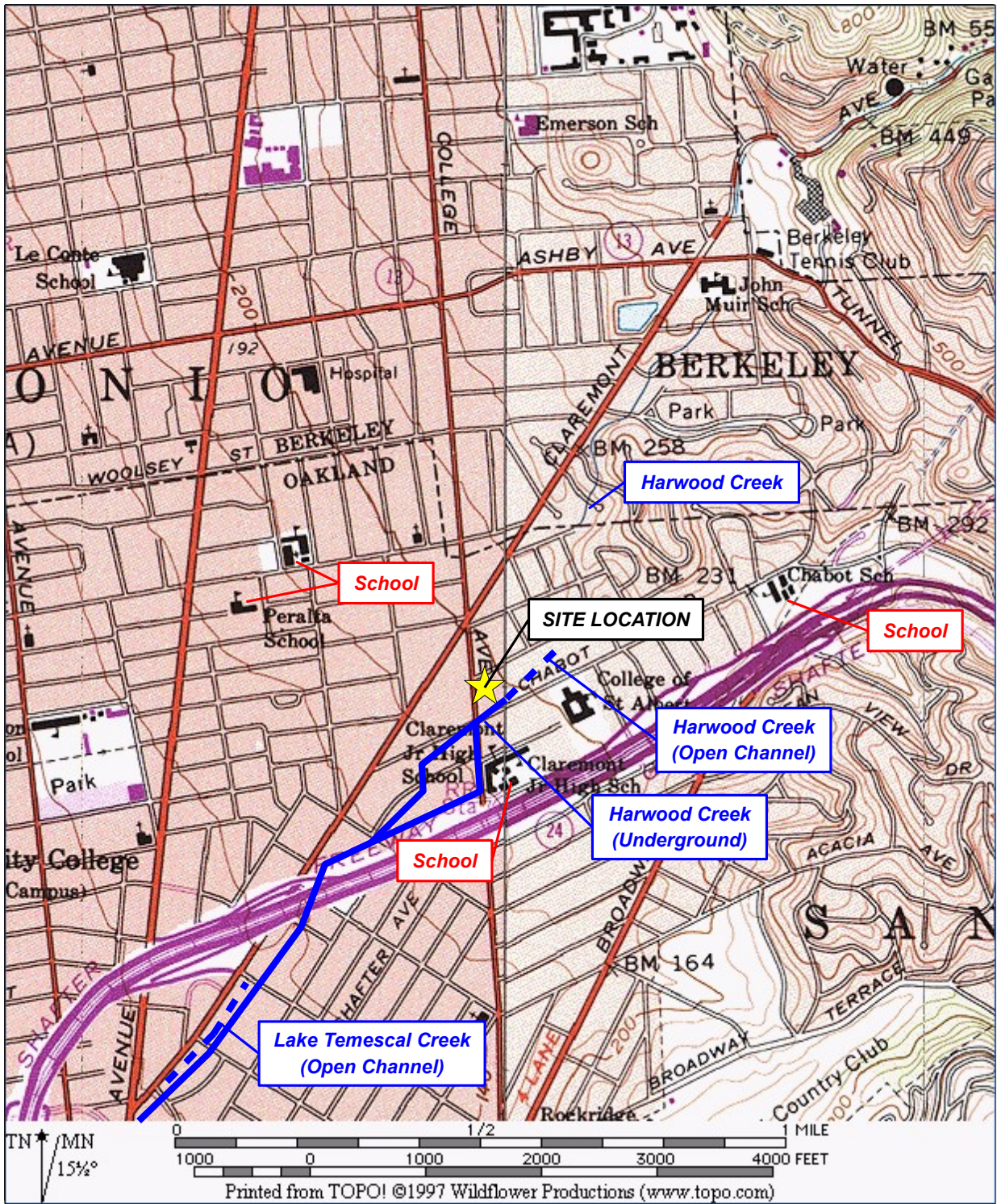
ACHCSA Fuel Leak Case No. RO0000377

FIGURES

- Figure 1 - Site Location Map**
- Figure 2 - Site Vicinity Map**
- Figure 3 - Site Plan**
- Figure 4 - Groundwater Data Diagram**

Golden Gate Tank Removal, Inc.
1480 Carroll Avenue, San Francisco, CA 94124

GGTR Project No. 9497



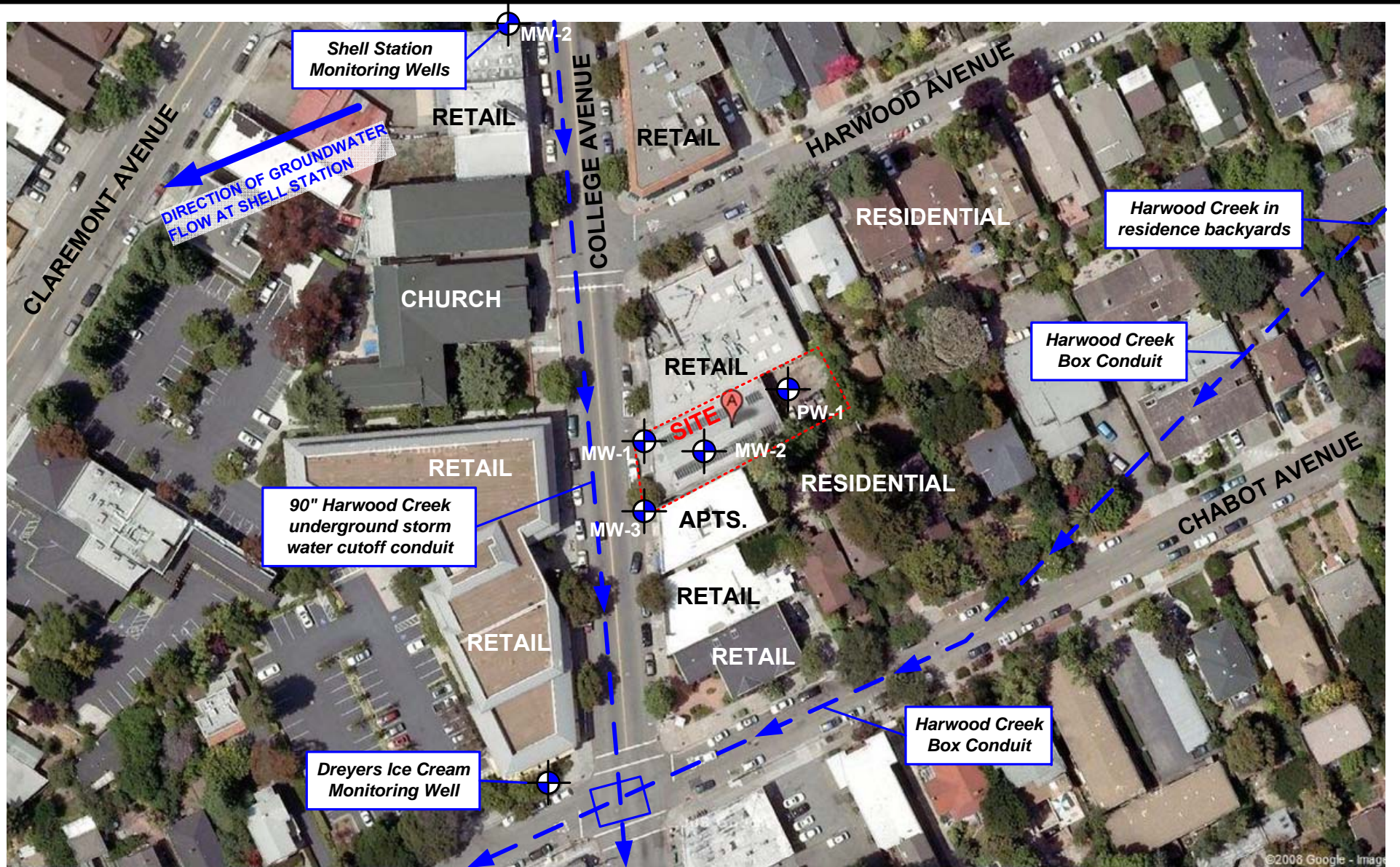
GOLDEN GATE ENVIRONMENTAL, INC.
 1455 Yosemite Av., San Francisco, CA 94124
 Phone (415) 970-9088 Fax (415) 970-9089

SITE LOCATION MAP
 5930 College Avenue, Oakland, California

GGE Project No. 2014

October 2014

Figure 1



Base Map from Google Maps, 2008, at a scale of about 1"=100 feet with North to top of map.

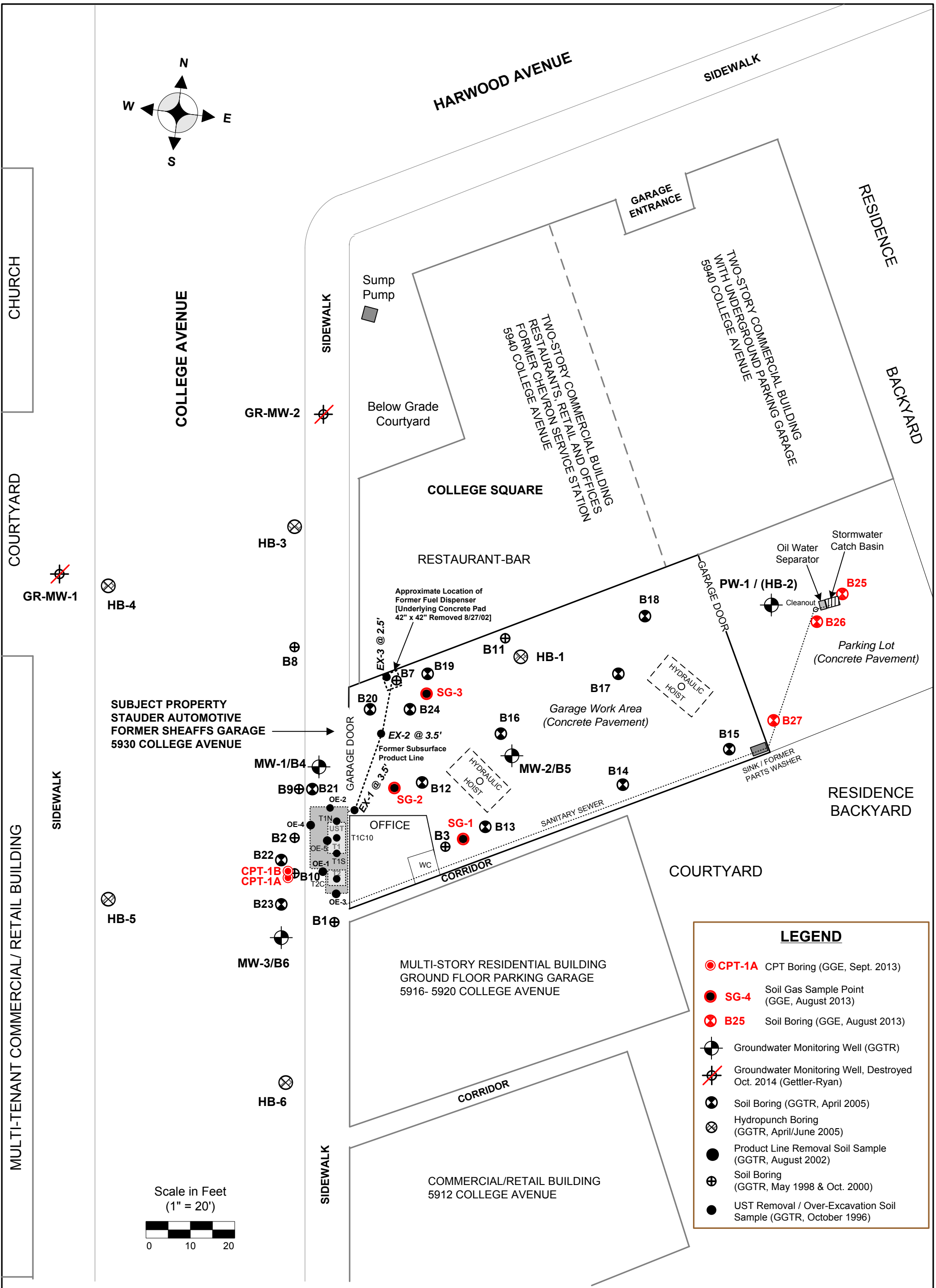
GOLDEN GATE TANK REMOVAL, INC.
 1480 Carroll Avenue, San Francisco, CA 94124
 Phone (415) 512-1555 Fax (415) 512-0964

SITE VICINITY MAP
 Sheaffs Garage
 5930 College Avenue, Oakland, California

GGTR Project No. 9497

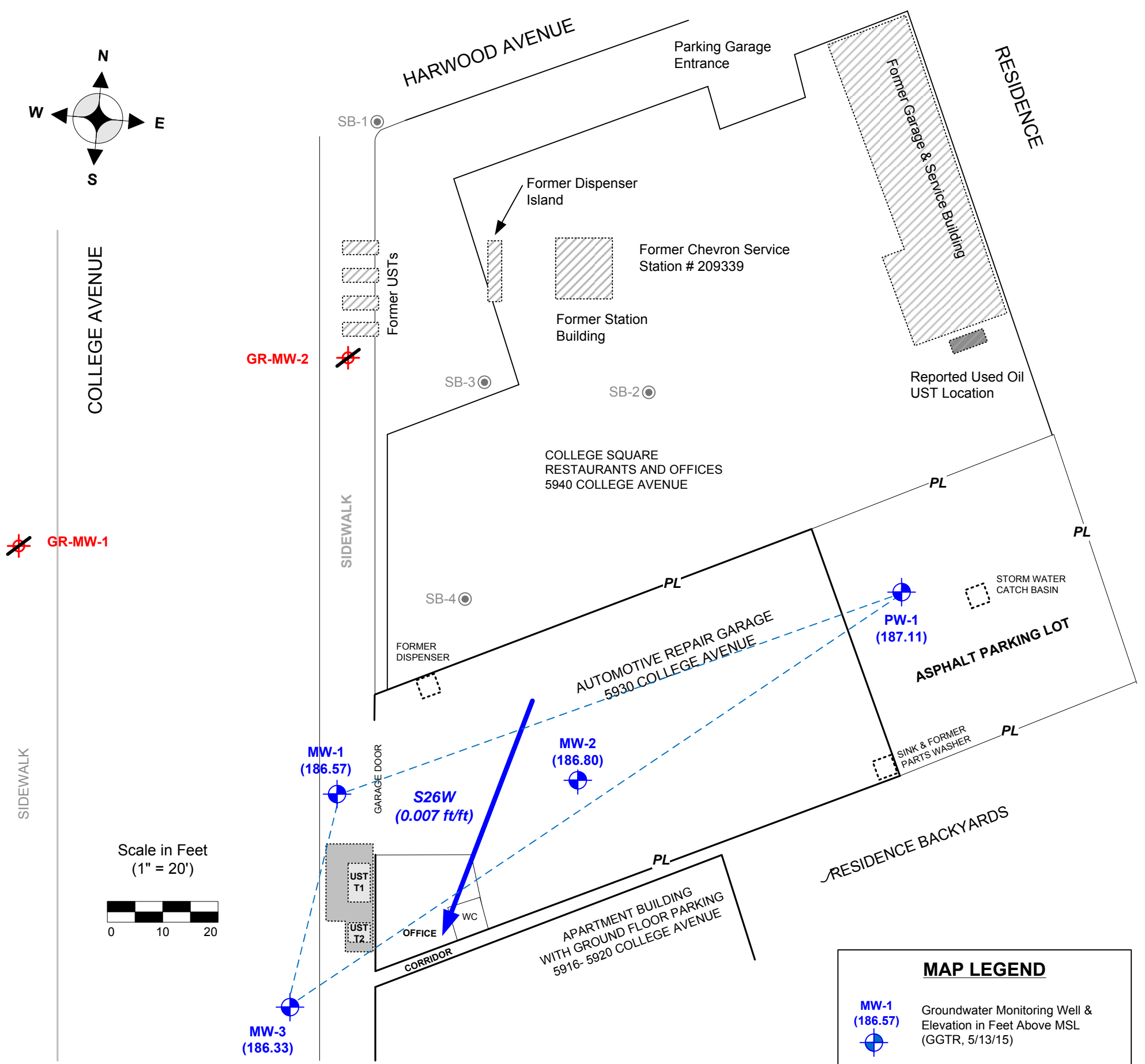
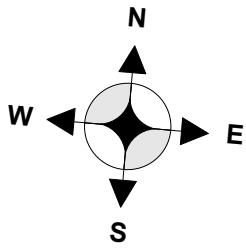
May 2015

FIGURE 2

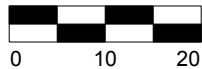


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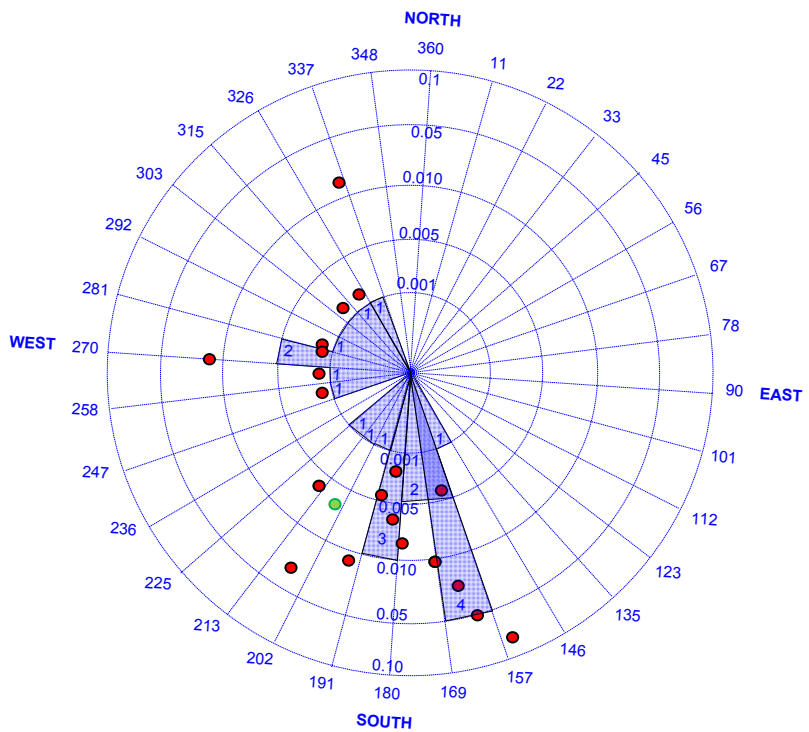
SITE PLAN
 Former Sheaff's Service Garage
 5930 College Avenue, Oakland, CA 94618



Scale in Feet
(1" = 20')



ROSE DIAGRAM



Rose diagram showing historic flow direction & gradient. Circles show recent data from three wells MW-1, MW-3 & PW-1 since April 14, 2005. Note non-linear scale for gradient to accommodate large variation in data. Bar graph shows number of values within each interval of flow direction for 2005-2014 data.

Date Groundwater Flow Direction / Hydraulic Gradient (ft/ft)

Wells MW-1, MW-3 & PW-1:

4/14/05	161.3@0.05
7/26/05	282.5@0.002
10/14/05	309.9@0.002
1/13/06	194.8@0.016
04/14/06	208.5@0.026
10/26/06	249.9@0.002
01/30/07	325@0.002
04/13/07	265.9@0.002
07/24/07	281.8@0.002
4/21/08	155.2@0.072
7/22/08	270.4@0.012
10/21/08	159.5@ 0.004
1/19/09	184 @ 0.0017
10/27/09	179 @ 0.008
10/14/10	188 @ 0.004
6/9/11	184 @ 0.006
10/7/11	216 @ 0.006
10/16/2013	169.1@0.012
4/14/2014	161.6@0.025
10/20/2014	333.4@0.014
5/13/2015	206 @ 0.007

MAP LEGEND

- MW-1 (186.57)** Groundwater Monitoring Well & Elevation in Feet Above MSL (GGTR, 5/13/15)
- GR-MW-1** Gettler-Ryan Groundwater Monitoring Well, Destroyed Oct. 2014
- Approximate Groundwater Flow Direction and Hydraulic Gradient (GGTR, 5/13/15)
- ug/L Micrograms per liter
- Approx. Limit of Former UST Excavation
- PL** Property Line

GOLDEN GATE TANK REMOVAL, INC.
1480 Carroll Avenue, San Francisco, CA 94124
Phone (415) 512-1555 Fax (415) 512-0964

GROUNDWATER DATA DIAGRAM
May 2015
Sheaffs Service Garage
5930 College Avenue, Oakland, CA 94618

**GROUNDWATER MONITORING REPORT
2nd Quarter 2015**

**Sheaff's Garage
5930 College Avenue
Oakland, CA 94618**

ACHCSA Fuel Leak Case No. RO0000377

TABLES

**TABLE 1A - Historical Results of Groundwater Sample Analysis & Fluid-Level Data
TABLE 1B - Groundwater Sampling Results for VOCs in PW-1**

Golden Gate Tank Removal, Inc.
1480 Carroll Avenue, San Francisco, CA 94124

GGTR Project No. 9497

TABLE 1
Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft, MSL)	Depth to GW (ft, TOC)	Water Elevation (ft, MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)	
MW-1	6/1/98	50.00 *	4.81	45.19	slight sheen	160000	NA	1900	28000 / 21000 / 3800 / 21000	NA	
	9/10/98	50.00 *	7.5	42.5	Odor	290000	NA	440	<50 / 25000 / 7100 / 32000	NA	
	10/7/99	50.00 *	10.04	39.96	Odor	85000	NA	1100	20000 / 13000 / 3800 / 17000	NA	
	1/26/00	50.00 *	8.26	41.74	slight sheen	130000	NA	470	25000 / 18000 / 4500 / 22000	NA	
	10/25/00	50.00 *	10.1	39.9	Odor	130000	NA	1300	23000 / 12000 / 3900 / 18000	NA	
	2/2/01	50.00 *	9.61	40.39	Odor	128000	NA	780	19000 / 11000 / 3800 / 18000	NA	
	4/25/01	195.9		7.39	188.51	Odor	120000	NA	900	21000 / 13000 / 390 / 18000	NA
	7/10/01		9.72	186.18	Odor	79000	NA	660	15000 / 7800 / 3000 / 15000	NA	
	10/8/01		10.88	185.02	Odor/sheen	112000	NA	374	25300 / 11800 / 4280 / 20600	NA	
	1/7/02		4.34	191.56	Odor	96100	NA	596	21100 / 13500 / 4160 / 21900	NA	
	4/8/02		6.84	189.06	slight odor	111000	NA	679	21200 / 13400 / 4230 / 21000	NA	
	7/9/02		9.4	186.5	slight odor	110000	NA	570	20300 / 13300 / 4060 / 19800	NA	
	10/23/02		11.04	184.86	None	54100	NA	1010 (1080)**	10800 / 3870 / 2320 / 9440	NA	
	10/15/03		10.8	185.1	None	90700	NA	724	17800 / 4740 / 3150 / 13900	NA	
	2/2/04		7.35	188.55	None	108000	NA	194	14200 / 7420 / 3450 / 19800	NA	
	4/23/04		6.83	189.07	slight odor	49200	NA	114	7910 / 1480 / 1810 / 10100	NA	
	7/19/04		8.95	186.95	Odor	63900	NA	303	7260 / 2270 / 2510 / 10100	NA	
	10/22/04		10.15	185.75	None	80700	NA	493 (296)**	13900 / 1670 / 3550 / 15200	NA	
	1/21/05		5.45	190.45	Odor	278000	NA	271 (174)**	14700 / 25300 / 10800 / 73500	NA	
	4/14/05		5.3	190.6	Odor /sheen	116000	NA	366 (410)**	15100 / 7080 / 4220 / 20700	NA	
	7/26/05		7.6	188.3	Odor	82000	NA	ND<250	12000 / 4500 / 3300 / 14000	NA	
	10/14/05		9.58	186.32	Odor/sheen	64000	NA	ND<250	13000 / 5700 / 3400 / 16000	NA	
	1/13/06		4.6	191.3	Odor/sheen	49000	NA	ND<250	12000 / 5300 / 3500 / 17000	NA	
	4/14/06		3.08	192.82	Odor	51000	NA	270	14000 / 5300 / 3500 / 17000	NA	
	10/26/06		9.22	186.68	Odor	34000	NA	ND<250	12000 / 1600 / 3100 / 8600	NA	
	1/30/07		9.6	186.3	Odor	39000	NA	ND<200	10000 / 2200 / 2900 / 10000	NA	
	4/13/07		9.24	186.66	NM	52000	NA	150	9100 / 2600 / 3100 / 11000	NA	
	7/24/07		10.67	185.23	None	46000	NA	240	10000 / 1200 / 3500 / 6200	NA	
	4/21/08		7.24	188.66	None	50000	NA	ND<100	7800 / 1500 / 3000 / 12000	NA	
	7/22/08		9.71	186.19	Odor	60000	NA	470 ¹	8100 / 1500 / 2700 / 9800	NA	
	10/21/08		11.63	184.27	Odor	15000	NA	110	4900 / 430 / 1900 / 2260	NA	
	1/19/09		10.91	184.99	Odor/Sheen	33000	NA	143	8830/837/2160/3880	NA	
	4/27/09		7.7	188.2	Odor	75000	NA	53	8500/2100/2300/11000	NA	
	10/27/09		9.34	186.56	Odor	61000	NA	75	8300/1500/2600/7900	NA	
	10/14/10		10.3	185.6	Clear/Odor	24000 ²	NA	220	8100/820/2200/4400	NA	
	6/9/11		6.38	189.5	Clear/Odor	53000	NA	NA	14000/3000/3800/16900	NA	
10/7/11	9.08		186.82	None	50000 ²	NA	89	9200/1500/4200/13500	NA		
10/16/13	10.83		185.07	Clear	12000 ²	NA	ND<21	2400/330/1500/2780	NA		
4/4/14	10.92		184.98	Clear	25000 ⁶	3000 ^{7,8}	ND<21	3000/480/2100/6700	500 ⁹		
10/20/14	11.2		184.7	Clear/Odor	18000 ²	2000 ^{7,8}	63	5600/300/2000/910	300 ⁹		
5/13/15	9.33		186.57	Clear/Odor	20000	2600 ^{7,8}	57	2700/340/1600/2760	360 ⁹		
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24	

Table & Notes Following

TABLE 1 (Cont.)
Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft, MSL)	Depth to GW (ft, TOC)	Water Elevation (ft, MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)	
MW-2	10/7/99	51.42*	11.49	39.93	slight/odor	18000	NA	490	3000 / 1700 / 1000 / 3900	NA	
	1/26/00	51.42*	7.85	43.57	None	42000	NA	560	9300 / 2200 / 2300 / 7700	NA	
	10/25/00	51.42*	11.57	39.85	slight/odor	31000	NA	500	5500 / 370 / 1700 / 2600	NA	
	2/2/01	51.42*	10.77	40.65	Odor	36000	NA	400	4300 / 530 / 1800 / 4500	NA	
	4/25/01	197.28	8.52	188.76	Odor	56000	NA	460	6700 / 1700 / 2600 / 8200	NA	
	7/10/01		11.05	186.23	Odor	39000	NA	180	6200 / 730 / 2300 / 6100	NA	
	10/8/01		12.79	184.49	Odor/sheen	40700	NA	6460	6310 / 399 / 2100 / 5320	NA	
	1/7/02		4.92	192.36	Odor	59600	NA	366**	10300 / 3250 / 4180 / 14400	NA	
	4/8/02		8.4	188.88	slight odor	66700	NA	583**	10200 / 2670 / 3840 / 13200	NA	
	7/9/02		10.55	186.73	slight odor	37100	NA	303 (298)**	5340 / 890 / 2110 / 6920	NA	
	10/23/02		13.85	183.43	None	13300	NA	322 (360)**	2420 / 216 / 922 / 1470	NA	
	10/15/03		12.38	184.9	None	11300	NA	264 (322)**	2660 / 51 / 1180 / 1220	NA	
	2/2/04		8.8	188.48	None	21700	NA	168 (200)**	2130 / 51 / 1030 / 2060	NA	
	4/23/04		8.4	188.88	Slight odor	30400	NA	112 (203)**	3570 / 322 / 1620 / 4140	NA	
	7/19/04		10.3	186.98	Odor	28300	NA	283 (373)**	2540 / 239 / 1320 / 2300	NA	
	10/22/04		10.25	187.03	Mod odor	13500	NA	273 (229)**	1790 / 54 / 892 / 915	NA	
	1/21/05		6.65	190.63	Mod odor	278000	NA	161 (163)**	5980 / 1030 / 2890 / 9070	NA	
	4/14/05		8.7	188.58	None	46100	NA	155 (150)**	5170 / 787 / 2530 / 6010	NA	
	7/26/05		8.95	188.33	Mod odor	41000	NA	ND (ND)**	5600 / 550 / 2600 / 4600	NA	
	10/14/05		10.92	186.36	Odor/sheen	13000	NA	130	2900 / 100 / 1300 / 1200	NA	
	1/13/06		5.48	191.8	Odor	20000	NA	ND<100	4900 / 490 / 2400 / 4200	NA	
	4/14/06		3.61	193.67	Odor	21000	NA	ND<100	4000 / 740 / 2300 / 5100	NA	
	10/26/06		10.58	186.7	Odor	8200	NA	68	1400 / 51 / 840 / 500	NA	
	1/30/07		10.98	186.3	Odor	17000	NA	62	3200 / 150 / 2200 / 1800	NA	
	4/13/07		10.54	186.74	NM	19000	NA	57	2000 / 85 / 1300 / 1100	NA	
	7/24/07		12.04	185.24	None	10000	NA	84	1300 / 41 / 710 / 270	NA	
	4/21/08		8.01	189.27	None	17000	NA	48	1800 / 100 / 1400 / 1300	NA	
	7/22/08		11.12	186.16	None	16000	NA	100 ¹	1900 / 98 / 1600 / 741	NA	
	10/21/08		13.11	184.17	Odor/sheen	4900	NA	65	700 / 20 / 370 / 52	NA	
	1/19/09		12.31	184.97	Odor	2500	NA	90	167/8.49/114/50.3	NA	
	4/27/09		9.01	188.27	Odor/sheen	21000	NA	ND<0.5	1700/130/1100/1800	NA	
	10/27/09		10.52	186.76	Odor	7000	NA	ND<0.5***	510/19/330/160	NA	
	10/14/2010		11.56	185.72	None	3200 ²	NA	35	460/16/230/110	NA	
	6/9/2011		7.67	189.61	Clear/Odor	9900	NA	NA	1900/75/1100/1013	NA	
	10/7/2011		10.42	186.86	Clear/Odor	9200 ⁴	NA	ND<22	810/34/610/100	NA	
	10/16/2013		12.18	185.1	Clear/Odor	4400 ^{2,5}	NA	ND<4.2	780/33/200/39.8	NA	
4/14/2014	12.34		C55-D88	Clear/Odor	6100 ²	2500 ^{7,8}	ND<2.1	530/270/19/47.6	86 ⁹		
10/20/2014	12.54		184.74	Clear/Odor	8600 ²	3700 ^{7,8}	15	140/5.6/73/20.9	24 ⁹		
5/13/2015				10.48	186.8	Clear/Odor	4800²	2300^{7,8}	7.7	220/10/96/38	30⁹
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24	

Table & Notes Following

TABLE 1 (Cont.)
Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft, MSL)	Depth to GW (ft, TOC)	Water Elevation (ft, MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)
MW-3	10/7/99	49.39*	9.67	39.72	None	6600	NA	390	310 / 110 / 430 / 1000	NA
	1/26/00	49.39*	5.4	43.99	None	3300	NA	40	110 / 8 / 100 / 32	NA
	10/25/00	49.39*	9.24	40.15	Slight odor	4500	NA	ND	100 / 2 / 120 / 130	NA
	2/2/01	49.39*	8.73	40.66	Slight odor	2900	NA	35	35 / 3 / 160 / 298	NA
	4/25/01	195.22	6.61	188.61	Slight odor	8400	NA	56	260 / 33 / 290 / 510	NA
	7/10/01		8.85	186.37	Slight odor	12000	NA	35	39 / 10 / 690 / 1600	NA
	10/8/01		9.75	185.47	Odor/sheen	4913	NA	52	108 / 4 / 99 / 133	NA
	1/7/02		4.25	190.97	Odor/sheen	7260	NA	81.7**	723 / 138 / 492 / 887	NA
	4/8/02		6.33	188.89	Odor	11700	NA	ND**	540 / 108 / 706 / 1710	NA
	7/9/02		8.56	186.66	Odor	2320	NA	28.3 (20)**	37.1 / 4.7 / 98.5 / 187	NA
	10/23/02		10.02	185.2	Odor/sheen	2830	NA	ND (ND)**	46.8 / 4.7 / 43.6 / 65.5	NA
	10/15/03		9.8	185.42	Odor/sheen	3040	NA	ND (ND)**	91.3 / 8.4 / 69.9 / 148	NA
	2/2/04		6.85	188.37	Odor/sheen	5140	NA	ND (ND)**	126 / 8.7 / 134 / 238	NA
	4/23/04		6.17	189.05	None	7210	NA	ND (ND)**	227 / 39.5 / 448 / 879	NA
	7/19/04		8.25	186.97	Slight odor	9860	NA	ND (ND)**	20.4 / 3.2 / 30.6 / 117	NA
	10/22/04		9.25	185.97	None	7420	NA	96 (21)**	152 / 12.8 / 267 / 480	NA
	1/21/05		5.22	190	Slight odor	2420	NA	ND (ND)**	111 / 11.4 / 139 / 265	NA
	4/14/05		6.64	188.58	Odor/sheen	5130	NA	54 (41.4)**	357 / 19.4 / 287 / 510	NA
	7/26/05		6.9	188.32	None	9800	NA	ND (21)**	200 / 23 / 220 / 360	NA
	10/14/05		8.83	186.39	Odor/sheen	6100	NA	ND	76 / 19 / 170 / 350	NA
	1/13/06		4.61	190.61	Odor	3900	NA	24	380 / 17 / 230 / 300	NA
	4/14/06		3.41	191.81	Odor	5000	NA	69	760 / 44 / 230 / 190	NA
	10/26/06		8.57	186.65	Odor	3100	NA	17	120 / 9.8 / 55 / 54	NA
	1/30/07		8.83	186.39	Odor	4500	NA	ND<10	90 / 7.6 / 75 / 44	NA
	4/13/07		8.57	186.65	NM	2800	NA	ND<5	55 / 4.9 / 19 / 6.1	NA
	7/24/07		9.98	185.24	None	4800	NA	ND<5	140 / 8.3 / 66 / 22	NA
	4/21/08		9.3	185.92	None	4300	NA	ND<5	200 / 11 / 30 / 14	NA
	7/22/08		9.05	186.17	None	2400	NA	53 ¹	140 / 13 / 26 / 18.5	NA
	10/21/08		11.12	184.1	Slight Odor	2900	NA	2.2	170 / 9.2 / 99 / 25.8	NA
	1/19/09		10.29	184.93	Odor	3600	NA	ND<0.5	148/6.73/24.5/22.1	NA
	4/27/09		7.15	188.07	Odor/sheen	5800	NA	8.8	370/12/82/84	NA
	10/27/09		8.96	186.26	Odor	4900 ²	NA	ND<0.5***	130/8.5/89/130	NA
	10/14/2010		9.76	185.46	None	2700 ²	NA	ND<4.4	270/11/290/399.2	NA
6/9/2011	5.92		189.3	Clear/Odor	3200 ²	NA	NA	220/ND<4.4/37/20	NA	
10/7/2011	8.6		186.62	None	5400 ²	NA	ND<4.4	140/7.0/160/67	NA	
10/16/2013	10.56		184.66	Lt. Gray/Odor	3400 ²	NA	ND<4.2	990/58/75/71	NA	
4/14/2014	11.07		184.15	Clear	3600 ²	700 ^{7,8}	ND<1.1	400/22/24/13.3	4.0 ⁹	
10/20/2014	10.09	185.13	Clear/Odor	9200 ²	25000 ^{7,8}	9.2	180/8.4/21/11	ND<2.1 ⁹		
5/13/2015	8.89	186.33	Clear	2600 ²	630 ^{7,8}	6.1	110/6.1/7.4/ND<8.4	ND<8.4 ⁹		
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24

Table & Notes Following

TABLE 1 (Cont.)
Historical Groundwater Levels & Hydrocarbon Analytical Results
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft, MSL)	Depth to GW (ft, TOC)	Water Elevation (ft, MSL)	Product Odor/ Sheen	TPH-G (ug/L)	TPH-D (ug/L)	MTBE (ug/L)	BTEX (ug/L)	Naphthalene (ug/L)
PW-1	4/14/05	197.17	6.4	190.77	None	3360	NA	ND (ND**)	62.8 / 6.7 / 79.5 / 317	NA
	7/26/05		8.63	188.54	None	1300	NA	ND (ND**)	22 / ND / 48 / 110	NA
	10/14/05		10.71	186.46	None	4300	NA	ND	93 / 1.2 / 100 / 140	NA
	1/13/06		4.87	192.3	None	450	NA	ND<2.0	10 / ND / 37 / 72	NA
	4/14/06		2.27	194.9	Odor	120	NA	ND<2.0	2.3 / ND<1.0 / 3.5 / 9.3	NA
	10/26/06		10.3	186.87	Odor	2800	NA	ND<10	61 / ND<5.0 / 130 / 34	NA
	1/30/07		10.8	186.37	Odor	1200	NA	ND<2	22 / ND<1.0 / 100 / 200	NA
	4/13/07		10.31	186.86	NM	510	NA	ND<1	6 / ND<0.5 / 30 / 56	NA
	7/24/07		11.81	185.36	None	3400	NA	ND<5	63 / ND<2.5 / 180 / 5.6	NA
	4/21/08		9.08	188.09	None	300	NA	ND<1	3 / ND<0.5 / 16 / 26	NA
	7/22/08		9.83	187.34	None	710	NA	3.1 ¹	9.3 / 1.2 ¹ / 49 / 67.86	NA
	10/21/08		12.9	184.27	None	1500 ²	NA	1	20 / ND<0.5 / 57 / 20	NA
	1/19/09		12.11	185.06	Odor/sheen	1100 ²	NA	ND<0.5	12.3/ND<0.5/30.8/9.20	NA
	4/27/2009		8.69	188.48	None	360 ³	NA	ND<0.5	2.7/ND<0.5/12/18	NA
	10/27/2009		10.32	186.85	None	1100 ²	NA	ND<0.5	12/ND<0.5/36/34	NA
	10/14/2010		11.38	185.79	None	860 ³	NA	ND<0.5	8.8/.55/44/44	NA
	6/9/2011		7.43	189.74	None	96 ³	NA	ND<0.5	ND<0.5/ND<0.5/3.1/2.5	NA
	10/7/2011		9.79	187.38	None	260 ⁵	NA	ND<0.5	ND<0.5/ND<0.5/5.9/4.5	NA
	10/16/2013		11.91	185.26	Clear	150 ^{2,5}	NA	ND<0.5	0.87/ND<0.5/ND<0.5/ND≤1.0	NA
	4/14/2014		12.14	185.03	Clear	ND<50	ND<0.1 ⁸	ND<0.5	ND<0.5/ND<0.5/ND<0.5/ND≤1.0	ND<0.5 ⁹
10/20/2014	12.28	184.89	Clear	380 ²	140 ^{7,8}	ND<0.5	2.4/ND<0.5/11/4.0	2.3 ⁹		
5/13/2015	10.06	187.11	Clear	72 ²	ND<0.1 ^{7,8}	ND<0.5	ND<0.5/ND<0.5/ND<0.5/ND≤1.0	ND<1.0 ⁹		
SF Bay RWQCB December 2013 ESL						500	640	1800	27 / 130 / 43 / 100	24

NOTES:

ft, MSL = feet Above Mean Sea Level

TOC = Top of Well Casing

GW = Depth to Groundwater in feet Below TOC

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl Tertiary Butyl Ether

BTEX = Benzene / Toluene / Ethylbenzene / Total Xylenes

ug/L = micrograms per liter

ND = Not detected above laboratory reporting limit

¹ = Presence confirmed, but Relative Percentage Difference (RPD) between columns exceeds 40%

² = Sample exhibit chromatographic pattern that does not resemble standard; See laboratory report for additional information

³ = Although TPH-gas compounds are present, value is elevated due to discrete peak (PCE) within C5-C12 range quantified as gasoline

⁴ = Result is elevated due to contribution from heavy end hydrocarbons within C5-C12 range quantified as gasoline

⁵ = Result is elevated due to contribution from heavy end hydrocarbons and discrete peak of non-fuel compound within C5-C12 range quantified as gasoline

⁶ = Reported TPH value includes amount due to discrete peak (See 8260B results - elevated aromatic compounds)

⁷ = Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.

⁸ = Sample also analyzed for TPH as Motor Oil (EPA Method SW8015B); See Lab Report for Sample Results

⁹ = Sample also analyzed for Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method SW8270C; See Lab Report for Sample Results

* = Arbitrary datum point with assumed elevation of 50 ft used prior to MSL survey on 4/ 25/01

** = Concentration confirmed by EPA Method 8260

** = Sample also analyzed for other Fuel oxygenates (EPA Method 8260); All results ND (See Lab Report)

SF Bay RWQCB/ESL = San Francisco Bay Regional Water Quality Control Board's Interim Final - December 2013, Environmental Screening Level at a residential or commercial/industrial use permitted sites with groundwater that Is Not a potential source of drinking water.

Well Construction Data:

Well #	Total Depth (ft, TOC)	Screen Interval (ft)	Installation Date
MW-1	14.5	5 to TD	5/20/1998
MW-2	19.6	5 to TD	10/2/1999
MW-3	19	5 to TD	10/2/1999
PW-1	19.8	5 to TD	4/5/2005

TABLE 2
Historical Groundwater VOC Analytical Results in PW-1
5930 College Avenue, Oakland, CA

Well ID	Sample Date	Casing Elevation (ft, MSL)	Depth to GW (ft, TOC)	Water Elevation (ft, MSL)	IPB (ug/L)	n-PB (ug/L)	1,3,5-TMB (ug/L)	1,2,4-TMB (ug/L)	Sec-BB (ug/L)	n-BB (ug/L)	Naphthalene (ug/L)	TCE (ug/L)	MC (ug/L)	cis-1,2-DCE (ug/L)	Vinyl Chloride (ug/L)	PCE (ug/L)	
PW-1	4/14/05	197.17	6.4	190.77	11	22	110	100	ND,10	ND<10	43	3.3	ND<25	12	ND<0.5	84.9	
	7/26/05		8.63	188.54	7.3	17	37	100	ND<10	ND<10	43	ND<1	ND<10	7	ND<1	48	
	10/14/05		10.71	186.46	28	72	67	120	12	17	43	4.1	ND<40	29	ND<1	25	
	1/13/06		4.87	192.3	ND<20	ND<10	ND<10	37	ND<10	ND<10	ND<10	1.4	ND<40	5	ND<1	95	
	4/14/06		2.27	194.9	ND<2	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	1.1	ND<40	2.8	ND<1	68	
	10/26/06		10.3	186.87	ND<10	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	6.2	ND<200	32	ND<5.0	26	
	1/30/07		10.8	186.37	ND<2	23	31	120	ND<10	ND<10	18	ND<1	ND<40	11	ND<1	29	
	4/13/07		10.31	186.86	2.4	6.1	7	30	ND<5	ND<5	6.8	0.84	ND<20	4.7	ND<0.5	64	
	7/24/07		11.81	185.36	ND<5.0	60	ND<25	ND<25	ND<25	ND<25	ND<25	ND<2.5	ND<100	58	ND<2.5	50	
	4/21/08		9.08	188.09	1.1	ND<5	15	ND<5	ND<5	ND<5	ND<5	0.88	ND<20	3.7	ND<0.5	91	
	7/22/08		9.83	187.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/21/08		12.9	184.27	17	14	5	15	9.4	14	5.1	6.2	ND<10	56	0.6	44	
	4/27/09		8.69	188.48	1.2	3.3	3.4	16	ND<0.5	ND<0.5	ND<1.0	1.4	ND<5.0	4	ND<0.5	120	
	10/27/09		10.32	186.85	6	4.8	ND<0.5	15	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<5.0	35	ND<0.5	78	
	10/14/10		11.38	185.79	9.8	15	12	44	4.4	ND<0.5	4	5	ND<5.0	61	ND<0.5	35	
	6/9/11		7.43	189.74	0.55	1.7	0.98	3.7	ND<0.5	ND<0.5	ND<1.0	0.85	ND<5.0	1.4	ND<0.5	86	
	10/7/11		9.79	187.38	0.79	1.8	0.99	3.8	ND<0.5	0.68	1.2	0.63	ND<5.0	2	ND<0.5	76	
	10/16/13		11.91	185.26	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.7	ND<5.0	12	ND<0.5	45	
4/14/14	12.14	185.03	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	1.4	ND<5.0	3.3	ND<0.5	110			
10/20/14	12.28	184.89	1.8	2.9	1	2.3	1.6	ND<0.5	2.3	6.4	ND<5.0	33	ND<0.5	36			
5/13/15	10.06	187.11	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2.6	ND<5.0	2.6	ND<0.5	93		
SF Bay RWQCB December 2013 ESL					NC	NC	NC	NC	NC	NC	24	130	2200	590	1.8	63	

NOTES:

ft, MSL = feet Above Mean Sea Level
 TOC = Top of Well Casing
 GW = Depth to Groundwater in feet Below TOC
 VOC = Volatile Organic Compounds
 IPB = Isopropylbenzene
 n-PB = n-Propylbenzene
 1,3,5-TMB = 1,3,5-Trimethylbenzene
 1,2,4-TMB = 1,2,4-Trimethylbenzene
 sec-BB = sec-Butylbenzene
 n-BB = n-Butylbenzene
 TCE = Trichloroethene
 MC = Methylene Chloride
 cis-1,2-DCE = cis-1,2-Dichloroethene
 PCE = Tetrachloroethene
 ug/l = micrograms per liter
 ND = Not detected above laboratory reporting limit
 NC = No Criteria Listed
 NA = Not Analyzed
 SF Bay RWQCB/ESL =

San Francisco Bay Regional Water Quality Control Board's Interim Final - December 2013, Environmental Screening Level at a residential or commercial/industrial use permitted sites with groundwater that Is Not a potential source of drinking water.

Well Construction Data:

Well #	Total Well Depth (ft, TOC)	Screen Interval (ft)	Installation Date
PW-1	19.8	5 to TD	4/5/2005

GROUNDWATER MONITORING REPORT
2nd Quarter 2015

Sheaff's Garage
5930 College Avenue
Oakland, CA 94618

ACHCSA Fuel Leak Case No. RO0000377

ATTACHMENT A

Fluid-Level Monitoring Data Sheet
Well Purging/Sampling Data Sheets

FLUID-LEVEL MONITORING DATA

Project Name: SHEAFFS SERVICE GARAGE Date: 05-13-15

Project/Site Location: 5930 COLLEGE AVE. OAKLAND, CA 94618

Technician: P. VASQUEZ / B. GODFREY Method: ELECTRONIC

Boring/Well	Depth to Water (feet)	Depth to Product (feet)	Product Thickness (feet)	Total Well Depth (feet)	Comments
PW-1	10.06	ND	ND	19.78	@0920
MW-3	8.89	↓	↓	19.03	@0922 H2O IN WELL BOX BELOW TDL
MW-2	10.48			19.58	@1045
MW-1	9.33			14.46	@0925

WELL NUMBER / FIELD POINT ID: MW-1

DATE: 05-13-2015

PROJECT / GLOBAL ID: T0600102112

SITE LOCATION: 5930 College Avenue

CITY: Oakland

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

casing diameter (inches) circle one 0.75 1 1.5 2 4 6
casing volumes (gallons/liters) circle one 0.02/0.08 0.05/0.19 0.15/0.57 0.2/0.75 0.7/2.65 1.52/5.75

WELL DATA

SAMPLER/S: Richard Vasquez/Bobby Godfrey

WELL NUMBER / FIELD POINT ID: MW-1

SCREEN INTERVAL (if known):

A. TOTAL WELL DEPTH: 14.46

B. DEPTH TO WATER: 9.33

C. WATER HEIGHT (A-B): 5.13

D. WELL CASING DIAMETER: 2

E. CASING VOLUME: 0.2

F. SINGLE CASE VOLUME (Cx E): 1.026

G. 80% RECHARGE LEVEL (F+B): 10.356

PURGE DATA

START TIME: 1123

PUMP DEPTH: 12

FINISH TIME: 1132

PUMP DEPTH: 12

SAMPLE TIME 1140

DEPTH TO WATER: 9.78 TIME MEASURED: 1132

SAMPLE APPEARANCE / ODOR: CLEAR / STRONG ODOR

~TOTAL LITERS PURGED: 1.125

WELL FLUID PARAMETERS

Time (interval 3 to 5 min.)	0	3	6	9				
~Total Volume Purged (L)	0	0.375	0.75	1.125				
pH (su)	6.62	6.68	6.70	6.72				
Temperature (Celsius)	18.7	18.5	18.4	18.5				
COND / SC (us/cm)	810	815	817	820				
DO (mg/L / %)	NA	—————>						
ORP (mV)	NA	—————>						
DTW (ft.)	9.33	9.61	9.70	9.78				
~Pump Depth (ft)	12	—————>						
~Pump Rate (mL/min.)	125.4 min	—————>						

WELL NUMBER / FIELD POINT ID: MW-2

DATE: 05-13-2015

PROJECT / GLOBAL ID: T0600102112

SITE LOCATION: 5930 College Avenue

CITY: Oakland

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

casing diameter (inches) circle one 0.75 1 1.5 2 4 6
casing volumes (gallons/liters) circle one 0.02/0.08 0.05/0.19 0.15/0.57 0.2/0.75 0.7/2.65 1.52/5.75

WELL DATA

SAMPLER/S: Richard Vasquez/Bobby Godfrey

WELL NUMBER / FIELD POINT ID: MW-2

SCREEN INTERVAL (if known):

A. TOTAL WELL DEPTH: 19.58

B. DEPTH TO WATER: 10.48

C. WATER HEIGHT (A-B): 9.10

D. WELL CASING DIAMETER: 2

E. CASING VOLUME: 0.2

F. SINGLE CASE VOLUME (Cx E): 1.82

G. 80% RECHARGE LEVEL (F+B): 12.30

PURGE DATA

START TIME: 1051

PUMP DEPTH: 14

FINISH TIME: 1103

PUMP DEPTH: 14

SAMPLE TIME 1114

DEPTH TO WATER: 11.33 TIME MEASURED: 1103

SAMPLE APPEARANCE / ODOR: CLEAR / MILD ODOR

~TOTAL LITERS PURGED: 2.4

WELL FLUID PARAMETERS

Time (interval 3 to 5 min.)	0	3	6	9	12			
~Total Volume Purged (L)	0	0.6	1.2	1.8	2.4			
pH (su)	6.48	6.62	6.67	6.67	6.68			
Temperature (Celsius)	18.3	18.3	18.4	18.5	18.5			
COND / SC (us/cm)	1134	1143	1142	1146	1151			
DO (mg/L / %)	NA	—————>						
ORP (mV)	NA	—————>						
DTW (ft.)	10.48	10.93	11.03	11.17	11.33			
~Pump Depth (ft)	14	—————>						
~Pump Rate (mL/min.)	200 mL / min	—————>						

WELL NUMBER / FIELD POINT ID: MW-3

DATE: 05-13-2015

PROJECT / GLOBAL ID: T0600102112

SITE LOCATION: 5930 College Avenue

CITY: Oakland

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

casing diameter (inches) circle one 0.75 1 1.5 2 4 6
casing volumes (gallons/liters) circle one 0.02/0.08 0.05/0.19 0.15/0.57 0.2/0.75 0.7/2.65 1.52/5.75

WELL DATA

SAMPLER/S: Richard Vasquez/Bobby Godfrey

WELL NUMBER / FIELD POINT ID: MW-3

SCREEN INTERVAL (if known):

A. TOTAL WELL DEPTH: 19.03

B. DEPTH TO WATER: 8.89

C. WATER HEIGHT (A-B): 10.14

D. WELL CASING DIAMETER: 2

E. CASING VOLUME: 0.2

F. SINGLE CASE VOLUME (Cx E): 2.028

G. 80% RECHARGE LEVEL (F+B): 10.918

PURGE DATA

START TIME: 1017

PUMP DEPTH: 14

FINISH TIME: 1029

PUMP DEPTH: 14

SAMPLE TIME 1035

DEPTH TO WATER: 9.91 TIME MEASURED: 1029

SAMPLE APPEARANCE / ODOR: CLEAR / NO ODOR

~TOTAL LITERS PURGED: 2.4

WELL FLUID PARAMETERS

Time (interval 3 to 5 min.)	0	3	6	9	12			
~Total Volume Purged (L)	0	0.6	1.2	1.8	2.4			
pH (su)	6.59	6.65	6.71	6.72	6.70			
Temperature (Celsius)	17.3	17.2	16.9	16.9	16.9			
COND / SC (us/cm)	534	540	537	537	536			
DO (mg/L / %)	NA	—————>						
ORP (mV)	NA	—————>						
DTW (ft.)	8.89	9.43	9.58	9.77	9.91			
~Pump Depth (ft)	14	—————>						
~Pump Rate (mL/min.)	200 mL / min	—————>						

WELL NUMBER / FIELD POINT ID: PW-1

DATE: 05-13-2015

PROJECT / GLOBAL ID: T0600102112

SITE LOCATION: 5930 College Avenue

CITY: Oakland

STATE: CA

PURGE DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

SAMPLING DEVICE

circle one submersible pump peristaltic pump bladder pump disposable bailer

casing diameter (inches) circle one 0.75 1 1.5 2 4 6
casing volumes (gallons/liters) circle one 0.02/0.08 0.05/0.19 0.15/0.57 0.2/0.75 0.7/2.65 1.52/5.75

WELL DATA

SAMPLER/S: Richard Vasquez/Bobby Godfrey

WELL NUMBER / FIELD POINT ID: PW-1

SCREEN INTERVAL (if known):

A. TOTAL WELL DEPTH: 19.78

B. DEPTH TO WATER: 10.06

C. WATER HEIGHT (A-B): 9.72

D. WELL CASING DIAMETER: 2

E. CASING VOLUME: 0.2

F. SINGLE CASE VOLUME (Cx E): 1.944

G: 80% RECHARGE LEVEL (F+B): 12.004

PURGE DATA

START TIME: 0942

PUMP DEPTH: 14'

FINISH TIME: 0957

PUMP DEPTH: 14'

SAMPLE TIME 1005

DEPTH TO WATER: 10.26

TIME MEASURED: 0957

SAMPLE APPEARANCE / ODOR: CLEAR / NO ODOR

~TOTAL LITERS PURGED: 2.25

WELL FLUID PARAMETERS

Time (interval 3 to 5 min.)	0	3	6	9	12	15		
~Total Volume Purged (L)	0	0.45	0.9	1.35	1.8	2.25		
pH (su)	7.05	6.70	6.62	6.59	6.58	6.59		
Temperature (Celsius)	16.8	16.8	16.7	16.7	16.8	16.9		
COND / SC (us/cm)	377.8	345.7	340.8	334.4	332.0	330.3		
DO (mg/L / %)	NA	—————>						
ORP (mV)	NA	—————>						
DTW (ft.)	10.06	10.39	10.53	10.22	10.25	10.26		
~Pump Depth (ft)	14	—————>						
~Pump Rate (mL/min.)	150 mL/min	—————>						

**GROUNDWATER MONITORING REPORT
2nd Quarter 2015**

**Sheaff's Garage
5930 College Avenue
Oakland, CA 94618**

ACHCSA Fuel Leak Case No. RO0000377

ATTACHMENT B

**Laboratory Certificate of Analysis
Chain of Custody Record
GeoTracker Upload Confirmation Sheets
EPA On-Line Tools for Site Assessment Calculation Sheet**



Golden Gate Tank Removal
1480 Carroll Ave
San Francisco, California 94124
Tel: 415-512-1555
Email: b.wheeler@ggtr.com
RE: 5930 College Avenue, Oakland

Work Order No.: 1505075

Dear Brent Wheeler:

Torrent Laboratory, Inc. received 4 sample(s) on May 14, 2015 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

Patti Sandrock
QA Officer

May 21, 2015

Date



Date: 5/21/2015

Client: Golden Gate Tank Removal

Project: 5930 College Avenue, Oakland

Work Order: 1505075

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.



Sample Result Summary

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15

Date Reported: 05/21/15

1505075-001

MW-1

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Benzene	SW8260B	42	3.7	21	2700	ug/L
Ethyl Benzene	SW8260B	42	3.1	21	1600	ug/L
MTBE	SW8260B	8.4	1.4	4.2	57	ug/L
tert-Butanol	SW8260B	8.4	13	42	46	ug/L
Toluene	SW8260B	8.4	0.50	4.2	340	ug/L
m,p-Xylene	SW8260B	8.4	1.1	8.4	2000	ug/L
o-Xylene	SW8260B	8.4	0.64	4.2	760	ug/L
Naphthalene	SW8260B	8.4	1.1	8.4	360	ug/L
TPH as Gasoline	8260TPH	8.4	260	420	20000	ug/L
TPH as Diesel	SW8015B(M)	2	0.0800	0.20	2.6	mg/L
2-Methylnaphthalene	SW8270C	10	9.3	40	120	ug/L
1-Methylnaphthalene	SW8270C	10	9.3	40	79	ug/L
Naphthalene	SW8270C	20	21	80	440	ug/L



Sample Result Summary

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15

Date Reported: 05/21/15

MW-2

1505075-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
MTBE	SW8260B	10.5	1.8	5.3	7.7	ug/L
Benzene	SW8260B	10.5	0.91	5.3	220	ug/L
Toluene	SW8260B	10.5	0.62	5.3	10	ug/L
Ethyl Benzene	SW8260B	10.5	0.78	5.3	96	ug/L
m,p-Xylene	SW8260B	10.5	1.4	11	38	ug/L
Naphthalene	SW8260B	10.5	1.4	11	30	ug/L
TPH as Gasoline	8260TPH	10.5	330	530	4800	ug/L
Naphthalene	SW8270C	1	0.94	3.6	15	ug/L
TPH as Diesel	SW8015B(M)	2	0.0800	0.20	2.3	mg/L
2-Methylnaphthalene	SW8270C	4	3.7	16	97	ug/L
1-Methylnaphthalene	SW8270C	4	3.7	16	67	ug/L

MW-3

1505075-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
MTBE	SW8260B	8.4	1.4	4.2	6.1	ug/L
Benzene	SW8260B	8.4	0.73	4.2	110	ug/L
Toluene	SW8260B	8.4	0.50	4.2	6.1	ug/L
Ethyl Benzene	SW8260B	8.4	0.62	4.2	7.4	ug/L
TPH as Gasoline	8260TPH	8.4	260	420	2600	ug/L
1-Methylnaphthalene	SW8270C	1	0.83	3.6	9.7	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.63	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	0.53	mg/L



Sample Result Summary

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15
1505075-004

PW-1

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH as Gasoline	8260TPH	1	31	50	72	ug/L
cis-1,2-Dichloroethene	SW8260B	1	0.19	0.50	2.6	ug/L
Trichloroethylene	SW8260B	1	0.13	0.50	2.6	ug/L
Tetrachloroethylene	SW8260B	1	0.14	0.50	93	ug/L



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-1	Lab Sample ID:	1505075-001A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 11:40		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	05/19/15	42	3.7	21	2700		ug/L	425544	NA
Ethyl Benzene	SW8260B	NA	05/19/15	42	3.1	21	1600		ug/L	425544	NA
(S) Dibromofluoromethane	SW8260B	NA	05/19/15	42	61.2	131	93.3		%	425544	NA
(S) Toluene-d8	SW8260B	NA	05/19/15	42	75.1	127	106		%	425544	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	05/19/15	42	64.1	120	89.7		%	425544	NA
MTBE	SW8260B	NA	05/19/15	8.4	1.4	4.2	57		ug/L	425544	NA
tert-Butanol	SW8260B	NA	05/19/15	8.4	13	42	46		ug/L	425544	NA
1,2-Dichloroethane	SW8260B	NA	05/19/15	8.4	0.95	4.2	ND		ug/L	425544	NA
Toluene	SW8260B	NA	05/19/15	8.4	0.50	4.2	340		ug/L	425544	NA
1,2-Dibromoethane	SW8260B	NA	05/19/15	8.4	0.57	4.2	ND		ug/L	425544	NA
m,p-Xylene	SW8260B	NA	05/19/15	8.4	1.1	8.4	2000		ug/L	425544	NA
o-Xylene	SW8260B	NA	05/19/15	8.4	0.64	4.2	760		ug/L	425544	NA
Naphthalene	SW8260B	NA	05/19/15	8.4	1.1	8.4	360		ug/L	425544	NA
(S) Dibromofluoromethane	SW8260B	NA	05/19/15	8.4	61.2	131	111		%	425544	NA
(S) Toluene-d8	SW8260B	NA	05/19/15	8.4	75.1	127	106		%	425544	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	05/19/15	8.4	64.1	120	91.8		%	425544	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	5/19/15	05/19/15	8.4	260	420	20000		ug/L	425544	14491
(S) 4-Bromofluorobenzene	8260TPH	5/19/15	05/19/15	8.4	41.5	125	105		%	425544	14491



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-1	Lab Sample ID:	1505075-001B
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 11:40		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
2-Methylnaphthalene	SW8270C	5/20/15	05/20/15	10	9.3	40	120		ug/L	425538	14486
1-Methylnaphthalene	SW8270C	5/20/15	05/20/15	10	9.3	40	79		ug/L	425538	14486
Acenaphthylene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Acenaphthene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Fluorene	SW8270C	5/20/15	05/20/15	1	0.54	3.6	ND		ug/L	425538	14486
Phenanthrene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Anthracene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
Fluoranthene	SW8270C	5/20/15	05/20/15	1	0.39	3.6	ND		ug/L	425538	14486
Pyrene	SW8270C	5/20/15	05/20/15	1	0.41	3.6	ND		ug/L	425538	14486
Benz[a]anthracene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Chrysene	SW8270C	5/20/15	05/20/15	1	0.58	3.6	ND		ug/L	425538	14486
Benzo[b]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.1	3.6	ND		ug/L	425538	14486
Benzo[k]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.9	3.6	ND		ug/L	425538	14486
Benzo[a]pyrene	SW8270C	5/20/15	05/20/15	1	0.25	3.6	ND		ug/L	425538	14486
Indeno[1,2,3-cd]pyrene	SW8270C	5/20/15	05/20/15	1	0.50	3.6	ND		ug/L	425538	14486
Dibenz[a,h]anthracene	SW8270C	5/20/15	05/20/15	1	1.2	3.6	ND		ug/L	425538	14486
Benzo[g,h,i]perylene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
2-Fluorobiphenyl (S)	SW8270C	5/20/15	05/20/15	1	41.4	120	75.0		%	425538	14486
p-Terphenyl-d14 (S)	SW8270C	5/20/15	05/20/15	1	35.3	135	84.1		%	425538	14486
Naphthalene	SW8270C	5/20/15	05/20/15	20	21	80	440		ug/L	425538	14486

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	5/14/15	05/14/15	2	0.0800	0.20	2.6	x	mg/L	425475	14449
TPH as Motor Oil	SW8015B(M)	5/14/15	05/14/15	2	0.180	0.80	ND		mg/L	425475	14449
Pentacosane (S)	SW8015B(M)	5/14/15	05/14/15	2	64.2	123	117		%	425475	14449

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-2	Lab Sample ID:	1505075-002A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 11:14		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	05/19/15	10.5	1.8	5.3	7.7		ug/L	425544	NA
tert-Butanol	SW8260B	NA	05/19/15	10.5	16	53	ND		ug/L	425544	NA
Benzene	SW8260B	NA	05/19/15	10.5	0.91	5.3	220		ug/L	425544	NA
1,2-Dichloroethane	SW8260B	NA	05/19/15	10.5	1.2	5.3	ND		ug/L	425544	NA
Toluene	SW8260B	NA	05/19/15	10.5	0.62	5.3	10		ug/L	425544	NA
1,2-Dibromoethane	SW8260B	NA	05/19/15	10.5	0.71	5.3	ND		ug/L	425544	NA
Ethyl Benzene	SW8260B	NA	05/19/15	10.5	0.78	5.3	96		ug/L	425544	NA
m,p-Xylene	SW8260B	NA	05/19/15	10.5	1.4	11	38		ug/L	425544	NA
o-Xylene	SW8260B	NA	05/19/15	10.5	0.79	5.3	ND		ug/L	425544	NA
Naphthalene	SW8260B	NA	05/19/15	10.5	1.4	11	30		ug/L	425544	NA
(S) Dibromofluoromethane	SW8260B	NA	05/19/15	10.5	61.2	131	99.3		%	425544	NA
(S) Toluene-d8	SW8260B	NA	05/19/15	10.5	75.1	127	105		%	425544	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	05/19/15	10.5	64.1	120	90.5		%	425544	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	5/19/15	05/19/15	10.5	330	530	4800	x	ug/L	425544	14491
(S) 4-Bromofluorobenzene	8260TPH	5/19/15	05/19/15	10.5	41.5	125	105		%	425544	14491

NOTE: x - Although TPH as Gasoline constituents are present, sample chromatogram does not resemble pattern of reference Gasoline standard.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-2	Lab Sample ID:	1505075-002B
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 11:14		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Naphthalene	SW8270C	5/20/15	05/20/15	1	0.94	3.6	15		ug/L	425538	14486
Acenaphthylene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Acenaphthene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Fluorene	SW8270C	5/20/15	05/20/15	1	0.54	3.6	ND		ug/L	425538	14486
Phenanthrene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Anthracene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
Fluoranthene	SW8270C	5/20/15	05/20/15	1	0.39	3.6	ND		ug/L	425538	14486
Pyrene	SW8270C	5/20/15	05/20/15	1	0.41	3.6	ND		ug/L	425538	14486
Benz[a]anthracene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Chrysene	SW8270C	5/20/15	05/20/15	1	0.58	3.6	ND		ug/L	425538	14486
Benzo[b]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.1	3.6	ND		ug/L	425538	14486
Benzo[k]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.9	3.6	ND		ug/L	425538	14486
Benzo[a]pyrene	SW8270C	5/20/15	05/20/15	1	0.25	3.6	ND		ug/L	425538	14486
Indeno[1,2,3-cd]pyrene	SW8270C	5/20/15	05/20/15	1	0.50	3.6	ND		ug/L	425538	14486
Dibenz[a,h]anthracene	SW8270C	5/20/15	05/20/15	1	1.2	3.6	ND		ug/L	425538	14486
Benzo[g,h,i]perylene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
2-Fluorobiphenyl (S)	SW8270C	5/20/15	05/20/15	1	41.4	120	62.7		%	425538	14486
p-Terphenyl-d14 (S)	SW8270C	5/20/15	05/20/15	1	35.3	135	78.4		%	425538	14486
2-Methylnaphthalene	SW8270C	5/20/15	05/20/15	4	3.7	16	97		ug/L	425538	14486
1-Methylnaphthalene	SW8270C	5/20/15	05/20/15	4	3.7	16	67		ug/L	425538	14486

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	5/14/15	05/14/15	2	0.0800	0.20	2.3	x	mg/L	425475	14449
TPH as Motor Oil	SW8015B(M)	5/14/15	05/14/15	2	0.180	0.80	ND		mg/L	425475	14449
Pentacosane (S)	SW8015B(M)	5/14/15	05/14/15	2	64.2	123	104		%	425475	14449

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-3	Lab Sample ID:	1505075-003A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:35		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	05/19/15	8.4	1.4	4.2	6.1		ug/L	425544	NA
tert-Butanol	SW8260B	NA	05/19/15	8.4	13	42	ND		ug/L	425544	NA
Benzene	SW8260B	NA	05/19/15	8.4	0.73	4.2	110		ug/L	425544	NA
1,2-Dichloroethane	SW8260B	NA	05/19/15	8.4	0.95	4.2	ND		ug/L	425544	NA
Toluene	SW8260B	NA	05/19/15	8.4	0.50	4.2	6.1		ug/L	425544	NA
1,2-Dibromoethane	SW8260B	NA	05/19/15	8.4	0.57	4.2	ND		ug/L	425544	NA
Ethyl Benzene	SW8260B	NA	05/19/15	8.4	0.62	4.2	7.4		ug/L	425544	NA
m,p-Xylene	SW8260B	NA	05/19/15	8.4	1.1	8.4	ND		ug/L	425544	NA
o-Xylene	SW8260B	NA	05/19/15	8.4	0.64	4.2	ND		ug/L	425544	NA
Naphthalene	SW8260B	NA	05/19/15	8.4	1.1	8.4	ND		ug/L	425544	NA
(S) Dibromofluoromethane	SW8260B	NA	05/19/15	8.4	61.2	131	110		%	425544	NA
(S) Toluene-d8	SW8260B	NA	05/19/15	8.4	75.1	127	104		%	425544	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	05/19/15	8.4	64.1	120	95.8		%	425544	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	5/19/15	05/19/15	8.4	260	420	2600	x	ug/L	425544	14491
(S) 4-Bromofluorobenzene	8260TPH	5/19/15	05/19/15	8.4	41.5	125	107		%	425544	14491

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons within the range of C5-C12 quantified as Gasoline.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	MW-3	Lab Sample ID:	1505075-003B
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:35		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Naphthalene	SW8270C	5/20/15	05/20/15	1	0.94	3.6	ND		ug/L	425538	14486
2-Methylnaphthalene	SW8270C	5/20/15	05/20/15	1	0.83	3.6	ND		ug/L	425538	14486
1-Methylnaphthalene	SW8270C	5/20/15	05/20/15	1	0.83	3.6	9.7		ug/L	425538	14486
Acenaphthylene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Acenaphthene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Fluorene	SW8270C	5/20/15	05/20/15	1	0.54	3.6	ND		ug/L	425538	14486
Phenanthrene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Anthracene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
Fluoranthene	SW8270C	5/20/15	05/20/15	1	0.39	3.6	ND		ug/L	425538	14486
Pyrene	SW8270C	5/20/15	05/20/15	1	0.41	3.6	ND		ug/L	425538	14486
Benz[a]anthracene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Chrysene	SW8270C	5/20/15	05/20/15	1	0.58	3.6	ND		ug/L	425538	14486
Benzo[b]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.1	3.6	ND		ug/L	425538	14486
Benzo[k]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.9	3.6	ND		ug/L	425538	14486
Benzo[a]pyrene	SW8270C	5/20/15	05/20/15	1	0.25	3.6	ND		ug/L	425538	14486
Indeno[1,2,3-cd]pyrene	SW8270C	5/20/15	05/20/15	1	0.50	3.6	ND		ug/L	425538	14486
Dibenz[a,h]anthracene	SW8270C	5/20/15	05/20/15	1	1.2	3.6	ND		ug/L	425538	14486
Benzo[g,h,i]perylene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
2-Fluorobiphenyl (S)	SW8270C	5/20/15	05/20/15	1	41.4	120	85.1		%	425538	14486
p-Terphenyl-d14 (S)	SW8270C	5/20/15	05/20/15	1	35.3	135	83.2		%	425538	14486

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	5/14/15	05/14/15	1	0.0400	0.10	0.63	x	mg/L	425475	14449
TPH as Motor Oil	SW8015B(M)	5/14/15	05/14/15	1	0.0900	0.40	0.53		mg/L	425475	14449
Pentacosane (S)	SW8015B(M)	5/14/15	05/14/15	1	64.2	123	111		%	425475	14449

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	PW-1	Lab Sample ID:	1505075-004A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:05		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	05/20/15	1	0.18	0.50	ND		ug/L	425548	NA
Chloromethane	SW8260B	NA	05/20/15	1	0.16	0.50	ND		ug/L	425548	NA
Vinyl Chloride	SW8260B	NA	05/20/15	1	0.16	0.50	ND		ug/L	425548	NA
Bromomethane	SW8260B	NA	05/20/15	1	0.18	0.50	ND		ug/L	425548	NA
Trichlorofluoromethane	SW8260B	NA	05/20/15	1	0.18	0.50	ND		ug/L	425548	NA
1,1-Dichloroethene	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
Freon 113	SW8260B	NA	05/20/15	1	0.19	0.50	ND		ug/L	425548	NA
Methylene Chloride	SW8260B	NA	05/20/15	1	0.23	5.0	ND		ug/L	425548	NA
trans-1,2-Dichloroethene	SW8260B	NA	05/20/15	1	0.19	0.50	ND		ug/L	425548	NA
MTBE	SW8260B	NA	05/20/15	1	0.17	0.50	ND		ug/L	425548	NA
tert-Butanol	SW8260B	NA	05/20/15	1	1.5	5.0	ND		ug/L	425548	NA
Diisopropyl ether (DIPE)	SW8260B	NA	05/20/15	1	0.13	0.50	ND		ug/L	425548	NA
1,1-Dichloroethane	SW8260B	NA	05/20/15	1	0.13	0.50	ND		ug/L	425548	NA
ETBE	SW8260B	NA	05/20/15	1	0.17	0.50	ND		ug/L	425548	NA
cis-1,2-Dichloroethene	SW8260B	NA	05/20/15	1	0.19	0.50	2.6		ug/L	425548	NA
2,2-Dichloropropane	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
Bromochloromethane	SW8260B	NA	05/20/15	1	0.20	0.50	ND		ug/L	425548	NA
Chloroform	SW8260B	NA	05/20/15	1	0.13	0.50	ND		ug/L	425548	NA
Carbon Tetrachloride	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
1,1,1-Trichloroethane	SW8260B	NA	05/20/15	1	0.097	0.50	ND		ug/L	425548	NA
1,1-Dichloropropene	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
Benzene	SW8260B	NA	05/20/15	1	0.13	0.50	ND		ug/L	425548	NA
TAME	SW8260B	NA	05/20/15	1	0.17	0.50	ND		ug/L	425548	NA
1,2-Dichloroethane	SW8260B	NA	05/20/15	1	0.14	0.50	ND		ug/L	425548	NA
Trichloroethylene	SW8260B	NA	05/20/15	1	0.13	0.50	2.6		ug/L	425548	NA
Dibromomethane	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
1,2-Dichloropropane	SW8260B	NA	05/20/15	1	0.17	0.50	ND		ug/L	425548	NA
Bromodichloromethane	SW8260B	NA	05/20/15	1	0.13	0.50	ND		ug/L	425548	NA
cis-1,3-Dichloropropene	SW8260B	NA	05/20/15	1	0.096	0.50	ND		ug/L	425548	NA
Toluene	SW8260B	NA	05/20/15	1	0.14	0.50	ND		ug/L	425548	NA
Tetrachloroethylene	SW8260B	NA	05/20/15	1	0.14	0.50	93		ug/L	425548	NA
trans-1,3-Dichloropropene	SW8260B	NA	05/20/15	1	0.23	0.50	ND		ug/L	425548	NA
1,1,2-Trichloroethane	SW8260B	NA	05/20/15	1	0.14	0.50	ND		ug/L	425548	NA
Dibromochloromethane	SW8260B	NA	05/20/15	1	0.096	0.50	ND		ug/L	425548	NA
1,3-Dichloropropane	SW8260B	NA	05/20/15	1	0.10	0.50	ND		ug/L	425548	NA



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	PW-1	Lab Sample ID:	1505075-004A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:05		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
1,2-Dibromoethane	SW8260B	NA	05/20/15	1	0.19	0.50	ND		ug/L	425548	NA
Chlorobenzene	SW8260B	NA	05/20/15	1	0.14	0.50	ND		ug/L	425548	NA
Ethyl Benzene	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	05/20/15	1	0.096	0.50	ND		ug/L	425548	NA
m,p-Xylene	SW8260B	NA	05/20/15	1	0.13	1.0	ND		ug/L	425548	NA
o-Xylene	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
Styrene	SW8260B	NA	05/20/15	1	0.21	0.50	ND		ug/L	425548	NA
Bromoform	SW8260B	NA	05/20/15	1	0.21	1.0	ND		ug/L	425548	NA
Isopropyl Benzene	SW8260B	NA	05/20/15	1	0.097	0.50	ND		ug/L	425548	NA
Bromobenzene	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	05/20/15	1	0.11	0.50	ND		ug/L	425548	NA
n-Propylbenzene	SW8260B	NA	05/20/15	1	0.078	0.50	ND		ug/L	425548	NA
2-Chlorotoluene	SW8260B	NA	05/20/15	1	0.076	0.50	ND		ug/L	425548	NA
1,3,5-Trimethylbenzene	SW8260B	NA	05/20/15	1	0.074	0.50	ND		ug/L	425548	NA
4-Chlorotoluene	SW8260B	NA	05/20/15	1	0.088	0.50	ND		ug/L	425548	NA
tert-Butylbenzene	SW8260B	NA	05/20/15	1	0.081	0.50	ND		ug/L	425548	NA
1,2,3-Trichloropropane	SW8260B	NA	05/20/15	1	0.14	0.50	ND		ug/L	425548	NA
1,2,4-Trimethylbenzene	SW8260B	NA	05/20/15	1	0.083	0.50	ND		ug/L	425548	NA
sec-Butyl Benzene	SW8260B	NA	05/20/15	1	0.092	0.50	ND		ug/L	425548	NA
p-Isopropyltoluene	SW8260B	NA	05/20/15	1	0.093	0.50	ND		ug/L	425548	NA
1,3-Dichlorobenzene	SW8260B	NA	05/20/15	1	0.10	0.50	ND		ug/L	425548	NA
1,4-Dichlorobenzene	SW8260B	NA	05/20/15	1	0.069	0.50	ND		ug/L	425548	NA
n-Butylbenzene	SW8260B	NA	05/20/15	1	0.081	0.50	ND		ug/L	425548	NA
1,2-Dichlorobenzene	SW8260B	NA	05/20/15	1	0.057	0.50	ND		ug/L	425548	NA
1,2-Dibromo-3-Chloropropane	SW8260B	NA	05/20/15	1	0.15	0.50	ND		ug/L	425548	NA
Hexachlorobutadiene	SW8260B	NA	05/20/15	1	0.19	0.50	ND		ug/L	425548	NA
1,2,4-Trichlorobenzene	SW8260B	NA	05/20/15	1	0.12	0.50	ND		ug/L	425548	NA
Naphthalene	SW8260B	NA	05/20/15	1	0.14	1.0	ND		ug/L	425548	NA
1,2,3-Trichlorobenzene	SW8260B	NA	05/20/15	1	0.23	0.50	ND		ug/L	425548	NA
(S) Dibromofluoromethane	SW8260B	NA	05/20/15	1	61.2	131	95.3		%	425548	NA
(S) Toluene-d8	SW8260B	NA	05/20/15	1	75.1	127	107		%	425548	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	05/20/15	1	64.1	120	96.6		%	425548	NA



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	PW-1	Lab Sample ID:	1505075-004A
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:05		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	5/19/15	05/19/15	1	31	50	72	x	ug/L	425544	14491
(S) 4-Bromofluorobenzene	8260TPH	5/19/15	05/19/15	1	41.5	125	96.7		%	425544	14491

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons within the range of C5-C12 quantified as Gasoline.



SAMPLE RESULTS

Report prepared for: Brent Wheeler
Golden Gate Tank Removal

Date Received: 05/14/15
Date Reported: 05/21/15

Client Sample ID:	PW-1	Lab Sample ID:	1505075-004B
Project Name/Location:	5930 College Avenue, Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	05/13/15 / 10:05		
Tag Number:	5930 College Avenue		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Naphthalene	SW8270C	5/20/15	05/20/15	1	0.94	3.6	ND		ug/L	425538	14486
2-Methylnaphthalene	SW8270C	5/20/15	05/20/15	1	0.83	3.6	ND		ug/L	425538	14486
1-Methylnaphthalene	SW8270C	5/20/15	05/20/15	1	0.83	3.6	ND		ug/L	425538	14486
Acenaphthylene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Acenaphthene	SW8270C	5/20/15	05/20/15	1	0.55	3.6	ND		ug/L	425538	14486
Fluorene	SW8270C	5/20/15	05/20/15	1	0.54	3.6	ND		ug/L	425538	14486
Phenanthrene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Anthracene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
Fluoranthene	SW8270C	5/20/15	05/20/15	1	0.39	3.6	ND		ug/L	425538	14486
Pyrene	SW8270C	5/20/15	05/20/15	1	0.41	3.6	ND		ug/L	425538	14486
Benz[a]anthracene	SW8270C	5/20/15	05/20/15	1	0.40	3.6	ND		ug/L	425538	14486
Chrysene	SW8270C	5/20/15	05/20/15	1	0.58	3.6	ND		ug/L	425538	14486
Benzo[b]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.1	3.6	ND		ug/L	425538	14486
Benzo[k]fluoranthene	SW8270C	5/20/15	05/20/15	1	1.9	3.6	ND		ug/L	425538	14486
Benzo[a]pyrene	SW8270C	5/20/15	05/20/15	1	0.25	3.6	ND		ug/L	425538	14486
Indeno[1,2,3-cd]pyrene	SW8270C	5/20/15	05/20/15	1	0.50	3.6	ND		ug/L	425538	14486
Dibenz[a,h]anthracene	SW8270C	5/20/15	05/20/15	1	1.2	3.6	ND		ug/L	425538	14486
Benzo[g,h,i]perylene	SW8270C	5/20/15	05/20/15	1	0.45	3.6	ND		ug/L	425538	14486
2-Fluorobiphenyl (S)	SW8270C	5/20/15	05/20/15	1	41.4	120	66.3		%	425538	14486
p-Terphenyl-d14 (S)	SW8270C	5/20/15	05/20/15	1	35.3	135	82.2		%	425538	14486

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	5/14/15	05/14/15	1	0.0400	0.10	ND		mg/L	425475	14449
TPH as Motor Oil	SW8015B(M)	5/14/15	05/14/15	1	0.0900	0.40	ND		mg/L	425475	14449
Pentacosane (S)	SW8015B(M)	5/14/15	05/14/15	1	64.2	123	104		%	425475	14449



MB Summary Report

Work Order:	1505075	Prep Method:	3510_TPH	Prep Date:	05/14/15	Prep Batch:	14449
Matrix:	Water	Analytical Method:	SW8015B	Analyzed Date:	05/14/15	Analytical Batch:	425475
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH as Fuel Oil	0.0920	0.20	ND		
TPH as Diesel	0.0287	0.10	0.047		
TPH as Motor Oil	0.0920	0.20	0.094		
Pentacosane (S)			76.1		

Work Order:	1505075	Prep Method:	3510_BNA	Prep Date:	05/20/15	Prep Batch:	14486
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	05/20/15	Analytical Batch:	425538
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Pyridine	1.8	3.6	ND		
N-Nitrosodimethylamine	0.68	3.6	ND		
Aniline	1.1	3.6	ND		
Phenol	0.87	3.6	ND		
Bis(2-chloroethyl) ether	0.97	3.6	ND		
2-Chlorophenol	1.2	3.6	ND		
1,3-Dichlorobenzene	0.89	3.6	ND		
1,4-Dichlorobenzene	1.1	3.6	ND		
Benzyl Alcohol	1.2	7.2	ND		
1,2-Dichlorobenzene	1.0	3.6	ND		
2-Methylphenol (o-Cresol)	1.3	3.6	ND		
Bis(2-chloroisopropyl)ether	1.3	3.6	ND		
3-/4-Methylphenol (p-/m-Cresol)	1.2	3.6	ND		
N-nitroso-di-n-propylamine	1.3	3.6	ND		
Hexachloroethane	1.2	3.6	ND		
Nitrobenzene	0.98	3.6	ND		
Isophorone	1.2	3.6	ND		
2-Nitrophenol	0.82	18	ND		
2,4-Dimethylphenol	0.082	3.6	ND		
Benzoic Acid	6.3	18	ND		
Bis(2-Chloroethoxy)methane	1.0	3.6	ND		
2,4-Dichlorophenol	0.94	3.6	ND		
1,2,4-Trichlorobenzene	0.85	3.6	ND		
2,6-Dichlorophenol	0.94	3.6	ND		
Naphthalene	0.94	3.6	ND		
4-Chloroaniline	0.84	7.2	ND		
Hexachloro-1,3-butadiene	0.79	3.6	ND		
4-Chloro-3-methylphenol	0.71	3.6	ND		



MB Summary Report

Work Order:	1505075	Prep Method:	3510_BNA	Prep Date:	05/20/15	Prep Batch:	14486
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	05/20/15	Analytical Batch:	425538
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
2-Methylnaphthalene	0.83	3.6	ND		
1-Methylnaphthalene	0.83	3.6	ND		
Hexachlorocyclopentadiene	0.32	18	ND		
2,4,6-Trichlorophenol	0.77	3.6	ND		
2,4,5-Trichlorophenol	0.76	3.6	ND		
2-Chloronaphthalene	0.93	3.6	ND		
2-Nitroaniline	0.39	18	ND		
1,4-Dinitrobenzene	0.45	3.6	ND		
Dimethyl phthalate	0.39	3.6	ND		
1,3-Dinitrobenzene	0.083	3.6	ND		
Acenaphthylene	0.55	3.6	ND		
2,6-Dinitrotoluene	0.40	3.6	ND		
1,2-Dinitrobenzene	0.45	3.6	ND		
3-Nitroaniline	0.75	18	ND		
Acenaphthene	0.55	3.6	ND		
2,4-Dinitrophenol	0.051	9.0	ND		
4-Nitrophenol	1.3	3.6	ND		
Dibenzofuran	0.67	3.6	ND		
2,4-Dinitrotoluene	0.44	3.6	ND		
2,3,5,6-Tetrachlorophenol	0.27	3.6	ND		
2,3,4,6-Tetrachlorophenol	0.22	3.6	ND		
Diethylphthalate	0.67	3.6	ND		
Fluorene	0.54	3.6	ND		
4-Chlorophenyl phenyl ether	0.57	3.6	ND		
4-Nitroaniline	0.19	18	ND		
4,6-Dinitro-2-methylphenol	0.70	18	ND		
Diphenylamine	0.56	3.6	ND		
Azobenzene	0.56	3.6	ND		
4-Bromophenyl phenyl ether	0.83	3.6	ND		
Hexachlorobenzene	0.58	3.6	ND		
Pentachlorophenol	0.23	3.6	ND		
Phenanthrene	0.40	3.6	ND		
Anthracene	0.45	3.6	ND		
Carbazole	0.45	3.6	ND		
Di-n-butylphthalate	0.38	3.6	ND		
Fluoranthene	0.39	3.6	ND		
Benzidine	0.10	18	ND		
Pyrene	0.41	3.6	ND		
Benzyl butyl phthalate	0.37	3.6	ND		
Benz[a]anthracene	0.40	3.6	ND		
3,3'-Dichlorobenzidine	0.27	7.2	ND		



MB Summary Report

Work Order:	1505075	Prep Method:	3510_BNA	Prep Date:	05/20/15	Prep Batch:	14486
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	05/20/15	Analytical Batch:	425538
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Chrysene	0.58	3.6	ND	
Bis(2-Ethylhexyl)phthalate	0.31	3.6	ND	
Di-n-octyl phthalate	0.37	3.6	ND	
Benzo[b]fluoranthene	1.1	3.6	ND	
Benzo[k]fluoranthene	1.9	3.6	ND	
Benzo[a]pyrene	0.25	3.6	ND	
Indeno[1,2,3-cd]pyrene	0.50	3.6	ND	
Dibenz[a,h]anthracene	1.2	3.6	ND	
Benzo[g,h,i]perylene	0.45	3.6	ND	
Phenol-d6 (S)			26.9	
2-Fluorophenol (S)			52.2	
2,4,6-Tribromophenol (S)			85.0	
Nitrobenzene-d5 (S)			59.1	
2-Fluorobiphenyl (S)			75.8	
p-Terphenyl-d14 (S)			76.3	

Work Order:	1505075	Prep Method:	5030	Prep Date:	05/19/15	Prep Batch:	14491
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	05/19/15	Analytical Batch:	425544
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Gasoline	31	50	ND	
(S) 4-Bromofluorobenzene			97.6	



MB Summary Report

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/19/15	Analytical Batch:	425544
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.18	0.50	ND		
Chloromethane	0.16	0.50	ND		
Vinyl Chloride	0.16	0.50	ND		
Bromomethane	0.18	0.50	0.47		
Trichlorofluoromethane	0.18	0.50	ND		
1,1-Dichloroethene	0.15	0.50	ND		
Freon 113	0.19	0.50	ND		
Methylene Chloride	0.23	5.0	ND		
trans-1,2-Dichloroethene	0.19	0.50	0.21		
MTBE	0.17	0.50	ND		
tert-Butanol	1.5	5.0	1.6		
Diisopropyl ether (DIPE)	0.13	0.50	ND		
1,1-Dichloroethane	0.13	0.50	ND		
ETBE	0.17	0.50	ND		
cis-1,2-Dichloroethene	0.19	0.50	ND		
2,2-Dichloropropane	0.15	0.50	ND		
Bromochloromethane	0.20	0.50	ND		
Chloroform	0.13	0.50	ND		
Carbon Tetrachloride	0.15	0.50	ND		
1,1,1-Trichloroethane	0.097	0.50	ND		
1,1-Dichloropropene	0.15	0.50	ND		
Benzene	0.13	0.50	ND		
TAME	0.17	0.50	ND		
1,2-Dichloroethane	0.14	0.50	ND		
Trichloroethylene	0.13	0.50	ND		
Dibromomethane	0.15	0.50	ND		
1,2-Dichloropropane	0.17	0.50	ND		
Bromodichloromethane	0.13	0.50	ND		
cis-1,3-Dichloropropene	0.096	0.50	0.12		
Toluene	0.14	0.50	ND		
Tetrachloroethylene	0.14	0.50	ND		
trans-1,3-Dichloropropene	0.23	0.50	ND		
1,1,2-Trichloroethane	0.14	0.50	ND		
Dibromochloromethane	0.096	0.50	ND		
1,3-Dichloropropane	0.10	0.50	ND		
1,2-Dibromoethane	0.19	0.50	ND		
Chlorobenzene	0.14	0.50	ND		
Ethyl Benzene	0.15	0.50	ND		
1,1,1,2-Tetrachloroethane	0.096	0.50	ND		
m,p-Xylene	0.13	1.0	ND		
o-Xylene	0.15	0.50	ND		



MB Summary Report

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/19/15	Analytical Batch:	425544
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	0.10		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	0.14		
1,4-Dichlorobenzene	0.069	0.50	0.19		
n-Butylbenzene	0.081	0.50	ND		
1,2-Dichlorobenzene	0.057	0.50	0.080		
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND		
Hexachlorobutadiene	0.19	0.50	ND		
1,2,4-Trichlorobenzene	0.12	0.50	0.22		
Naphthalene	0.14	1.0	0.33		
1,2,3-Trichlorobenzene	0.23	0.50	0.24		
(S) Dibromofluoromethane			98.5		
(S) Toluene-d8			105		
(S) 4-Bromofluorobenzene			91.7		
Ethanol	0.21	0.50	ND	TIC	



MB Summary Report

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/20/15	Analytical Batch:	425548
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.18	0.50	ND		
Chloromethane	0.16	0.50	ND		
Vinyl Chloride	0.16	0.50	ND		
Bromomethane	0.18	0.50	0.23		
Trichlorofluoromethane	0.18	0.50	ND		
1,1-Dichloroethene	0.15	0.50	ND		
Freon 113	0.19	0.50	ND		
Methylene Chloride	0.23	5.0	ND		
trans-1,2-Dichloroethene	0.19	0.50	ND		
MTBE	0.17	0.50	ND		
tert-Butanol	1.5	5.0	ND		
Diisopropyl ether (DIPE)	0.13	0.50	ND		
1,1-Dichloroethane	0.13	0.50	ND		
ETBE	0.17	0.50	ND		
cis-1,2-Dichloroethene	0.19	0.50	ND		
2,2-Dichloropropane	0.15	0.50	ND		
Bromochloromethane	0.20	0.50	ND		
Chloroform	0.13	0.50	ND		
Carbon Tetrachloride	0.15	0.50	ND		
1,1,1-Trichloroethane	0.097	0.50	ND		
1,1-Dichloropropene	0.15	0.50	ND		
Benzene	0.13	0.50	ND		
TAME	0.17	0.50	ND		
1,2-Dichloroethane	0.14	0.50	ND		
Trichloroethylene	0.13	0.50	ND		
Dibromomethane	0.15	0.50	ND		
1,2-Dichloropropane	0.17	0.50	ND		
Bromodichloromethane	0.13	0.50	ND		
cis-1,3-Dichloropropene	0.096	0.50	ND		
Toluene	0.14	0.50	ND		
Tetrachloroethylene	0.14	0.50	ND		
trans-1,3-Dichloropropene	0.23	0.50	ND		
1,1,2-Trichloroethane	0.14	0.50	ND		
Dibromochloromethane	0.096	0.50	ND		
1,3-Dichloropropane	0.10	0.50	ND		
1,2-Dibromoethane	0.19	0.50	ND		
Chlorobenzene	0.14	0.50	ND		
Ethyl Benzene	0.15	0.50	ND		
1,1,1,2-Tetrachloroethane	0.096	0.50	ND		
m,p-Xylene	0.13	1.0	ND		
o-Xylene	0.15	0.50	ND		



MB Summary Report

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/20/15	Analytical Batch:	425548
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	ND		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	0.21		
1,4-Dichlorobenzene	0.069	0.50	0.11		
n-Butylbenzene	0.081	0.50	0.090		
1,2-Dichlorobenzene	0.057	0.50	0.10		
1,2-Dibromo-3-Chloropropane	0.15	0.50	0.16		
Hexachlorobutadiene	0.19	0.50	0.27		
1,2,4-Trichlorobenzene	0.12	0.50	0.35		
Naphthalene	0.14	1.0	0.46		
1,2,3-Trichlorobenzene	0.23	0.50	ND		
(S) Dibromofluoromethane			99.4		
(S) Toluene-d8			109		
(S) 4-Bromofluorobenzene			97.7		
Ethanol	0.21	0.50	ND	TIC	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1505075	Prep Method:	3510_TPH	Prep Date:	05/14/15	Prep Batch:	14449
Matrix:	Water	Analytical Method:	SW8015B	Analyzed Date:	05/14/15	Analytical Batch:	425475
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.029	0.10	ND	1	101	103	2.33	46.2 - 109	30	
Pentacosane (S)			ND	200	67.1	78.6		53.3 - 124		

Work Order:	1505075	Prep Method:	3510_BNA	Prep Date:	05/20/15	Prep Batch:	14486
Matrix:	Water	Analytical Method:	SW8270C	Analyzed Date:	05/20/15	Analytical Batch:	425538
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Phenol	0.87	3.6	ND	40	42.7	40.7	4.80	10.5 - 112	30	
2-Chlorophenol	1.2	3.6	ND	40	85.2	84.0	1.21	23 - 134	30	
1,4-Dichlorobenzene	1.1	3.6	ND	20	77.8	77.3	0.668	45 - 135	30	
N-Nitroso-di-n-propylamine	1.3	3.6	ND	40	85.0	84.5	0.592	35.5 - 129	30	
1,2,4-Trichlorobenzene	0.85	3.6	ND	20	71.3	69.9	1.93	51.8 - 125	30	
4-Chloro-3-methylphenol	0.71	3.6	ND	40	76.0	73.4	3.51	46.7 - 112	30	
Acenaphthene	0.55	3.6	ND	20	83.7	79.8	4.74	52.5 - 116	30	
4-Nitrophenol	1.3	3.6	ND	40	31.9	27.6	14.3	11.6 - 74.9	30	
2,4-Dinitrotoluene	0.44	3.6	ND	20	84.0	80.2	4.65	60.3 - 112	30	
Pentachlorophenol	0.23	3.6	ND	40	88.2	85.0	3.67	46.2 - 116	30	
Pyrene	0.41	3.6	ND	20	101	96.8	4.04	45.9 - 127	30	
Phenol-d6 (S)			ND	40	30.3	28.3		10 - 94		
2-Fluorophenol (S)			ND	40	45.0	43.4		21 - 100		
2,4,6-Tribromophenol (S)			ND	40	87.7	80.8		29.6 - 130		
Nitrobenzene-d5 (S)			ND	20	67.9	65.2		31.0 - 116		
2-Fluorobiphenyl (S)			ND	20	72.0	69.6		21.3 - 123		
p-Terphenyl-d14 (S)			ND	20	73.1	72.4		10 - 123		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1505075	Prep Method:	5030	Prep Date:	05/19/15	Prep Batch:	14491
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	05/19/15	Analytical Batch:	425544
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Gasoline	31	50	ND	238.1	95.4	82.7	14.3	52.4 - 127	30	
(S) 4-Bromofluorobenzene			97.6	11.9	111	86.0		41.5 - 125		

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/19/15	Analytical Batch:	425544
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.86	109	88.6	20.8	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.86	111	90.1	21.2	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.86	111	96.3	14.6	69.3 - 144	30	
Toluene	0.059	0.50	0.47	17.86	110	95.6	14.2	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.86	107	92.3	15.2	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.9	107	98.0		61.2 - 131		
(S) Toluene-d8			ND	11.9	104	103		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.9	89.2	87.9		64.1 - 120		

Work Order:	1505075	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	05/20/15	Analytical Batch:	425548
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.86	92.4	104	12.1	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.86	98.0	107	8.90	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.86	91.3	102	10.7	69.3 - 144	30	
Toluene	0.059	0.50	0.23	17.86	95.5	105	9.63	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.86	91.8	101	9.52	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.9	108	109		61.2 - 131		
(S) Toluene-d8			ND	11.9	108	107		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.9	93.6	96.5		64.1 - 120		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m³ , mg.m³ , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p>X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>



Sample Receipt Checklist

Client Name: Golden Gate Tank Removal

Date and Time Received: 5/14/2015 10:35

Project Name: 5930 College Avenue, Oakland

Received By: ng

Work Order No.: 1505075

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: FedEx

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? Yes Temperature: 2 °C
Water-VOA vials have zero headspace? Yes
Water-pH acceptable upon receipt? N/A

pH Checked by: na pH Adjusted by: na



Login Summary Report

Client ID: TL5128 Golden Gate Tank Removal
Project Name: 5930 College Avenue, Oakland
Project # :
Report Due Date: 5/21/2015

QC Level:
TAT Requested: 5+ day:0
Date Received: 5/14/2015
Time Received: 10:35

Comments:

Work Order # : 1505075

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1505075-001A	MW-1	05/13/15 11:40	Water	06/28/15			EDF W_GCMS-GRO W_8260PetE	
Sample Note:	TPHg, MTBE, TBA, EDB, EDC, Naphthalene, BTEX.							
1505075-001B	MW-1	05/13/15 11:40	Water	06/28/15			W_8270CPAH W_TPHDO	
Sample Note:	TPHd, mo, 8270C-PAHs.							
1505075-002A	MW-2	05/13/15 11:14	Water	06/28/15			W_GCMS-GRO W_8260PetE	
1505075-002B	MW-2	05/13/15 11:14	Water	06/28/15			W_TPHDO W_8270CPAH	
1505075-003A	MW-3	05/13/15 10:35	Water	06/28/15			W_GCMS-GRO W_8260PetE	
1505075-003B	MW-3	05/13/15 10:35	Water	06/28/15			W_TPHDO W_8270CPAH	
1505075-004A	PW-1	05/13/15 10:05	Water	06/28/15			W_8260Full W_GCMS-GRO	
Sample Note:	Tests: TPHg, VOCs for sample 004A only.							
1505075-004B	PW-1	05/13/15 10:05	Water	06/28/15			W_TPHDO W_8270CPAH	

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GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

<u>Submittal Type:</u>	EDF
<u>Report Title:</u>	2nd Quarter 2015 Groundwater Sample Results
<u>Report Type:</u>	Monitoring Report - Semi-Annually
<u>Facility Global ID:</u>	T0600102112
<u>Facility Name:</u>	SHEAFFS SERVICE GARAGE
<u>File Name:</u>	GGTR 1505075 5930 College EDF.zip
<u>Organization Name:</u>	Golden Gate Environmental, Inc.
<u>Username:</u>	GGE
<u>IP Address:</u>	75.101.98.2
<u>Submittal Date/Time:</u>	5/27/2015 2:42:43 PM
<u>Confirmation Number:</u>	9929396212

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

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UPLOADING A GEO_WELL FILE

SUCCESS

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

<u>Submittal Type:</u>	GEO_WELL
<u>Report Title:</u>	2nd Quarter 2015 Groundwater Monitoring Results
<u>Facility Global ID:</u>	T0600102112
<u>Facility Name:</u>	SHEAFFS SERVICE GARAGE
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Golden Gate Environmental, Inc.
<u>Username:</u>	GGE
<u>IP Address:</u>	75.101.98.2
<u>Submittal Date/Time:</u>	5/27/2015 2:41:02 PM
<u>Confirmation Number:</u>	5096259415

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UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

<u>Submittal Type:</u>	GEO_REPORT
<u>Report Title:</u>	Groundwater Monitoring Report - 2nd Quarter 2015
<u>Report Type:</u>	Monitoring Report - Semi-Annually
<u>Report Date:</u>	6/1/2015
<u>Facility Global ID:</u>	T0600102112
<u>Facility Name:</u>	SHEAFFS SERVICE GARAGE
<u>File Name:</u>	9497_GWM Report_ 2Q15_060115.pdf
<u>Organization Name:</u>	Golden Gate Tank Removal
<u>Username:</u>	GGTR
<u>IP Address:</u>	75.101.98.2
<u>Submittal Date/Time:</u>	6/3/2015 2:27:59 PM
<u>Confirmation Number:</u>	4514879345

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EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient -- Magnitude and Direction

Gradient Calculation from fitting a plane to as many as thirty points

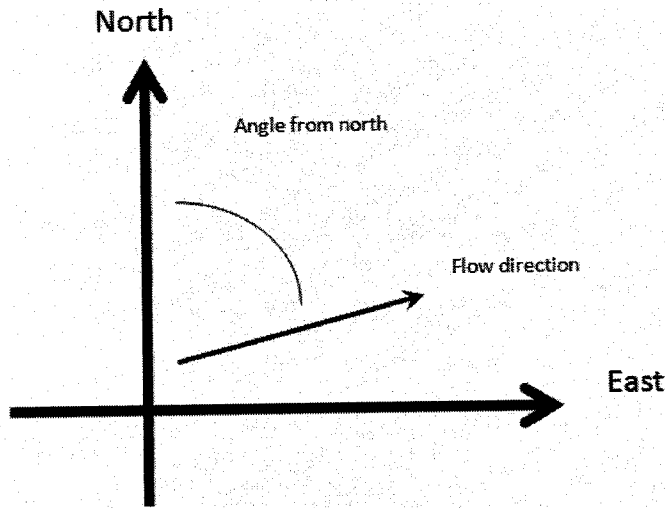
$$\begin{aligned}
 a x_1 + b y_1 + c &= h_1 \\
 a x_2 + b y_2 + c &= h_2 \\
 a x_3 + b y_3 + c &= h_3 \\
 &\dots \\
 a x_{30} + b y_{30} + c &= h_{30}
 \end{aligned}$$

where (x_i, y_i) are the coordinates of the well and h_i is the head

$i = 1, 2, 3, \dots, 30$

The coefficients a , b , and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant



Inputs

Example Data Set 1 | Example Data Set 2 | Calculate | Clear

Save Data | Recall Data | Go Back

Site Name: 5930 College Ave.

Date: 5/13/15 | Current Date

Calculation basis: Head

Coordinates: ft

I.D.	x-coordinate	y-coordinate	head	ft
1) MW-1	6055822.91	2135878.96	186.57	
2) MW-3	6055818.98	2135842.80	186.33	
3) PW-1	6055924.91	2135914.96	187.11	
4)				
5)				
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				
16)				
17)				

18)				
19)				
20)				
21)				
22)				
23)				
24)				
25)				
26)				
27)				
28)				
29)				
30)				

Results

Number of Points Used in Calculation	3
Max. Difference Between Head Values	0.2377
Gradient Magnitude (i)	0.007011
Flow direction as degrees from North (positive y axis)	206.0
Coefficient of Determination (R ²)	1.00

WCMS

Last updated on Thursday, January 10, 2013