December 7, 2012

Karel Detterman, P.G. Alameda County Health Care Services Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

RE: Soil and Groundwater Investigation Report

SITE: Kroger Residential Property 725 Central Avenue, Alameda, California ACHCSA Fuel Leak Case No. RO0003071 GGE Project 2043

Dear Ms. Detterman:

Upon my authorization, Golden Gate Environmental, Inc. (GGE) has prepared a *Soil and Groundwater Investigation Report* (Dated December 6, 2012) for the preliminary environmental site investigation activities conducted in October 2012 in the vicinity of the former 1,500-gallon diesel underground storage tank at the above-referenced property. The Alameda County Health Care Services Agency conditionally approved the preliminary soil and groundwater investigation work in its letter dated August 2, 2012.

GGE has uploaded an electronic copy of the document to the State Water Resources Control Board's GeoTracker Database System. Should you have any questions, please contact Mr. Brent Wheeler, Project Engineer of GGE at (415) 970-9088 at your convenience.

I declare, under penalty of perjury, that I have reviewed the attached *Soil and Groundwater Investigation Report* and the information and/or proposed work scope contained in the document are true and correct to the best of my knowledge.

Respectfully Submitted

Mr. Fred T. Kroger

Kroger Family Trust Post Office Box 11244 Piedmont, California 94611-0244

Distribution: (1) Addressee

RECEIVED

10:22 am, Dec 11, 2012

Alameda County Environmental Health



#### SOIL AND GROUNDWATER INVESTIGATION REPORT

#### Kroger Residential Property 725 Central Avenue Alameda, California 94501 ACHCSA RO0003071

Prepared For:

Mr. Fred Kroger P.O. Box 11244 Piedmont, CA 94611

Prepared By:

Golden Gate Environmental, Inc. 1455 Yosemite Avenue San Francisco, CA 94124

> GGE Project No. 2043 December 6, 2012

ED MARK YOUNGKIN No. 1380 a CERTIFIED NGINEERING Mark Youngkin GEOLOGIST Brent A. Wheeler ěer4-30 Registered Geologist Project E

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757 Santa Clara Avenue, Alameda, California

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#### SOIL AND GROUNDWATER INVESTIGATION REPORT

#### Kroger Residential Property 725 Central Avenue, Alameda, California ACHCSA RO0003071

#### INTRODUCTION

#### **Purpose**

On behalf of Mr. Fred Kroger and the Kroger Trust et al, Golden Gate Environmental, Inc. (GGE) is pleased to submit this report, which discusses the activities and findings of the preliminary soil and groundwater investigation activities, conducted in October 2012 at the Kroger Residential Property located at 725 Central Avenue in Alameda, California (the Site). The report was prepared in response to an April 19, 2012 letter issued by the Alameda County Environmental Health (ACEH; Site #RO0003071), which requested a soil and groundwater investigation to assess the presence and extent of contamination in soil and groundwater in the direct vicinity of the former underground storage tank (UST) removed from the Site in September 2008.

The purpose of this report is to present the activities and findings of the subsurface investigation performed at the Site, and based on evaluation and interpretation of the data obtained, provide findings and recommendations for additionally required investigation or Site closure review. The investigation activities were conducted in general accordance with our *Soil and Groundwater Investigation Work Plan* dated June 21, 2012, which was conditionally approved by the ACEH in a letter dated August 2, 2012. The general scope of work proposed in the work plan included drilling three subsurface soil borings and collecting representative soil and grab groundwater samples for laboratory analysis. The investigation activities were performed in general accordance with the State Water Resources Control Board's Leaking Underground Fuel Tank (LUFT) manual and the TRI-Regional Board Staff Recommendation for Preliminary Evaluation and Investigation of Underground Tank Sites. A Copy of the ACEH August 2, 2012 Work Plan Approval Letter is presented in Appendix A.

#### Scope of Work

The general scope of work conducted at the site included the following:

- Pre-field work activities and permitting
- Soil boring activities
- Soil and grab groundwater sampling activities
- Sample handling and transportation
- Backfilling activities
- Sample analysis

- Waste Management
- Data interpretation, report preparation and submittal.

#### Site Location and Description

The Site is located at the north side of Central Avenue, approximately 300 feet east of Webster Street, in the City and County of Alameda. The Site lies approximately 0.2 mile north-northeast and presumed up gradient from the San Francisco Bay (at Robert Crown Memorial State Beach Inlet). The location of the Site is shown in the attached Figure 1 - *Site Location Map*.

According to Figure 1, the elevation of the Site is estimated to be approximately 20 feet above Mean Sea Level. The Site consists of a rectangular multi-unit apartment building with a front landscaped area and an additional parking area in the rear. The Site occupies approximately 11,500 square feet (0.26 acre) in lot area and is currently owned by the Fred Kroger Trust (Alameda County Assessor Parcel 73-423-15-1).

The Site is relatively flat lying with the topographic relief generally directed towards the south-southwest (Figure 1), in the general direction of the San Francisco Bay. A multi-story, apartment building, approximately 7,000 square feet in area, is situated on the majority of the Site, with a driveway on the west side of the building providing access for tenant vehicular parking in the rear of the property. The surface area leading to the rear garage and rear parking area are completely paved with concrete. The rear parking area is enclosed with cyclone fencing to the north and east, and a concrete cinderblock wall to the west (adjacent to the west side of the driveway leading to Central Avenue). The front entryway of the building is paved throughout with stamped concrete with small landscaped/lawn areas on each side of the entryway (Figure 2). The City right of way sidewalk borders the south property line.

One 1500-gallon underground heating oil storage tank (UST) was located beneath the sidewalk in front of the southeast corner of the Site and removed by Golden Gate Tank Removal, Inc. (GGTR) in September 2008. The attached Figure 2 titled *Site Plan* shows general Site features and the location of the former UST.

#### Site Geology and Hydrogeology

According to a Geologic Map of the San Francisco-San Jose Quadrangle (California Department of Conservation, 1990), the Site lies on sand or artificial fill and is underlain by up to 500 feet of Quaternary alluvial deposits (unconsolidated and dissected stream and basin deposits) and possibly marine sandstone, shale, cherts, and conglomerates of the Mesozoic Franciscan Complex (thickness not established). The geologic map also indicates that the Site is situated approximately 5 miles southwest and 16 miles northeast of the Hayward and San Andreas Fault Zones, respectively.

The Site is in the East Bay Plain groundwater basin according to the San Francisco Bay Basin Water Quality Control Plan prepared by the CRWQCB – Region 2, 1995.

Groundwater in this basin is designated beneficial for municipal and domestic water supply and industrial process, service water, and agricultural water supply.

The regional groundwater flow direction in the vicinity of the Site is estimated to be toward the south-southwest, in the general direction of the San Francisco Bay and decreasing topographic relief. The Site specific groundwater flow direction and gradient is unknown at this time. Based on information provided by the State Water Resources Control Board GeoTracker Database system, the depth to groundwater measured in active monitoring wells located at the northwest corner of Lincoln Avenue and Webster Street (Shell Service Station #13-5032; RO0002745) ranged between 6.5 and 8 fbg (February 2012). Also, the depth to groundwater measured in temporary borehole piezometers formerly located at the residential property at 757 Santa Clara Avenue (RO0002957), ranged between 7.4 and 8.3 fbg (March 2008). The nearest surface water body is the Robert Crown Memorial State Beach Inlet of the San Francisco Bay, located approximately 0.2 mile south-southwest of the Site (Figure 1).

#### Site Subsurface Geology and Hydrogeology

Shallow subsurface soil texture logged during the October 2012 soil boring and sampling activities, was predominantly a moist to wet, dark yellowish brown to dark brown, finegrained silty/clayey sand to the total explored depth of 13 feet below grade (fbg). See the Boring Logs in Appendix B for details. No identifiable petroleum staining or hydrocarbon odor was observed in any of the soils logged or sampled in the three borings. The measured depth to groundwater at the Site measured during drilling activities on October 15, 2012, was between 10.5 and 11.0 fbg (non-static). A temporary wellhead elevation survey was not performed during this event and the site-specific groundwater elevation and flow direction were not measured.

#### **Environmental Background**

On September 23, 2008, GGTR removed one 1500-gallon UST at the approximate location shown in the attached Figure 2 - Site Plan. The UST contained residual diesel fuel and resembled a common heating oil storage tank associated with the adjacent apartment building. The bottom of the UST was located at nine feet below grade. No soil discoloration was observed in the tank overburden soil or in soil underlying the tank. No hydrocarbon odors were noted in the overburden soil or in the soil underlying the tank. The tank was observed to be in poor condition with at least one visible hole. During removal activities, the subsurface product piping extending between the top of the tank and the foundation of the exterior building structure was cut at each end, drained of any residual product and removed from the excavation area. The subsurface piping remaining in place at the building perimeter was filled with concrete and capped.

GGTR collected a discrete confirmation soil sample from the center of the excavation approximately 2 feet below the tank bottom at 11 feet below grade (fbg). GGTR also collected a four point composite soil sample from the excavation overburden stockpile. The confirmation soil sample contained no detectable concentration of total petroleum hydrocarbons as diesel (TPH-D) at <1.0 milligrams per kilograms (mg/kg). The overburden

stockpile soil sample contained a concentration of total petroleum hydrocarbons as diesel (TPH-D) at 23 mg/kg. The laboratory indicated that the detectable concentration does not resemble the typical chromatographic pattern for diesel. The compounds benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE) and other fuel oxygenates were not detected in the confirmation soil sample or the composite soil sample. Groundwater was not encountered during the UST removal and sampling activities. Figure 2, attached, depicts the approximate location of the discrete and stockpile confirmation soil samples. The attached Table 1 titled *UST Removal Sampling Results Form* summarizes the results of the UST removal samples collected in September 2008.

With the approval of Mr. Robert Weston of the ACHCSA, GGTR backfilled the excavation with the UST excavation overburden soil (3-9 fbg) and clean imported Class II baserock (0.5-3 fbg), and the overlying sidewalk was replaced with concrete according to City of Alameda Department of Public Works (CADPW) requirements. UST removal and sampling activities were conducted under the direct supervision of Mr. Robert Weston of the ACHCSA. Additional details including sample analytical results are included GGTR's *Tank Closure Report*, dated October 27, 2008.

Based on the deteriorated tank condition and soil sample analytical results, the ACHCSA requested a work plan to assess the presence and extent of contamination in the vicinity of the former UST, and whether hydrocarbons have impacted the groundwater beneath the Site. On May 29, 2012, Mr. Fred Kroger contracted GGE to prepare the requested work plan and implement the proposed work plan activities upon approval by the ACHCSA. On June 21, 2012, GGE submitted its *Soil and Groundwater Investigation Work Plan* to the ACEH Cleanup Oversight Program's FTP site, which was conditionally approved in a letter dated August 2, 2012. The findings and results of the Preliminary Soil and Groundwater Investigation activities are presented in the following sections.

### **INVESTIGATION ACTIVITIES**

#### Sequence of Work

The following is the sequence of the Soil and Groundwater Investigation activities performed at the Site in August and October 2012:

- Obtained a Drilling Permit from the Alameda County Public Works Agency (ACPWA)-Water Resources Division
- Prepared a Traffic Control Plan for pedestrian diversion during work activities conducted in the public right-of-way; Obtained Soil Boring Permit and an Encroachment Permit from the City of Alameda DPW Engineering Division for work conducted in the public right of way
- Prepared a Site-specific Health & Safety Plan

- Outlined the proposed work area and boring locations in white surface paint and notified Underground Service Alert (USA) for subsurface utility clearance
- Notified all representative parties of scheduled field activities
- Conducted soil boring and sampling activities
- Submitted all soil and grab groundwater samples to a State-certified environmental laboratory for analysis
- Profiled, transported, and disposed of all generated soil and liquid wastes to a Statelicensed disposal/recycling facility
- Interpreted all field and analytical data and prepared a report summarizing the activities, findings, and conclusions of the investigation
- Uploaded all analytical data to State Geo Tracker Database System.

#### **Pre-Field Activities**

Prior to commencing all fieldwork, GGE scheduled John Carver Civil Engineering (JCCE) of Oakland, California for the proposed percussion drilling activities at the Site. GGE obtained drilling Permit No. WR2008-0071 from the ACPWA-Water Resources Division, Right-of-Way Permit No. EX12-0039 and Encroachment Permit No. EN12-0152 from the City of Alameda DPW. GGE also prepared a Community Site Health and Safety Plan (HASP) for all field activities performed at the Site. GGE then notified all property representatives and regulatory personnel of all scheduled fieldwork dates. GGE marked the general work area and proposed boring locations in white surface paint and notified USA at least 72 hours prior to commencement of drilling activities, so that any subsurface utilities extending through the work area are located. A copy of the ACPWA and City drilling/encroachment permits is included in Appendix A.

Proposed boring locations were chosen in areas free of conflict with overhead utility lines and marked subsurface utilities, and in areas accessible for hand augering equipment and a limited access, trailer-mounted GeoProbe® drill rig (B1). Actual boring locations were determined by on-site field personnel during drilling activities, and are shown in Figure 2 - *Site Plan.* 

#### **Drilling and Soil Sampling Activities**

On October 15, 2012, GGE contracted JCCE (State Contractors C-57 License #407379) to perform the soil boring and sampling activities at the Site. GGE initially conducted a safety tailgate meeting with all pertinent Site personnel to discuss all information provided in the project Health and Safety Plan. JCCE initially hand-augured each proposed exploratory boring (B1 through B3) to approximately 5 fbg to clear for any unmarked utilities. Due to the

presence of sandy subsurface soils, JCCE indicated that drilling the borings utilizing handauguring equipment was feasible for this Site. Because of access constraints involved with the use of the proposed percussion drilling rig and to allow for pedestrian sidewalk traffic along the Central Avenue frontage, GGE directed JCCE to advance all exploratory borings using hand drilling equipment only. Figure 2, Site Plan, depicts each soil boring location.

JCCE continued hand drilling each boring to approximately 13 fbg and continuously logged all auger cuttings. GGE and JCCE recovered discrete soil samples in each boring at 5 and 9.5 fbg in undisturbed soil utilizing a slide-hammer and 2-inch-diameter, brass tube-lined, remote core sampler (3-inch length). No soil samples could be recovered from water saturated sand at the total depth of each boring. At the bottom section of each sample interval and at selected depths in each boring, GGE placed a small volume of soil in a plastic Ziploc baggie, and subsequently monitored / recorded the organic vapor concentrations of each bagged sample using a Mini Rae® Photoionization Detector (PID). GGE classified and logged all soil samples and hand auger soil cuttings using the Unified Soil Classification System and Munsell Rock Color Chart. Boring logs B1 through B3 are presented in Appendix B.

Immediately following soil sample collection, GGE sealed the ends of each sample tube with Teflon® tape and plastic caps, appropriately labeled each tube and transferred the samples to a cooler chilled with blue ice. The core sampler was decontaminated between each sample interval using an Alconox® solution and double rinsed with clean, potable water. Auger soil cuttings and equipment wash / rinse water was transferred to separate 55-gallon D.O.T.-approved steel drums and temporarily stored onsite.

#### Sample Analysis

The discrete soil samples were submitted under chain of custody command to Torrent Laboratory, Inc. of Milpitas, California (State ELAP #1991), and analyzed for the following compounds using approved Environmental Protection Agency (EPA) methods:

- TPH as Diesel (TPH-D) by Analysis Method SW8015B(M)
- BTEX by Analysis Method SW8260B
- Fuel Oxygenates by Analysis Method SW8260B with addition of EDB and EDC

The attached Table 2 includes a summary the laboratory analytical results of the soil samples collected from borings B1 through B3. A copy of the laboratory analytical report, QA/QC report, and chain of custody record is included in Appendix C.

#### **Grab Groundwater Sampling Activities**

Immediately following soil sampling activities in soil borings B1 through B3; JCCE placed temporary 0.75-inch-diameter, factory-sealed, screened piezometer casing to the total depth of each borehole at approximately 13 fbg. JCCE monitored and recorded the depth to groundwater in each borehole relative to grade surface using an electronic water level indicator. GGE collected a grab groundwater sample from the temporary casing in borings B1 through B3 using a peristaltic pump with dedicated polyethylene tubing. GGE carefully

drained the groundwater sample from the effluent end of the peristaltic pump tubing directly into laboratory-cleaned amber 1-liter bottles and 40-milliliter volatile organic analysis (VOA) vials. GGE sealed each sample container with a threaded cap and inverted the VOA vials to insure no headspaces or entrapped air bubbles were present. GGE appropriately labeled each sample container and immediately placed the samples in a cooler chilled to approximately 4° Centigrade.

#### Grab Groundwater Sample Analysis

All groundwater samples were submitted under chain of custody command to Torrent Laboratory, Inc. of Milpitas, California (State ELAP #1991), and analyzed for the following compounds using approved Environmental Protection Agency (EPA) methods:

- TPH as Diesel (TPH-D) by Analysis Method SW8015B(M)
- BTEX by Analysis Method SW8260B
- Fuel Oxygenates by Analysis Method SW8260B with addition of EDB and EDC

The attached Table 3 presents a summary the laboratory analytical results of the grab groundwater samples collected from borings B1 through B3. A copy of the laboratory analytical report, QA/QC report, and chain of custody record is included in Appendix C.

#### **Backfilling Activities**

GGE subsequently extracted the temporary piezometer casing and backfilled each open borehole with neat Portland cement to approximately 0.5 foot below grade surface. To restore original Site conditions, GGE backfilled the balance of B1 (parking strip) with surface concrete, as inspected and approved by the City of Alameda DPW. The balance of borings B2 & B3 were backfilled w/ top soil and or grass sod material.

#### Waste Management

Auger soil cuttings and the equipment wash and rinse water generated during the October 2012 drilling/sampling activities were transferred to separate 55-gallon D.O.T.-approved steel drums, appropriately labeled, sealed, and temporarily stored on site in a secure area pending final disposal at a State-licensed recycling facility. On November 29, 2012, Icon Environmental transported the drums containing the auger soil cuttings (@ 200 pounds) and wash/rinse water (15 gallons) under Non- Hazardous Waste Manifest No. 6951, to the Icon facility in Richmond, California. A copy of the liquid waste manifest is presented in Appendix C.

#### GeoTracker/ACEH FTP Upload

All soil/groundwater sample analytical data collected during the preliminary Site characterization activities were uploaded in Electronic Deliverable Format to the State Water Resources Control Board's GeoTracker Database System. Also, geologic boring logs, a scaled Site Plan, and report prepared during this investigation were uploaded in PDF format to the State GeoTracker Database. GGE also uploaded a copy of the report to the ACEH's FTP Site. Copies of the GeoTracker upload confirmation sheets are included in Appendix C.

#### **Findings of Investigation**

The following is a summary of the findings of the preliminary site characterization activities:

#### General Site Conditions

- On October 15, 2012, JCCE & GGE hand-drilled three (3) subsurface investigative borings, B1 through B3, to approximately 13 fbg to evaluate the extent of hydrocarbon-affected soil and groundwater in the direct vicinity of the former 1500-gallon heating oil UST removed in September 2008. Boring B3 was located within the former UST excavation. Borings B1 and B2 were located on north and south side of the UST in the presumed down-gradient and up-gradient directions. GGE recovered discrete soil samples in each exploratory boring at the vadose zone from 5 fbg and at the groundwater interface zone from 9.5 fbg for a total of six discrete soil samples. JCCE placed temporary well casing in borings B1 through B3 to the total depth at 13 fbg and measured standing water at 10.5-11 fbg. GGE collected a grab groundwater sample from the slotted casing in each boring for a total of three groundwater samples. Each borehole was subsequently backfilled and the surface restored, pursuant to ACPWA and City of Alameda DPW requirements and final inspection.
- The property is currently occupied by a multi-family residential building. The property consists of a rectangular Site occupying 11,500 square feet (0.26 acre) in lot area. The elevation of the site is approximately 20 feet above Mean Sea Level (Figure 1).
- Subsurface soil encountered beneath the Site during the preliminary soil and groundwater investigation activities was predominantly a moist to wet, dark yellowish brown to dark brown, fine-grained silty/clayey sand to the total explored sample depth of 13 fbg (See Boring Logs, Appendix B). No staining or hydrocarbon odor was observed in soil from any of the borings. No VOCs were detected in soil recovered from each boring as measured with a PID.
- The regional groundwater flow direction in the vicinity of the Site is estimated to be toward the south-southwest in the general direction of the San Francisco Bay and decreasing topographic relief. The depth to groundwater at the Site as measured during drilling activities on October 15, 2012, was between approximately 10.5 and 11.0 fbg (non-static). A temporary wellhead elevation survey was not performed during this event, and the site-specific groundwater elevation and flow direction were not measured.

#### Soil Analytical Data (Refer To Attached Table 2)

- The soil samples collected in borings B1, B2, and B3 at 5 and 9.5 fbg, contained nondetectable concentrations of TPH as Diesel, BTEX, and Fuel Oxygenates.
- The non-detectable result of soil sampling confirms the absence of petroleum hydrocarbons in shallow soil beneath the center of the former UST removed from the property in September 2008.

#### Grab Groundwater Analytical Data (Refer To Attached Table 3)

- The grab groundwater samples collected in borings B1 through B3 contained nondetectable concentrations of TPH as Diesel, BTEX, and Fuel Oxygenates (including MTBE).
- The non-detectable result of grab groundwater sampling confirms the absence of petroleum hydrocarbons in shallow groundwater in the vicinity of the former UST removed from the property in September 2008.

#### **Conclusions / Recommendation**

Based on the findings of the October 2012 soil and groundwater investigation activities presented above, GGE concludes that the soil and groundwater beneath the former location of the 1500-gallon heating oil tank has not been significantly impacted by diesel-range petroleum hydrocarbons, BTEX or fuel oxygenates. The shallow soil and groundwater in the vicinity of the former UST has been adequately assessed. GGE recommends no further action at the former UST location and suggests that the ACEH initiate case closure review.

#### **Report Distribution**

This document and all subsequent reports that are prepared during the continuing work on this project will be sent to:

Alameda County Health Care Services Agency	(1 Co
Environmental Health Services	(1 Ele
1131 Harbor Bay Parkway, Suite 250	
Alameda, California 94502-6577	
Attn: Ms. Karel Detterman	
<u>karel.detterman@acgov.org</u>	

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Ms. Elsie Hamilton woodleafrentals@gmail.com *(1 Copy, copied to FTP Site)*(1 Electronic Copy via GeoTracker)

(2 Copies, Bound) (1 Electronic Copy via Email)

(1 Electronic Copy via Email)

#### <u>Limitations</u>

This document has been prepared in accordance with generally accepted environmental practices exercised by professional geologists, scientists, and engineers. No warranty, either expressed or implied, is made as to the professional advice presented herein. The proposed activities 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 professional opinions presented herein are based solely upon visual observations of the subject property and vicinity, and interpretation of available information as described in this report. The scope of services conducted in execution of this 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 sole risk of said user.

#### **References**

California Regional Water Quality Control Board, San Francisco Bay Region. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater; Interim Final – November 2007 (Revised May 2008).

California Regional Water Quality Control Board, San Francisco Bay Region, 1995. Water Quality Control Plan, San Francisco Bay Region.

California Regional Water Quality Control Board, San Francisco Bay Region. Tri-Regional Staff Recommendations for Preliminary Evaluation and Investigation of Underground Storage Tank Sites, August 1990.

California Division of Mines & Geology, 1990. Geologic Map of the San Francisco-San Jose Quadrangle, Wagner, D.L., Bortugno, E.J., and McJunkin, R.D.

Geological Society of America, 1991. Munsell Rock Color Chart.

GGTR. Tank Closure Report, 725 Central Avenue, Alameda, California. October 27, 2008.

GGE. Soil and Groundwater Investigation Workplan, 725 Central Avenue, Alameda, California. June 21, 2012. Project No. 2043.

## TABLE 1Historical Results of Tank Removal Sample Analysis725 Central Avenue, Alameda, CA

Sample ID	Sample Depth	Sample Date	TPH-D	В	Т	Е	Х	OXY	LEAD
	(fbg)		(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
9029-SP (A-D) (Stockpile)	Not Applicable	9/23/2008	23*	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND <u>&lt;</u> 0.094	12
9029-C-11 (Excavation)	11	9/23/2008	ND<1.0	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND <u>&lt;</u> 0.094	NA

Notes:

TPH-D = Total Petroleum Hydrocarbons as diesel

BTEX = benzene, toluene, ethylbenzene, total xylenes

OXY = Fuel Oxygenates including methyl tertiary-butyl ether (MTBE), tert butyl alcohol (TBA), ethyl tert butyl alcohol (ETBA), and tert amyl methyl ether (TAME)

fbg = Feet below grade

ppm = parts per million

\* = Sample exhibits chromatographic pattern that does not resemble standard

NA = Not Analyzed

ND = Not Detected

## TABLE 2 Results of Subsurface Boring Soil Sample Analysis 725 Central Avenue, Alameda, CA

Boring	Sample ID	Sample Date	Sample	TPH-D	В	Т	E	Х	MTBE	TBA/DIPE/ETBE/TAME/ED
Location			Depth							B/EDC
			(fbg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
R1	B1-5	10/15/2012	5	ND<2.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND <u>&lt;</u> 0.010	ND <u>≤</u> 0.050
BI	B1-9.5	10/15/2012	9.5	ND<2.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND <u>&lt;</u> 0.010	ND <u>&lt;</u> 0.050
<b>B</b> 2	B2-5	10/15/2012	5	ND<2.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND<0.010	ND <u>&lt;</u> 0.050
D2	B2-9.5	10/15/2012	9.5	ND<2.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND<0.010	ND <u>&lt;</u> 0.050
<b>B3</b>	B3-5	10/15/2012	5	ND<8.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND<0.010	ND <u>&lt;</u> 0.050
Б3	B3-9.5	10/15/2012	9.5	ND<2.0	ND<0.010	ND<0.010	ND<0.010	ND <u>&lt;</u> 0.010	ND<0.010	ND <u>&lt;</u> 0.050
CRWQCB November 2007 ESL		83	0.044	2.9	2.3	2.3	0.023	0.075/NE/NE/NE/NE/NE		

Notes:

TPH-D = Total Petroleum Hydrocarbons as Diesel

BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE = Methyl tertiary-butyl ether

TBA = Tert-Butanol

DIPE = Di isopropyl Ether

ETBE = Ethyl tert-butyl ether

TAME = tert-Amyl Methyl Ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

fbg = feet below grade surface

mg/kg = milligrams per kilogram

ND = Not Detected

NE = Not Established

CRWQCB November 2007 / ESL:

California Regional Water Quality Control Board / Environmental Screening Levels for shallow soils ( $\leq$  10fbg) in Residential Land Use, where groundwater *IS* a current or potential source of drinking water.

#### TABLE 3

#### **Results of Grab Groundwater Sample Analysis**

725 (	Central 1	Avenue, A	Alameda,	CA
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Boring	Sample	Sample Date	Depth to	TPH-D	В	Т	E	X	MTBE	TBA/DIPE/ETBE/TAME/ED
Location	ID		GW (fbg)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
B1	B1-GW	10/15/2012	11	ND<130	ND<0.5	ND<0.5	ND<0.5	ND <u>&lt;</u> 1.0	ND<0.5	ND <u>&lt;</u> 5
B2	B2-GW	10/15/2012	11	ND<130	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND <u>&lt;</u> 5
B3	B3-GW	10/15/2012	10.5	ND<100	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND <u>&lt;</u> 5
CR	CRWQCB November 2007 ESL		100	1	40	30	20	5	12/NE/NE/NE/NE/NE	

Notes:

GW = Groundwater; fbg - feet below grade surface

TPH-D = Total Petroleum Hydrocarbons as Diesel

BTEX = Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE = Methyl tertiary-butyl

TBA = Tert-Butanol

DIPE = Diisopropyl Ether

 $ETBE = Ethyl \; tert\text{-}butyl \; ether$ 

TAME = tert-Amyl Methyl Ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

ug/L = micrograms per literNE = Not Established

ND = Not Detected

ND = Not Detected

CRWQCB November 2007 / ESL: California Regional Water Quality Control Board / Environmental Screening Levels for groundwater that *IS* a current or potential source of drinking water (Residential Land Use).





	<b></b>			fbg	Feet Below Grade	;			
Parking Lane									
Sidewalk									
Garden Ct		Residential Property			Commercial Properties				
<b>GOL</b> 1455 Yo Phon	GOLDEN GATE ENVIRONMENTAL, INC. 1455 Yosemite Avenue, San Francisco, CA 94124 Phone: (415) 970-9088 Fax: (415) 970-9089			725 Alamed	<b>SITE PLAN</b> Central Avenue a, California 945	01			
GGE Proje	ct No. 2043	Fn: 2043_F2_Site Plan_112912	Fn: 2043_F2_Site Plan_112912         Figure By:			By: BAW_Nov. 2012 Figure 2			

## **APPENDIX** A

#### PERMITS

Golden Gate Environmental, Inc. 1455 Yosemite Avenue San Francisco, CA 94124

GGE Project No. 2043

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



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

Application Approved	on: 08/27/2012 By jamesy	Permit Numbers: W2012-0610 Permits Valid from 09/06/2012 to 09/13/2012			
Application Id: Site Location:	1345667257391 725 Central Avenue	City of Project Site: Alameda			
Project Start Date: Assigned Inspector:	09/06/2012 Contact Steve Miller at (510) 670-5517 or stever	<b>Completion Date:</b> 09/13/2012 m@acpwa.org			
Applicant:	Golden Gate Environmental, Inc Brent	Phone: 415-970-9088			
Property Owner: Client:	Wheeler 1455 Yosemite Avenue, San Francisco, CA 941 Fred Kroger P.O. Box 11244, Piedmont, CA 94611 ** same as Property Owner **	24 <b>Phone:</b> 510-654-3822			
	Receipt Number: WR2012-0271 Payer Name : Timothy P. Hallen, Golden Gate	Total Due:\$265.00Total Amount Paid:\$265.00Paid By: VISAPAID IN FULL			
	Tank				

#### Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 3 Boreholes Driller: John Carver Civil Engineering - Lic #: 407379 - Method: DP

Work Total: \$265.00

#### Specifications

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2012-	08/27/2012	12/05/2012	3	2.00 in.	15.00 ft
0610					

#### **Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

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

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

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

## City of Alameda

Interdepartmental Memorandum

Date: September 24, 2012

To: Permit Office

- From: Ahmed Aly Associate Civil Engineer Public Works Department
- Re: Permit No. EX12-0039, 725 Central Ave, Environmental Subsurface Investigation (2) Soil Borings in Public Right-of-Way

Job Address: 725 Central Ave

Applicant: Golden Gate Engineering 1455 Yosemite Ave San Francisco, CA 94124

#### APPROVAL NOTICE

The following conditions of approval are the City of Alameda's requirements for permitted construction activity occurring within the public right-of-way and shall be enforced, as necessary, by the Public Work's right-of-way inspection staff. The permittee and/or his contractor(s) shall abide by the following provisions:

#### **Specific Comments:**

Civil

1. <u>Existing Utilities</u>: The contractor must protect all existing facilities in place. This permit does not authorize the removal or destruction of any existing utility.

<u>Traffic</u>

- 1. The work times shall be limited to 9:00 a.m. to 4:00 p.m.
- 2. Maintain at least 4 feet of sidewalk width for pedestrians and ADA.

These comments are only for the traffic control plan. Other departments, or divisions, may have additional comments/requirements for the actual permit. If you have any questions or comments regarding the traffic comments, please contact Alan Ta at (510) 747-7930.

#### **General Comments (inspector will enforce the comments that are applicable):**

- 1. <u>Public Notifications</u>: All property owners within the immediate vicinity of the work area must be notified in writing at least 5 days prior to the start of construction. The notification letter must include a brief description of the work, the anticipated project completion date and a contact name and phone number for citizens to report their concerns while work is in progress.
- <u>"No Parking" Signs</u>: Posting of "No-Parking" signs including side streets, as applicable, is required 48 hours in advance. "No-Parking" signs are available at the Planning and Building Department, Room 190, City Hall. A fee will be charged for the signs. Only City of Alameda issued "No-Parking" signs are permitted for use within the public rightof-way.
- 3. <u>Designated Truck Routes</u>: All truck deliveries to the proposed work site must remain on established truck routes.
- 4. <u>Work Hours:</u> Unless stated otherwise in the specific comments, work hours are limited to the hours of 8:30 a.m. to 4:30 p.m., Monday through Friday. Be advised that uninterrupted traffic circulation within the public right-of-way is mandatory during the commute hour of 7:30 a.m. to 9:00 a.m. and 3:00 p.m. to 4:30 p.m. Work done on Saturdays, requiring inspection, is prohibited unless approved by the City Engineer and an inspector is available. Requests to work Saturday require two-week minimum prior notice. Inspection fees for Saturday work will be at time and a half (1-1/2) with a four-hour minimum. Said fee will be in accordance with the latest public works fee overtime schedule. No construction activity shall be permitted on Sundays or State and Federal holidays.
- 5. <u>Construction Staging</u>: Storage of construction materials and equipment within the public right-of-way is not permitted.
- 6. <u>URCWP (General/As Applicable)</u>: Construction materials (i.e. cement bags, paints, flammables, oils, fertilizers, pesticides, or any other materials that have potential for being discharged into the storm drain system by wind or as the result of a material spill) shall be kept in a contained and covered area on-site, as is practical, while construction is in progress. When feasible, tarps shall be used on the ground to collect fallen debris or splatters that could contribute to stormwater pollution. All temporary construction piles may remain on-site no more than 48 hours (continuous) and shall be securely covered overnight with a tarp or other device to contain debris. All construction debris shall be gathered and properly disposed of off-site on a regular basis.
- 7. <u>Noise Generating Construction Activity</u>: Maintain construction noise, dust control and cleanup to City acceptable levels. Construction equipment shall be properly muffled. Unnecessary idling of excavation and/or grading equipment is prohibited. Stationary noise-generating construction equipment such as compressors shall be located as far as practical from occupied residential housing units. Contractor shall be responsible for responding to any local complaints about construction noise.

- 8. <u>Daily Work Site Cleanup</u>: Trash and debris shall be cleaned up daily. Work area and haul routes shall be swept daily (with water sweepers) to remove construction-related materials. All construction debris shall be gathered on a regular basis and placed in a dumpster which is emptied or removed weekly. Any temporary on-site construction piles shall be securely covered with a tarp or other device to contain debris. Construction and demolition debris, and recycling, disposal shall be in accordance to the Alameda Municipal Code, Chapter XXI.
- 9. <u>Storm Water BMP</u>: Construction equipment, tools, etc. shall not be cleaned or rinsed into a street, gutter or storm drain. Concrete trucks and concrete finishing operations shall not discharge wash water into the street gutters or drains. There shall be no debris in the gutters. A contained and covered area on-site shall be used for storage of cement bags, paints, flammables, oils, fertilizers, pesticides, or any other materials that have potential for being discharged to the storm drain system by wind or in the event of a material spill. When feasible, tarps shall be used on the ground to collect fallen debris or splatters that could contribute to storm water pollution. Construction best management practices (BMP) for control of storm water runoff (e.g. straw waddles at catch basin inlets) shall be used where applicable. Contact the Public Works Environmental Services Division, at (510) 749-5857 for information on best management practices.
- 10. <u>USA</u>: All utilities within the work area shall be located and marked by USA prior to commencing excavation, trenching, micro-tunneling, or boring operations.
- 11. <u>Pavement, Traffic Striping & Detectors</u>: If the street pavement in the vicinity of the job site is damaged as a result of construction activity, then either pavement repair/reconstruction or an asphalt concrete overlay shall be required, as determined by the City Engineer or assigned representative. Additionally, traffic striping & marking, signal detectors, curb, gutter and other concrete improvements, damaged as a result of construction shall be replaced to the satisfaction of the City Engineer or assigned representative. Installation and maintenance of temporary striping and pavement markers is required while work is ongoing.

#### 12. Traffic Control:

- The traffic control plan shall follow the standards and guidelines provided by the most recent version of the CA MUTCD and Caltrans Standard Plans.
- The permittee is required to maintain the following minimum lane widths in each direction at all times:
  - one twelve (12) ft width lane on truck routes, bus routes, and paratransit routes
  - ten (10) ft otherwise
- Where space is limited the permittee shall maintain one twelve (12) foot minimum width lane of travel with two flagmen directing traffic. If flaggers are used in the detour plan, they shall be shown in the drawings.
- Unless otherwise stated in the specific comments, any lane closures shall only be between 9:00 A.M. and 3:00 P.M
- Taper lengths, delineator spacing, and sign spacing shall be based on a traffic speed equal to the posted speed limit plus 5 MPH.

- One R4-7 sign shall be posted at the entrance of every coned centerline delineation.
- The permittee shall also provide all lights, signs, barricades, flagmen, and/or other traffic safety devices necessary to provide public safety in accordance with Caltrans, Work Area Traffic Control Handbook and CAL-OSHA specifications. The Public Works Inspector may require implementation of additional traffic control measures while construction is in progress to address unforeseen field conditions.
- In the event that the permittee substantially alters the approved traffic control plan, the permittee must allow a minimum of five (5) working days for review and approval of the revised plan. The traffic control plan must also address how to safely direct pedestrians within and around the construction zone.
- Be advised that all property owners with dwellings fronting the project area must be allowed clear and safe ingress/egress at all times. The applicant must obtain approval from the property owner of any driveways being blocked.
- Motorists, bicyclists, and pedestrians shall be properly detoured through temporary traffic control and to **appropriate crossing locations** whenever a sidewalk/crosswalk is closed. Only one crossing at an intersection shall be closed at any time. See the California MUTCD's Typical Application 28 for guidance. Pedestrian routes must be accessible in accordance with the Americans with Disabilities Act of 1990 (ADA).
- Notify Gail Payne at the City of Alameda Public Works Department (510-747-7948) if the work zone is in or near a City of Alameda Paratransit Shuttle stop.
- Work shall not interfere with A.C. Transit bus service in the area. If the work zone is in a bus stop, near a bus stop, or on a bus route, notify Cheryl Washington at AC Transit (510-891-4976) at least 2 weeks in advance of the work.
- If flaggers are used in the detour plan, they shall be shown in the drawings.
- 13. "<u>Bell-Hole</u>" Excavation (As Applicable): Where there are multiple "Bell-Hole" excavations within close proximity of each other complete breakout and restoration of all existing A.C. between excavations is required. The locations where this condition applies shall be determined in the field as work progresses. All work shall be done to the satisfaction of the City Engineer or designated agent.
- 14. <u>CCTV Inspection (As Applicable</u>): Where boring or micro-tunneling work is proposed, all adjacent utility lines shall be closed circuit television (CCTV) inspected prior to the commencement of work and after the completion of work. Pipe cleaning shall be performed prior to CCTV inspection and all debris shall be removed from the pipeline. If the pipeline is damaged, it shall be replaced at the permittee's expense to the satisfaction of the City Engineer or his designated agent.
- 15. <u>Open Trench Excavation</u>: At no time shall there be more than 200 lineal feet of the trench opened along any single conduit alignment, including the section opened ahead of the pipe laying and the section behind the pipe laying which has not been completely backfilled and has a temporary cap. This also dictates the maximum length of right-of-way that may be posted with no parking signs at any one time.
- 16. <u>Excavation Restoration</u>: Excavation restoration in the roadway shall conform to City of Alameda Standard Plan 2930-22 (attached) and the following condition: At the direction of the City Engineer or assigned agent, pavement restoration may extend to a maximum

18" beyond the standard plan limits where existing adjacent pavement is raveled or alligatored. Pavement restoration shall include sawcut, removal of asphalt concrete, and replacement in kind in conjunction with the trench restoration/paving course. The limits of the area within the roadway to be repaved must be pre-approved by the City Inspector. All work shall be done to the satisfaction of the City Engineer or his assigned agent.

- 17. <u>Hardscape Restoration</u>: A concrete permit is required for the demolition and restoration of concrete curb, gutter and sidewalk within the public right-of-way. Concrete restoration of concrete curb, gutter, sidewalk and/or driveway within City right-of-way shall conform to City of Alameda Standard Plan 6297-24 (available upon request). Also, existing decorative concrete (e.g. tinted concrete, etc.) shall be replaced in kind and to the nearest expansion joint.
- 18. <u>Site Restoration</u>: Upon completion of the work all existing improvements within the project area (e.g. landscaping, irrigation, utilities, paths, area drainage, etc.) shall be completely restored to prior condition, or better, within five (5) working days of installation. Any damage within the public-right-of-way shall be replaced at the permittee's expense to the satisfaction of the City Engineer or his designated agent.
- 19. <u>Construction Inspection</u>: The permittee shall notify the Senior Inspector (510) 747-7930, 48-hours prior to beginning of any work within the City right-of-way. Work performed or covered without adequate notice will be subject to rejection.

Should you require further clarification regarding these comments, contact Ahmed Aly at (510) 747-7964.

G:\pubworks\Permits\2012\Excavation\EX12-0039.725 Central Ave.Soil Boring\EX12-0039.(A).GGE.bw.725 Central Ave.Soil Boring.doc

AA:aa



CITY OF ALAMEDA

2263 SANTA CLARA AVENUE, ROOM 190 ALAMEDA, CA 94501

(510) 747-6800 FAX (510) 865-4053

#### **ENCROACHMENT PERMIT: EN12-0152**

Applicant InformationColdGOLDEN GATE ENGINEERING1955 POSEMETE AVESAN FRANCISCO CA 94124415-970-9088	<u>Owner</u> KROGI ETAL PO BO ORIND	<u>Owner Information</u> KROGER FRED T & ROBBIN C TRS ETAL PO BOX 117 ORINDA CA 94563-0117						
Project InformationStatus: IssuedApplied: 10/09/2012Issued: 10/09/2012Type: Encroachment PermitFinaled: Expires: 10/16/2012Category: NASub-Type: NAParcel Number: 073-0423-015-01Valuation: \$17.58								
Parcel Number: 073-0423-015-01				valuatio	on: \$17.58			
Work Description: NO PARKING - GOI ON 10/15/12 FROM	.DEN GATE ENĜIN 8AM UNTIL 5 PM A	EERING -	BRENT WHEE	LER - CONSTR	RUCTION (3 SPAC	ES)		
ITEM # FEE DESCRIPTION		ACCOU	NT CODE	UNITS	FEE AMOUNT	PAID		
835 Engineering - Other Revenue		4210-39900 (1590)		18	\$17.58	\$17.58		
				TOTALS:	\$17.58	\$17.58		
RECEIPT # PAYMENT METHO	D CHECK #	PAYOR:		RECEIPT D	ATE RECEIP			
480741 Credit Card		BRENTW	HEELER	10/09/2012	<u> </u>	\$17.58		
Cashier: LBARRAZA						,		
	3							
				Total Pay	ments:	\$17.58		
				Balanc	e Due:	\$0.00		
		10						

#### INSPECTIONS

(510) 747-7930

Call for an inspection when work is complete

This is to certify that the above work has been completed to my satisfaction and approval.

Date

Inspector

10/9/2012

lice

510-337-8820

#### **APPENDIX B**

#### SOIL BORING LOGS

Golden Gate Environmental, Inc. 1455 Yosemite Avenue San Francisco, CA 94124

GGE Project No. 2043





SOIL BORING LOG B3									
Depth (fbg)	Recovery/ Sample ID	Blow Counts (#/6")	Organic Vapor (ppm)	USCS Soil Type		Description	Boring Backfill Detail		
- 1 - 5 - 10 - 10 - 10 - 10 - 10 - 10 - 20 - 20 - 20 - 25	Jab       B3-5.0         ■       B3-9.5	NA	0.0 0.0 0.0 0.0	SM	6" Lawn/To (0.5'-3') Silt yellowish B to coarse-g Debris. No (3'-9.5') Silt (10YR 4/2). Moderately Hydrocarbo sand and 3 (9.5'-13') Si Clayey, Slig No staining Total Boref Installed te collected g 10/15/12 at	pp Soil by, Gravelly Sand (SM). Fill: Dark rown (10YR 4/2), Moist, Loose, Fine- rained, Well graded, w/ Concrete Hydrocarbon odor. No staining. ty Sand (SM). Dark yellowish Brown Moist, Loose, Fine-grained, graded, w/ Concrete Debris. No on odor. No staining. Approx. 70% 0% fines. ilty Sand (SM). Same; Moist to wet, ght Plasticity. No Hydrocarbon odor. Approx. 60% sand and 40% fines. nole Depth = 13 fbg mporary 0.75" piezometer casing, rab groundwater sample B3-GW on a 12:30 PM.	Lawn/Top Soil (0-6") Neat Portland Cement (0.5'-13')		
BORING NUMBER: B3 LOCATION: 725 Central Ave., Alameda, CA PROJECT No: 2043 DRILLING CONTRACTOR: John Carver Civil Eng. DRILLING METHOD: Hand Auger/DPT (Geoprobe) DRILLING DATE: October 15, 2012 Logged By: J. Carver Checked By: M. Youngkin					ng. [ be) (1	Legend/Notes:         bg = feet below grade         opm = parts per million         X = Lithologic sample interval         I = Analytical sample         0.5) = Approximate depth to ground        √         (non-static) measured on 10	Page 1 of 1 NA = Not applicable dwater /15/12		

## **APPENDIX C**

#### LABORATORY ANALYTICAL REPORT CHAIN OF CUSTODY RECORD WASTE MANIFEST GEOTRACKER UPLOAD CONFIRMATION FORMS

Golden Gate Environmental, Inc. 1455 Yosemite Avenue San Francisco, CA 94124

GGE Project No. 2043



Golden Gate Environmental, Inc 1455 Yosemite Avenue San Francisco, California 94124 Tel: (415) 686-8846 cell

RE: 725 Central Avenue, Alameda

Work Order No.: 1210128 Rev: 1

Dear Brent Wheeler:

Torrent Laboratory, Inc. received 9 sample(s) on October 16, 2012 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.

yes Bhe

Janice Winn-Shilling Sr. Project Manager

October 23, 2012 Date



#### Date: 10/23/2012

Client: Golden Gate Environmental, Inc Project: 725 Central Avenue, Alameda Work Order: 1210128

#### 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.

**REVISIONS:** 

Report revised to include EDB and EDC per client request.

Rev 1 (12/03/2012)



#### Sample Result Summary

Report prepared for:	Brent Wheeler				Date	Received:	10/16/12
	Golden Gate Environmental, Inc				Date	Reported:	10/23/12
B1 - 5.0						12	10128-001
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-o	detectable for this sample.						
B1 - 9.5						12	10128-002
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-o	letectable for this sample.						
B2 - 5.0						12	10128-003
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u>	<u>Unit</u>
All compounds were non-o	letectable for this sample.						
B2 - 9.5						12	10128-004
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	PQL	<u>Results</u>	<u>Unit</u>
All compounds were non-o	detectable for this sample.						
B3 - 5.0						12	10128-005
Parameters:		<u>Analysis</u> <u>Method</u>	DF	MDL	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-o	letectable for this sample.						
B3 - 9.5						12	10128-006
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>

All compounds were non-detectable for this sample.

483 Sinclair Frontage Rd., Milpitas, CA 95035 | tel: 408.263.5258 | fax: 408.263.8293 | www.torrentlab.com



#### Sample Result Summary

Report prepared for:	Brent Wheeler				Date	Received: 1	0/16/12
	Golden Gate Environmental, Inc				Date	Reported: 1	0/23/12
B1-GW						121	0128-007
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
All compounds were non-c	letectable for this sample.						
B2-GW						121	0128-008
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	PQL	<u>Results</u>	<u>Unit</u>
All compounds were non-c	letectable for this sample.						
B3-GW						121	0128-009
Parameters:		<u>Analysis</u> <u>Method</u>	<u>DF</u>	MDL	<u>PQL</u>	<u>Results</u>	<u>Unit</u>

All compounds were non-detectable for this sample.



Report prepared for:	Brent Wheeler Golden Gate Enviro	Inc				Da Da	te Rece te Repe	eived: 10/1 orted: 10/2	6/12 3/12		
Client Sample ID:	B1 - 5.0				Lab Sa	mple ID:	12101	28-001A			
Project Name/Location:	725 Central Av	enue,Alam	eda		Sample	Matrix:	Soil				
Project Number:											
Date/Time Sampled:	10/15/12 / 11:4	5									
Tag Number:	725 Central Av	enue,Alam	eda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	2.6	10	ND		ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
TAME	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	1.7	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	123		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	113		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	114		%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/18/12	1	0.660	2.0	ND		mg/Kg	412070	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/18/12	1	57.9	129	58.3		%	412070	6879



Report prepared for:	Brent Wheeler Golden Gate Enviro				Da Da	te Rece te Repe	eived: 10/1 orted: 10/2	6/12 3/12			
Client Sample ID:	B1 - 9.5				Lab Sa	mple ID:	12101	28-002A			
Project Name/Location:	725 Central Av	enue,Alam	eda		Sample	Matrix:	Soil				
Project Number:	10/15/10 / 11-1	F									
Tog Number	10/15/12 / 11.4	0 0000 Alam	ada								
rag Number:	725 Central Av	enue,Alam	eua								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	2.6	10	ND	I	ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
TAME	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	1.7	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	127		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	111		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	124		%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/17/12	1	0.660	2.0	ND		mg/Kg	412058	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/17/12	1	57.9	129	79.2		%	412058	6879



Report prepared for:	Brent Wheeler Golden Gate Enviro				Da Da	te Rece te Repo	vived: 10/1 orted: 10/2	6/12 3/12			
Client Sample ID: Project Name/Location: Project Number:	B2 - 5.0 725 Central Av	enue,Alam	eda		Lab Sar Sample	mple ID: Matrix:	12101 Soil	28-003A			
Date/Time Sampled:	10/15/12 / 11:0	5									
Tag Number:	725 Central Av	enue,Alam	eda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/17/12	1	2.6	10	ND		ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
ТАМЕ	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	128		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	113		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	127		%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/17/12	1	0.660	2.0	ND		mg/Kg	412058	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/17/12	1	57.9	129	80.5		%	412058	6879



Report prepared for:	Brent Wheeler Golden Gate Enviro	onmental,	Inc				Da Da	te Rece te Repe	eived: 10/1 orted: 10/2	6/12 3/12	
Client Sample ID:	B2 - 9.5				Lab Sa	mple ID:	12101	28-004A			
Project Name/Location:	725 Central Av	enue,Alam	eda		Sample	e Matrix:	Soil				
Date/Time Sampled	10/15/12 / 11·2	5									
Tag Number:	725 Central Av	enue Alam	eda								
		ende,/ dam	cuu								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	2.6	10	ND		ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
TAME	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	1.7	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	128		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	112		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	125		%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/17/12	1	0.660	2.0	ND		mg/Kg	412058	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/17/12	1	57.9	129	73.5		%	412058	6879



Report prepared for:	Brent Wheeler Golden Gate Enviro	onmental,	Inc					Da Da	te Rece te Repe	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID:	B3 - 5.0				Lab Sa	mple ID:	12101	28-005A			
Project Name/Location:	725 Central Av	enue,Alam	eda		Sample	e Matrix:	Soil				
Date/Time Sampled	10/15/12 / 9:55										
Tag Number:	725 Central Av	enue,Alam	eda								
		-				1	1			1	
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	2.6	10	ND		ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
TAME	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	1.7	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	134		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	116		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	147	S	%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/18/12	2	2.67	8.0	ND		mg/Kg	412070	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/18/12	2	57.9	129	83.5		%	412070	6879



Report prepared for:	Brent Wheeler Golden Gate Enviro	onmental,	Inc					Da Da	te Rece te Repe	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID:	B3 - 9.5				Lab Sa	mple ID:	12101	28-006A			
Project Name/Location:	725 Central Av	enue,Alam	eda		Sample	Matrix:	Soil				
Project Number:											
Date/Time Sampled:	10/15/12 / 10:2	0									
Tag Number:	725 Central Av	enue,Alam	eda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	2.6	10	ND		ug/Kg	412105	NA
tert-Butanol	SW8260B	NA	10/17/12	1	21	50	ND		ug/Kg	412105	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	2.2	10	ND		ug/Kg	412105	NA
ETBE	SW8260B	NA	10/17/12	1	2.4	10	ND		ug/Kg	412105	NA
Benzene	SW8260B	NA	10/17/12	1	1.5	10	ND		ug/Kg	412105	NA
TAME	SW8260B	NA	10/17/12	1	2.1	10	ND		ug/Kg	412105	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
Toluene	SW8260B	NA	10/17/12	1	0.98	10	ND		ug/Kg	412105	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	1.7	10	ND		ug/Kg	412105	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.86	10	ND		ug/Kg	412105	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	1.9	10	ND		ug/Kg	412105	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.66	5.0	ND		ug/Kg	412105	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	59.8	148	129		%	412105	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	55.2	133	115		%	412105	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	55.8	141	131		%	412105	NA
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/17/12	10/18/12	1	0.660	2.0	ND		mg/Kg	412070	6879
Pentacosane (S)	SW8015B(M)	10/17/12	10/18/12	1	57.9	129	70.7		%	412070	6879



Report prepared for:	Brent Wheeler Golden Gate Envire	onmental	, Inc					Dat Dat	te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID: Project Name/Location: Project Number:	B1-GW 725 Central Av	enue,Alan	neda		Lab Sar Sample	mple ID: Matrix:	12101 Groun	28-007A dwater			
Date/Time Sampled:	10/15/12 / 12:3	0	nada								
Tag Number:	725 Central AV	enue,Alan	neda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
МТВЕ	SW8260B	NA	10/17/12	1	0.17	0.50	ND		ug/L	412063	NA
tert-Butanol	SW8260B	NA	10/17/12	1	1.5	5.0	ND		ug/L	412063	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	0.15	0.50	ND		ug/L	412063	NA
ETBE	SW8260B	NA	10/17/12	1	0.13	0.50	ND		ug/L	412063	NA
Benzene	SW8260B	NA	10/17/12	1	0.088	0.50	ND		ug/L	412063	NA
ТАМЕ	SW8260B	NA	10/17/12	1	0.095	0.50	ND		ug/L	412063	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	0.11	0.50	ND		ug/L	412063	NA
Toluene	SW8260B	NA	10/17/12	1	0.059	0.50	ND		ug/L	412063	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	0.068	0.50	ND		ug/L	412063	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.074	0.50	ND		ug/L	412063	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	0.13	1.0	ND		ug/L	412063	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.076	0.50	ND		ug/L	412063	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	61.2	131	113		%	412063	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	75.1	127	114		%	412063	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	64.1	120	112		%	412063	NA



Report prepared for:	Brent Wheeler Golden Gate Envire	onmental,	Inc					Dat Dat	te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12		
Client Sample ID:	B1-GW				Lab Sar	nple ID:	121012	28-007B					
Project Name/Location:	725 Central Av	725 Central Avenue, Alameda					Sample Matrix: Groundwater						
Date/Time Sampled:	10/15/12 / 12:3	0											
Tag Number:	725 Central Av	725 Central Avenue, Alameda											
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch		
TPH as Diesel	SW8015B(M)	10/16/12	10/17/12	1	0.0500	0.13	ND	<u>.</u>	mg/L	412069	6860		
Pentacosane (S)	SW8015B(M)	10/16/12	10/17/12	1	64.2	123	96.6		%	412069	6860		



Report prepared for:	Brent Wheeler Golden Gate Enviro	onmental	, Inc					Dat Dat	te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID: Project Name/Location: Project Number:	B2-GW 725 Central Av	enue,Alan	neda		Lab Sar Sample	nple ID: Matrix:	12101: Ground	28-008A dwater			
Date/Time Sampled:	10/15/12 / 12:1	5									
Tag Number:	725 Central Av	enue,Alan	neda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/17/12	1	0.17	0.50	ND	1	ug/L	412063	NA
tert-Butanol	SW8260B	NA	10/17/12	1	1.5	5.0	ND		ug/L	412063	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	0.15	0.50	ND		ug/L	412063	NA
ETBE	SW8260B	NA	10/17/12	1	0.13	0.50	ND		ug/L	412063	NA
Benzene	SW8260B	NA	10/17/12	1	0.088	0.50	ND		ug/L	412063	NA
ТАМЕ	SW8260B	NA	10/17/12	1	0.095	0.50	ND		ug/L	412063	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	0.11	0.50	ND		ug/L	412063	NA
Toluene	SW8260B	NA	10/17/12	1	0.059	0.50	ND		ug/L	412063	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	0.068	0.50	ND		ug/L	412063	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.074	0.50	ND		ug/L	412063	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	0.13	1.0	ND		ug/L	412063	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.076	0.50	ND		ug/L	412063	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	61.2	131	110		%	412063	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	75.1	127	113		%	412063	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	64.1	120	109		%	412063	NA



Report prepared for:	Brent Wheeler Golden Gate Envire	onmental,	Inc					te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12		
Client Sample ID:	B2-GW				Lab Sar	nple ID:	121012	28-008B				
Project Name/Location:	725 Central Av	725 Central Avenue, Alameda					Ground	dwater				
Project Number: Date/Time Sampled:	10/15/12 / 12:1	5										
Tag Number:	725 Central Av	725 Central Avenue, Alameda										
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch	
TPH as Diesel	SW8015B(M)	10/16/12	10/17/12	1	0.0500	0.13	ND	<u>.</u>	mg/L	412069	6860	
Pentacosane (S)	SW8015B(M)	10/16/12	10/17/12	1	64.2	123	99.3		%	412069	6860	



Report prepared for:	Brent Wheeler Golden Gate Enviro	onmental	, Inc					Dat Dat	te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID: Project Name/Location: Project Number:	B3-GW 725 Central Av	enue,Alan	neda		Lab Sar Sample	nple ID: Matrix:	12101: Ground	28-009A dwater			
Date/Time Sampled:	10/15/12 / 12:3	0									
Tag Number:	725 Central Av	enue,Alan	neda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/17/12	1	0.17	0.50	ND		ug/L	412063	NA
tert-Butanol	SW8260B	NA	10/17/12	1	1.5	5.0	ND		ug/L	412063	NA
Diisopropyl ether (DIPE)	SW8260B	NA	10/17/12	1	0.15	0.50	ND		ug/L	412063	NA
ETBE	SW8260B	NA	10/17/12	1	0.13	0.50	ND		ug/L	412063	NA
Benzene	SW8260B	NA	10/17/12	1	0.088	0.50	ND		ug/L	412063	NA
ТАМЕ	SW8260B	NA	10/17/12	1	0.095	0.50	ND		ug/L	412063	NA
1,2-Dichloroethane	SW8260B	NA	10/17/12	1	0.11	0.50	ND		ug/L	412063	NA
Toluene	SW8260B	NA	10/17/12	1	0.059	0.50	ND		ug/L	412063	NA
1,2-Dibromoethane	SW8260B	NA	10/17/12	1	0.068	0.50	ND		ug/L	412063	NA
Ethyl Benzene	SW8260B	NA	10/17/12	1	0.074	0.50	ND		ug/L	412063	NA
m,p-Xylene	SW8260B	NA	10/17/12	1	0.13	1.0	ND		ug/L	412063	NA
o-Xylene	SW8260B	NA	10/17/12	1	0.076	0.50	ND		ug/L	412063	NA
(S) Dibromofluoromethane	SW8260B	NA	10/17/12	1	61.2	131	118		%	412063	NA
(S) Toluene-d8	SW8260B	NA	10/17/12	1	75.1	127	116		%	412063	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/17/12	1	64.1	120	117		%	412063	NA



Report prepared for:	Brent Wheeler Golden Gate Envire	onmental,	Inc					Dat Dat	te Rece te Repo	eived: 10/1 orted: 10/2	6/12 3/12
Client Sample ID:	B3-GW				Lab Sar	nple ID:	121012	28-009B			
Project Name/Location:	725 Central Av	725 Central Avenue, Alameda				Sample Matrix: Groundwate					
Date/Time Sampled:	10/15/12 / 12:3	0									
Tag Number:	725 Central Av	enue,Alam	eda								
Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/16/12	10/17/12	1	0.0400	0.10	ND	<u> </u>	mg/L	412069	6860
Pentacosane (S)	SW8015B(M)	10/16/12	10/17/12	1	64.2	123	98.2		%	412069	6860



Work Order:	1210128	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Water	Analy	tical	SW8260B	Anal	yzed Date:	10/17/12	Analytical	412063
Units:	ua/L	Metho	d:					Batch:	
	- 3-								
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluoromet	hane	0.18	0.50	ND					
Chloromethane		0.16	0.50	ND					
Vinyl Chloride		0.16	0.50	ND					
Bromomethane		0.18	0.50	0.30					
Trichlorofluorometh	ane	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	0.79					
trans-1,2-Dichloroe	thene	0.19	0.50	ND					
MTBE		0.17	0.50	ND					
tert-Butanol		1.5	5.0	ND					
Diisopropyl ether (D	DIPE)	0.13	0.50	ND					
1,1-Dichloroethane		0.13	0.50	ND					
EIBE		0.17	0.50	ND					
cis-1,2-Dichloroethe	ene	0.19	0.50	ND					
2,2-Dichloropropan	e	0.15	0.50	ND					
Bromochlorometha	ne	0.20	0.50	ND					
Chloroform		0.13	0.50	ND					
Carbon Letrachloric	le	0.15	0.50	ND					
1,1,1-I richloroethar	ne	0.097	0.50	ND					
1,1-Dichloropropen	e	0.15	0.50	ND					
Benzene		0.13	0.50	ND					
		0.17	0.50	ND					
1,2-Dichloroethane		0.14	0.50	ND					
Irichloroethylene		0.13	0.50	ND					
Dibromomethane	_	0.15	0.50	ND					
1,2-Dicnioropropan	e	0.17	0.50	ND					
Bromodicniorometh	lane	0.13	0.50	ND					
Toluono	Jene	0.096	0.50						
Toluene		0.14	0.50						
trans 1.2 Dichlorop	ropopo	0.14	0.50						
1 1 2 Trichlorootha		0.23	0.50						
Dibromochloromoth		0.14	0.50						
1 3-Dichloropropag		0.090	0.50						
1.2-Dibromosthono	6	0.10	0.50						
		0.19	0.50						
Ethyl Benzene		0.14	0.50						
1 1 1 2-Totrachlorov	ethane	0.15	0.50						
m n Xylana		0.030	1 0						
m,p-Ayione		0.10	1.0						



Work Order:	1210128	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA	
Matrix:	Water	Analy	tical	SW8260B	Anal	yzed Date:	10/17/12	Analytical	412063	
Units:	ug/L	Metho	od:					Batch:		
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier					
o-Xylene		0.15	0.50	ND						
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-Tetrachloroe	ethane	0.11	0.50	ND						
n-Propylbenzene		0.078	0.50	ND						
2-Chlorotoluene		0.076	0.50	ND						
1,3,5,-Trimethylben	zene	0.074	0.50	ND						
4-Chlorotoluene		0.088	0.50	ND						
tert-Butylbenzene		0.081	0.50	ND						
1,2,3-Trichloropropa	ane	0.14	0.50	ND						
1,2,4-Trimethylbenz	zene	0.083	0.50	ND						
sec-Butyl Benzene		0.092	0.50	ND						
p-Isopropyltoluene		0.093	0.50	ND						
1,3-Dichlorobenzen	e	0.10	0.50	ND						
1,4-Dichlorobenzen	e	0.069	0.50	ND						
n-Butylbenzene		0.081	0.50	ND						
1,2-Dichlorobenzen	e	0.057	0.50	ND						
1,2-Dibromo-3-Chlo	propropane	0.15	0.50	ND						
Hexachlorobutadier	ne	0.19	0.50	ND						
1,2,4-Trichlorobenz	ene	0.12	0.50	ND						
Naphthalene		0.14	1.0	ND						
1,2,3-Trichlorobenz	ene	0.23	0.50	ND						
(S) Dibromofluorom	lethane			113						
(S) Toluene-d8				114						
(S) 4-Bromofluorob	enzene			112						
Ethanol		0.21	0.50	ND	TIC					



Work Order:	1210128	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Soil	Analy Metho	tical	SW8260B	Anal	yzed Date:	10/17/12	Analytical Batch:	412105
Units:	ug/Kg	motine						Batom	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Dichlorodifluorometh	nane	4.4	10	ND					
Chloromethane		4.6	10	ND					
Vinyl Chloride		2.6	10	ND					
Bromomethane		4.7	10	ND					
Trichlorofluorometha	ane	2.9	10	ND					
1,1-Dichloroethene		1.5	10	ND					
Freon 113		3.7	10	ND					
Methylene Chloride		2.0	50	ND					
trans-1,2-Dichloroet	hene	1.1	10	ND					
MTBE		2.6	10	ND					
tert-Butanol		21	50	ND					
Diisopropyl ether (D	IPE)	2.2	10	ND					
1,1-Dichloroethane		1.3	10	ND					
ETBE		2.4	10	ND					
cis-1,2-Dichloroethe	ne	1.8	10	ND					
2,2-Dichloropropane	)	1.2	10	ND					
Bromochloromethan	е	2.3	10	ND					
Chloroform		1.2	10	ND					
Carbon Tetrachlorid	е	1.6	10	ND					
1,1,1-Trichloroethan	е	1.2	10	ND					
1,1-Dichloropropene	)	1.4	10	ND					
Benzene		1.5	10	ND					
TAME		2.1	10	ND					
1,2-Dichloroethane		1.9	10	ND					
Trichloroethylene		3.9	10	ND					
Dibromomethane		2.2	10	ND					
1,2-Dichloropropane	)	1.3	10	ND					
Bromodichlorometha	ane	1.1	10	ND					
cis-1,3-Dichloroprop	ene	1.4	10	ND					
Toluene		0.98	10	ND					
Tetrachloroethylene		1.8	10	ND					
trans-1,3-Dichloropre	opene	1.2	10	ND					
1,1,2-Trichloroethan	е	1.8	10	ND					
Dibromochlorometha	ane	1.1	10	ND					
1,3-Dichloropropane	)	2.1	10	ND					
1,2-Dibromoethane		1.7	10	ND					
Ethyl Benzene		0.86	10	1.1					
Chlorobenzene		4.2	10	ND					
1,1,1,2-Tetrachloroe	thane	0.86	10	ND					
m,p-Xylene		1.9	10	2.2					
o-Xylene		0.66	5.0	ND					

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Work Order:	1210128	Prep I	Method:	NA	Prep	Date:	NA	Prep Batch:	NA
Matrix:	Soil	Analy	tical	SW8260B	Anal	yzed Date:	10/17/12	Analytical	412105
Units:	ug/Kg	Metho	od:					Batch:	
	0.0								
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
Styrene		0.77	10	ND					
Bromoform		1.9	10	ND					
Isopropyl Benzen	е	1.2	10	ND					
n-Propylbenzene		1.4	10	ND					
Bromobenzene		1.2	10	ND					
1,1,2,2-Tetrachlor	roethane	3.0	10	ND					
1,3,5-Trimethylbe	enzene	1.1	10	ND					
1,2,3-Trichloropro	pane	3.3	10	ND					
4-Chlorotoluene		1.6	10	ND					
2-Chlorotoluene		1.6	10	ND					
tert-Butylbenzene	•	1.4	10	ND					
1,2,4-Trimethylbe	nzene	1.1	10	ND					
sec-Butyl Benzen	е	1.6	10	ND					
p-Isopropyltoluen	е	1.5	10	ND					
1,3-Dichlorobenze	ene	1.8	10	ND					
1,4-Dichlorobenze	ene	1.5	10	ND					
n-Butylbenzene		2.2	10	ND					
1,2-Dichlorobenze	ene	1.3	10	ND					
1,2-Dibromo-3-Ch	nloropropane	4.2	10	ND					
Hexachlorobutadi	iene	2.6	10	ND					
1,2,4-Trichlorober	nzene	2.1	10	ND					
Naphthalene		2.8	10	ND					
1,2,3-Trichlorobe	nzene	2.9	10	ND					
(S) Dibromofluoro	omethane			106					
(S) Toluene-d8				100					
(S) 4-Bromofluoro	obenzene			112					
Work Order:	1210128	Prep I	Method:	3510_TPH	Prep	Date:	10/16/12	Prep Batch:	6860
Matrix:	Water	Δnalv	tical	SW8015B(M)	) Anal	vzed Date:	10/16/12	Analytical	412042
Units:	mg/L	Metho	od:		, , , , , , , , , , , , , , , , , , ,	,		Batch:	
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier				
TPH as Diesel		0.0440	0.10	ND					
TPH as Motor Oil		0.0920	0.40	0.17					
Pentacosane (S)				88.1					

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Work Order:	1210128	Prep	Method:	3545_TPH	Prep	Date:	10/17/12	Prep Batch:	6879	
Matrix:	Soil	Analytical Method:		SW8015B(M)	Anal	yzed Date:	10/17/12	Analytical	412058	
Units:	mg/Kg							Batch:		
Parameters		MDL	PQL	Method Blank Conc.	Lab Qualifier					
TPH as Diesel		0.656	2.0	1.3						
TPH as Motor Oil		1.36	10	1.5						
Pentacosane (S)				90.6						



### LCS/LCSD Summary Report

								Raw value	es are used in	quality contro	ol assessment.
Work Order:	1210128		Prep Metho	od: NA		Prep Da	te:	NA	Prep Ba	tch: NA	
Matrix:	Water		Analytical	SW8	260B	Analyze	d Date:	10/17/12	Analytic	<b>al</b> 412	063
Units:	ug/L		Method:						Batch:		
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroether	ne	0.14	0.50	ND	17.04	99.3	94.2	5.10	61.4 - 129	30	I
Benzene		0.087	0.50	ND	17.04	93.7	93.0	0.910	66.9 - 140	30	
Trichloroethylene	9	0.057	0.50	ND	17.04	76.9	79.3	3.13	69.3 - 144	30	
Toluene		0.059	0.50	0.30	17.04	92.6	94.1	1.51	76.6 - 123	30	
Chlorobenzene		0.068	0.50	ND	17.04	89.9	90.6	0.872	73.9 - 137	30	
(S) Dibromofluor	omethane			ND	11.36	106	103		61.2 - 131		
(S) Toluene-d8				ND	11.36	115	112		75.1 - 127		
(S) 4-Bromofluor	obenzene			0.79	11.36	114	112		64.1 - 120		
Work Order:	1210128		Prep Metho	od: NA		Prep Da	te:	NA	Prep Ba	tch: NA	
Matrix:	Soil		Analytical Mothod:	SW8	260B	Analyze	d Date:	10/17/12	Analytic Batch	<b>al</b> 412	105
Units:	ug/Kg		Methou.						Batch.		
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroether	ne	1.5	10	ND	50	94.1	88.8	5.67	53.7 - 139	30	
Benzene		1.5	10	ND	50	102	96.0	5.67	66.5 - 135	30	
Trichloroethylene	9	3.9	10	ND	50	99.6	92.9	7.00	57.5 - 150	30	
Toluene		0.98	10	ND	50	104	94.5	9.91	56.8 - 134	30	
Chlorobenzene		4.2	10	ND	50	122	113	7.69	57.4 - 134	30	
(S) Dibromofluor	omethane			ND	50	120	122		59.8 - 148		
(S) Toluene-d8				ND	50	113	110		55.2 - 133		
(S) 4-Bromofluor	obenzene			ND	50	117	116		55.8 - 141		
Work Order:	1210128		Prep Metho	od: 3510	_TPH	Prep Da	te:	10/16/12	Prep Ba	t <b>ch:</b> 686	0
Matrix:	Water		Analytical	SW8	015B(M)	Analyze	d Date:	10/16/12	Analytic Batch	<b>al</b> 4120	042
Units:	mg/L		Metrioa.						Balch.		
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel		0.0440	0.10	ND	1	85.3	86.3	1.19	50.3 - 125	30	
Pentacosane (S)				0.17	100	87.2	88.2		57.9 - 125		



### LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1210128		Prep Meth	od: 354	5_TPH	Prep Da	te:	10/17/12	Prep Bat	t <b>ch:</b> 687	9
Matrix:	Soil		Analytical	SW8	3015B(M)	Analyze	d Date:	10/17/12	Analytica	<b>al</b> 412	058
Units:	mg/Kg		Method:						Batch:		
Parameters		MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel		0.656	2	1.3	33.33	68.1	71.9	5.43	50.3 - 115	30	
Pentacosane (S)				1.5	100	80.9	86.8		57.9 - 129		



## **MS/MSD Summary Report**

Raw values are used in quality control assessment.

Work Order:	1210128		Prep Metho	od: 3545_T	PH	Prep Date:	10/17	7/12	Prep Batch:	6879	
Matrix:	Soil		Analytical	SW801	5B(M)	Analyzed D	ate: 10/1	7/12	Analytical	412058	
Spiked Sample:	1210128-003A		Method:						Batch:		
Units:	mg/Kg										
Parameters		MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel		0.66	2.0	40.69752	33.33	65.9	59.1	10.3	50.3 - 115	30	
Pentacosane (S)					100	82.1	77.3		57.9 - 129		
Work Order:	1210128		Prep Metho	od: NA		Prep Date:	NA		Prep Batch:	NA	
Matrix:	Soil		Analytical	SW826	0B	Analyzed D	ate: 10/1	7/12	Analytical	412105	
Spiked Sample:	1210128-006A		Method:						Batch:		
Units:	ua/Ka										
	ug/itg										
Parameters		MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Parameters Benzene		<b>MDL</b> 1.5	<b>PQL</b> 10	Sample Conc.	Spike Conc.	MS % Recovery 98.0	MSD % Recovery 94.9	<b>MS/MSD</b> % RPD 3.21	% Recovery Limits 66.5 - 135	% RPD Limits 30	Lab Qualifier
Parameters Benzene Toluene		<b>MDL</b> 1.5 0.98	<b>PQL</b> 10 10	Sample Conc. 0 0	<b>Spike</b> <b>Conc.</b> 50 50	<b>MS %</b> <b>Recovery</b> 98.0 102	<b>MSD %</b> <b>Recovery</b> 94.9 93.0	<b>MS/MSD</b> % RPD 3.21 9.05	% Recovery Limits 66.5 - 135 56.8 - 134	% RPD Limits 30 30	Lab Qualifier
Parameters Benzene Toluene (S) Dibromofluorome	ethane	<b>MDL</b> 1.5 0.98	<b>PQL</b> 10 10	Sample Conc. 0 0	<b>Spike</b> <b>Conc.</b> 50 50 50	MS % Recovery 98.0 102 123	<b>MSD %</b> <b>Recovery</b> 94.9 93.0 124	<b>MS/MSD</b> % RPD 3.21 9.05	% Recovery Limits 66.5 - 135 56.8 - 134 59.8 - 148	% RPD Limits 30 30	Lab Qualifier
Parameters Benzene Toluene (S) Dibromofluorome (S) Toluene-d8	ethane	<b>MDL</b> 1.5 0.98	<b>PQL</b> 10 10	Sample Conc. 0 0	<b>Spike</b> <b>Conc.</b> 50 50 50 50	MS % Recovery 98.0 102 123 112	<b>MSD %</b> <b>Recovery</b> 94.9 93.0 124 112	<b>MS/MSD</b> % RPD 3.21 9.05	% Recovery Limits 66.5 - 135 56.8 - 134 59.8 - 148 55.2 - 133	% RPD Limits 30 30	Lab Qualifier



## 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 100cm2 surface)

#### LABORATORY QUALIFIERS:

**B** - Indicates when the anlayte is found in the associated method or preparation blank

D - Surrogate is not recoverable due to the necessary dilution of the sample

**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.

H- Indicates that the recommended holding time for the analyte or compound has been exceeded

J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative

NA - Not Analyzed

N/A - Not Applicable

**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

R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts

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

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.



## Sample Receipt Checklist

Client Name: Golden Gate Environmental, Inc	Date and Time Received: 10/16/2012 15:50
Project Name: 725 Central Avenue, Alameda	Received By: LORNA
Work Order No.: <u>1210128</u>	Physically Logged By: LORNA
	Checklist Completed By: LORNA
	Carrier Name: First Courier
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 Receip	t Information
Custody seals intact on shipping container/cooler?	Not Present
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 H	old Time (HT) Information
All samples received within holding time?	Yes
Container/Temp Blank temperature in compliance?	Yes Temperature: <u>6</u> °C
Water-VOA vials have zero headspace?	Yes
Water-pH acceptable upon receipt?	No
pH Checked by: <u>N/A</u>	pH Adjusted by: <u>N/A</u>

Recv'd VOA NOT preserved.



#### Login Summary Report

Client ID:	TL5127	Golden Gate Environmental, Inc	QC Level:	
Project Name:	725 Central Ave	enue,Alameda	TAT Requested:	5+ day:0
Project # :			Date Received:	10/16/2012
Report Due Date:	10/23/2012		Time Received:	15:50

Comments: 5 day TAT!!!! EDF Pls. email to bwheeler@ggtr.com.

Work Order # : 1210128

WO Sample ID	<u>Client</u> Sample ID	Collection Date/Time	<u>Matrix</u>	<u>Scheduled</u> <u>Disposal</u>	<u>Sample</u> <u>On Hold</u>	<u>Test</u> <u>On Hold</u>	<u>Requested</u> <u>Tests</u>	Subbed
1210128-001A	B1 - 5.0	10/15/12 11:4	45 Soil	04/14/13			EDF S_8260Pet S TPHDO	
Sample Note:	BTEX/Fuel Oxygenates and	Diesel.EDF						
1210128-002A	B1 - 9.5	10/15/12 11:4	15 Soil	04/14/13				
							S_8260Pet	
1210128-0034	B2 - 5 0	10/15/12 11.0	)5 Soil	04/14/13			S_TPHDO	
1210120 000/	B2 0.0	10/10/12 11.0	000	10			S_8260Pet	
							S_TPHDO	
1210128-004A	B2 - 9.5	10/15/12 11:2	25 Soil	04/14/13			S 8260Pot	
							S TPHDO	
1210128-005A	B3 - 5.0	10/15/12 9:55	5 Soil	04/14/13				
							S_8260Pet	
1210128-006A	B3 - 9.5	10/15/12 10:2	20 Soil	04/14/13			S_IPHDU	
	20 0.0			0 ., 1 ., 10			S_8260Pet	
1010100 0071	D4 014		· · · · ·	0.4/4.4/4.0			S_TPHDO	
1210128-007A	B1-GW	10/15/12 12:3	30 Water	04/14/13			W 8260Pet	
Sample Note:	Recv' d VOA 's NOT preser	ved Diesel only/	BTEX and Fu	el Oxtgenates			W_02001 01	
1210128-007B	B1-GW	10/15/12 12:3	30 Water	04/14/13				
	-						W_TPHDO	
1210128-008A	B2-GW	10/15/12 12:1	5 Water	04/14/13				
1210128-008B	B2-GW	10/15/12 12.1	15 Water	04/14/13			VV_8260Pet	
1210120 0000		10/10/12 12.1		0 // / // /0			W_TPHDO	
1210128-009A	B3-GW	10/15/12 12:3	30 Water	04/14/13				
1210128-009B	B3-GW	10/15/12 12:3	30 Water	04/14/13			vv_8260Pet	
1210120 0000		10/10/12 12.0		01,1710			W_TPHDO	



	483 Sinclair Fronta Milpitas, CA 95035 Phone: 408.263.52 FAX: 408.263.8293 www.torrentlab.com	ge Road 5 58 n	í.N	C OTE: SHA	CH/	<b>NREAS</b>	OF ARE F	CL	<b>JST</b> DRREN		Y USE (	ONLY		LAB WORK ORDER NO
Company Name: Golden Gate Envi	ronmental, Inc.			Env.	) H 🖸	Food	Special	Locat	ion of S	ampling	: 725 (	Centra	l Aven	ue, Alameda
Address: 1455 Yosemite Avenue				Purpose: Soil and Groundwater Investigation										
City: CA State: CA Zip Code: 94124 S				Special Instructions / Comments: Global ID#: T10000002520								002520		
Telephone: 415-970-9088 FAX: 415-970-9089				Field Point IDs - See Remarks Section; BT = Brass Tube								ube		
REPORT TO: Brent Wheeler SAMPLER: J. Carver				P.O. #: GGE 2043 EMAIL: b.wheeler@ggtr.com								om		
TURNAROUND TIME:	SAMPLE TYPE	:	REPORT	FORMAT:			(0)							
10 Work Days       4 Work Days       1 Work         7 Work Days       3 Work Days       1 Noon -1         ✓       5 Work Days       2 Work Days       2 - 8 Ho	Day Storm Water Ukt Day Ground Water Urs Soil	Air Other	er 🖉 EDF Excel / EDD		.D (8015M)	K (8260)	Oxygenates (82							
LAB ID CANISTER I.D. CLIENT'S SAMPLE	.D. DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH	BTE	Fuel							REMARKS
-00 IA B1-5.0	10-15-12/1145	so	1	BT	1	1	1							Field Point ID: B1
- 007A B1-9.5	10-15-12/1145	so	1	BT	1	1	1							Field Point ID: B1
-003A B2-5.0	10-15-12/1105	SO	1	BT	1	1	1							Field Point ID: B2
-004A B2-9.5	10-15-12/1125	so	1	BT	1	1	1							Field Point ID: B2
-00 SA B3-5.0	10-15-12/0955	so	1	BT	1	1	1							Field Point ID: B3
-006A B3-9.5	10-15-12/1020	so	1	BT	1	1	1							Field Point ID: B3
	4						,							
-007A B1-GW	10-15-12/1230	GW	4	Varies	1	1	1		<u> </u>					Field Point ID: B1
-00 8A B2-GW	10-15-12/1215	GW	4	Varies	1	1	1							Field Point ID: B2
-009A B3-GW	10-15-12/1230	GW	4	Varies	1	1	1							Field Point ID: B3
Relinquished BY: BEEJT Printing	EALER Date: 2008 10-	15-12	Time:	00	Recei	ved By:	5	An	Print: Kot	24		Date:	14/1	L Time: 1.25/m
2 Ang JPHN KAS	10 10/10	1/12	<u>3</u> :	نرح		<u> </u>	-	レ	P.	In	ulsal	10	-16-1	2 3.'0
Were Samples Received in Good Condition? NOTE: Samples are discarded by the lat Log In By:	Yes    NO ′ S     oratory 30 days from da     Date /	amples on lite of receipt	ce? LY unless oth Log In Rev	es L NO ler arrangem riewed By: _	Metho nents are	d of Ship e made.	oment		<u>+C</u> Da	Temp te:	ء و	ample s	eals inta	cct?





#### Change Order

Work Order: 1210128		Serial #: CO12-0253	Print Date:	12/4/2012	
Project N	Name: 725 Central Avenue, Alameda				
Client:	Golden Gate En∨ironmental, Inc	Requested By:	Brent Wheeler		
			<u>Requested</u> Date	<u>Requested</u> <u>Time</u>	Extended Price

11/29/2012

2:35:00PM

More Paperwork Revise report to include EDB and 1,2-DCA

Page 1 of 1

- P		1. Generator's LIS FI	PA ID No.	2 P	age 1	3. Docume	nt Number		
1997 - 19	NON-HAZARDOUS WASTE MANIFEST		и. 	0	f 1		1094	7	
Ň	4. Generator's Name and Mailing Address		<u></u>						
	Generator's Phone	725 Central Av c/o Fred T. Kro P.O. Box 11244	enue Apartments ger 1 24611						
	5. Transporter Company Name Icon Environmental Servi	fices	US EPA ID Numb CAL 000 36	2 980 7. T	ransporter	Phone			
	CLEARWATER ENVIRONMENTAL	73-1/2	ت (510) 476-1740						
	8. Designated Facility Name and Site Address	per 10.	10. Facility's Phone						
	icon Environmental Sen 1220 Whipple Road Union City, CA 94587	59 026	510-476-1740						
	11. Waste Shipping Name and Description	·			12. Co No.	ntainers Type	13. Total Quantity	14. Unit Wt/V	
RAT	a. Non-Hazardous waste Lige J				Ø	DM	26	6	
<b>२</b>   	D. NUN HEZONdons Liste	Solin			01	Dur	1000	P	
	15. Special Handling Instructions and Additional Inf	ormation		Han	dling Code	s for Wastes	Listed Above		
	Wear PPE Emergency Contact (510) 476-1740 Attn: Charles Seaton				11a.		112	••	
	Customer: Golden Gate Tank Remo	oval							
V	16. GENERATOR'S CERTIFICATION: I certify the r Printed/Typed Name	materials described above	on this manifest are not subje Signature	ct to state or federal reg	ulations for r	eporting prop	er disposal of Haz	ardous Was	
2 4 4	GINA wee		-1/	an			Month 12	Day Y	
5 DR ER	17. Transporter Acknowledgement of Receipt of Ma Printed/Typed Name Eugenic V.//GI	aterials 1 Co	Signature		0		Month	Day 1	
	18. Discrepancy Indication Space						· · · · · · · · · · · · · · · · · · ·		
		· 					· · · · · ·		
FAC									
FAGILIF	89 								
FACILITY	19. Facility Owner or Operator: Certification of rece	ipt of waste materials	covered by this manifest exc	cept as noted in Item	18.		· · ·		

WHITE-ORIGINAL (Return to Generator) YELLOW-TSDF (Retain Copy) PINK-TRANSPORTER COPY GOLDENROD-GENERATOR'S COPY

**UPLOADING A EDF FILE** 

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

Submittal Type: Report Title: Report Type: Facility Global ID: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: EDF Soil and Groundwater Investigation Report Soil and Water Investigation Report T10000002520 KROGER RESIDENTIAL PROPERTY GGE 1210128 725 Central Ave EDF.zip Golden Gate Environmental, Inc. GGE 108.81.108.167 12/6/2012 10:15:01 AM 7298094987

**VIEW QC REPORT** 

**VIEW DETECTIONS REPORT** 

UPLOADING A GEO\_BORE FILE

## SUCCESS

Your GEO\_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO\_BORE T10000002520 B1 KROGER RESIDENTIAL PROPERTY Log\_B1.pdf Golden Gate Environmental, Inc. GGE 108.81.108.167 11/29/2012 2:58:38 PM 4340732634

UPLOADING A GEO\_BORE FILE

## SUCCESS

Your GEO\_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO\_BORE T10000002520 B2 KROGER RESIDENTIAL PROPERTY Log\_B2.pdf Golden Gate Environmental, Inc. GGE 108.81.108.167 11/29/2012 2:59:47 PM 1432494401

UPLOADING A GEO\_BORE FILE

## SUCCESS

Your GEO\_BORE file has been successfully submitted!

Submittal Type: Facility Global ID: Field Point: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO\_BORE T10000002520 B3 KROGER RESIDENTIAL PROPERTY Log\_B3.pdf Golden Gate Environmental, Inc. GGE 108.81.108.167 11/29/2012 3:00:27 PM 7369979798

UPLOADING A GEO\_MAP FILE

## SUCCESS

Your GEO\_MAP file has been successfully submitted!

Submittal Type: Facility Global ID: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO\_MAP T1000002520 KROGER RESIDENTIAL PROPERTY Fig 2\_Site Plan\_Nov. 2012.pdf Golden Gate Environmental, Inc. GGE 108.81.108.167 11/29/2012 1:58:17 PM 5345844328