



Mercedes-Benz

Mercedes-Benz of Oakland

November 18, 2016

Anne Jurek, M.S.
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED

By Alameda County Environmental Health 2:52 pm, Nov 21, 2016

RE: Underground Storage Tank Closure Report

SITE: Mercedes-Benz of Oakland
2915 Broadway, Oakland, California
(344 29th Street, Oakland, California)
ACHCSA Fuel Leak Case No. RO0003220
Global ID #T10000009111

Dear Ms. Jurek:

Upon my authorization, Golden Gate Tank Removal, Inc. has prepared the attached *Underground Storage Tank Closure Report*, dated November 11, 2013, for the above-referenced property at 2915 Broadway in Oakland, California. GGTR has uploaded an electronic copy of the document to the State Water Resources Control Board's GeoTracker Database System, as well as the Alameda County Health Care Services Agency FTP Site. Should you have any questions, please contact Mr. Brent Wheeler, Manager of Wheeler Group Environmental, LLC (acting consultant for project) at (415) 686-8846 at your convenience.

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

Respectfully Submitted,

Mr. Ask Zaki
President
Euromotors Oakland, Inc.

Distribution: (1) Addressee

2915 Broadway,
Oakland, CA 94611

Telephone: (510) 832-6030
(800) 622-9682
Fax: (510) 287-8595

www.mbofoak.com



UNDERGROUND STORAGE TANK

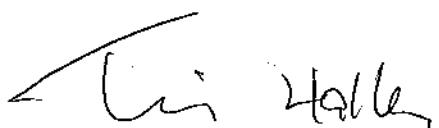
CLOSURE REPORT

2915 Broadway Street
Oakland, CA 94607
Job No. 9378
November 11, 2013

Prepared For:

Mercedes Benz of Oakland
2915 Broadway Street
Oakland, CA 94607





Tim Hallen
Registered Environmental Assessor 08006

TABLE OF CONTENTS

COVER SHEET

TABLE OF CONTENTS

1. SITE LOCATION.....	1
2. SITE HISTORY	1
3. TANK REMOVAL.....	1
4. TANK AND SOIL CONDITION	2
5. TANK SAMPLING & ANALYSIS	2
6. OVER-EXCAVATION & RE-SAMPLING & ANALYSIS.....	2
7. WASTE MANAGEMENT & SOIL DISPOSAL.....	3
8. SITE RESTORATION	3
9. FINDINGS / RECOMMENDATION	3

FIGURES

TABLE

ATTACHMENTS

1. SITE LOCATION

The subject commercial property is located at 2915 Broadway Street between 29th Street and 30th Street in Oakland, California. Figure 1 attached shows the general site location.

2. SITE HISTORY

One underground storage tank (UST) containing waste oil was located beneath the sidewalk, at the rear of the building along the Webster Street site frontage. The tank had a capacity of approximately 600 gallons, measuring approximately 6 feet in length by 4 feet in diameter, and was constructed of single wall bare steel. The fill port was located at the center of the tank. The age of the tank is unknown. The owner had no prior knowledge of the tank nor is there any indication of previous site investigation activities. A 2-inch-diameter observation well (total depth @ 10 feet below grade) was located at the northwest corner of the UST excavation. The approximate location of the tank as well as nearby streets is shown on the attached Figure 2.

3. TANK REMOVAL

In September 2013, Golden Gate Tank Removal, Inc. (GGTR) applied for and obtained permits for the tank removal activities from the City of Oakland Fire Department (OFD) and City of Oakland Planning and Building (OPB). A copy of each agency permit is included as an attachment.

On September 18, 2013, GGTR mobilized its equipment and began work on the project. The concrete sidewalk covering the tank was removed and disposed of at a local recycler. The overburden soil covering the tank was removed and stockpiled on visqueen sheeting adjacent to the tank excavation. Field measurements indicated that the bottom of the tank was 10 feet below grade (fbg). The subsurface product piping extending between the top of the tank to the remote fill port located adjacent to the interior foundation wall of the building structure were cut at each end, drained of any residual product and removed from the excavation area. GGTR subsequently sawcut and removed the vertical section of remote fill piping.

GGTR pumped the residual product from the tank and piping into ten 55-gallon steel drums. GGTR then washed the interior of the tank with a 180-degree water under 3,000-psi pressure. A non-toxic enzyme was used to break down thick oil deposits. On September 23, 2013, NRC Environmental Services removed the drums and transported the waste liquid (10 drums) under Uniform Hazardous Waste Manifest No. 010957990JJK to the Crosby & Overton Inc. facility in Long Beach California. A copy of the liquid manifest is included as an attachment.

GGTR collected a sample of the rinsate water from the tank and submitted it to Accutest Laboratories (State Certification #08258CA) under a formal Chain-of-Custody protocol. The rinsate sample was analyzed for Total Petroleum Hydrocarbons (TPH) Extractable as TPH-GRO (C6-C10) by Method SW846 8260B, TPH (C10-C28) and TPH(>C28-C40) by Method SW846 8015B M. The attached Table provided by Accutest Laboratories presents a summary of the rinsate sample analytical results. A copy of the laboratory certificate of analysis and chain of custody form is included as an attachment.

On September 23, 2013, OFD Inspector Keith Matthews tested the lower explosive limit (LEL) and oxygen (O₂) levels in the tank with a Cannonball 3 combustible gas meter. The LEL and O₂ levels were 0% and 21.8%, respectively.

On September 23, 2013, as directed by Inspector Keith Matthews of the OFD, GGTR removed the tank from the excavation. After a visual inspection, the tank was loaded into a truck and transported as scrap metal to Circosta Iron & Metal, Inc. in San Francisco, California. A copy of the Certificate of Disposal and Circosta Scrap Metal Recycling Receipt are attached. Figure 3 depicts photographs of the tank removal activities.

4. TANK AND SOIL CONDITION

The tank was found to be in good condition with no visible hole. Soil discoloration and hydrocarbon odors were observed in the tank overburden soil and/or in the soil beneath the tank. Soil observed during the UST removal was predominantly moist to wet, dark greenish gray, silty clay with rock fragments. Groundwater was observed in the excavation during tank removal activities. The depth to groundwater measured in the observation well on 9/23/13 was 6.0 fbg. Because of soil contamination, an Underground Storage Tank Unauthorized Release (Leak) / Contamination Site Report was required by the OFD. A copy of this report is included as an attachment.

5. TANK SAMPLING & ANALYSIS

On September 23, 2013, under the direction of Keith Matthews of the OFD, GGTR collected two four-point composite soil samples from the stockpiled overburden, two discrete soil sample from the former tank excavation, two groundwater samples and remote fill sample. The composite samples were labeled 9378-SP1(A-D)COMP and 9378-SP2(A-D)COMP, the remote fill sample was labeled 9378-REMOTE FILL, the groundwater samples were labeled 9378-GW-7 and 9378-OW-6 and the discrete samples were labeled 9378-EX-N-6 AND 9378-EX-S-6. The groundwater sample 9378-GW-7 was collected from the excavation bottom at approximately 7 fbg, and sample 9378-OW-6 was collected from the observation well. The discrete soil samples, 9378-EX-N-6 and 9378-EX-S-6, were collected 2 feet below the respective north and south ends of the tank bottom at approximately 6 fbg, respectively.

All samples were analyzed for Total Petroleum Hydrocarbons (TPH) as TPH (C10-C28) and TPH (>C28-C40) by EPA Method SW846 8015B M, TPH-GRO & VOA 8260 List by EPA Method SW846 8260B and also BN PAH List by EP Method SW846 8270C. Additionally, sample 9378-OW-6 and soil samples were analyzed for Cadmium, Chromium, Lead, Nickel and Zinc by EPA Method SWW846 6010B.

A summary of the analytical results is included in the Table provided by Accutest Northern California, Inc. A copy of the laboratory certificate of analysis and chain of custody form is included as an attachment.

6. OVER-EXCAVATION & RE-SAMPLING & ANALYSIS

Based on elevated results of the UST removal soil sample analysis, GGTR, on October 16, 2013, revisited the site to perform over-excavation and confirmation re-sampling activities. Keith Matthews of the OFD provided oversight for the over-excavation activities. Using a mechanical backhoe, GGTR over-excavated to 13 fbg and removed approximately 24.52 tons of residual hydrocarbon-impacted soil from the UST cavity. The impacted soil was directly transferred into a dump truck. GGTR then collected two additional discrete confirmation soil samples. Soil sample 9378-EX-N-13 was collected beneath the north tank bottom at approximately 13 fbg, and 9378-EX-S-13 was collected beneath the south tank bottom at approximately 13 fbg.

GGTR observed groundwater at the bottom of the excavation. NRC Environmental Services returned to the site and pumped the groundwater from the tank cavity and transported the Non-Hazardous Waste Liquid (350 Gallons) under Uniform Hazardous Waste Manifest No. 77872 01 to the Riverbank Oil Transfer, LLC facility in Riverbank California. A copy of the liquid manifest is included as an attachment.

Following adequate groundwater recharge, GGTR collected a grab sample directly from the surface of the groundwater. The depth to groundwater prior to sampling was measured at 11.5 fbg. The grab groundwater sample was labeled 9378-GW-11.5.

All samples were analyzed for Total Petroleum Hydrocarbons (TPH) as TPH (C10-C28) and TPH (>C28-C40) by EPA Method SW846 8015B M, TPH-GRO & VOA 8260 List by EPA Method SW846 8260B and also BN PAH List by EP Method SW846 8270C. Additionally, the soil samples were analyzed for Cadmium, Chromium, Lead, Nickel and Zinc by EPA Method SWW846 6010B.

7. WASTE MANAGEMENT & SOIL DISPOSAL

Following waste profiling and facility acceptance, GGTR, on October 16 & 17, 2013, transported the Non-Hazardous Solid Waste (24.52 tons) under Waste Profile No. 42121317504 to Republic Services' Keller Canyon Landfill Facility in Pittsburg, CA. A copy of the solid waste manifest and associated weight tags is included as an attachment.

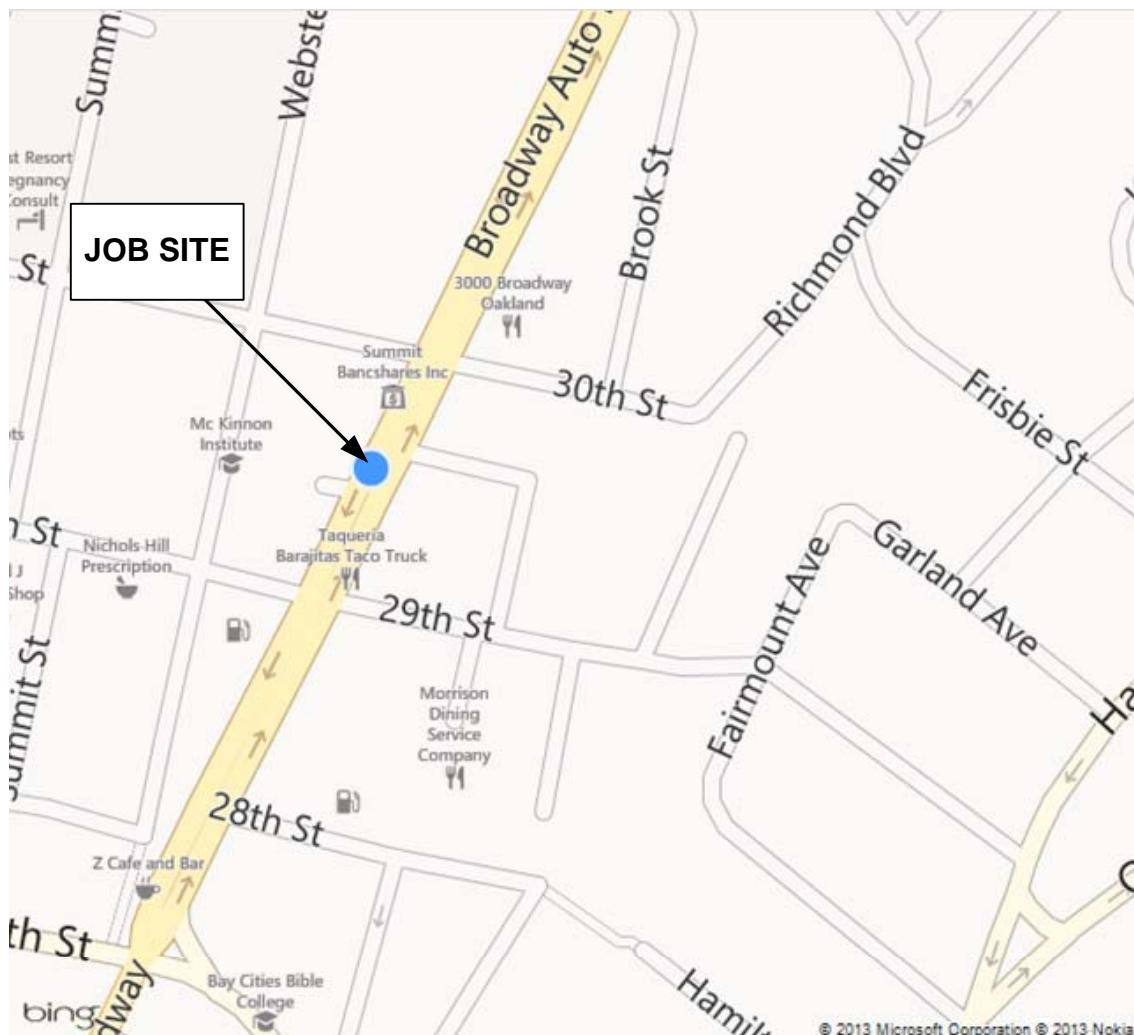
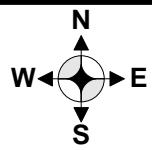
8. SITE RESTORATION

On October 17 & 18, 2013, GGTR returned to the site to backfill the excavation with clean import material. The soil was placed in 12" lifts and compacted using a jumping jack compactor. The sidewalk was subsequently replaced in conformance with OPB requirements.

9. FINDINGS / RECOMMENDATION

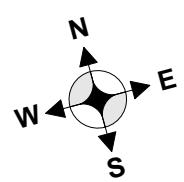
There were no visible holes in the tank. Soil discoloration and hydrocarbon odors in the material underlying the tank/overburden material were noted during tank removal activities. As well, lab analysis reported high concentrations of TPH (diesel) in the tank bottom and stockpiled overburden soil samples, as well as in the grab groundwater samples collected in the UST excavation. Based on field observations and sample analysis, GGTR proposed to over-excavate the impacted material and collect confirmation samples. Following OFD approval, the impacted soil was removed, properly profiled and transported for disposal to Keller Canyon Landfill Facility in Pittsburg, CA. Both soil and grab groundwater confirmation samples contained detectable concentrations of diesel- and motor oil-range total petroleum hydrocarbons. If warranted, any additional environmental site assessment or corrective action work associated with the UST investigation will be directed by the OFD and/or Alameda County Health Care Services Agency.

FIGURES



GOLDEN GATE TANK REMOVAL, INC.
1455 Yosemite Avenue
San Francisco, CA 94124
Ph (415) 512-1555 Fx (415) 512-0964

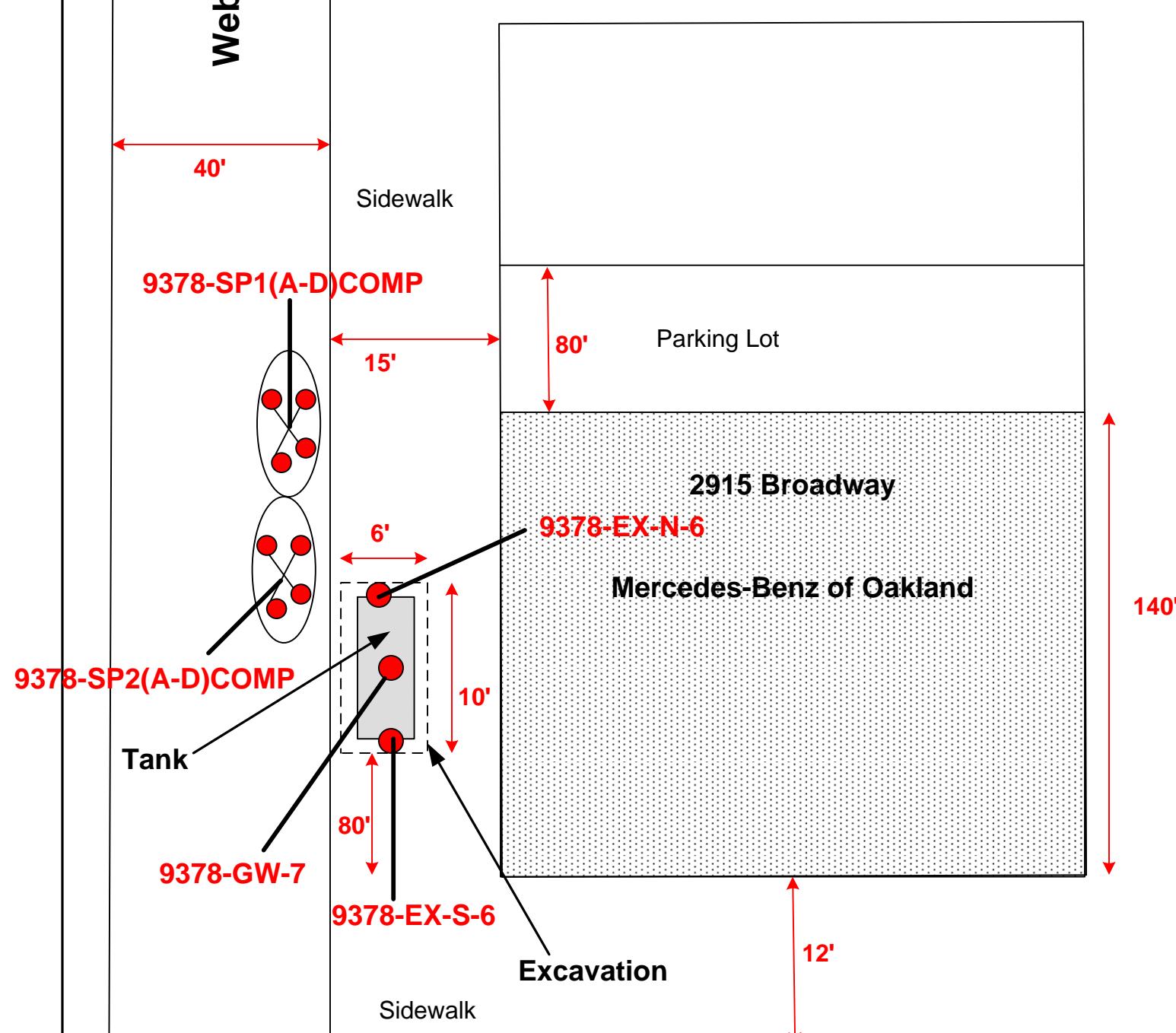
VICINITY MAP
2915 Broadway
Oakland, CA 94607



30th St.

Webster St.

Broadway



29th St.

Not To Scale

GOLDEN GATE TANK REMOVAL, INC.

1455 Yosemite Avenue, San Francisco, CA 94124
Ph (415) 512-1555 Fx (415) 512-0964

Site Drawing

2915 Broadway
Oakland, California 94607

GGTR Project No. 9378

Drawing By: AC

September 2013

Figure 2



**UST READY TO BE REMOVED
FROM EXCAVATION**

**TANK REMOVAL IN
PROCESS**



**TANK READY TO BE
TRANSPORTED FOR
DISPOSAL**

GOLDEN GATE TANK REMOVAL, INC.
1455 Yosemite Avenue
San Francisco, CA 94124
Ph (415) 512-1555 Fx (415) 512-0964

UST REMOVAL
2915 Broadway Street
Oakland, CA 94607

November 11, 2013
2915 Broadway, San Francisco, CA 94607

Underground Storage Tank Closure Report
Job #9378

TABLE



Accutest Northern California, Inc.	Sep 30, 2013 14:41 pm
Job Number:	C29884
Account:	Golden Gate Tank Removal
Project:	2915 Broadway - Oakland, CA
Project Number:	9378

Legend: Hit

Client Sample ID:		9378-GW-7	9378-OW-6	9378-R3	
Lab Sample ID:		C29884-2	C29884-1	C29884-15	
Date Sampled:		09/23/2013	09/23/2013	09/23/2013	
Matrix:		Ground Water	Ground Water	Water	

GC/MS Volatiles (SW846 8260B)

Acetone	ug/l	24.7	9.6 J	-	
Benzene	ug/l	2.0	2.5	-	
Bromobenzene	ug/l	ND (0.20)	ND (0.40)	-	
Bromochloromethane	ug/l	ND (0.20)	ND (0.40)	-	
Bromodichloromethane	ug/l	ND (0.20)	ND (0.40)	-	
Bromoform	ug/l	ND (0.22)	ND (0.44)	-	
n-Butylbenzene	ug/l	0.35 J	ND (0.40)	-	
sec-Butylbenzene	ug/l	0.81 J	1.3 J	-	
tert-Butylbenzene	ug/l	ND (0.28)	ND (0.56)	-	
Chlorobenzene	ug/l	74.7	95.0	-	
Chloroethane	ug/l	ND (0.20)	ND (0.40)	-	
Chloroform	ug/l	ND (0.20)	ND (0.40)	-	
o-Chlorotoluene	ug/l	0.90 J	0.99 J	-	
p-Chlorotoluene	ug/l	0.35 J	ND (0.52)	-	
Carbon tetrachloride	ug/l	ND (0.20)	ND (0.40)	-	
1,1-Dichloroethane	ug/l	ND (0.20)	ND (0.40)	-	
1,1-Dichloroethylene	ug/l	ND (0.20)	ND (0.40)	-	
1,1-Dichloropropene	ug/l	ND (0.20)	ND (0.40)	-	
1,2-Dibromo-3-chloropropane	ug/l	ND (0.40)	ND (0.80)	-	
1,2-Dibromoethane	ug/l	ND (0.20)	ND (0.40)	-	
1,2-Dichloroethane	ug/l	ND (0.20)	ND (0.40)	-	
1,2-Dichloropropane	ug/l	ND (0.20)	ND (0.40)	-	
1,3-Dichloropropane	ug/l	ND (0.20)	ND (0.40)	-	
Di-Isopropyl ether	ug/l	ND (0.22)	ND (0.44)	-	
2,2-Dichloropropane	ug/l	ND (0.20)	ND (0.40)	-	
Dibromochloromethane	ug/l	ND (0.20)	ND (0.40)	-	



Dichlorodifluoromethane	ug/l	ND (0.20)	ND (0.40)	-	
cis-1,2-Dichloroethylene	ug/l	ND (0.20)	ND (0.40)	-	
cis-1,3-Dichloropropene	ug/l	ND (0.20)	ND (0.40)	-	
m-Dichlorobenzene	ug/l	ND (0.20)	ND (0.40)	-	
o-Dichlorobenzene	ug/l	ND (0.20)	ND (0.40)	-	
p-Dichlorobenzene	ug/l	ND (0.20)	ND (0.40)	-	
trans-1,2-Dichloroethylene	ug/l	ND (0.20)	ND (0.40)	-	
trans-1,3-Dichloropropene	ug/l	ND (0.30)	ND (0.60)	-	
Ethylbenzene	ug/l	0.29 J	ND (0.40)	-	
Ethyl Tert Butyl Ether	ug/l	ND (0.22)	ND (0.44)	-	
2-Hexanone	ug/l	ND (2.0)	ND (4.0)	-	
Hexachlorobutadiene	ug/l	ND (0.20)	ND (0.40)	-	
Isopropylbenzene	ug/l	0.22 J	ND (0.40)	-	
p-Isopropyltoluene	ug/l	0.71 J	ND (0.40)	-	
4-Methyl-2-pentanone	ug/l	1.0 J	ND (2.0)	-	
Methyl bromide	ug/l	ND (0.20)	ND (0.40)	-	
Methyl chloride	ug/l	ND (0.30)	ND (0.60)	-	
Methylene bromide	ug/l	ND (0.20)	ND (0.40)	-	
Methylene chloride	ug/l	ND (2.0)	ND (4.0)	-	
Methyl ethyl ketone	ug/l	4.3 J	ND (4.0)	-	
Methyl Tert Butyl Ether	ug/l	1.2	1.2 J	-	
Naphthalene	ug/l	2.5 J	ND (1.0)	-	
n-Propylbenzene	ug/l	0.66 J	ND (0.40)	-	
Styrene	ug/l	ND (0.20)	ND (0.40)	-	
Tert-Amyl Methyl Ether	ug/l	ND (0.40)	ND (0.80)	-	
Tert-Butyl Alcohol	ug/l	6.1 J	ND (4.8)	-	
1,1,1,2-Tetrachloroethane	ug/l	ND (0.30)	ND (0.60)	-	
1,1,1-Trichloroethane	ug/l	ND (0.20)	ND (0.40)	-	
1,1,2,2-Tetrachloroethane	ug/l	ND (0.20)	ND (0.40)	-	
1,1,2-Trichloroethane	ug/l	ND (0.22)	ND (0.44)	-	
1,2,3-Trichlorobenzene	ug/l	ND (0.20)	ND (0.40)	-	
1,2,3-Trichloropropane	ug/l	ND (0.20)	ND (0.40)	-	
1,2,4-Trichlorobenzene	ug/l	ND (0.20)	ND (0.40)	-	
1,2,4-Trimethylbenzene	ug/l	1.7 J	ND (0.40)	-	
1,3,5-Trimethylbenzene	ug/l	0.93 J	ND (0.40)	-	
Tetrachloroethylene	ug/l	ND (0.30)	ND (0.60)	-	
Toluene	ug/l	0.40 J	ND (0.40)	-	
Trichloroethylene	ug/l	ND (0.20)	ND (0.40)	-	
Trichlorofluoromethane	ug/l	ND (0.20)	ND (0.40)	-	
Vinyl chloride	ug/l	ND (0.20)	ND (0.40)	-	
Xylene (total)	ug/l	2.6	1.2 J	-	
TPH-GRO (C6-C10)	ug/l	209 ^a	214 ^a	55.0 ^b	



GC/MS Semi-volatiles (SW846 8270C)					
Acenaphthene	ug/l	ND (1.3)	ND (1.3)	-	
Acenaphthylene	ug/l	ND (1.1)	ND (1.1)	-	
Anthracene	ug/l	ND (1.2)	ND (1.2)	-	
Benzo(a)anthracene	ug/l	ND (1.3)	ND (1.3)	-	
Benzo(a)pyrene	ug/l	ND (1.0)	ND (1.0)	-	
Benzo(b)fluoranthene	ug/l	ND (1.2)	ND (1.2)	-	
Benzo(g,h,i)perylene	ug/l	ND (1.4)	ND (1.4)	-	
Benzo(k)fluoranthene	ug/l	ND (1.3)	ND (1.3)	-	
Chrysene	ug/l	ND (1.5)	ND (1.5)	-	
Dibenzo(a,h)anthracene	ug/l	ND (1.2)	ND (1.2)	-	
Fluoranthene	ug/l	ND (1.4)	ND (1.4)	-	
Fluorene	ug/l	ND (1.4)	ND (1.4)	-	
Indeno(1,2,3-cd)pyrene	ug/l	ND (1.3)	ND (1.3)	-	
1-Methylnaphthalene	ug/l	ND (1.2)	ND (1.2)	-	
2-Methylnaphthalene	ug/l	ND (1.2)	ND (1.2)	-	
Naphthalene	ug/l	ND (1.2)	ND (1.2)	-	
Phenanthrene	ug/l	ND (1.2)	ND (1.2)	-	
Pyrene	ug/l	ND (1.5)	ND (1.5)	-	
GC Semi-volatiles (SW846 8015B M)					
TPH (C10-C28)	mg/l	10.9	12.3	3.43	
TPH (>C28-C40)	mg/l	9.83	6.62	5.56	
Metals Analysis					
Cadmium	ug/l	-	<2.0	-	
Chromium	ug/l	-	<10	-	
Lead	ug/l	-	27.2	-	
Nickel	ug/l	-	12.6	-	
Zinc	ug/l	-	174	-	
Client Sample ID:		9378-EX-N-6	9378-EX-S-6	9378-SP1(A-D)COMP	9378-SP2(A-D)COMP
Lab Sample ID:		C29884-3	C29884-4	C29884-9	C29884-14
Date Sampled:		09/23/2013	09/23/2013	09/23/2013	09/23/2013
Matrix:		Soil	Soil	Soil	Soil
GC/MS Volatiles (SW846 8260B)					



Acetone	ug/kg	ND (5000)	ND (2500)	ND (500)	ND (1200)
Benzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Bromobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Bromochloromethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Bromodichloromethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Bromoform	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
n-Butylbenzene	ug/kg	641 J	341 J	ND (25)	261 J
sec-Butylbenzene	ug/kg	588 J	306 J	ND (25)	124 J
tert-Butylbenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Chlorobenzene	ug/kg	2400 J	3640	ND (25)	1690
Chloroethane	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Chloroform	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
o-Chlorotoluene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
p-Chlorotoluene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Carbon tetrachloride	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1-Dichloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1-Dichloroethylene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1-Dichloropropene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2-Dibromo-3-chloropropane	ug/kg	ND (700)	ND (350)	ND (70)	ND (170)
1,2-Dibromoethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2-Dichloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2-Dichloropropane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,3-Dichloropropane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Di-Isopropyl ether	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
2,2-Dichloropropane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Dibromochloromethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Dichlorodifluoromethane	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
cis-1,2-Dichloroethylene	ug/kg	ND (550)	ND (270)	ND (55)	ND (140)
cis-1,3-Dichloropropene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
m-Dichlorobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
o-Dichlorobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
p-Dichlorobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
trans-1,2-Dichloroethylene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
trans-1,3-Dichloropropene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Ethylbenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Ethyl tert-Butyl Ether	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
2-Hexanone	ug/kg	ND (1000)	ND (500)	ND (99)	ND (250)
Hexachlorobutadiene	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Isopropylbenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
p-Isopropyltoluene	ug/kg	ND (250)	ND (120)	ND (25)	64.5 J
4-Methyl-2-pentanone	ug/kg	ND (1000)	ND (500)	ND (99)	ND (250)



Methyl bromide	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Methyl chloride	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Methylene bromide	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Methylene chloride	ug/kg	ND (2500)	ND (1200)	ND (250)	ND (620)
Methyl ethyl ketone	ug/kg	ND (1000)	ND (500)	ND (99)	ND (250)
Methyl Tert Butyl Ether	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Naphthalene	ug/kg	ND (500)	ND (250)	ND (50)	241 J
n-Propylbenzene	ug/kg	477 J	379 J	ND (25)	249 J
Styrene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Tert-Amyl Methyl Ether	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Tert Butyl Alcohol	ug/kg	ND (5000)	ND (2500)	ND (500)	ND (1200)
1,1,1,2-Tetrachloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1,1-Trichloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1,2,2-Tetrachloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,1,2-Trichloroethane	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2,3-Trichlorobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2,3-Trichloropropane	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
1,2,4-Trichlorobenzene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
1,2,4-Trimethylbenzene	ug/kg	ND (500)	ND (250)	ND (50)	534 J
1,3,5-Trimethylbenzene	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Tetrachloroethylene	ug/kg	ND (300)	ND (150)	ND (30)	ND (75)
Toluene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Trichloroethylene	ug/kg	ND (250)	ND (120)	ND (25)	ND (62)
Trichlorofluoromethane	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Vinyl chloride	ug/kg	ND (500)	ND (250)	ND (50)	ND (120)
Xylene (total)	ug/kg	ND (500)	ND (250)	ND (50)	218 J
TPH-GRO (C6-C10)	ug/kg	555000 ^c	226000 ^c	ND (2500)	98300 ^c

GC/MS Semi-volatiles (SW846 8270C)

Acenaphthene	ug/kg	ND (540)	ND (290)	ND (140)	ND (150)
Acenaphthylene	ug/kg	ND (580)	ND (310)	ND (150)	ND (150)
Anthracene	ug/kg	ND (400)	ND (210)	ND (110)	ND (110)
Benzo(a)anthracene	ug/kg	ND (250)	ND (130)	ND (66)	67.1 J
Benzo(a)pyrene	ug/kg	ND (250)	ND (130)	ND (66)	ND (66)
Benzo(b)fluoranthene	ug/kg	ND (250)	ND (130)	ND (66)	ND (66)
Benzo(g,h,i)perylene	ug/kg	ND (320)	ND (170)	120 J	100 J
Benzo(k)fluoranthene	ug/kg	ND (250)	ND (130)	ND (66)	ND (66)
Chrysene	ug/kg	ND (250)	ND (130)	ND (66)	ND (66)
Dibenzo(a,h)anthracene	ug/kg	ND (310)	ND (170)	ND (82)	ND (82)
Fluoranthene	ug/kg	ND (250)	ND (130)	ND (66)	ND (66)
Fluorene	ug/kg	ND (540)	ND (290)	ND (140)	ND (140)



Indeno(1,2,3-cd)pyrene	ug/kg	ND (320)	ND (170)	ND (85)	ND (85)
1-Methylnaphthalene	ug/kg	ND (570)	ND (300)	ND (150)	250 J
2-Methylnaphthalene	ug/kg	ND (590)	ND (320)	ND (160)	ND (160)
Naphthalene	ug/kg	ND (570)	ND (310)	ND (150)	ND (150)
Phenanthrene	ug/kg	ND (430)	ND (230)	ND (120)	ND (120)
Pyrene	ug/kg	307 J	211 J	88.8 J	129 J

GC Semi-volatiles (SW846 8015B M)

TPH (C10-C28)	mg/kg	2020	1170	1650	1320
TPH (>C28-C40)	mg/kg	6660	4010	5120	4100

Metals Analysis

Cadmium	mg/kg	<0.85	<0.86	<0.83	<0.83
Chromium	mg/kg	50.1	60.0	47.0	39.7
Lead	mg/kg	12.7	10.6	2.8	20.8
Nickel	mg/kg	67.1	62.5	62.9	29.7
Zinc	mg/kg	42.6	35.3	50.7	41.8

Footnotes:

^a Atypical pattern; value primarily due to a single peak(s).

^b Atypical pattern; value primarily due to non-target hydrocarbons in the gasoline range.

^c Atypical pattern; heavier hydrocarbons contributing to quantitation.



Accutest Northern California, Inc.	Oct 11, 2013 16:38 pm	
Job Number:	C30144	
Account:	Golden Gate Tank Removal	
Project:	2915 Broadway - Oakland, CA	
Project Number:	9378	
Legend:	Hit	
Client Sample ID:		9378-REMOTE FILL
Lab Sample ID:		C30144-1
Date Sampled:		10/03/2013
Matrix:		Soil
GC/MS Volatiles (SW846 8260B)		
Acetone	ug/kg	ND (9.7)
Benzene	ug/kg	ND (0.49)
Bromobenzene	ug/kg	ND (0.49)
Bromoform	ug/kg	ND (0.49)
n-Butylbenzene	ug/kg	ND (0.49)
sec-Butylbenzene	ug/kg	ND (0.49)
tert-Butylbenzene	ug/kg	ND (0.49)
Chlorobenzene	ug/kg	ND (0.49)
Chloroethane	ug/kg	ND (0.97)
Chloroform	ug/kg	ND (0.49)
o-Chlorotoluene	ug/kg	ND (0.49)
p-Chlorotoluene	ug/kg	ND (0.49)
Carbon tetrachloride	ug/kg	ND (0.49)
1,1-Dichloroethane	ug/kg	ND (0.49)
1,1-Dichloroethylene	ug/kg	ND (0.49)
1,1-Dichloropropene	ug/kg	ND (0.49)
1,2-Dibromo-3-chloropropane	ug/kg	ND (1.4)
1,2-Dibromoethane	ug/kg	ND (0.49)
1,2-Dichloroethane	ug/kg	ND (0.49)
1,2-Dichloropropane	ug/kg	ND (0.49)
1,3-Dichloropropane	ug/kg	ND (0.49)



Di-Isopropyl ether	ug/kg	ND (0.49)
2,2-Dichloropropane	ug/kg	ND (0.49)
Dibromochloromethane	ug/kg	ND (0.49)
Dichlorodifluoromethane	ug/kg	ND (0.97)
cis-1,2-Dichloroethylene	ug/kg	ND (1.1)
cis-1,3-Dichloropropene	ug/kg	ND (0.49)
m-Dichlorobenzene	ug/kg	ND (0.49)
o-Dichlorobenzene	ug/kg	ND (0.49)
p-Dichlorobenzene	ug/kg	ND (0.49)
trans-1,2-Dichloroethylene	ug/kg	ND (0.49)
trans-1,3-Dichloropropene	ug/kg	ND (0.49)
Ethylbenzene	ug/kg	ND (0.49)
Ethyl tert-Butyl Ether	ug/kg	ND (0.49)
2-Hexanone	ug/kg	ND (1.9)
Hexachlorobutadiene	ug/kg	ND (0.97)
Isopropylbenzene	ug/kg	ND (0.49)
p-Isopropyltoluene	ug/kg	ND (0.49)
4-Methyl-2-pentanone	ug/kg	ND (1.9)
Methyl bromide	ug/kg	ND (0.97)
Methyl chloride	ug/kg	ND (0.97)
Methylene bromide	ug/kg	ND (0.49)
Methylene chloride	ug/kg	ND (4.9)
Methyl ethyl ketone	ug/kg	ND (1.9)
Methyl Tert Butyl Ether	ug/kg	ND (0.97)
Naphthalene	ug/kg	ND (0.97)
n-Propylbenzene	ug/kg	ND (0.49)
Styrene	ug/kg	ND (0.49)
Tert-Amyl Methyl Ether	ug/kg	ND (0.49)
Tert Butyl Alcohol	ug/kg	ND (9.7)
1,1,1,2-Tetrachloroethane	ug/kg	ND (0.49)
1,1,1-Trichloroethane	ug/kg	ND (0.49)
1,1,2,2-Tetrachloroethane	ug/kg	ND (0.49)
1,1,2-Trichloroethane	ug/kg	ND (0.49)
1,2,3-Trichlorobenzene	ug/kg	ND (0.49)
1,2,3-Trichloropropane	ug/kg	ND (0.97)
1,2,4-Trichlorobenzene	ug/kg	ND (0.49)
1,2,4-Trimethylbenzene	ug/kg	ND (0.97)
1,3,5-Trimethylbenzene	ug/kg	ND (0.97)
Tetrachloroethylene	ug/kg	ND (0.58)
Toluene	ug/kg	ND (0.49)



Trichloroethylene	ug/kg	ND (0.49)
Trichlorofluoromethane	ug/kg	ND (0.97)
Vinyl chloride	ug/kg	ND (0.97)
Xylene (total)	ug/kg	ND (0.97)
TPH-GRO (C6-C10)	ug/kg	ND (49)

GC/MS Semi-volatiles (SW846 8270C)

Acenaphthene	ug/kg	ND (72)
Acenaphthylene	ug/kg	ND (77)
Anthracene	ug/kg	ND (53)
Benzo(a)anthracene	ug/kg	ND (33)
Benzo(a)pyrene	ug/kg	ND (33)
Benzo(b)fluoranthene	ug/kg	ND (33)
Benzo(g,h,i)perylene	ug/kg	ND (43)
Benzo(k)fluoranthene	ug/kg	ND (33)
Chrysene	ug/kg	ND (33)
Dibenzo(a,h)anthracene	ug/kg	ND (41)
Fluoranthene	ug/kg	ND (33)
Fluorene	ug/kg	ND (72)
Indeno(1,2,3-cd)pyrene	ug/kg	ND (42)
1-Methylnaphthalene	ug/kg	ND (76)
2-Methylnaphthalene	ug/kg	ND (79)
Naphthalene	ug/kg	ND (76)
Phenanthrene	ug/kg	ND (58)
Pyrene	ug/kg	ND (33)

GC Semi-volatiles (SW846 8015B M)

TPH (C10-C28)	mg/kg	51.6
TPH (>C28-C40)	mg/kg	130

Metals Analysis

Cadmium	mg/kg	<0.83
Chromium	mg/kg	35.5
Lead	mg/kg	3.3
Nickel	mg/kg	22.3
Zinc	mg/kg	18.5



Accutest Northern California, Inc.		Oct 24, 2013 17:32 pm	
Job Number:	C30355		
Account:	Golden Gate Tank Removal		
Project:	2915 Broadway - Oakland, CA		
Project Number:	9378		
	Legend:	Hit	
Client Sample ID:	9378-GW-11.5		
Lab Sample ID:	C30355-3		
Date Sampled:	10/16/2013		
Matrix:	Ground Water		
GC/MS Volatiles (SW846 8260B)			
Acetone	ug/l	8.9 J	
Benzene	ug/l	0.26 J	
Bromobenzene	ug/l	ND (0.20)	
Bromochloromethane	ug/l	ND (0.20)	
Bromodichloromethane	ug/l	ND (0.20)	
Bromoform	ug/l	ND (0.22)	
n-Butylbenzene	ug/l	1.3 J	
sec-Butylbenzene	ug/l	0.70 J	
tert-Butylbenzene	ug/l	ND (0.28)	
Chlorobenzene	ug/l	35.2	
Chloroethane	ug/l	ND (0.20)	
Chloroform	ug/l	ND (0.20)	
o-Chlorotoluene	ug/l	1.3 J	
p-Chlorotoluene	ug/l	0.68 J	
Carbon tetrachloride	ug/l	ND (0.20)	
1,1-Dichloroethane	ug/l	ND (0.20)	
1,1-Dichloroethylene	ug/l	ND (0.20)	
1,1-Dichloropropene	ug/l	ND (0.20)	
1,2-Dibromo-3-chloropropane	ug/l	ND (0.40)	
1,2-Dibromoethane	ug/l	ND (0.20)	
1,2-Dichloroethane	ug/l	ND (0.20)	
1,2-Dichloropropane	ug/l	ND (0.20)	
1,3-Dichloropropane	ug/l	ND (0.20)	
Di-Isopropyl ether	ug/l	ND (0.22)	
2,2-Dichloropropane	ug/l	ND (0.20)	
Dibromochloromethane	ug/l	ND (0.20)	
Dichlorodifluoromethane	ug/l	ND (0.20)	
cis-1,2-Dichloroethylene	ug/l	ND (0.20)	
cis-1,3-Dichloropropene	ug/l	ND (0.20)	
m-Dichlorobenzene	ug/l	ND (0.20)	
o-Dichlorobenzene	ug/l	ND (0.20)	



p-Dichlorobenzene	ug/l	ND (0.20)	
trans-1,2-Dichloroethylene	ug/l	ND (0.20)	
trans-1,3-Dichloropropene	ug/l	ND (0.30)	
Ethylbenzene	ug/l	ND (0.20)	
Ethyl Tert Butyl Ether	ug/l	ND (0.22)	
2-Hexanone	ug/l	ND (2.0)	
Hexachlorobutadiene	ug/l	ND (0.20)	
Isopropylbenzene	ug/l	0.24 J	
p-Isopropyltoluene	ug/l	ND (0.20)	
4-Methyl-2-pentanone	ug/l	ND (1.0)	
Methyl bromide	ug/l	ND (0.20)	
Methyl chloride	ug/l	ND (0.30)	
Methylene bromide	ug/l	ND (0.20)	
Methylene chloride	ug/l	ND (2.0)	
Methyl ethyl ketone	ug/l	ND (2.0)	
Methyl Tert Butyl Ether	ug/l	0.60 J	
Naphthalene	ug/l	0.90 J	
n-Propylbenzene	ug/l	1.0 J	
Styrene	ug/l	ND (0.20)	
Tert-Amyl Methyl Ether	ug/l	ND (0.40)	
Tert-Butyl Alcohol	ug/l	7.2 J	
1,1,1,2-Tetrachloroethane	ug/l	ND (0.30)	
1,1,1-Trichloroethane	ug/l	ND (0.20)	
1,1,2,2-Tetrachloroethane	ug/l	ND (0.20)	
1,1,2-Trichloroethane	ug/l	ND (0.22)	
1,2,3-Trichlorobenzene	ug/l	ND (0.20)	
1,2,3-Trichloropropane	ug/l	ND (0.20)	
1,2,4-Trichlorobenzene	ug/l	ND (0.20)	
1,2,4-Trimethylbenzene	ug/l	1.3 J	
1,3,5-Trimethylbenzene	ug/l	0.36 J	
Tetrachloroethylene	ug/l	ND (0.30)	
Toluene	ug/l	ND (0.20)	
Trichloroethylene	ug/l	ND (0.20)	
Trichlorofluoromethane	ug/l	ND (0.20)	
Vinyl chloride	ug/l	ND (0.20)	
Xylene (total)	ug/l	1.5 J	
TPH-GRO (C6-C10)	ug/l	116 ^a	

GC/MS Semi-volatiles (SW846 8270C)

Acenaphthene	ug/l	ND (5.2)	
Acenaphthylene	ug/l	ND (4.5)	
Anthracene	ug/l	ND (4.8)	
Benzo(a)anthracene	ug/l	ND (5.5)	
Benzo(a)pyrene	ug/l	ND (4.2)	
Benzo(b)fluoranthene	ug/l	ND (5.1)	



Benzo(g,h,i)perylene	ug/l	ND (5.7)	
Benzo(k)fluoranthene	ug/l	ND (5.3)	
Chrysene	ug/l	ND (6.3)	
Dibenzo(a,h)anthracene	ug/l	ND (4.9)	
Fluoranthene	ug/l	ND (5.6)	
Fluorene	ug/l	ND (5.8)	
Indeno(1,2,3-cd)pyrene	ug/l	ND (5.2)	
1-Methylnaphthalene	ug/l	ND (4.9)	
2-Methylnaphthalene	ug/l	ND (5.1)	
Naphthalene	ug/l	ND (4.7)	
Phenanthrene	ug/l	ND (5.1)	
Pyrene	ug/l	ND (6.1)	

GC Semi-volatiles (SW846 8015B M)

TPH (C10-C28)	mg/l	1.86	
TPH (>C28-C40)	mg/l	0.374 J	

Client Sample ID:		9378-EX-N-13	9378-EX-S-13
Lab Sample ID:		C30355-1	C30355-2
Date Sampled:		10/16/2013	10/16/2013
Matrix:		Soil	Soil

GC/MS Volatiles (SW846 8260B)

Acetone	ug/kg	20.1 J	ND (350)
Benzene	ug/kg	1.7 J	ND (18)
Bromobenzene	ug/kg	ND (0.50)	ND (18)
Bromoform	ug/kg	ND (0.50)	ND (18)
n-Butylbenzene	ug/kg	3.7 J	ND (18)
sec-Butylbenzene	ug/kg	25.8	44.1 J
tert-Butylbenzene	ug/kg	1.9 J	ND (18)
Chlorobenzene	ug/kg	1290	504
Chloroethane	ug/kg	ND (0.99)	ND (35)
Chloroform	ug/kg	ND (0.50)	ND (18)
o-Chlorotoluene	ug/kg	ND (0.50)	ND (18)
p-Chlorotoluene	ug/kg	ND (0.50)	ND (18)
Carbon tetrachloride	ug/kg	ND (0.50)	ND (18)
1,1-Dichloroethane	ug/kg	ND (0.50)	ND (18)
1,1-Dichloroethylene	ug/kg	ND (0.50)	ND (18)
1,1-Dichloropropene	ug/kg	ND (0.50)	ND (18)
1,2-Dibromo-3-chloropropane	ug/kg	ND (1.4)	ND (50)
1,2-Dibromoethane	ug/kg	ND (0.50)	ND (18)
1,2-Dichloroethane	ug/kg	ND (0.50)	ND (18)



1,2-Dichloropropane	ug/kg	ND (0.50)	ND (18)
1,3-Dichloropropane	ug/kg	ND (0.50)	ND (18)
Di-Isopropyl ether	ug/kg	ND (0.50)	ND (18)
2,2-Dichloropropane	ug/kg	ND (0.50)	ND (18)
Dibromochloromethane	ug/kg	ND (0.50)	ND (18)
Dichlorodifluoromethane	ug/kg	ND (0.99)	ND (35)
cis-1,2-Dichloroethylene	ug/kg	ND (1.1)	ND (39)
cis-1,3-Dichloropropene	ug/kg	ND (0.50)	ND (18)
m-Dichlorobenzene	ug/kg	ND (0.50)	ND (18)
o-Dichlorobenzene	ug/kg	ND (0.50)	ND (18)
p-Dichlorobenzene	ug/kg	ND (0.50)	ND (18)
trans-1,2-Dichloroethylene	ug/kg	ND (0.50)	ND (18)
trans-1,3-Dichloropropene	ug/kg	ND (0.50)	ND (18)
Ethylbenzene	ug/kg	1.8 J	ND (18)
Ethyl tert-Butyl Ether	ug/kg	ND (0.50)	ND (18)
2-Hexanone	ug/kg	ND (2.0)	ND (71)
Hexachlorobutadiene	ug/kg	ND (0.99)	ND (35)
Isopropylbenzene	ug/kg	13.1	21.3 J
p-Isopropyltoluene	ug/kg	ND (0.50)	ND (18)
4-Methyl-2-pentanone	ug/kg	ND (2.0)	ND (71)
Methyl bromide	ug/kg	ND (0.99)	ND (35)
Methyl chloride	ug/kg	ND (0.99)	ND (35)
Methylene bromide	ug/kg	ND (0.50)	ND (18)
Methylene chloride	ug/kg	ND (5.0)	ND (180)
Methyl ethyl ketone	ug/kg	ND (2.0)	ND (71)
Methyl Tert Butyl Ether	ug/kg	ND (0.99)	ND (35)
Naphthalene	ug/kg	ND (0.99)	ND (35)
n-Propylbenzene	ug/kg	22.8	55.8 J
Styrene	ug/kg	ND (0.50)	ND (18)
Tert-Amyl Methyl Ether	ug/kg	ND (0.50)	ND (18)
Tert Butyl Alcohol	ug/kg	ND (9.9)	ND (350)
1,1,1,2-Tetrachloroethane	ug/kg	ND (0.50)	ND (18)
1,1,1-Trichloroethane	ug/kg	ND (0.50)	ND (18)
1,1,2,2-Tetrachloroethane	ug/kg	ND (0.50)	ND (18)
1,1,2-Trichloroethane	ug/kg	ND (0.50)	ND (18)
1,2,3-Trichlorobenzene	ug/kg	ND (0.50)	ND (18)
1,2,3-Trichloropropane	ug/kg	ND (0.99)	ND (35)
1,2,4-Trichlorobenzene	ug/kg	ND (0.50)	ND (18)
1,2,4-Trimethylbenzene	ug/kg	ND (0.99)	ND (35)
1,3,5-Trimethylbenzene	ug/kg	ND (0.99)	ND (35)
Tetrachloroethylene	ug/kg	ND (0.59)	ND (21)
Toluene	ug/kg	ND (0.50)	ND (18)
Trichloroethylene	ug/kg	ND (0.50)	ND (18)
Trichlorofluoromethane	ug/kg	ND (0.99) ^b	ND (35)
Vinyl chloride	ug/kg	ND (0.99)	ND (35)
Xylene (total)	ug/kg	ND (0.99)	ND (35)



TPH-GRO (C6-C10)	ug/kg	29400 ^a	25300 ^a
GC/MS Semi-volatiles (SW846 8270C)			
Acenaphthene	ug/kg	ND (73)	ND (73)
Acenaphthylene	ug/kg	ND (78)	ND (78)
Anthracene	ug/kg	ND (53)	ND (54)
Benzo(a)anthracene	ug/kg	ND (33)	ND (33)
Benzo(a)pyrene	ug/kg	ND (33)	ND (33)
Benzo(b)fluoranthene	ug/kg	ND (33)	ND (33)
Benzo(g,h,i)perylene	ug/kg	ND (43)	ND (43)
Benzo(k)fluoranthene	ug/kg	ND (33)	ND (33)
Chrysene	ug/kg	ND (33)	ND (33)
Dibenzo(a,h)anthracene	ug/kg	ND (41)	ND (41)
Fluoranthene	ug/kg	ND (33)	ND (33)
Fluorene	ug/kg	ND (72)	ND (72)
Indeno(1,2,3-cd)pyrene	ug/kg	ND (42)	ND (43)
1-Methylnaphthalene	ug/kg	ND (76)	ND (76)
2-Methylnaphthalene	ug/kg	ND (79)	ND (79)
Naphthalene	ug/kg	ND (77)	ND (77)
Phenanthrene	ug/kg	ND (58)	ND (58)
Pyrene	ug/kg	ND (33)	33.8 J
GC Semi-volatiles (SW846 8015B M)			
TPH (C10-C28)	mg/kg	99.9	202
TPH (>C28-C40)	mg/kg	302	626
Metals Analysis			
Cadmium	mg/kg	<0.92	<0.86
Chromium	mg/kg	75.0	79.6
Lead	mg/kg	7.5	8.3
Nickel	mg/kg	69.7	73.4
Zinc	mg/kg	70.5	69.9
Footnotes:			
^a Atypical pattern; heavier hydrocarbons contributing to quantitation.			
^b CCV outside of control limits (biased high); not detected in sample.			

ATTACHMENTS

**ANALYTICAL REPORT
UST CLOSURE INSPECTION RECORDS
CERTIFICATE OF TANK DISPOSAL
SCRAP METAL RECYCLING RECEIPT
LIQUID WASTE MANIFESTS
SOLID WASTE MANIFEST & WEIGHT TAG
UST UNAUTHORIZED RELEASE (LEAK)/CONTAMINATION SITE REPORTS
HAZARDOUS WASTE TANK CLOSURE CERTIFICATION
PERMITS**



09/30/13

Technical Report for

Golden Gate Tank Removal

2915 Broadway - Oakland, CA

9378

Accutest Job Number: C29884

Sampling Date: 09/23/13

Report to:

Golden Gate Tank Removal
1455 Yosemite Avenue
San Francisco, CA 94124
Data@ggtr.com; b.wheeler@ggtr.com;
annettechen@ggtr.com; tim@ggtr.com;
ATTN: Tim Hallen

Total number of pages in report: 114



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that appears to read "James J. Rhudy".

James J. Rhudy
Lab Director

Client Service contact: Tony Vega 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3	1
Section 2: Summary of Hits	5	2
Section 3: Sample Results	8	3
3.1: C29884-1: 9378-OW-6	9	4
3.2: C29884-2: 9378-GW-7	15	5
3.3: C29884-3: 9378-EX-N-6	20	6
3.4: C29884-4: 9378-EX-S-6	26	7
3.5: C29884-9: 9378-SP1(A-D)COMP	32	8
3.6: C29884-14: 9378-SP2(A-D)COMP	38	
3.7: C29884-15: 9378-R3	44	
Section 4: Misc. Forms	46	
4.1: Chain of Custody	47	
Section 5: GC/MS Volatiles - QC Data Summaries	50	
5.1: Method Blank Summary	51	
5.2: Blank Spike/Blank Spike Duplicate Summary	63	
5.3: Laboratory Control Sample Summary	75	
5.4: Matrix Spike/Matrix Spike Duplicate Summary	79	
Section 6: GC/MS Semi-volatiles - QC Data Summaries	91	
6.1: Method Blank Summary	92	
6.2: Blank Spike/Blank Spike Duplicate Summary	94	
6.3: Matrix Spike/Matrix Spike Duplicate Summary	96	
Section 7: GC Semi-volatiles - QC Data Summaries	97	
7.1: Method Blank Summary	98	
7.2: Blank Spike/Blank Spike Duplicate Summary	100	
7.3: Matrix Spike/Matrix Spike Duplicate Summary	102	
Section 8: Metals Analysis - QC Data Summaries	103	
8.1: Prep QC MP6756: Cd,Cr,Pb,Ni,Zn	104	
8.2: Prep QC MP6765: Cd,Cr,Pb,Ni,Zn	110	

Sample Summary

Golden Gate Tank Removal

Job No: C29884

2915 Broadway - Oakland, CA
Project No: 9378

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
C29884-1	09/23/13	09:30 BW	09/24/13	AQ	Ground Water
C29884-2	09/23/13	10:25 BW	09/24/13	AQ	Ground Water
C29884-3	09/23/13	11:00 BW	09/24/13	SO	Soil
C29884-4	09/23/13	11:05 BW	09/24/13	SO	Soil
C29884-5	09/23/13	10:15 BW	09/24/13	SO	Soil
C29884-6	09/23/13	10:15 BW	09/24/13	SO	Soil
C29884-7	09/23/13	10:15 BW	09/24/13	SO	Soil
C29884-8	09/23/13	10:15 BW	09/24/13	SO	Soil
C29884-9	09/23/13	00:00 BW	09/24/13	SO	Soil
C29884-10	09/23/13	11:15 BW	09/24/13	SO	Soil
C29884-11	09/23/13	11:15 BW	09/24/13	SO	Soil
C29884-12	09/23/13	11:15 BW	09/24/13	SO	Soil
C29884-13	09/23/13	11:15 BW	09/24/13	SO	Soil

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

Golden Gate Tank Removal

Job No: C29884

2915 Broadway - Oakland, CA
Project No: 9378

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C29884-14	09/23/13	00:00 BW	09/24/13	SO	Soil	9378-SP2(A-D)COMP
C29884-15	09/23/13	00:00 BW	09/24/13	AQ	Water	9378-R3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C29884
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 09/23/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

C29884-1 9378-OW-6

Acetone	9.6 J	40	8.0	ug/l	SW846 8260B
Benzene	2.5	2.0	0.40	ug/l	SW846 8260B
sec-Butylbenzene	1.3 J	4.0	0.40	ug/l	SW846 8260B
Chlorobenzene	95.0	2.0	0.40	ug/l	SW846 8260B
o-Chlorotoluene	0.99 J	4.0	0.40	ug/l	SW846 8260B
Methyl Tert Butyl Ether	1.2 J	2.0	0.40	ug/l	SW846 8260B
Xylene (total)	1.2 J	4.0	0.92	ug/l	SW846 8260B
TPH-GRO (C6-C10) ^a	214	100	50	ug/l	SW846 8260B
TPH (C10-C28)	12.3	1.1	0.26	mg/l	SW846 8015B M
TPH (> C28-C40)	6.62	2.1	0.53	mg/l	SW846 8015B M
Lead	27.2	10		ug/l	SW846 6010B
Nickel	12.6	5.0		ug/l	SW846 6010B
Zinc	174	20		ug/l	SW846 6010B

C29884-2 9378-GW-7

Acetone	24.7	20	4.0	ug/l	SW846 8260B
Benzene	2.0	1.0	0.20	ug/l	SW846 8260B
n-Butylbenzene	0.35 J	2.0	0.20	ug/l	SW846 8260B
sec-Butylbenzene	0.81 J	2.0	0.20	ug/l	SW846 8260B
Chlorobenzene	74.7	1.0	0.20	ug/l	SW846 8260B
o-Chlorotoluene	0.90 J	2.0	0.20	ug/l	SW846 8260B
p-Chlorotoluene	0.35 J	2.0	0.26	ug/l	SW846 8260B
Ethylbenzene	0.29 J	1.0	0.20	ug/l	SW846 8260B
Isopropylbenzene	0.22 J	1.0	0.20	ug/l	SW846 8260B
p-Isopropyltoluene	0.71 J	2.0	0.20	ug/l	SW846 8260B
4-Methyl-2-pentanone	1.0 J	10	1.0	ug/l	SW846 8260B
Methyl ethyl ketone	4.3 J	10	2.0	ug/l	SW846 8260B
Methyl Tert Butyl Ether	1.2	1.0	0.20	ug/l	SW846 8260B
Naphthalene	2.5 J	5.0	0.50	ug/l	SW846 8260B
n-Propylbenzene	0.66 J	2.0	0.20	ug/l	SW846 8260B
Tert-Butyl Alcohol	6.1 J	10	2.4	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	1.7 J	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	0.93 J	2.0	0.20	ug/l	SW846 8260B
Toluene	0.40 J	1.0	0.20	ug/l	SW846 8260B
Xylene (total)	2.6	2.0	0.46	ug/l	SW846 8260B
TPH-GRO (C6-C10) ^a	209	50	25	ug/l	SW846 8260B
TPH (C10-C28)	10.9	0.94	0.24	mg/l	SW846 8015B M
TPH (> C28-C40)	9.83	1.9	0.47	mg/l	SW846 8015B M

C29884-3 9378-EX-N-6

n-Butylbenzene	641 J	2500	250	ug/kg	SW846 8260B
----------------	-------	------	-----	-------	-------------

Summary of Hits

Job Number: C29884
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 09/23/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
sec-Butylbenzene		588 J	2500	250	ug/kg	SW846 8260B
Chlorobenzene		2400 J	2500	250	ug/kg	SW846 8260B
n-Propylbenzene		477 J	2500	250	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^b		555000	50000	25000	ug/kg	SW846 8260B
Pyrene ^c		307 J	1200	250	ug/kg	SW846 8270C
TPH (C10-C28)		2020	990	250	mg/kg	SW846 8015B M
TPH (> C28-C40)		6660	2000	500	mg/kg	SW846 8015B M
Chromium		50.1	0.85		mg/kg	SW846 6010B
Lead		12.7	1.7		mg/kg	SW846 6010B
Nickel		67.1	0.85		mg/kg	SW846 6010B
Zinc		42.6	1.7		mg/kg	SW846 6010B

C29884-4 9378-EX-S-6

n-Butylbenzene	341 J	1200	120	ug/kg	SW846 8260B
sec-Butylbenzene	306 J	1200	120	ug/kg	SW846 8260B
Chlorobenzene	3640	1200	120	ug/kg	SW846 8260B
n-Propylbenzene	379 J	1200	120	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^b	226000	25000	12000	ug/kg	SW846 8260B
Pyrene ^d	211 J	670	130	ug/kg	SW846 8270C
TPH (C10-C28)	1170	490	120	mg/kg	SW846 8015B M
TPH (> C28-C40)	4010	990	250	mg/kg	SW846 8015B M
Chromium	60.0	0.86		mg/kg	SW846 6010B
Lead	10.6	1.7		mg/kg	SW846 6010B
Nickel	62.5	0.86		mg/kg	SW846 6010B
Zinc	35.3	1.7		mg/kg	SW846 6010B

C29884-9 9378-SP1(A-D)COMP

Benzo(g,h,i)perylene ^d	120 J	330	86	ug/kg	SW846 8270C
Pyrene ^d	88.8 J	330	66	ug/kg	SW846 8270C
TPH (C10-C28)	1650	990	250	mg/kg	SW846 8015B M
TPH (> C28-C40)	5120	2000	490	mg/kg	SW846 8015B M
Chromium	47.0	0.83		mg/kg	SW846 6010B
Lead	2.8	1.7		mg/kg	SW846 6010B
Nickel	62.9	0.83		mg/kg	SW846 6010B
Zinc	50.7	1.7		mg/kg	SW846 6010B

C29884-14 9378-SP2(A-D)COMP

n-Butylbenzene ^e	261 J	620	62	ug/kg	SW846 8260B
sec-Butylbenzene ^e	124 J	620	62	ug/kg	SW846 8260B
Chlorobenzene ^e	1690	620	62	ug/kg	SW846 8260B
p-Isopropyltoluene ^e	64.5 J	620	62	ug/kg	SW846 8260B
Naphthalene ^e	241 J	620	120	ug/kg	SW846 8260B

Summary of Hits

Job Number: C29884
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 09/23/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
n-Propylbenzene ^e	249 J	620	62	ug/kg	SW846 8260B	
1,2,4-Trimethylbenzene ^e	534 J	620	120	ug/kg	SW846 8260B	
Xylene (total) ^e	218 J	1200	120	ug/kg	SW846 8260B	
TPH-GRO (C6-C10) ^f	98300	12000	6200	ug/kg	SW846 8260B	
Benzo(a)anthracene ^d	67.1 J	330	66	ug/kg	SW846 8270C	
Benzo(g,h,i)perylene ^d	100 J	330	86	ug/kg	SW846 8270C	
1-Methylnaphthalene ^d	250 J	330	150	ug/kg	SW846 8270C	
Pyrene ^d	129 J	330	66	ug/kg	SW846 8270C	
TPH (C10-C28)	1320	390	98	mg/kg	SW846 8015B M	
TPH (> C28-C40)	4100	790	200	mg/kg	SW846 8015B M	
Chromium	39.7	0.83		mg/kg	SW846 6010B	
Lead	20.8	1.7		mg/kg	SW846 6010B	
Nickel	29.7	0.83		mg/kg	SW846 6010B	
Zinc	41.8	1.7		mg/kg	SW846 6010B	

C29884-15 9378-R3

TPH-GRO (C6-C10) ^g	55.0	50	25	ug/l	SW846 8260B
TPH (C10-C28)	3.43	0.49	0.12	mg/l	SW846 8015B M
TPH (> C28-C40)	5.56	0.98	0.25	mg/l	SW846 8015B M

- (a) Atypical pattern; value primarily due to a single peak(s).
- (b) Atypical pattern; heavier hydrocarbons contributing to quantitation.
- (c) Dilution required due to matrix interference. Extract would not concentrate (dark and viscous); and high concentration of non-target hydrocarbons.
- (d) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).
- (e) 4:1 composite.
- (f) 4:1 composite. Atypical pattern; heavier hydrocarbons contributing to quantitation.
- (g) Atypical pattern; value primarily due to non-target hydrocarbons in the gasoline range.



Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

3

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U13764.D	2	09/25/13	TF	n/a	n/a	VU533
Run #2							

Purge Volume	
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.6	40	8.0	ug/l	J
71-43-2	Benzene	2.5	2.0	0.40	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.40	ug/l	
74-97-5	Bromo(chloromethane)	ND	2.0	0.40	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.40	ug/l	
75-25-2	Bromoform	ND	2.0	0.44	ug/l	
104-51-8	n-Butylbenzene	ND	4.0	0.40	ug/l	
135-98-8	sec-Butylbenzene	1.3	4.0	0.40	ug/l	J
98-06-6	tert-Butylbenzene	ND	4.0	0.56	ug/l	
108-90-7	Chlorobenzene	95.0	2.0	0.40	ug/l	
75-00-3	Chloroethane	ND	2.0	0.40	ug/l	
67-66-3	Chloroform	ND	2.0	0.40	ug/l	
95-49-8	o-Chlorotoluene	0.99	4.0	0.40	ug/l	J
106-43-4	p-Chlorotoluene	ND	4.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.40	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.40	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	0.80	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.40	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.40	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.40	ug/l	
108-20-3	Di-Isopropyl ether	ND	4.0	0.44	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.40	ug/l	
124-48-1	Dibromo(chloromethane)	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.40	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.40	ug/l	
541-73-1	m-Dichlorobenzene	ND	2.0	0.40	ug/l	
95-50-1	o-Dichlorobenzene	ND	2.0	0.40	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.40	ug/l	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.40	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.60	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.40	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	4.0	0.44	ug/l	
591-78-6	2-Hexanone	ND	20	4.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	0.40	ug/l	
98-82-8	Isopropylbenzene	ND	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	ND	4.0	0.40	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/l	
74-83-9	Methyl bromide	ND	4.0	0.40	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	20	4.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	4.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.2	2.0	0.40	ug/l	J
91-20-3	Naphthalene	ND	10	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	4.0	0.40	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	4.0	0.80	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	4.8	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.60	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.44	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	4.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	4.0	0.40	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.0	0.40	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	0.40	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	0.40	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.60	ug/l	
108-88-3	Toluene	ND	2.0	0.40	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.40	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.40	ug/l	
1330-20-7	Xylene (total)	1.2	4.0	0.92	ug/l	J
	TPH-GRO (C6-C10) ^a	214	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3-1
3

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	109%		70-130%

(a) Atypical pattern; value primarily due to a single peak(s).

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z4409.D	1	09/25/13	MT	09/25/13	OP8763	EZ213
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.7	1.3	ug/l	
208-96-8	Acenaphthylene	ND	4.7	1.1	ug/l	
120-12-7	Anthracene	ND	4.7	1.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	1.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	1.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	1.4	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	1.3	ug/l	
218-01-9	Chrysene	ND	4.7	1.5	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	1.2	ug/l	
206-44-0	Fluoranthene	ND	4.7	1.4	ug/l	
86-73-7	Fluorene	ND	4.7	1.4	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	1.3	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	1.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	1.2	ug/l	
91-20-3	Naphthalene	ND	4.7	1.2	ug/l	
85-01-8	Phenanthrene	ND	4.7	1.2	ug/l	
129-00-0	Pyrene	ND	4.7	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	55%		27-112%
321-60-8	2-Fluorobiphenyl	53%		27-112%
1718-51-0	Terphenyl-d14	48%		45-128%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG47305.D	10	09/24/13	NN	09/24/13	OP8760	GGG1284
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	12.3	1.1	0.26	mg/l	
	TPH (> C28-C40)	6.62	2.1	0.53	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		32-124%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-OW-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-1	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	2915 Broadway - Oakland, CA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 2.0	2.0	ug/l	1	09/24/13	09/25/13 RS	SW846 6010B ¹	SW3010A ²
Chromium	< 10	10	ug/l	1	09/24/13	09/25/13 RS	SW846 6010B ¹	SW3010A ²
Lead	27.2	10	ug/l	1	09/24/13	09/25/13 RS	SW846 6010B ¹	SW3010A ²
Nickel	12.6	5.0	ug/l	1	09/24/13	09/25/13 RS	SW846 6010B ¹	SW3010A ²
Zinc	174	20	ug/l	1	09/24/13	09/25/13 RS	SW846 6010B ¹	SW3010A ²

(1) Instrument QC Batch: MA3471

(2) Prep QC Batch: MP6756

RL = Reporting Limit

Report of Analysis

Page 1 of 3

32
3

Client Sample ID:	9378-GW-7	Date Sampled:	09/23/13
Lab Sample ID:	C29884-2	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U13765.D	1	09/25/13	TF	n/a	n/a	VU533
Run #2							

Purge Volume	
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	24.7	20	4.0	ug/l	
71-43-2	Benzene	2.0	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	0.35	2.0	0.20	ug/l	J
135-98-8	sec-Butylbenzene	0.81	2.0	0.20	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	74.7	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	0.90	2.0	0.20	ug/l	J
106-43-4	p-Chlorotoluene	0.35	2.0	0.26	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-GW-7	Date Sampled:	09/23/13
Lab Sample ID:	C29884-2	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.29	1.0	0.20	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	0.22	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	0.71	2.0	0.20	ug/l	J
108-10-1	4-Methyl-2-pentanone	1.0	10	1.0	ug/l	J
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	4.3	10	2.0	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	1.2	1.0	0.20	ug/l	
91-20-3	Naphthalene	2.5	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	0.66	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	6.1	10	2.4	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.7	2.0	0.20	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.93	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	0.40	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	2.6	2.0	0.46	ug/l	
	TPH-GRO (C6-C10) ^a	209	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-GW-7	Date Sampled:	09/23/13
Lab Sample ID:	C29884-2	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

(a) Atypical pattern; value primarily due to a single peak(s).

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	9378-GW-7	Date Sampled:	09/23/13
Lab Sample ID:	C29884-2	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z4410.D	1	09/25/13	MT	09/25/13	OP8763	EZ213
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.7	1.3	ug/l	
208-96-8	Acenaphthylene	ND	4.7	1.1	ug/l	
120-12-7	Anthracene	ND	4.7	1.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.7	1.3	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.7	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.7	1.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.7	1.4	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.7	1.3	ug/l	
218-01-9	Chrysene	ND	4.7	1.5	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.7	1.2	ug/l	
206-44-0	Fluoranthene	ND	4.7	1.4	ug/l	
86-73-7	Fluorene	ND	4.7	1.4	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.7	1.3	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.7	1.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.7	1.2	ug/l	
91-20-3	Naphthalene	ND	4.7	1.2	ug/l	
85-01-8	Phenanthrene	ND	4.7	1.2	ug/l	
129-00-0	Pyrene	ND	4.7	1.5	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	50%		27-112%
321-60-8	2-Fluorobiphenyl	34%		27-112%
1718-51-0	Terphenyl-d14	27% ^a		45-128%

(a) Surrogate outside control limits due to matrix interference. Emulsion formed during extraction process.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	9378-GW-7	Date Sampled:	09/23/13
Lab Sample ID:	C29884-2	Date Received:	09/24/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG47306.D	10	09/24/13	NN	09/24/13	OP8760	GGG1284
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	10.9	0.94	0.24	mg/l	
	TPH (> C28-C40)	9.83	1.9	0.47	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	61%		32-124%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 3

33
3

Client Sample ID: 9378-EX-N-6
Lab Sample ID: C29884-3
Matrix: SO - Soil
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 09/23/13
Date Received: 09/24/13
Percent Solids: n/a^a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L27730.D	1	09/27/13	XB	n/a	n/a	VL877
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.98 g	5.0 ml	10.0 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20000	5000	ug/kg	
71-43-2	Benzene	ND	2500	250	ug/kg	
108-86-1	Bromobenzene	ND	2500	250	ug/kg	
74-97-5	Bromo(chloromethane)	ND	2500	250	ug/kg	
75-27-4	Bromodichloromethane	ND	2500	250	ug/kg	
75-25-2	Bromoform	ND	2500	250	ug/kg	
104-51-8	n-Butylbenzene	641	2500	250	ug/kg	J
135-98-8	sec-Butylbenzene	588	2500	250	ug/kg	J
98-06-6	tert-Butylbenzene	ND	2500	250	ug/kg	
108-90-7	Chlorobenzene	2400	2500	250	ug/kg	J
75-00-3	Chloroethane	ND	2500	500	ug/kg	
67-66-3	Chloroform	ND	2500	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	2500	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	2500	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	2500	250	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2500	250	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2500	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2500	250	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2500	700	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2500	250	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2500	250	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2500	250	ug/kg	
142-28-9	1,3-Dichloropropane	ND	2500	250	ug/kg	
108-20-3	Di-Isopropyl ether	ND	2500	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2500	250	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	2500	250	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2500	500	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2500	550	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2500	250	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2500	250	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2500	250	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2500	250	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

33
3

Client Sample ID:	9378-EX-N-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-3	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	2500	250	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2500	250	ug/kg	
100-41-4	Ethylbenzene	ND	2500	250	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	2500	250	ug/kg	
591-78-6	2-Hexanone	ND	10000	1000	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2500	500	ug/kg	
98-82-8	Isopropylbenzene	ND	2500	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2500	250	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10000	1000	ug/kg	
74-83-9	Methyl bromide	ND	2500	500	ug/kg	
74-87-3	Methyl chloride	ND	2500	500	ug/kg	
74-95-3	Methylene bromide	ND	2500	250	ug/kg	
75-09-2	Methylene chloride	ND	10000	2500	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10000	1000	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2500	500	ug/kg	
91-20-3	Naphthalene	ND	2500	500	ug/kg	
103-65-1	n-Propylbenzene	477	2500	250	ug/kg	J
100-42-5	Styrene	ND	2500	250	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	2500	250	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	20000	5000	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2500	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2500	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2500	250	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2500	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2500	250	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	2500	500	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2500	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2500	500	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2500	500	ug/kg	
127-18-4	Tetrachloroethylene	ND	2500	300	ug/kg	
108-88-3	Toluene	ND	2500	250	ug/kg	
79-01-6	Trichloroethylene	ND	2500	250	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2500	500	ug/kg	
75-01-4	Vinyl chloride	ND	2500	500	ug/kg	
1330-20-7	Xylene (total)	ND	5000	500	ug/kg	
	TPH-GRO (C6-C10) ^b	555000	50000	25000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.3
3

Client Sample ID:	9378-EX-N-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-3	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	114%		70-130%

(a) All results reported on a wet weight basis.

(b) Atypical pattern; heavier hydrocarbons contributing to quantitation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33
3

Client Sample ID:	9378-EX-N-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-3	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Z4411.D	5	09/25/13	MT	09/25/13	OP8762	EZ213
Run #2 ^c	Z4419.D	10	09/25/13	MT	09/25/13	OP8762	EZ213

	Initial Weight	Final Volume
Run #1	30.2 g	1.5 ml
Run #2	30.2 g	1.5 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	1200	540	ug/kg	
208-96-8	Acenaphthylene	ND	1200	580	ug/kg	
120-12-7	Anthracene	ND	1200	400	ug/kg	
56-55-3	Benzo(a)anthracene	ND	1200	250	ug/kg	
50-32-8	Benzo(a)pyrene	ND	1200	250	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	1200	250	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	1200	320	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	1200	250	ug/kg	
218-01-9	Chrysene	ND	1200	250	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	1200	310	ug/kg	
206-44-0	Fluoranthene	ND	1200	250	ug/kg	
86-73-7	Fluorene	ND	1200	540	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1200	320	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1200	570	ug/kg	
91-57-6	2-Methylnaphthalene	ND	1200	590	ug/kg	
91-20-3	Naphthalene	ND	1200	570	ug/kg	
85-01-8	Phenanthrene	ND	1200	430	ug/kg	
129-00-0	Pyrene	307	1200	250	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%	71%	15-101%
321-60-8	2-Fluorobiphenyl	92%	91%	15-104%
1718-51-0	Terphenyl-d14	95%	90%	56-123%

- (a) All results reported on a wet weight basis.
 (b) Dilution required due to matrix interference. Extract would not concentrate (dark and viscous); and high concentration of non-target hydrocarbons.
 (c) Confirmation run for internal standard areas.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33
3

Client Sample ID:	9378-EX-N-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-3	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308053.D	100	09/25/13	AG	09/25/13	OP8767	GHH1088
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	2020	990	250	mg/kg	
	TPH (> C28-C40)	6660	2000	500	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	116%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33
3

Client Sample ID:	9378-EX-N-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-3	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.85	0.85	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	50.1	0.85	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	12.7	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	67.1	0.85	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	42.6	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3474

(2) Prep QC Batch: MP6765

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Page 1 of 3

34
3

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M42086.D	1	09/27/13	XB	n/a	n/a	VM1269
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	20.0 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10000	2500	ug/kg	
71-43-2	Benzene	ND	1200	120	ug/kg	
108-86-1	Bromobenzene	ND	1200	120	ug/kg	
74-97-5	Bromo(chloromethane)	ND	1200	120	ug/kg	
75-27-4	Bromodichloromethane	ND	1200	120	ug/kg	
75-25-2	Bromoform	ND	1200	120	ug/kg	
104-51-8	n-Butylbenzene	341	1200	120	ug/kg	J
135-98-8	sec-Butylbenzene	306	1200	120	ug/kg	J
98-06-6	tert-Butylbenzene	ND	1200	120	ug/kg	
108-90-7	Chlorobenzene	3640	1200	120	ug/kg	
75-00-3	Chloroethane	ND	1200	250	ug/kg	
67-66-3	Chloroform	ND	1200	120	ug/kg	
95-49-8	o-Chlorotoluene	ND	1200	120	ug/kg	
106-43-4	p-Chlorotoluene	ND	1200	120	ug/kg	
56-23-5	Carbon tetrachloride	ND	1200	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1200	120	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	1200	120	ug/kg	
563-58-6	1,1-Dichloropropene	ND	1200	120	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1200	350	ug/kg	
106-93-4	1,2-Dibromoethane	ND	1200	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1200	120	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1200	120	ug/kg	
142-28-9	1,3-Dichloropropane	ND	1200	120	ug/kg	
108-20-3	Di-Isopropyl ether	ND	1200	120	ug/kg	
594-20-7	2,2-Dichloropropane	ND	1200	120	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	1200	120	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	1200	250	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	1200	270	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1200	120	ug/kg	
541-73-1	m-Dichlorobenzene	ND	1200	120	ug/kg	
95-50-1	o-Dichlorobenzene	ND	1200	120	ug/kg	
106-46-7	p-Dichlorobenzene	ND	1200	120	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

34
3

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1200	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1200	120	ug/kg	
100-41-4	Ethylbenzene	ND	1200	120	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	1200	120	ug/kg	
591-78-6	2-Hexanone	ND	5000	500	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1200	250	ug/kg	
98-82-8	Isopropylbenzene	ND	1200	120	ug/kg	
99-87-6	p-Isopropyltoluene	ND	1200	120	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	5000	500	ug/kg	
74-83-9	Methyl bromide	ND	1200	250	ug/kg	
74-87-3	Methyl chloride	ND	1200	250	ug/kg	
74-95-3	Methylene bromide	ND	1200	120	ug/kg	
75-09-2	Methylene chloride	ND	5000	1200	ug/kg	
78-93-3	Methyl ethyl ketone	ND	5000	500	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	1200	250	ug/kg	
91-20-3	Naphthalene	ND	1200	250	ug/kg	
103-65-1	n-Propylbenzene	379	1200	120	ug/kg	J
100-42-5	Styrene	ND	1200	120	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	1200	120	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	10000	2500	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1200	120	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1200	120	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1200	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1200	120	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	1200	120	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	1200	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1200	120	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	1200	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	1200	250	ug/kg	
127-18-4	Tetrachloroethylene	ND	1200	150	ug/kg	
108-88-3	Toluene	ND	1200	120	ug/kg	
79-01-6	Trichloroethylene	ND	1200	120	ug/kg	
75-69-4	Trichlorofluoromethane	ND	1200	250	ug/kg	
75-01-4	Vinyl chloride	ND	1200	250	ug/kg	
1330-20-7	Xylene (total)	ND	2500	250	ug/kg	
	TPH-GRO (C6-C10) ^b	226000	25000	12000	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

(a) All results reported on a wet weight basis.

(b) Atypical pattern; heavier hydrocarbons contributing to quantitation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

34
3

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Z4412.D	4	09/25/13	MT	09/25/13	OP8762	EZ213
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	670	290	ug/kg	
208-96-8	Acenaphthylene	ND	670	310	ug/kg	
120-12-7	Anthracene	ND	670	210	ug/kg	
56-55-3	Benzo(a)anthracene	ND	670	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	670	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	670	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	670	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	670	130	ug/kg	
218-01-9	Chrysene	ND	670	130	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	670	170	ug/kg	
206-44-0	Fluoranthene	ND	670	130	ug/kg	
86-73-7	Fluorene	ND	670	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	670	170	ug/kg	
90-12-0	1-Methylnaphthalene	ND	670	300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	670	320	ug/kg	
91-20-3	Naphthalene	ND	670	310	ug/kg	
85-01-8	Phenanthrene	ND	670	230	ug/kg	
129-00-0	Pyrene	211	670	130	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		15-101%
321-60-8	2-Fluorobiphenyl	93%		15-104%
1718-51-0	Terphenyl-d14	91%		56-123%

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

34
3

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308054.D	50	09/25/13	AG	09/25/13	OP8767	GHH1088
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1170	490	120	mg/kg	
	TPH (> C28-C40)	4010	990	250	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	109%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

34
3

Client Sample ID:	9378-EX-S-6	Date Sampled:	09/23/13
Lab Sample ID:	C29884-4	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.86	0.86	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	60.0	0.86	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	10.6	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	62.5	0.86	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	35.3	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3474

(2) Prep QC Batch: MP6765

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Page 1 of 3

35
3

Client Sample ID: 9378-SP1(A-D)COMP
Lab Sample ID: C29884-9
Matrix: SO - Soil
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 09/23/13
Date Received: 09/24/13
Percent Solids: n/a^a

Run #1 ^b	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L27663.D	1	09/25/13	XB	n/a	n/a	VL875

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	500	ug/kg	
71-43-2	Benzene	ND	250	25	ug/kg	
108-86-1	Bromobenzene	ND	250	25	ug/kg	
74-97-5	Bromo(chloromethane)	ND	250	25	ug/kg	
75-27-4	Bromodichloromethane	ND	250	25	ug/kg	
75-25-2	Bromoform	ND	250	25	ug/kg	
104-51-8	n-Butylbenzene	ND	250	25	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	25	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	25	ug/kg	
108-90-7	Chlorobenzene	ND	250	25	ug/kg	
75-00-3	Chloroethane	ND	250	50	ug/kg	
67-66-3	Chloroform	ND	250	25	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	25	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	25	ug/kg	
56-23-5	Carbon tetrachloride	ND	250	25	ug/kg	
75-34-3	1,1-Dichloroethane	ND	250	25	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	250	25	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	70	ug/kg	
106-93-4	1,2-Dibromoethane	ND	250	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	250	25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	250	25	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	25	ug/kg	
108-20-3	Di-Isopropyl ether	ND	250	25	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	25	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	250	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	50	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	250	55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	250	25	ug/kg	
541-73-1	m-Dichlorobenzene	ND	250	25	ug/kg	
95-50-1	o-Dichlorobenzene	ND	250	25	ug/kg	
106-46-7	p-Dichlorobenzene	ND	250	25	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-SP1(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-9	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	250	25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	250	25	ug/kg	
100-41-4	Ethylbenzene	ND	250	25	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	250	25	ug/kg	
591-78-6	2-Hexanone	ND	990	99	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	50	ug/kg	
98-82-8	Isopropylbenzene	ND	250	25	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	25	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	990	99	ug/kg	
74-83-9	Methyl bromide	ND	250	50	ug/kg	
74-87-3	Methyl chloride	ND	250	50	ug/kg	
74-95-3	Methylene bromide	ND	250	25	ug/kg	
75-09-2	Methylene chloride	ND	990	250	ug/kg	
78-93-3	Methyl ethyl ketone	ND	990	99	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	250	50	ug/kg	
91-20-3	Naphthalene	ND	250	50	ug/kg	
103-65-1	n-Propylbenzene	ND	250	25	ug/kg	
100-42-5	Styrene	ND	250	25	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	250	25	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	2000	500	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	250	25	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	250	25	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	25	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	25	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	50	ug/kg	
127-18-4	Tetrachloroethylene	ND	250	30	ug/kg	
108-88-3	Toluene	ND	250	25	ug/kg	
79-01-6	Trichloroethylene	ND	250	25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	50	ug/kg	
75-01-4	Vinyl chloride	ND	250	50	ug/kg	
1330-20-7	Xylene (total)	ND	500	50	ug/kg	
	TPH-GRO (C6-C10)	ND	5000	2500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

35
3

Client Sample ID:	9378-SP1(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-9	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%

- (a) All results reported on a wet weight basis.
 (b) 4:1 composite.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

35
3

Client Sample ID:	9378-SP1(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-9	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Z4413.D	2	09/25/13	MT	09/25/13	OP8762	EZ213
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	330	140	ug/kg	
208-96-8	Acenaphthylene	ND	330	150	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	120	330	86	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
218-01-9	Chrysene	ND	330	66	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	330	82	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	88.8	330	66	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		15-101%
321-60-8	2-Fluorobiphenyl	91%		15-104%
1718-51-0	Terphenyl-d14	95%		56-123%

(a) All results reported on a wet weight basis.

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

35
3

Client Sample ID:	9378-SP1(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-9	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308055.D	100	09/25/13	AG	09/25/13	OP8767	GHH1088
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1650	990	250	mg/kg	
	TPH (> C28-C40)	5120	2000	490	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	97%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

35
3

Client Sample ID:	9378-SP1(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-9	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.83	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	47.0	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	2.8	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	62.9	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	50.7	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3474

(2) Prep QC Batch: MP6765

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Page 1 of 3

36
3

Client Sample ID: 9378-SP2(A-D)COMP
Lab Sample ID: C29884-14
Matrix: SO - Soil
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 09/23/13
Date Received: 09/24/13
Percent Solids: n/a^a

Run #1 ^b	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L27664.D	1	09/25/13	XB	n/a	n/a	VL875

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	40.0 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5000	1200	ug/kg	
71-43-2	Benzene	ND	620	62	ug/kg	
108-86-1	Bromobenzene	ND	620	62	ug/kg	
74-97-5	Bromo(chloromethane)	ND	620	62	ug/kg	
75-27-4	Bromodichloromethane	ND	620	62	ug/kg	
75-25-2	Bromoform	ND	620	62	ug/kg	
104-51-8	n-Butylbenzene	261	620	62	ug/kg	J
135-98-8	sec-Butylbenzene	124	620	62	ug/kg	J
98-06-6	tert-Butylbenzene	ND	620	62	ug/kg	
108-90-7	Chlorobenzene	1690	620	62	ug/kg	
75-00-3	Chloroethane	ND	620	120	ug/kg	
67-66-3	Chloroform	ND	620	62	ug/kg	
95-49-8	o-Chlorotoluene	ND	620	62	ug/kg	
106-43-4	p-Chlorotoluene	ND	620	62	ug/kg	
56-23-5	Carbon tetrachloride	ND	620	62	ug/kg	
75-34-3	1,1-Dichloroethane	ND	620	62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	620	62	ug/kg	
563-58-6	1,1-Dichloropropene	ND	620	62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	620	170	ug/kg	
106-93-4	1,2-Dibromoethane	ND	620	62	ug/kg	
107-06-2	1,2-Dichloroethane	ND	620	62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	620	62	ug/kg	
142-28-9	1,3-Dichloropropane	ND	620	62	ug/kg	
108-20-3	Di-Isopropyl ether	ND	620	62	ug/kg	
594-20-7	2,2-Dichloropropane	ND	620	62	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	620	62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	620	120	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	620	140	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	620	62	ug/kg	
541-73-1	m-Dichlorobenzene	ND	620	62	ug/kg	
95-50-1	o-Dichlorobenzene	ND	620	62	ug/kg	
106-46-7	p-Dichlorobenzene	ND	620	62	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

3.6
3

Client Sample ID:	9378-SP2(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-14	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	620	62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	620	62	ug/kg	
100-41-4	Ethylbenzene	ND	620	62	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	620	62	ug/kg	
591-78-6	2-Hexanone	ND	2500	250	ug/kg	
87-68-3	Hexachlorobutadiene	ND	620	120	ug/kg	
98-82-8	Isopropylbenzene	ND	620	62	ug/kg	
99-87-6	p-Isopropyltoluene	64.5	620	62	ug/kg	J
108-10-1	4-Methyl-2-pentanone	ND	2500	250	ug/kg	
74-83-9	Methyl bromide	ND	620	120	ug/kg	
74-87-3	Methyl chloride	ND	620	120	ug/kg	
74-95-3	Methylene bromide	ND	620	62	ug/kg	
75-09-2	Methylene chloride	ND	2500	620	ug/kg	
78-93-3	Methyl ethyl ketone	ND	2500	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	620	120	ug/kg	
91-20-3	Naphthalene	241	620	120	ug/kg	J
103-65-1	n-Propylbenzene	249	620	62	ug/kg	J
100-42-5	Styrene	ND	620	62	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	620	62	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	5000	1200	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	620	62	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	620	62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	620	62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	620	62	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	620	62	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	620	120	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	620	62	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	534	620	120	ug/kg	J
108-67-8	1,3,5-Trimethylbenzene	ND	620	120	ug/kg	
127-18-4	Tetrachloroethylene	ND	620	75	ug/kg	
108-88-3	Toluene	ND	620	62	ug/kg	
79-01-6	Trichloroethylene	ND	620	62	ug/kg	
75-69-4	Trichlorofluoromethane	ND	620	120	ug/kg	
75-01-4	Vinyl chloride	ND	620	120	ug/kg	
1330-20-7	Xylene (total)	218	1200	120	ug/kg	J
	TPH-GRO (C6-C10) ^c	98300	12000	6200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3.6
3

Client Sample ID:	9378-SP2(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-14	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

- (a) All results reported on a wet weight basis.
 (b) 4:1 composite.
 (c) Atypical pattern; heavier hydrocarbons contributing to quantitation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.6
3

Client Sample ID:	9378-SP2(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-14	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Z4414.D	2	09/25/13	MT	09/25/13	OP8762	EZ213
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	150	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
56-55-3	Benzo(a)anthracene	67.1	330	66	ug/kg	J
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	100	330	86	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
218-01-9	Chrysene	ND	330	66	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	330	82	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
90-12-0	1-Methylnaphthalene	250	330	150	ug/kg	J
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	129	330	66	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		15-101%
321-60-8	2-Fluorobiphenyl	84%		15-104%
1718-51-0	Terphenyl-d14	96%		56-123%

- (a) All results reported on a wet weight basis.
 (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.6
3

Client Sample ID:	9378-SP2(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-14	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308057.D	40	09/25/13	AG	09/25/13	OP8767	GHH1088
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1320	390	98	mg/kg	
	TPH (> C28-C40)	4100	790	200	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	103%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3.6
3

Client Sample ID:	9378-SP2(A-D)COMP	Date Sampled:	09/23/13
Lab Sample ID:	C29884-14	Date Received:	09/24/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.83	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	39.7	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	20.8	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	29.7	0.83	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	41.8	1.7	mg/kg	1	09/25/13	09/27/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3474

(2) Prep QC Batch: MP6765

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Page 1 of 1

37
3

Client Sample ID:	9378-R3	Date Sampled:	09/23/13
Lab Sample ID:	C29884-15	Date Received:	09/24/13
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U13766.D	1	09/25/13	TF	n/a	n/a	VU533
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
----------------	-----------------	---------------	-----------	------------	--------------	----------

TPH-GRO (C6-C10) ^a	55.0	50	25	ug/l	
-------------------------------	------	----	----	------	--

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
----------------	-----------------------------	---------------	---------------	---------------

1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

(a) Atypical pattern; value primarily due to non-target hydrocarbons in the gasoline range.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

37
3

Client Sample ID:	9378-R3	Date Sampled:	09/23/13
Lab Sample ID:	C29884-15	Date Received:	09/24/13
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG47315.D	5	09/25/13	NN	09/24/13	OP8760	GGG1285
Run #2							

	Initial Volume	Final Volume
Run #1	1020 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	3.43	0.49	0.12	mg/l	
	TPH (> C28-C40)	5.56	0.98	0.25	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		32-124%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY



2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

Client/Reporting Information

Project Name:

Golden Gate Trailhead

Street:

2915 Sanddene

City:

San Francisco, CA

State:

CA

Zip:

94124

Project #:

9278

Phone #:

415-512-1555

Email:

tim.lallen@accutest.com

Sampler's Name:

BRENT WOODRIDGE

Project Information

FED-EX Tracking

Bulletin Order Control #

Accutest INC Job #: C

Accession Quota

Matrix Codes

Requested Analysis

Comments / Remarks

LAB USE ONLY

Number of preserved Bottles

Collection

Date Sampled by Matrix

Time Sampled by Matrix

of bottles

Method

ENCODE

ENCODING

Method

ENCODING



CHAIN OF CUSTODY

, San Jose, CA 95131
FAX: (408) 588-0201

卷之三

C29884: Chain of Custody
Page 2 of 3



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C29884 **Date / Time Received:** 9/24/2013 **Cooler Temps (Initial/Adjusted):** #1:(4.2/4.2);0

Client: GOLDEN GATE TANK REMOVAL **Delivery Method:** Accutest Courier **Airbill #'s:**

Project: 2915 BROADWAY - OAKLAND, CA

Cooler Security		Y or N	Y or N	Sample Integrity - Documentation	Y or N
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Sample labels present on bottles:	<input checked="" type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Container labeling complete:	<input checked="" type="checkbox"/>
3. Sample container label / COC agree:				3. Sample container label / COC agree:	<input checked="" type="checkbox"/>
Cooler Temperature		Y or N	Y or N	Sample Integrity - Condition	Y or N
1. Temp criteria achieved:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Sample recvd within HT:	<input checked="" type="checkbox"/>
2. Cooler temp verification:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. All containers accounted for:	<input checked="" type="checkbox"/>
3. Cooler media:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Condition of sample:	<input checked="" type="checkbox"/>
4. No. Coolers:				Intact	
		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input checked="" type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>		
Quality Control Preservation		Y or N	N/A	Sample Integrity - Instructions	Y or N
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Analysis requested is clear:	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Bottles received for unspecified tests	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>
4. VOCs headspace free:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. Compositing instructions clear:	<input type="checkbox"/>
				5. Filtering instructions clear:	<input checked="" type="checkbox"/>

Comments

San Jose, CA 95131
www.accutest.com

C29884: Chain of Custody
Page 3 of 3

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-MB	U13763.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-MB	U13763.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

5.1.1
5

Method Blank Summary

Page 3 of 3

Job Number: C29884
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-MB	U13763.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	102%	70-130%
2037-26-5	Toluene-D8	107%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

Method Blank Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-MB	L27652.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-MB	L27652.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Page 3 of 3

Job Number: C29884
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-MB	L27652.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	101%	70-130%
2037-26-5	Toluene-D8	95%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

Method Blank Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-MB	L27712.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-MB	L27712.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

5.1.3
5

Method Blank Summary

Page 3 of 3

Job Number: C29884
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-MB	L27712.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	103%	70-130%
2037-26-5	Toluene-D8	93%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

5.1.3
5

Method Blank Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-MB	M42068.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

5.1.4
5

Method Blank Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-MB	M42068.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

5.1.4
5

Method Blank Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-MB	M42068.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	98%	70-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

5.1.4
5

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-BS	U13759.D	1	09/25/13	TF	n/a	n/a	VU533
VU533-BSD	U13760.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	69.7	87	70.2	88	1	38-159/24
71-43-2	Benzene	20	17.5	88	17.9	90	2	77-122/25
108-86-1	Bromobenzene	20	19.0	95	19.3	97	2	76-126/17
74-97-5	Bromochloromethane	20	17.3	87	17.8	89	3	77-130/17
75-27-4	Bromodichloromethane	20	17.9	90	17.9	90	0	75-127/16
75-25-2	Bromoform	20	22.7	114	22.4	112	1	69-141/17
104-51-8	n-Butylbenzene	20	19.2	96	19.5	98	2	72-129/18
135-98-8	sec-Butylbenzene	20	17.2	86	17.6	88	2	74-128/18
98-06-6	tert-Butylbenzene	20	17.5	88	17.7	89	1	73-127/18
108-90-7	Chlorobenzene	20	17.5	88	17.7	89	1	77-122/16
75-00-3	Chloroethane	20	18.5	93	19.2	96	4	69-133/18
67-66-3	Chloroform	20	18.1	91	18.5	93	2	74-126/17
95-49-8	o-Chlorotoluene	20	18.1	91	16.5	83	9	72-127/20
106-43-4	p-Chlorotoluene	20	17.3	87	17.5	88	1	68-127/18
56-23-5	Carbon tetrachloride	20	18.4	92	18.4	92	0	71-133/19
75-34-3	1,1-Dichloroethane	20	16.8	84	17.4	87	4	71-125/17
75-35-4	1,1-Dichloroethylene	20	16.4	82	16.9	85	3	66-125/20
563-58-6	1,1-Dichloropropene	20	19.3	97	19.5	98	1	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	19.0	95	19.6	98	3	65-131/20
106-93-4	1,2-Dibromoethane	20	19.8	99	19.7	99	1	75-135/17
107-06-2	1,2-Dichloroethane	20	17.8	89	17.7	89	1	71-131/17
78-87-5	1,2-Dichloropropane	20	18.2	91	18.9	95	4	78-124/16
142-28-9	1,3-Dichloropropane	20	18.5	93	18.8	94	2	78-123/16
108-20-3	Di-Isopropyl ether	20	17.2	86	18.1	91	5	68-129/17
594-20-7	2,2-Dichloropropane	20	16.5	83	16.9	85	2	70-131/19
124-48-1	Dibromochloromethane	20	19.9	100	19.7	99	1	76-132/16
75-71-8	Dichlorodifluoromethane	20	23.3	117	22.1	111	5	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	17.7	89	18.5	93	4	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	20.6	103	20.9	105	1	72-130/16
541-73-1	m-Dichlorobenzene	20	17.9	90	18.2	91	2	75-124/16
95-50-1	o-Dichlorobenzene	20	18.3	92	18.6	93	2	76-124/16
106-46-7	p-Dichlorobenzene	20	18.9	95	19.0	95	1	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	17.4	87	18.0	90	3	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	18.5	93	18.7	94	1	71-126/16
100-41-4	Ethylbenzene	20	19.5	98	19.9	100	2	76-126/17
637-92-3	Ethyl Tert Butyl Ether	20	19.5	98	20.3	102	4	75-134/17

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-BS	U13759.D	1	09/25/13	TF	n/a	n/a	VU533
VU533-BSD	U13760.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	76.3	95	77.2	97	1	67-150/22
87-68-3	Hexachlorobutadiene	20	18.2	91	19.0	95	4	69-135/20
98-82-8	Isopropylbenzene	20	19.8	99	20.1	101	2	61-125/17
99-87-6	p-Isopropyltoluene	20	17.5	88	17.7	89	1	68-127/18
108-10-1	4-Methyl-2-pentanone	80	81.2	102	81.2	102	0	71-142/21
74-83-9	Methyl bromide	20	20.8	104	21.7	109	4	68-132/18
74-87-3	Methyl chloride	20	20.1	101	21.4	107	6	39-150/28
74-95-3	Methylene bromide	20	18.8	94	18.8	94	0	77-127/16
75-09-2	Methylene chloride	20	16.7	84	17.4	87	4	67-128/18
78-93-3	Methyl ethyl ketone	80	77.3	97	78.6	98	2	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	18.9	95	19.7	99	4	73-132/17
91-20-3	Naphthalene	20	21.7	109	24.2	121	11	70-136/20
103-65-1	n-Propylbenzene	20	18.3	92	18.7	94	2	71-127/17
100-42-5	Styrene	20	19.5	98	19.8	99	2	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	19.5	98	20.0	100	3	73-133/17
75-65-0	Tert-Butyl Alcohol	100	92.4	92	88.8	89	4	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	19.3	97	19.2	96	1	77-130/16
71-55-6	1,1,1-Trichloroethane	20	17.0	85	17.3	87	2	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	19.1	96	19.3	97	1	77-129/17
79-00-5	1,1,2-Trichloroethane	20	18.8	94	19.2	96	2	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	20.5	103	22.4	112	9	70-133/18
96-18-4	1,2,3-Trichloropropane	20	19.8	99	19.7	99	1	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	20.2	101	21.3	107	5	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	20.5	103	20.8	104	1	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	19.2	96	19.5	98	2	77-129/17
127-18-4	Tetrachloroethylene	20	19.1	96	19.5	98	2	69-127/20
108-88-3	Toluene	20	18.9	95	19.5	98	3	75-122/17
79-01-6	Trichloroethylene	20	18.5	93	18.8	94	2	78-123/17
75-69-4	Trichlorofluoromethane	20	20.1	101	19.8	99	2	65-136/23
75-01-4	Vinyl chloride	20	23.1	116	22.9	115	1	57-146/22
1330-20-7	Xylene (total)	60	57.0	95	58.2	97	2	77-125/17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	93%	95%	70-130%

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-BS	U13759.D	1	09/25/13	TF	n/a	n/a	VU533
VU533-BSD	U13760.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	103%	105%	70-130%
460-00-4	4-Bromofluorobenzene	109%	107%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-BS	L27649.D	1	09/25/13	XB	n/a	n/a	VL875
VL875-BSD	L27650.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	142	89	154	96	8	62-130/24
71-43-2	Benzene	40	42.9	107	40.6	102	6	81-119/20
108-86-1	Bromobenzene	40	38.6	97	37.7	94	2	79-120/22
74-97-5	Bromochloromethane	40	42.1	105	42.6	107	1	81-120/19
75-27-4	Bromodichloromethane	40	42.1	105	41.3	103	2	79-124/20
75-25-2	Bromoform	40	42.8	107	44.1	110	3	76-128/21
104-51-8	n-Butylbenzene	40	41.3	103	39.3	98	5	79-123/26
135-98-8	sec-Butylbenzene	40	38.8	97	36.9	92	5	77-122/24
98-06-6	tert-Butylbenzene	40	38.6	97	36.3	91	6	77-121/23
108-90-7	Chlorobenzene	40	38.1	95	37.1	93	3	82-121/20
75-00-3	Chloroethane	40	42.8	107	43.2	108	1	80-126/21
67-66-3	Chloroform	40	44.5	111	43.7	109	2	82-123/20
95-49-8	o-Chlorotoluene	40	40.3	101	38.5	96	5	78-125/25
106-43-4	p-Chlorotoluene	40	39.3	98	35.2	88	11	75-125/26
56-23-5	Carbon tetrachloride	40	44.8	112	41.2	103	8	82-127/22
75-34-3	1,1-Dichloroethane	40	43.9	110	42.1	105	4	80-123/20
75-35-4	1,1-Dichloroethylene	40	44.2	111	41.6	104	6	76-123/19
563-58-6	1,1-Dichloropropene	40	44.8	112	41.5	104	8	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	39.7	99	42.3	106	6	64-133/23
106-93-4	1,2-Dibromoethane	40	39.9	100	40.3	101	1	80-120/20
107-06-2	1,2-Dichloroethane	40	42.3	106	41.7	104	1	76-132/21
78-87-5	1,2-Dichloropropane	40	43.2	108	41.9	105	3	80-121/20
142-28-9	1,3-Dichloropropane	40	39.3	98	39.7	99	1	78-120/20
108-20-3	Di-Isopropyl ether	40	42.5	106	41.7	104	2	78-126/19
594-20-7	2,2-Dichloropropane	40	45.4	114	42.8	107	6	77-132/22
124-48-1	Dibromochloromethane	40	41.6	104	41.2	103	1	76-121/21
75-71-8	Dichlorodifluoromethane	40	49.8	125	50.0	125	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	43.8	110	43.1	108	2	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	46.2	116	45.0	113	3	81-124/21
541-73-1	m-Dichlorobenzene	40	37.2	93	36.5	91	2	79-123/23
95-50-1	o-Dichlorobenzene	40	38.0	95	37.4	94	2	79-124/22
106-46-7	p-Dichlorobenzene	40	40.1	100	39.2	98	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	44.7	112	42.5	106	5	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	39.4	99	39.1	98	1	81-123/22
100-41-4	Ethylbenzene	40	41.5	104	39.3	98	5	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	47.5	119	47.1	118	1	75-132/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-BS	L27649.D	1	09/25/13	XB	n/a	n/a	VL875
VL875-BSD	L27650.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	149	93	163	102	9	68-139/24
87-68-3	Hexachlorobutadiene	40	41.0	103	39.1	98	5	81-126/32
98-82-8	Isopropylbenzene	40	38.7	97	36.6	92	6	81-122/22
99-87-6	p-Isopropyltoluene	40	38.1	95	36.9	92	3	81-121/23
108-10-1	4-Methyl-2-pentanone	160	164	103	175	109	6	74-136/23
74-83-9	Methyl bromide	40	46.9	117	47.0	118	0	82-124/20
74-87-3	Methyl chloride	40	39.0	98	40.6	102	4	60-132/26
74-95-3	Methylene bromide	40	40.8	102	41.4	104	1	82-120/20
75-09-2	Methylene chloride	40	41.6	104	40.7	102	2	75-119/20
78-93-3	Methyl ethyl ketone	160	152	95	168	105	10	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	45.0	113	45.4	114	1	79-127/19
91-20-3	Naphthalene	40	41.4	104	43.5	109	5	78-125/23
103-65-1	n-Propylbenzene	40	37.6	94	35.6	89	5	79-124/22
100-42-5	Styrene	40	41.6	104	40.5	101	3	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	46.3	116	46.8	117	1	80-127/20
75-65-0	Tert Butyl Alcohol	200	213	107	240	120	12	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	41.6	104	40.4	101	3	82-123/21
71-55-6	1,1,1-Trichloroethane	40	46.8	117	43.7	109	7	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	40.3	101	42.0	105	4	77-126/20
79-00-5	1,1,2-Trichloroethane	40	40.1	100	40.1	100	0	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	40.2	101	40.2	101	0	81-122/26
96-18-4	1,2,3-Trichloropropane	40	41.3	103	43.0	108	4	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	40.3	101	39.6	99	2	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	41.3	103	40.1	100	3	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	42.3	106	40.5	101	4	81-123/23
127-18-4	Tetrachloroethylene	40	39.0	98	37.3	93	4	80-125/25
108-88-3	Toluene	40	40.2	101	38.4	96	5	80-117/21
79-01-6	Trichloroethylene	40	42.8	107	40.7	102	5	81-122/20
75-69-4	Trichlorofluoromethane	40	46.2	116	46.1	115	0	77-133/22
75-01-4	Vinyl chloride	40	57.0	143* a	55.5	139* a	3	71-133/23
1330-20-7	Xylene (total)	120	117	98	112	93	4	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	104%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-BS	L27649.D	1	09/25/13	XB	n/a	n/a	VL875
VL875-BSD	L27650.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	94%	94%	70-130%
460-00-4	4-Bromofluorobenzene	103%	104%	70-130%

(a) Outside control limits (high bias). Not detected in associated samples. AZ:L1

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-BS	L27709.D	1	09/27/13	XB	n/a	n/a	VL877
VL877-BSD	L27710.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	149	93	138	86	8	62-130/24
71-43-2	Benzene	40	40.1	100	41.8	105	4	81-119/20
108-86-1	Bromobenzene	40	36.9	92	37.3	93	1	79-120/22
74-97-5	Bromochloromethane	40	42.7	107	43.4	109	2	81-120/19
75-27-4	Bromodichloromethane	40	39.5	99	41.0	103	4	79-124/20
75-25-2	Bromoform	40	42.3	106	42.0	105	1	76-128/21
104-51-8	n-Butylbenzene	40	38.5	96	40.1	100	4	79-123/26
135-98-8	sec-Butylbenzene	40	36.0	90	37.4	94	4	77-122/24
98-06-6	tert-Butylbenzene	40	35.5	89	36.6	92	3	77-121/23
108-90-7	Chlorobenzene	40	35.8	90	37.0	93	3	82-121/20
75-00-3	Chloroethane	40	42.2	106	40.9	102	3	80-126/21
67-66-3	Chloroform	40	43.6	109	44.9	112	3	82-123/20
95-49-8	o-Chlorotoluene	40	37.9	95	34.7	87	9	78-125/25
106-43-4	p-Chlorotoluene	40	36.3	91	37.9	95	4	75-125/26
56-23-5	Carbon tetrachloride	40	40.5	101	43.9	110	8	82-127/22
75-34-3	1,1-Dichloroethane	40	41.9	105	43.8	110	4	80-123/20
75-35-4	1,1-Dichloroethylene	40	42.6	107	45.6	114	7	76-123/19
563-58-6	1,1-Dichloropropene	40	40.9	102	43.6	109	6	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	42.0	105	38.9	97	8	64-133/23
106-93-4	1,2-Dibromoethane	40	39.4	99	39.1	98	1	80-120/20
107-06-2	1,2-Dichloroethane	40	39.9	100	40.7	102	2	76-132/21
78-87-5	1,2-Dichloropropane	40	40.4	101	42.0	105	4	80-121/20
142-28-9	1,3-Dichloropropane	40	38.8	97	38.3	96	1	78-120/20
108-20-3	Di-Isopropyl ether	40	41.5	104	42.7	107	3	78-126/19
594-20-7	2,2-Dichloropropane	40	42.7	107	44.8	112	5	77-132/22
124-48-1	Dibromochloromethane	40	39.4	99	39.6	99	1	76-121/21
75-71-8	Dichlorodifluoromethane	40	46.7	117	46.5	116	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	43.1	108	44.3	111	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	43.7	109	44.7	112	2	81-124/21
541-73-1	m-Dichlorobenzene	40	35.2	88	36.1	90	3	79-123/23
95-50-1	o-Dichlorobenzene	40	36.1	90	36.6	92	1	79-124/22
106-46-7	p-Dichlorobenzene	40	37.8	95	38.6	97	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	44.2	111	45.5	114	3	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	37.3	93	37.6	94	1	81-123/22
100-41-4	Ethylbenzene	40	38.2	96	39.8	100	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	46.4	116	47.5	119	2	75-132/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-BS	L27709.D	1	09/27/13	XB	n/a	n/a	VL877
VL877-BSD	L27710.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	153	96	145	91	5	68-139/24
87-68-3	Hexachlorobutadiene	40	38.6	97	39.7	99	3	81-126/32
98-82-8	Isopropylbenzene	40	35.5	89	37.3	93	5	81-122/22
99-87-6	p-Isopropyltoluene	40	35.7	89	37.3	93	4	81-121/23
108-10-1	4-Methyl-2-pentanone	160	169	106	161	101	5	74-136/23
74-83-9	Methyl bromide	40	46.2	116	44.8	112	3	82-124/20
74-87-3	Methyl chloride	40	38.9	97	35.1	88	10	60-132/26
74-95-3	Methylene bromide	40	40.3	101	40.6	102	1	82-120/20
75-09-2	Methylene chloride	40	42.1	105	43.5	109	3	75-119/20
78-93-3	Methyl ethyl ketone	160	165	103	153	96	8	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	45.1	113	45.4	114	1	79-127/19
91-20-3	Naphthalene	40	41.5	104	41.5	104	0	78-125/23
103-65-1	n-Propylbenzene	40	34.6	87	36.2	91	5	79-124/22
100-42-5	Styrene	40	38.9	97	40.1	100	3	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	45.7	114	46.7	117	2	80-127/20
75-65-0	Tert Butyl Alcohol	200	231	116	226	113	2	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	38.9	97	39.8	100	2	82-123/21
71-55-6	1,1,1-Trichloroethane	40	43.7	109	46.2	116	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	40.9	102	39.7	99	3	77-126/20
79-00-5	1,1,2-Trichloroethane	40	38.9	97	39.2	98	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	39.0	98	40.0	100	3	81-122/26
96-18-4	1,2,3-Trichloropropane	40	40.8	102	40.2	101	1	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	38.5	96	39.1	98	2	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	38.3	96	39.9	100	4	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	39.1	98	41.0	103	5	81-123/23
127-18-4	Tetrachloroethylene	40	35.8	90	38.4	96	7	80-125/25
108-88-3	Toluene	40	37.6	94	39.0	98	4	80-117/21
79-01-6	Trichloroethylene	40	40.0	100	41.7	104	4	81-122/20
75-69-4	Trichlorofluoromethane	40	45.0	113	44.5	111	1	77-133/22
75-01-4	Vinyl chloride	40	53.4	134* ^a	52.9	132	1	71-133/23
1330-20-7	Xylene (total)	120	109	91	113	94	4	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	104%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-BS	L27709.D	1	09/27/13	XB	n/a	n/a	VL877
VL877-BSD	L27710.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	94%	93%	70-130%
460-00-4	4-Bromofluorobenzene	103%	101%	70-130%

(a) Outside control limits. Not detected in associated samples.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-BS	M42065.D	1	09/27/13	XB	n/a	n/a	VM1269
VM1269-BSD	M42066.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	115	72	112	70	3	62-130/24
71-43-2	Benzene	40	36.6	92	35.7	89	2	81-119/20
108-86-1	Bromobenzene	40	36.2	91	36.4	91	1	79-120/22
74-97-5	Bromochloromethane	40	35.8	90	34.6	87	3	81-120/19
75-27-4	Bromodichloromethane	40	36.2	91	35.0	88	3	79-124/20
75-25-2	Bromoform	40	39.3	98	38.1	95	3	76-128/21
104-51-8	n-Butylbenzene	40	37.9	95	37.5	94	1	79-123/26
135-98-8	sec-Butylbenzene	40	34.7	87	34.4	86	1	77-122/24
98-06-6	tert-Butylbenzene	40	34.4	86	33.6	84	2	77-121/23
108-90-7	Chlorobenzene	40	33.7	84	32.9	82	2	82-121/20
75-00-3	Chloroethane	40	34.7	87	34.7	87	0	80-126/21
67-66-3	Chloroform	40	37.1	93	35.7	89	4	82-123/20
95-49-8	o-Chlorotoluene	40	36.9	92	37.0	93	0	78-125/25
106-43-4	p-Chlorotoluene	40	32.6	82	31.4	79	4	75-125/26
56-23-5	Carbon tetrachloride	40	37.2	93	35.9	90	4	82-127/22
75-34-3	1,1-Dichloroethane	40	36.8	92	35.3	88	4	80-123/20
75-35-4	1,1-Dichloroethylene	40	37.3	93	36.6	92	2	76-123/19
563-58-6	1,1-Dichloropropene	40	38.2	96	36.9	92	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	36.1	90	34.9	87	3	64-133/23
106-93-4	1,2-Dibromoethane	40	35.6	89	34.7	87	3	80-120/20
107-06-2	1,2-Dichloroethane	40	36.5	91	34.5	86	6	76-132/21
78-87-5	1,2-Dichloropropane	40	36.9	92	36.6	92	1	80-121/20
142-28-9	1,3-Dichloropropane	40	35.0	88	33.8	85	3	78-120/20
108-20-3	Di-Isopropyl ether	40	35.2	88	34.2	86	3	78-126/19
594-20-7	2,2-Dichloropropane	40	35.9	90	34.2	86	5	77-132/22
124-48-1	Dibromochloromethane	40	36.7	92	35.5	89	3	76-121/21
75-71-8	Dichlorodifluoromethane	40	44.4	111	42.5	106	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	37.3	93	36.3	91	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	38.7	97	37.0	93	4	81-124/21
541-73-1	m-Dichlorobenzene	40	34.7	87	34.2	86	1	79-123/23
95-50-1	o-Dichlorobenzene	40	34.7	87	34.4	86	1	79-124/22
106-46-7	p-Dichlorobenzene	40	37.3	93	36.8	92	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	38.2	96	37.6	94	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	34.0	85	32.8	82	4	81-123/22
100-41-4	Ethylbenzene	40	36.0	90	35.2	88	2	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	38.6	97	37.3	93	3	75-132/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-BS	M42065.D	1	09/27/13	XB	n/a	n/a	VM1269
VM1269-BSD	M42066.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	133	83	132	83	1	68-139/24
87-68-3	Hexachlorobutadiene	40	37.3	93	36.3	91	3	81-126/32
98-82-8	Isopropylbenzene	40	33.5	84	32.5	81	3	81-122/22
99-87-6	p-Isopropyltoluene	40	34.4	86	34.1	85	1	81-121/23
108-10-1	4-Methyl-2-pentanone	160	139	87	136	85	2	74-136/23
74-83-9	Methyl bromide	40	39.7	99	39.2	98	1	82-124/20
74-87-3	Methyl chloride	40	34.7	87	35.0	88	1	60-132/26
74-95-3	Methylene bromide	40	36.4	91	34.9	87	4	82-120/20
75-09-2	Methylene chloride	40	36.1	90	35.8	90	1	75-119/20
78-93-3	Methyl ethyl ketone	160	128	80	128	80	0	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	36.0	90	35.1	88	3	79-127/19
91-20-3	Naphthalene	40	36.2	91	35.5	89	2	78-125/23
103-65-1	n-Propylbenzene	40	34.7	87	34.1	85	2	79-124/22
100-42-5	Styrene	40	36.3	91	35.3	88	3	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	36.3	91	34.8	87	4	80-127/20
75-65-0	Tert Butyl Alcohol	200	167	84	156	78	7	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	36.1	90	35.2	88	3	82-123/21
71-55-6	1,1,1-Trichloroethane	40	37.5	94	36.1	90	4	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	38.3	96	37.5	94	2	77-126/20
79-00-5	1,1,2-Trichloroethane	40	36.5	91	35.1	88	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	35.7	89	35.0	88	2	81-122/26
96-18-4	1,2,3-Trichloropropane	40	35.9	90	34.2	86	5	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	35.5	89	35.1	88	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	37.5	94	36.8	92	2	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	38.5	96	37.7	94	2	81-123/23
127-18-4	Tetrachloroethylene	40	32.6	82	31.7	79*	3	80-125/25
108-88-3	Toluene	40	35.9	90	35.6	89	1	80-117/21
79-01-6	Trichloroethylene	40	35.9	90	35.0	88	3	81-122/20
75-69-4	Trichlorofluoromethane	40	37.3	93	36.6	92	2	77-133/22
75-01-4	Vinyl chloride	40	39.8	100	38.8	97	3	71-133/23
1330-20-7	Xylene (total)	120	103	86	99.9	83	3	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	101%	70-130%

* = Outside of Control Limits.

5.2.4
5

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-BS	M42065.D	1	09/27/13	XB	n/a	n/a	VM1269
VM1269-BSD	M42066.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	100%	101%	70-130%
460-00-4	4-Bromofluorobenzene	98%	98%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU533-LCS	U13761.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	134	107	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	70-130%
2037-26-5	Toluene-D8	108%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL875-LCS	L27651.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	267	107	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	94%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL877-LCS	L27711.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	293	117	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	93%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1269-LCS	M42067.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	241	96	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	102%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

* = Outside of Control Limits.

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29893-1MS	U13781.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1MSD	U13782.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1 ^a	U13767.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	C29893-1		Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND	80	77.5	97	73.2	92	6	38-159/24	
71-43-2	Benzene	ND	20	18.2	91	18.0	90	1	77-122/16	
108-86-1	Bromobenzene	ND	20	20.0	100	20.2	101	1	76-126/17	
74-97-5	Bromochloromethane	ND	20	18.0	90	17.7	89	2	77-130/17	
75-27-4	Bromodichloromethane	ND	20	18.7	94	18.0	90	4	75-127/16	
75-25-2	Bromoform	ND	20	23.9	120	23.0	115	4	69-141/17	
104-51-8	n-Butylbenzene	ND	20	18.4	92	19.7	99	7	72-129/18	
135-98-8	sec-Butylbenzene	ND	20	17.2	86	18.1	91	5	74-128/18	
98-06-6	tert-Butylbenzene	ND	20	18.0	90	18.6	93	3	73-127/18	
108-90-7	Chlorobenzene	ND	20	18.3	92	18.4	92	1	77-122/16	
75-00-3	Chloroethane	ND	20	18.2	91	18.7	94	3	69-133/18	
67-66-3	Chloroform	ND	20	19.1	96	18.5	93	3	74-126/17	
95-49-8	o-Chlorotoluene	ND	20	16.4	82	19.0	95	15	72-127/20	
106-43-4	p-Chlorotoluene	ND	20	17.7	89	18.0	90	2	68-127/18	
56-23-5	Carbon tetrachloride	ND	20	20.1	101	19.1	96	5	71-133/19	
75-34-3	1,1-Dichloroethane	ND	20	17.1	86	16.9	85	1	71-125/17	
75-35-4	1,1-Dichloroethylene	ND	20	16.8	84	17.0	85	1	66-125/20	
563-58-6	1,1-Dichloropropene	ND	20	20.4	102	19.9	100	2	75-124/18	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	18.9	95	18.9	95	0	65-131/20	
106-93-4	1,2-Dibromoethane	ND	20	20.3	102	20.0	100	1	75-135/17	
107-06-2	1,2-Dichloroethane	ND	20	18.6	93	17.6	88	6	71-131/17	
78-87-5	1,2-Dichloropropane	ND	20	18.2	91	18.2	91	0	78-124/16	
142-28-9	1,3-Dichloropropane	ND	20	19.0	95	18.9	95	1	78-123/16	
108-20-3	Di-Isopropyl ether	ND	20	16.3	82	16.6	83	2	68-129/17	
594-20-7	2,2-Dichloropropane	ND	20	16.0	80	15.6	78	3	70-131/19	
124-48-1	Dibromochloromethane	ND	20	20.8	104	20.4	102	2	76-132/16	
75-71-8	Dichlorodifluoromethane	ND	20	23.0	115	21.3	107	8	32-168/28	
156-59-2	cis-1,2-Dichloroethylene	ND	20	18.5	93	18.4	92	1	73-126/17	
10061-01-5	cis-1,3-Dichloropropene	ND	20	20.6	103	20.4	102	1	72-130/16	
541-73-1	m-Dichlorobenzene	ND	20	18.4	92	18.9	95	3	75-124/16	
95-50-1	o-Dichlorobenzene	ND	20	19.1	96	19.2	96	1	76-124/16	
106-46-7	p-Dichlorobenzene	ND	20	19.4	97	19.7	99	2	75-124/16	
156-60-5	trans-1,2-Dichloroethylene	ND	20	17.8	89	17.8	89	0	71-126/18	
10061-02-6	trans-1,3-Dichloropropene	ND	20	19.1	96	18.6	93	3	71-126/16	
100-41-4	Ethylbenzene	ND	20	20.4	102	20.4	102	0	76-126/17	
637-92-3	Ethyl Tert Butyl Ether	ND	20	18.9	95	19.0	95	1	75-134/17	

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29893-1MS	U13781.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1MSD	U13782.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1 ^a	U13767.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Compound	C29893-1		Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
591-78-6	2-Hexanone	ND	80	75.0	94	74.4	93	1	67-150/22	
87-68-3	Hexachlorobutadiene	ND	20	16.1	81	18.8	94	15	69-135/20	
98-82-8	Isopropylbenzene	ND	20	20.5	103	20.8	104	1	61-125/17	
99-87-6	p-Isopropyltoluene	ND	20	17.4	87	18.2	91	4	68-127/18	
108-10-1	4-Methyl-2-pentanone	ND	80	77.4	97	76.8	96	1	71-142/21	
74-83-9	Methyl bromide	ND	20	21.2	106	21.0	105	1	68-132/18	
74-87-3	Methyl chloride	ND	20	20.1	101	19.3	97	4	39-150/28	
74-95-3	Methylene bromide	ND	20	19.3	97	18.8	94	3	77-127/16	
75-09-2	Methylene chloride	ND	20	16.6	83	16.7	84	1	67-128/18	
78-93-3	Methyl ethyl ketone	ND	80	73.7	92	74.6	93	1	56-155/23	
1634-04-4	Methyl Tert Butyl Ether	6.7	20	24.0	87	24.3	88	1	73-132/17	
91-20-3	Naphthalene	0.95	20	21.9	105	24.6	118	12	70-136/20	
103-65-1	n-Propylbenzene	ND	20	18.4	92	19.2	96	4	71-127/17	
100-42-5	Styrene	ND	20	20.2	101	20.4	102	1	72-134/16	
994-05-8	Tert-Amyl Methyl Ether	ND	20	19.0	95	19.0	95	0	73-133/17	
75-65-0	Tert-Butyl Alcohol	ND	100	93.8	94	96.0	96	2	60-149/26	
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	20.2	101	19.8	99	2	77-130/16	
71-55-6	1,1,1-Trichloroethane	ND	20	18.3	92	17.8	89	3	74-128/19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	18.7	94	19.0	95	2	77-129/17	
79-00-5	1,1,2-Trichloroethane	ND	20	19.5	98	19.1	96	2	77-125/16	
87-61-6	1,2,3-Trichlorobenzene	ND	20	20.5	103	23.3	117	13	70-133/18	
96-18-4	1,2,3-Trichloropropane	ND	20	19.4	97	19.0	95	2	69-126/18	
120-82-1	1,2,4-Trichlorobenzene	ND	20	20.2	101	21.9	110	8	68-129/17	
95-63-6	1,2,4-Trimethylbenzene	ND	20	20.9	105	21.5	108	3	74-129/17	
108-67-8	1,3,5-Trimethylbenzene	ND	20	19.4	97	20.1	101	4	77-129/17	
127-18-4	Tetrachloroethylene	ND	20	21.4	107	21.5	108	0	69-127/20	
108-88-3	Toluene	ND	20	20.0	100	20.1	101	0	75-122/17	
79-01-6	Trichloroethylene	ND	20	20.0	100	19.7	99	2	78-123/17	
75-69-4	Trichlorofluoromethane	ND	20	21.2	106	20.2	101	5	65-136/23	
75-01-4	Vinyl chloride	ND	20	23.5	118	23.1	116	2	57-146/22	
1330-20-7	Xylene (total)	ND	60	60.0	100	60.1	100	0	77-125/17	

CAS No.	Surrogate Recoveries	MS	MSD	C29893-1	Limits
1868-53-7	Dibromofluoromethane	94%	93%	100%	70-130%

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29893-1MS	U13781.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1MSD	U13782.D	1	09/25/13	TF	n/a	n/a	VU533
C29893-1 ^a	U13767.D	1	09/25/13	TF	n/a	n/a	VU533

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-1, C29884-2, C29884-15

CAS No.	Surrogate Recoveries	MS	MSD	C29893-1	Limits
2037-26-5	Toluene-D8	104%	105%	107%	70-130%
460-00-4	4-Bromofluorobenzene	107%	106%	100%	70-130%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29890-1MS	L27665.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1MSD	L27666.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1	L27654.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	C29890-1		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
67-64-1	Acetone	38.7	J	158	196	100	199	102	2	62-130/24
71-43-2	Benzene	ND		39.4	36.1	92	35.4	90	2	81-119/20
108-86-1	Bromobenzene	ND		39.4	31.6	80	32.1	81	2	79-120/22
74-97-5	Bromochloromethane	ND		39.4	38.4	97	38.8	98	1	81-120/19
75-27-4	Bromodichloromethane	ND		39.4	38.1	97	37.8	96	1	79-124/20
75-25-2	Bromoform	ND		39.4	38.4	97	38.4	97	0	76-128/21
104-51-8	n-Butylbenzene	ND		39.4	29.0	74* a	28.8	73* a	1	79-123/26
135-98-8	sec-Butylbenzene	ND		39.4	30.4	77	30.5	77	0	77-122/24
98-06-6	tert-Butylbenzene	ND		39.4	31.5	80	31.1	79	1	77-121/23
108-90-7	Chlorobenzene	ND		39.4	32.5	82	32.4	82	0	82-121/20
75-00-3	Chloroethane	ND		39.4	38.8	98	38.8	98	0	80-126/21
67-66-3	Chloroform	ND		39.4	38.1	97	38.3	97	1	82-123/20
95-49-8	o-Chlorotoluene	ND		39.4	31.0	79	31.8	81	3	78-125/25
106-43-4	p-Chlorotoluene	ND		39.4	29.9	76	30.2	77	1	75-125/26
56-23-5	Carbon tetrachloride	ND		39.4	35.8	91	35.7	90	0	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.4	37.2	94	37.1	94	0	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.4	35.8	91	36.5	93	2	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.4	35.5	90	35.3	89	1	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.4	40.7	103	42.0	106	3	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.4	38.0	96	37.9	96	0	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.4	38.0	96	37.3	95	2	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.4	37.4	95	36.5	93	2	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.4	37.2	94	37.2	94	0	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.4	38.2	97	37.9	96	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.4	35.4	90	35.2	89	1	77-132/22
124-48-1	Dibromochloromethane	ND		39.4	37.1	94	36.4	92	2	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.4	46.1	117	46.3	117	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.4	36.9	94	36.7	93	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.4	38.1	97	37.7	96	1	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.4	29.0	74* a	29.2	74* a	1	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.4	30.7	78* a	30.5	77* a	1	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.4	29.4	75* a	29.3	74* a	0	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.4	35.5	90	36.2	92	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.4	36.2	92	35.9	91	1	81-123/22
100-41-4	Ethylbenzene	ND		39.4	33.1	84	33.1	84	0	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		39.4	39.8	101	39.5	100	1	75-132/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29890-1MS	L27665.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1MSD	L27666.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1	L27654.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Compound	C29890-1		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
591-78-6	2-Hexanone	ND		158	162	103	161	102	1	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.4	25.5	65* a	25.8	65* a	1	81-126/32
98-82-8	Isopropylbenzene	ND		39.4	32.2	82	32.2	82	0	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.4	30.3	77* a	30.5	77* a	1	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		158	181	115	177	112	2	74-136/23
74-83-9	Methyl bromide	ND		39.4	42.1	107	42.3	107	0	82-124/20
74-87-3	Methyl chloride	ND		39.4	39.4	100	37.8	96	4	60-132/26
74-95-3	Methylene bromide	ND		39.4	39.1	99	38.8	98	1	82-120/20
75-09-2	Methylene chloride	ND		39.4	34.7	88	34.3	87	1	75-119/20
78-93-3	Methyl ethyl ketone	5.2	J	158	172	106	177	109	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.4	41.1	104	41.2	104	0	79-127/19
91-20-3	Naphthalene	ND		39.4	34.1	86	33.7	85	1	78-125/23
103-65-1	n-Propylbenzene	ND		39.4	31.2	79	31.3	79	0	79-124/22
100-42-5	Styrene	ND		39.4	32.6	83	32.1	81* a	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.4	40.7	103	41.0	104	1	80-127/20
75-65-0	Tert Butyl Alcohol	ND		197	235	119	254	129	8	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.4	35.0	89	34.4	87	2	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.4	37.5	95	37.9	96	1	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.4	39.2	99	39.6	100	1	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.4	37.5	95	36.7	93	2	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.4	27.5	70* a	27.7	70* a	1	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.4	40.2	102	39.6	100	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.4	26.6	67* a	26.9	68* a	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.4	33.8	86	31.7	80* a	6	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.4	32.5	82	31.2	79* a	4	81-123/23
127-18-4	Tetrachloroethylene	ND		39.4	31.3	79* a	32.0	81	2	80-125/25
108-88-3	Toluene	ND		39.4	32.9	83	33.0	84	0	80-117/21
79-01-6	Trichloroethylene	ND		39.4	35.4	90	35.2	89	1	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.4	40.7	103	41.3	105	1	77-133/22
75-01-4	Vinyl chloride	ND		39.4	53.6	136* b	52.3	133	2	71-133/23
1330-20-7	Xylene (total)	ND		118	98.9	84	97.9	83	1	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C29890-1	Limits
1868-53-7	Dibromofluoromethane	105%	105%	100%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29890-1MS	L27665.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1MSD	L27666.D	1	09/25/13	XB	n/a	n/a	VL875
C29890-1	L27654.D	1	09/25/13	XB	n/a	n/a	VL875

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-9, C29884-14

CAS No.	Surrogate Recoveries	MS	MSD	C29890-1	Limits
2037-26-5	Toluene-D8	94%	95%	95%	70-130%
460-00-4	4-Bromofluorobenzene	104%	102%	103%	70-130%

(a) Outside control limits due to matrix interference. AZ:M2

(b) Outside control limits (high bias). Not detected in associated samples. AZ:L1

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29956-13MS	L27721.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13MSD	L27722.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13	L27719.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	C29956-13 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	159	218	137* a	215	136* a	1	62-130/24
71-43-2	Benzene	ND	39.8	42.4	107	40.5	102	5	81-119/20
108-86-1	Bromobenzene	ND	39.8	37.2	94	35.5	90	5	79-120/22
74-97-5	Bromochloromethane	ND	39.8	44.8	113	43.4	110	3	81-120/19
75-27-4	Bromodichloromethane	ND	39.8	43.6	110	42.0	106	4	79-124/20
75-25-2	Bromoform	ND	39.8	43.6	110	42.3	107	3	76-128/21
104-51-8	n-Butylbenzene	ND	39.8	36.7	92	33.7	85	9	79-123/26
135-98-8	sec-Butylbenzene	ND	39.8	37.9	95	35.3	89	7	77-122/24
98-06-6	tert-Butylbenzene	ND	39.8	38.5	97	36.1	91	6	77-121/23
108-90-7	Chlorobenzene	ND	39.8	39.1	98	36.8	93	6	82-121/20
75-00-3	Chloroethane	ND	39.8	48.4	122	46.2	117	5	80-126/21
67-66-3	Chloroform	ND	39.8	45.9	115	44.1	111	4	82-123/20
95-49-8	o-Chlorotoluene	ND	39.8	40.3	101	37.4	94	7	78-125/25
106-43-4	p-Chlorotoluene	ND	39.8	39.6	100	37.1	94	7	75-125/26
56-23-5	Carbon tetrachloride	ND	39.8	44.0	111	41.6	105	6	82-127/22
75-34-3	1,1-Dichloroethane	ND	39.8	45.6	115	42.9	108	6	80-123/20
75-35-4	1,1-Dichloroethylene	ND	39.8	43.9	110	41.6	105	5	76-123/19
563-58-6	1,1-Dichloropropene	ND	39.8	42.7	107	40.5	102	5	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND	39.8	45.2	114	43.2	109	5	64-133/23
106-93-4	1,2-Dibromoethane	ND	39.8	42.5	107	41.7	105	2	80-120/20
107-06-2	1,2-Dichloroethane	ND	39.8	42.6	107	41.3	104	3	76-132/21
78-87-5	1,2-Dichloropropane	ND	39.8	42.4	107	40.8	103	4	80-121/20
142-28-9	1,3-Dichloropropane	ND	39.8	41.9	105	40.3	102	4	78-120/20
108-20-3	Di-Isopropyl ether	ND	39.8	44.8	113	42.6	108	5	78-126/19
594-20-7	2,2-Dichloropropane	ND	39.8	46.6	117	43.6	110	7	77-132/22
124-48-1	Dibromochloromethane	ND	39.8	42.4	107	40.8	103	4	76-121/21
75-71-8	Dichlorodifluoromethane	ND	39.8	58.5	147* a	54.7	138* a	7	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND	39.8	44.1	111	42.0	106	5	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND	39.8	44.0	111	42.3	107	4	81-124/21
541-73-1	m-Dichlorobenzene	ND	39.8	36.3	91	34.3	87	6	79-123/23
95-50-1	o-Dichlorobenzene	ND	39.8	37.1	93	35.2	89	5	79-124/22
106-46-7	p-Dichlorobenzene	ND	39.8	36.5	92	34.4	87	6	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND	39.8	43.8	110	42.0	106	4	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND	39.8	41.2	104	39.9	101	3	81-123/22
100-41-4	Ethylbenzene	ND	39.8	40.0	101	37.7	95	6	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND	39.8	45.7	115	44.4	112	3	75-132/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29956-13MS	L27721.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13MSD	L27722.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13	L27719.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Compound	C29956-13		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
591-78-6	2-Hexanone	ND		159	186	117	180	114	3	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.8	31.3	79* a	28.7	72* a	9	81-126/32
98-82-8	Isopropylbenzene	ND		39.8	39.7	100	37.4	94	6	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.8	37.7	95	34.9	88	8	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		159	196	123	193	122	2	74-136/23
74-83-9	Methyl bromide	ND		39.8	52.1	131* a	49.3	124	6	82-124/20
74-87-3	Methyl chloride	ND		39.8	60.4	152* a	55.7	141* a	8	60-132/26
74-95-3	Methylene bromide	ND		39.8	44.1	111	42.4	107	4	82-120/20
75-09-2	Methylene chloride	ND		39.8	41.3	104	39.2	99	5	75-119/20
78-93-3	Methyl ethyl ketone	ND		159	212	133* a	205	129	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.8	46.4	117	45.6	115	2	79-127/19
91-20-3	Naphthalene	ND		39.8	41.8	105	40.1	101	4	78-125/23
103-65-1	n-Propylbenzene	ND		39.8	38.7	97	35.8	90	8	79-124/22
100-42-5	Styrene	ND		39.8	39.6	100	37.4	94	6	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.8	46.9	118	45.7	115	3	80-127/20
75-65-0	Tert Butyl Alcohol	ND		199	287	144	280	141	2	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.8	40.2	101	38.4	97	5	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.8	47.2	119	44.3	112	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.8	43.6	110	41.5	105	5	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.8	41.1	103	39.7	100	3	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.8	35.9	90	33.3	84	8	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.8	45.6	115	43.7	110	4	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.8	35.1	88	33.0	83	6	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.8	38.4	97	36.0	91	6	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.8	38.4	97	36.0	91	6	81-123/23
127-18-4	Tetrachloroethylene	ND		39.8	42.1	106	41.4	105	2	80-125/25
108-88-3	Toluene	ND		39.8	39.6	100	37.2	94	6	80-117/21
79-01-6	Trichloroethylene	ND		39.8	42.8	108	40.3	102	6	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.8	52.4	132	50.4	127	4	77-133/22
75-01-4	Vinyl chloride	ND		39.8	64.9	163* a	62.2	157* a	4	71-133/23
1330-20-7	Xylene (total)	ND		119	119	100	112	94	6	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C29956-13	Limits
1868-53-7	Dibromofluoromethane	108%	106%	106%	70-130%

* = Outside of Control Limits.

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29956-13MS	L27721.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13MSD	L27722.D	1	09/27/13	XB	n/a	n/a	VL877
C29956-13	L27719.D	1	09/27/13	XB	n/a	n/a	VL877

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-3

CAS No.	Surrogate Recoveries	MS	MSD	C29956-13	Limits
2037-26-5	Toluene-D8	93%	93%	93%	70-130%
460-00-4	4-Bromofluorobenzene	103%	104%	101%	70-130%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29974-5MS	M42084.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5MSD	M42085.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5	M42083.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	C29974-5		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
67-64-1	Acetone	ND		12600	11600	92	11100	88	4	62-130/24
71-43-2	Benzene	ND		3140	2840	90	2750	87	3	81-119/20
108-86-1	Bromobenzene	ND		3140	2810	89	2920	93	4	79-120/22
74-97-5	Bromochloromethane	ND		3140	2720	86	2670	85	2	81-120/19
75-27-4	Bromodichloromethane	ND		3140	3000	95	2840	90	5	79-124/20
75-25-2	Bromoform	ND		3140	2720	86	2660	85	2	76-128/21
104-51-8	n-Butylbenzene	ND		3140	3070	98	3060	97	0	79-123/26
135-98-8	sec-Butylbenzene	ND		3140	2960	94	3020	96	2	77-122/24
98-06-6	tert-Butylbenzene	ND		3140	2870	91	3110	99	8	77-121/23
108-90-7	Chlorobenzene	ND		3140	2740	87	2700	86	1	82-121/20
75-00-3	Chloroethane	ND		3140	2680	85	2750	87	3	80-126/21
67-66-3	Chloroform	ND		3140	3090	98	2890	92	7	82-123/20
95-49-8	o-Chlorotoluene	ND		3140	2980	95	3050	97	2	78-125/25
106-43-4	p-Chlorotoluene	ND		3140	2940	93	2930	93	0	75-125/26
56-23-5	Carbon tetrachloride	ND		3140	2950	94	2750	87	7	82-127/22
75-34-3	1,1-Dichloroethane	ND		3140	3070	98	2900	92	6	80-123/20
75-35-4	1,1-Dichloroethylene	ND		3140	2660	85	2620	83	2	76-123/19
563-58-6	1,1-Dichloropropene	ND		3140	2950	94	2790	89	6	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		3140	3090	98	2870	91	7	64-133/23
106-93-4	1,2-Dibromoethane	ND		3140	2800	89	2710	86	3	80-120/20
107-06-2	1,2-Dichloroethane	ND		3140	3160	100	2850	91	10	76-132/21
78-87-5	1,2-Dichloropropane	ND		3140	3020	96	2840	90	6	80-121/20
142-28-9	1,3-Dichloropropane	ND		3140	2890	92	2760	88	5	78-120/20
108-20-3	Di-Isopropyl ether	ND		3140	2800	89	2720	86	3	78-126/19
594-20-7	2,2-Dichloropropane	ND		3140	2870	91	2690	86	6	77-132/22
124-48-1	Dibromochloromethane	ND		3140	2780	88	2670	85	4	76-121/21
75-71-8	Dichlorodifluoromethane	ND		3140	3790	121	3620	115	5	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		3140	2800	89	2730	87	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		3140	2870	91	2710	86	6	81-124/21
541-73-1	m-Dichlorobenzene	ND		3140	2830	90	2860	91	1	79-123/23
95-50-1	o-Dichlorobenzene	ND		3140	2860	91	2920	93	2	79-124/22
106-46-7	p-Dichlorobenzene	ND		3140	2850	91	2900	92	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		3140	2810	89	2670	85	5	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		3140	2880	92	2740	87	5	81-123/22
100-41-4	Ethylbenzene	ND		3140	2870	91	2760	88	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		3140	3050	97	2850	91	7	75-132/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29974-5MS	M42084.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5MSD	M42085.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5	M42083.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Compound	C29974-5		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
591-78-6	2-Hexanone	ND		12600	12400	99	11700	93	6	68-139/24
87-68-3	Hexachlorobutadiene	ND		3140	2950	94	2870	91	3	81-126/32
98-82-8	Isopropylbenzene	ND		3140	2880	92	2790	89	3	81-122/22
99-87-6	p-Isopropyltoluene	96.7	J	3140	3030	93	3090	95	2	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		12600	12600	100	11600	92	8	74-136/23
74-83-9	Methyl bromide	ND		3140	2860	91	2950	94	3	82-124/20
74-87-3	Methyl chloride	ND		3140	2860	91	2850	91	0	60-132/26
74-95-3	Methylene bromide	ND		3140	2890	92	2750	87	5	82-120/20
75-09-2	Methylene chloride	ND		3140	2570	82	2500	79	3	75-119/20
78-93-3	Methyl ethyl ketone	ND		12600	11800	94	11100	88	6	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		3140	2940	93	2750	87	7	79-127/19
91-20-3	Naphthalene	ND		3140	2880	92	2890	92	0	78-125/23
103-65-1	n-Propylbenzene	ND		3140	3010	96	3030	96	1	79-124/22
100-42-5	Styrene	ND		3140	2830	90	2740	87	3	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		3140	2920	93	2740	87	6	80-127/20
75-65-0	Tert Butyl Alcohol	ND		15700	15300	97	12900	82	17	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		3140	2780	88	2690	86	3	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		3140	3080	98	2830	90	8	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		3140	2880	92	2880	92	0	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		3140	2880	92	2780	88	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		3140	2820	90	2770	88	2	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		3140	2960	94	2800	89	6	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		3140	2770	88	2750	87	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		3140	2950	94	2980	95	1	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		3140	2960	94	2980	95	1	81-123/23
127-18-4	Tetrachloroethylene	ND		3140	2950	94	3530	112	18	80-125/25
108-88-3	Toluene	ND		3140	2790	89	2740	87	2	80-117/21
79-01-6	Trichloroethylene	ND		3140	2680	85	2700	86	1	81-122/20
75-69-4	Trichlorofluoromethane	ND		3140	3050	97	2970	94	3	77-133/22
75-01-4	Vinyl chloride	ND		3140	2640	84	2470	79	7	71-133/23
1330-20-7	Xylene (total)	ND		9430	8370	89	8100	86	3	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C29974-5	Limits
1868-53-7	Dibromofluoromethane	107%	103%	106%	70-130%

* = Outside of Control Limits.

5.4.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29974-5MS	M42084.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5MSD	M42085.D	1	09/27/13	XB	n/a	n/a	VM1269
C29974-5	M42083.D	1	09/27/13	XB	n/a	n/a	VM1269

The QC reported here applies to the following samples:

Method: SW846 8260B

C29884-4

CAS No.	Surrogate Recoveries	MS	MSD	C29974-5	Limits
2037-26-5	Toluene-D8	100%	101%	105%	70-130%
460-00-4	4-Bromofluorobenzene	104%	100%	101%	70-130%

* = Outside of Control Limits.

5.4.4
5



GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8762-MB	Y22574.D	1	09/25/13	MT	09/25/13	OP8762	EY1045

The QC reported here applies to the following samples:

Method: SW846 8270C

C29884-3, C29884-4, C29884-9, C29884-14

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	69% 14-99%
4165-62-2	Phenol-d5	75% 18-100%
118-79-6	2,4,6-Tribromophenol	84% 25-107%
4165-60-0	Nitrobenzene-d5	72% 15-101%
321-60-8	2-Fluorobiphenyl	71% 15-104%
1718-51-0	Terphenyl-d14	104% 56-123%

Method Blank Summary

Job Number: C29884
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8763-MB	Y22575A.D	1	09/25/13	MT	09/25/13	OP8763	EY1045

The QC reported here applies to the following samples:

Method: SW846 8270C

C29884-1, C29884-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	1.3	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.2	ug/l	
120-12-7	Anthracene	ND	5.0	1.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.4	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	1.5	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.4	ug/l	
218-01-9	Chrysene	ND	5.0	1.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	1.3	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.5	ug/l	
86-73-7	Fluorene	ND	5.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	1.4	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	1.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.3	ug/l	
91-20-3	Naphthalene	ND	5.0	1.2	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.3	ug/l	
129-00-0	Pyrene	ND	5.0	1.6	ug/l	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	86%
321-60-8	2-Fluorobiphenyl	87%
1718-51-0	Terphenyl-d14	119%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8762-BS	Y22572.D	1	09/25/13	MT	09/25/13	OP8762	EY1045
OP8762-BSD	Y22573.D	1	09/25/13	MT	09/25/13	OP8762	EY1045

The QC reported here applies to the following samples:

Method: SW846 8270C

C29884-3, C29884-4, C29884-9, C29884-14

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	Limits	
		ug/kg	ug/kg	%	ug/kg	%	RPD	Rec/RPD
83-32-9	Acenaphthene	833	672	81	700	84	4	34-112/28
208-96-8	Acenaphthylene	833	680	82	701	84	3	33-115/28
120-12-7	Anthracene	833	747	90	787	94	5	59-111/21
56-55-3	Benzo(a)anthracene	833	782	94	813	98	4	72-122/22
50-32-8	Benzo(a)pyrene	833	748	90	791	95	6	71-120/22
205-99-2	Benzo(b)fluoranthene	833	731	88	779	93	6	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	716	86	823	99	14	57-134/24
207-08-9	Benzo(k)fluoranthene	833	779	93	814	98	4	74-126/25
218-01-9	Chrysene	833	736	88	778	93	6	73-125/22
53-70-3	Dibenz(a,h)anthracene	833	720	86	793	95	10	59-132/23
206-44-0	Fluoranthene	833	794	95	829	99	4	69-117/21
86-73-7	Fluorene	833	722	87	756	91	5	42-112/24
193-39-5	Indeno(1,2,3-cd)pyrene	833	691	83	799	96	14	60-131/21
90-12-0	1-Methylnaphthalene	833	618	74	627	75	1	33-110/30
91-57-6	2-Methylnaphthalene	833	629	75	632	76	0	33-107/30
91-20-3	Naphthalene	833	599	72	604	72	1	32-121/31
85-01-8	Phenanthrene	833	755	91	786	94	4	57-113/21
129-00-0	Pyrene	833	819	98	875	105	7	63-120/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	69%	70%	14-99%
4165-62-2	Phenol-d5	76%	76%	18-100%
118-79-6	2,4,6-Tribromophenol	89%	93%	25-107%
4165-60-0	Nitrobenzene-d5	72%	72%	15-101%
321-60-8	2-Fluorobiphenyl	76%	78%	15-104%
1718-51-0	Terphenyl-d14	92%	99%	56-123%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8763-BS	Y22576A.D	1	09/25/13	MT	09/25/13	OP8763	EY1045
OP8763-BSD	Y22577A.D	1	09/25/13	MT	09/25/13	OP8763	EY1045

The QC reported here applies to the following samples:

Method: SW846 8270C

C29884-1, C29884-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	25	23.1	92	22.8	91	1	68-105/26
208-96-8	Acenaphthylene	25	23.2	93	23.0	92	1	68-110/26
120-12-7	Anthracene	25	24.8	99	24.8	99	0	71-109/14
56-55-3	Benzo(a)anthracene	25	25.3	101	25.3	101	0	76-118/26
50-32-8	Benzo(a)pyrene	25	23.9	96	23.7	95	1	77-112/26
205-99-2	Benzo(b)fluoranthene	25	23.6	94	24.9	100	5	73-117/18
191-24-2	Benzo(g,h,i)perylene	25	22.6	90	19.4	78	15	60-129/28
207-08-9	Benzo(k)fluoranthene	25	25.0	100	25.7	103	3	78-121/27
218-01-9	Chrysene	25	23.9	96	23.8	95	0	75-123/25
53-70-3	Dibenz(a,h)anthracene	25	23.0	92	19.3	77	17	64-125/27
206-44-0	Fluoranthene	25	25.7	103	25.6	102	0	72-114/28
86-73-7	Fluorene	25	24.2	97	24.3	97	0	69-108/16
193-39-5	Indeno(1,2,3-cd)pyrene	25	23.0	92	19.2	77	18	62-125/28
90-12-0	1-Methylnaphthalene	25	21.7	87	21.5	86	1	59-102/26
91-57-6	2-Methylnaphthalene	25	22.1	88	21.7	87	2	59-100/27
91-20-3	Naphthalene	25	21.0	84	21.0	84	0	61-114/27
85-01-8	Phenanthrene	25	24.8	99	24.8	99	0	71-111/26
129-00-0	Pyrene	25	26.5	106	27.4	110	3	64-121/28

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	85%	84%	27-112%
321-60-8	2-Fluorobiphenyl	87%	87%	27-112%
1718-51-0	Terphenyl-d14	100%	102%	45-128%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8762-MS	Y22578.D	1	09/25/13	MT	09/25/13	OP8762	EY1045
OP8762-MSD	Y22579.D	1	09/25/13	MT	09/25/13	OP8762	EY1045
C29890-3	Y22585.D	1	09/25/13	MT	09/25/13	OP8762	EY1045

The QC reported here applies to the following samples:

Method: SW846 8270C

C29884-3, C29884-4, C29884-9, C29884-14

CAS No.	Compound	C29890-3		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
83-32-9	Acenaphthene	ND	832	453	54	494	59	9	34-112/28	
208-96-8	Acenaphthylene	ND	832	450	54	488	59	8	33-115/28	
120-12-7	Anthracene	ND	832	638	77	702	84	10	59-111/21	
56-55-3	Benzo(a)anthracene	ND	832	729	88	762	92	4	72-122/22	
50-32-8	Benzo(a)pyrene	ND	832	693	83	750	90	8	71-120/22	
205-99-2	Benzo(b)fluoranthene	ND	832	693	83	755	91	9	67-123/24	
191-24-2	Benzo(g,h,i)perylene	ND	832	676	81	686	82	1	57-134/24	
207-08-9	Benzo(k)fluoranthene	ND	832	702	84	758	91	8	74-126/25	
218-01-9	Chrysene	ND	832	683	82	730	88	7	73-125/22	
53-70-3	Dibenz(a,h)anthracene	ND	832	681	82	700	84	3	59-132/23	
206-44-0	Fluoranthene	ND	832	736	88	778	94	6	69-117/21	
86-73-7	Fluorene	ND	832	533	64	592	71	10	42-112/24	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	832	691	83	704	85	2	60-131/21	
90-12-0	1-Methylnaphthalene	ND	832	418	50	437	53	4	33-110/30	
91-57-6	2-Methylnaphthalene	ND	832	424	51	438	53	3	33-107/30	
91-20-3	Naphthalene	ND	832	407	49	420	50	3	32-121/31	
85-01-8	Phenanthrene	ND	832	637	77	700	84	9	57-113/21	
129-00-0	Pyrene	ND	832	750	90	833	100	10	63-120/20	

CAS No.	Surrogate Recoveries	MS	MSD	C29890-3	Limits
367-12-4	2-Fluorophenol	51%	51%	54%	14-99%
4165-62-2	Phenol-d5	56%	56%	59%	18-100%
118-79-6	2,4,6-Tribromophenol	75%	82%	67%	25-107%
4165-60-0	Nitrobenzene-d5	49%	50%	55%	15-101%
321-60-8	2-Fluorobiphenyl	51%	52%	55%	15-104%
1718-51-0	Terphenyl-d14	86%	94%	92%	56-123%

* = Outside of Control Limits.



GC Semi-volatiles

QC Data Summaries

7

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8760-MB	GG47301.D	1	09/24/13	NN	09/24/13	OP8760	GGG1284

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	76% 32-124%

Method Blank Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8767-MB	HH308043.D1		09/25/13	AG	09/25/13	OP8767	GHH1088

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29884-3, C29884-4, C29884-9, C29884-14

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	78% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8760-BS	GG47302.D	1	09/24/13	NN	09/24/13	OP8760	GGG1284
OP8760-BSD	GG47303.D	1	09/24/13	NN	09/24/13	OP8760	GGG1284

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29884-1, C29884-2, C29884-15

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	RPD	Limits
		mg/l	mg/l	%	mg/l	%		Rec/RPD
	TPH (C10-C28)	1	0.832	83	0.738	74	12	38-115/22
	TPH (> C28-C40)	1	0.947	95	0.852	85	11	45-114/20
CAS No.	Surrogate Recoveries	BSP		BSD		Limits		
630-01-3	Hexacosane	81%		75%		32-124%		

* = Outside of Control Limits.

7.2.1

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8767-BS	HH308046.D1		09/25/13	AG	09/25/13	OP8767	GHH1088
OP8767-BSD	HH308047.D1		09/25/13	AG	09/25/13	OP8767	GHH1088

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29884-3, C29884-4, C29884-9, C29884-14

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	RPD	Limits
		mg/kg	mg/kg	%	mg/kg	%		Rec/RPD
	TPH (C10-C28)	100	82.3	82	80.9	81	2	39-102/29
	TPH (> C28-C40)	100	101	101	103	103	2	42-111/26
CAS No.	Surrogate Recoveries	BSP		BSD		Limits		
630-01-3	Hexacosane	92%		90%		37-122%		

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C29884

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8767-MS	HH308051.D1		09/25/13	AG	09/25/13	OP8767	GHH1088
OP8767-MSD	HH308052.D1		09/25/13	AG	09/25/13	OP8767	GHH1088
C29874-1	HH308048.D1		09/25/13	AG	09/25/13	OP8767	GHH1088

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29884-3, C29884-4, C29884-9, C29884-14

7.3.1
7

CAS No.	Compound	C29874-1		Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
		mg/kg	Q							
	TPH (C10-C28)	2.77	J	99.7	74.8	72	72.0	70	4	39-102/29
	TPH (> C28-C40)	5.30	J	99.7	110	105	110	105	0	42-111/26
CAS No.	Surrogate Recoveries	MS		MSD		C29874-1		Limits		
630-01-3	Hexacosane	88%		88%		88%		37-122%		

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

∞

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C29884
Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6756
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

09/24/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	13	8.5		
Antimony	6.0	.7	.51		
Arsenic	10	.7	.65		
Barium	200	.4	.35		
Beryllium	5.0	.2	.4		
Bismuth	20		2.9		
Boron	100	.9	.64		
Cadmium	2.0	.2	.15	0.0	<2.0
Calcium	5000	7.1	12		
Chromium	10	.3	.41	0.10	<10
Cobalt	5.0	.2	.3		
Copper	10	1.2	3		
Iron	200	6.4	12		
Lead	10	.7	.85	1.2	<10
Lithium	50		2		
Magnesium	5000	27	36		
Manganese	15	.1	1.3		
Molybdenum	20	.2	.22		
Nickel	5.0	.2	.12	-0.20	<5.0
Potassium	10000	18	44		
Selenium	10	1.8	2.2		
Silicon	100	1.2	6.9		
Silver	5.0	.3	.47		
Sodium	10000	15	13		
Strontium	10	.2	.24		
Thallium	10	.5	.54		
Tin	50	.2	.7		
Titanium	10	.4	.34		
Vanadium	10	.3	.3		
Zinc	20	.3	4.2	4.6	<20

Associated samples MP6756: C29884-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6756
Matrix Type: AQUEOUSMethods: SW846 6010B
Units: ug/l

Prep Date: 09/24/13

Metal	C29694-6 Original MS	Spikelot MPIR4	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	0.20	527	500	105.4
Calcium	anr			
Chromium	1.6	521	500	103.9
Cobalt				
Copper				
Iron	anr			
Lead	0.0	518	500	103.6
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	22.9	554	500	106.2
Potassium				
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	541	1030	500	97.8

Associated samples MP6756: C29884-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6756
Matrix Type: AQUEOUSMethods: SW846 6010B
Units: ug/l

Prep Date:

09/24/13

Metal	C29694-6 Original	MSD	Spikelot MPIR4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Bismuth						
Boron						
Cadmium	0.20	524	500	104.8	0.6	20
Calcium	anr					
Chromium	1.6	523	500	104.3	0.4	20
Cobalt						
Copper						
Iron	anr					
Lead	0.0	516	500	103.2	0.4	20
Lithium						
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	22.9	553	500	106.0	0.2	20
Potassium						
Selenium						
Silicon						
Silver						
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	541	1030	500	97.8	0.0	20

Associated samples MP6756: C29884-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6756
Matrix Type: AQUEOUSMethods: SW846 6010B
Units: ug/l

Prep Date:

09/24/13

Metal	BSP Result	Spikelot MPIR4	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium	537	500	107.4	80-120
Calcium	anr			
Chromium	550	500	110.0	80-120
Cobalt				
Copper				
Iron	anr			
Lead	529	500	105.8	80-120
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	521	500	104.2	80-120
Potassium				
Selenium				
Silicon				
Silver				
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	548	500	109.6	80-120

Associated samples MP6756: C29884-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: C29884
 Account: GGTRCASF - Golden Gate Tank Removal
 Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6756
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 09/24/13

Metal	C29694-6	Original	SDL 1:5	%DIF	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Bismuth					
Boron					
Cadmium	0.200	1.00	400.0	(a)	0-10
Calcium	anr				
Chromium	1.60	1.80	12.5	(a)	0-10
Cobalt					
Copper					
Iron	anr				
Lead	0.00	0.00	NC		0-10
Lithium					
Magnesium	anr				
Manganese	anr				
Molybdenum					
Nickel	22.9	19.3	15.7*	(b)	0-10
Potassium					
Selenium					
Silicon					
Silver					
Sodium	anr				
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	541	517	4.5		0-10

Associated samples MP6756: C29884-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

SERIAL DILUTION RESULTS SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6756
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

(b) Serial dilution indicates possible matrix interference.

8.1.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C29884
Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6765
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

09/25/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015	0.010	<1.0
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054	0.030	<1.0
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.12	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024	0.010	<1.0
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098	-0.22	<2.0

Associated samples MP6765: C29884-3, C29884-4, C29884-9, C29884-14

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6765
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 09/25/13

Metal	C29890-1 Original MS	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	0.16	45.3	43.9	102.9
Calcium				
Chromium	37.2	86.3	43.9	111.9
Cobalt	anr			
Copper	anr			
Iron				
Lead	5.6	51.3	43.9	104.2
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	40.2	90.4	43.9	114.5
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	66.1	98.5	43.9	73.9N(a) 75-125

Associated samples MP6765: C29884-3, C29884-4, C29884-9, C29884-14

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29884
 Account: GGTRCASF - Golden Gate Tank Removal
 Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6765
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date:

09/25/13

Metal	C29890-1 Original	MSD	Spikelot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.16	42.8	42	101.5	5.7	20
Calcium						
Chromium	37.2	81.4	42	105.2	5.8	20
Cobalt	anr					
Copper	anr					
Iron						
Lead	5.6	48.8	42	102.8	5.0	20
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	40.2	84.9	42	106.4	6.3	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	66.1	97.7	42	75.2	0.8	20

Associated samples MP6765: C29884-3, C29884-4, C29884-9, C29884-14

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6765
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 09/25/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	43.7	50	87.4	80-120
Calcium				
Chromium	43.9	50	87.8	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	43.9	50	87.8	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	42.9	50	85.8	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	44.4	50	88.8	80-120

Associated samples MP6765: C29884-3, C29884-4, C29884-9, C29884-14

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

(anr) Analyte not requested

8.2.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: C29884

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6765
Matrix Type: SOLIDMethods: SW846 6010B
Units: ug/l

Prep Date: 09/25/13

Metal	C29890-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	1.80	1.80	0.0	0-10
Calcium				
Chromium	424	469	10.6*(a)	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	64.0	75.5	18.0*(a)	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	458	470	2.4	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	754	761	0.9	0-10

Associated samples MP6765: C29884-3, C29884-4, C29884-9, C29884-14

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Serial dilution indicates possible matrix interference.



10/11/13



Technical Report for

Golden Gate Tank Removal

2915 Broadway - Oakland, CA

9378

Accutest Job Number: C30144

Sampling Date: 10/03/13

Report to:

Golden Gate Tank Removal
1455 Yosemite Avenue
San Francisco, CA 94124
Data@ggtr.com; b.wheeler@ggtr.com;
annettechen@ggtr.com; tim@ggtr.com;
ATTN: Tim Hallen

Total number of pages in report: **39**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "James J. Rhudy".

James J. Rhudy
Lab Director

Client Service contact: Tony Vega 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: C30144-1: 9378-REMOTE FILL	6
Section 4: Misc. Forms	12
4.1: Chain of Custody	13
Section 5: GC/MS Volatiles - QC Data Summaries	15
5.1: Method Blank Summary	16
5.2: Blank Spike/Blank Spike Duplicate Summary	19
5.3: Laboratory Control Sample Summary	22
5.4: Matrix Spike/Matrix Spike Duplicate Summary	23
Section 6: GC/MS Semi-volatiles - QC Data Summaries	26
6.1: Method Blank Summary	27
6.2: Blank Spike/Blank Spike Duplicate Summary	28
6.3: Matrix Spike/Matrix Spike Duplicate Summary	29
Section 7: GC Semi-volatiles - QC Data Summaries	30
7.1: Method Blank Summary	31
7.2: Blank Spike/Blank Spike Duplicate Summary	32
7.3: Matrix Spike/Matrix Spike Duplicate Summary	33
Section 8: Metals Analysis - QC Data Summaries	34
8.1: Prep QC MP6833: Cd,Cr,Pb,Ni,Zn	35

1
2
3
4
5
6
7
8



Sample Summary

Golden Gate Tank Removal

Job No: C30144

2915 Broadway - Oakland, CA
Project No: 9378

Sample Number	Collected Date	Time By	Matrix Received	Code Type	Client Sample ID
C30144-1	10/03/13	00:00 RL	10/07/13	SO	Soil

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C30144
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 10/03/13

Lab Sample ID Analyte	Client Sample ID Qual	Result/ RL	MDL	Units	Method
C30144-1 9378-REMOTE FILL					
TPH (C10-C28)	51.6	20	5.0	mg/kg	SW846 8015B M
TPH (> C28-C40)	130	40	9.9	mg/kg	SW846 8015B M
Chromium	35.5	0.83		mg/kg	SW846 6010B
Lead	3.3	1.7		mg/kg	SW846 6010B
Nickel	22.3	0.83		mg/kg	SW846 6010B
Zinc	18.5	1.7		mg/kg	SW846 6010B



Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

3

Client Sample ID: 9378-REMOTE FILL
Lab Sample ID: C30144-1
Matrix: SO - Soil
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 10/03/13
Date Received: 10/07/13
Percent Solids: n/a^a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L27923.D	1	10/07/13	XB	n/a	n/a	VL883
Run #2							

Initial Weight	
Run #1	5.14 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.7	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromo(chloromethane)	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.97	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	0.49	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-REMOTE FILL	Date Sampled:	10/03/13
Lab Sample ID:	C30144-1	Date Received:	10/07/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.97	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.97	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.97	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	19	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.97	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.97	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.58	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.97	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	0.97	ug/kg	
	TPH-GRO (C6-C10)	ND	97	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3-1
3

Client Sample ID:	9378-REMOTE FILL	Date Sampled:	10/03/13
Lab Sample ID:	C30144-1	Date Received:	10/07/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	103%		70-130%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-REMOTE FILL	Date Sampled:	10/03/13
Lab Sample ID:	C30144-1	Date Received:	10/07/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y22897.D	1	10/09/13	MT	10/08/13	OP8846	EY1054
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	72	ug/kg	
208-96-8	Acenaphthylene	ND	170	77	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	76	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		15-101%
321-60-8	2-Fluorobiphenyl	70%		15-104%
1718-51-0	Terphenyl-d14	85%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-REMOTE FILL	Date Sampled:	10/03/13
Lab Sample ID:	C30144-1	Date Received:	10/07/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG47745.D	2	10/09/13	NN	10/07/13	OP8837	GGG1301
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	51.6	20	5.0	mg/kg	
	TPH (> C28-C40)	130	40	9.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	83%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-REMOTE FILL	Date Sampled:	10/03/13
Lab Sample ID:	C30144-1	Date Received:	10/07/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.83	0.83	mg/kg	1	10/08/13	10/10/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	35.5	0.83	mg/kg	1	10/08/13	10/10/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	3.3	1.7	mg/kg	1	10/08/13	10/10/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	22.3	0.83	mg/kg	1	10/08/13	10/10/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	18.5	1.7	mg/kg	1	10/08/13	10/10/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3500

(2) Prep QC Batch: MP6833

(a) All results reported on a wet weight basis.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

GGTRCASF5522

Client / Reporting Information		Project Information		FED-EX Tracking #		Bottle Order Control #	
Company Name <i>Golden Gate Tank Removal</i>	Project Name:	Address 1455 Yosemite Ave.	Street 2915 Broadway	Accutest Quote #	Accutest NC Job #: C	C30144	
City San Francisco CA 94114	State CA	Zip	City Oakland, CA.	State			
Project Contact: Tim Hellen	Project # 9378	EMAIL: t.hellen@gefril.com					
Samplers's Name R. LIMON	Client Purchase Order #						
				Requested Analysis		Matrix Codes	
				BT	Number of preserved Bottles		
		Date	Time	Sampled by R.L.	Matrix SO	1	WW: Wastewater GW: Ground Water SW: Surface Water SO: Soil OI: Oil WP: Wipe LIQ: Non-aqueous Liquid DW: Drinking Water (Perchlorate Only)
					TPH	X X X X X X	AIR
					TPH - GASES	X X X X X X	DW
					VOCs (METHANE)	X X X X X X	
					MTBE, TBA, EDS, EDX	X X X X X X	
					1% PRECIPITANT	X X X X X X	
					LEAD & METALS	X X X X X X	
							LAB USE ONLY

Accutest Sample ID	Collection	Data Deliverable Information	Comments / Remarks					
1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Date: 10/3/13</td> <td>Time: 10:00</td> <td>Sampled by: R.L.</td> <td>Matrix: SO</td> <td>Number of preserved Bottles: 1</td> </tr> </table>	Date: 10/3/13	Time: 10:00	Sampled by: R.L.	Matrix: SO	Number of preserved Bottles: 1	<input type="checkbox"/> Commercial "A" - Results only <input checked="" type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format <input type="checkbox"/> Provide EDF Global ID <input type="checkbox"/> Provide EDF Logcode:	BT = BRASS TUBE
Date: 10/3/13	Time: 10:00	Sampled by: R.L.	Matrix: SO	Number of preserved Bottles: 1				
Turnaround Time (Business days)								
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day (125% markup) <input type="checkbox"/> 2 Day (150% markup) <input type="checkbox"/> 1 Day (200% markup) <input type="checkbox"/> Same Day (300% markup)		Approved By / Date: <i>STANDARD 1-DAY TAT</i> <input type="checkbox"/> Commercial "A" - Results only <input checked="" type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format <input type="checkbox"/> Provide EDF Global ID <input type="checkbox"/> Provide EDF Logcode:						
Emergency T/A data available VIA Lablink Sample Custody must be documented below each time samples change possession, including courier delivery.								
Relinquished by Sampler: 1 <i>R. LIMON</i>	Date Time: 10-4-13 10:00	Received By: <i>Mike Monks</i>	Relinquished By: <i>Mike Monks</i>	Date Time: 10-7-13 12:20	Received By: <i>Megan Beaman</i>			
Relinquished by: 3	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:			
Relinquished by: 5	Date Time:	Received By:	Custody Seal #	Appropriate Bottle / Pressure Labels match Coc? Y / N	Headspace Y / N On Ice Y / N Cooler Temp. Separate Receiving Check List used: Y / N			

C30144: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

4.1

4

Accutest Job Number:	C30144	Client:	GOLDEN GATE TANK RENEWAL	Project:	2915 Broadway - Oakland, CA
Date / Time Received:	10/7/2013	Delivery Method:	Accutest Courier	Airbill #'s:	
Cooler Temps (Initial/Adjusted): #1: (1.4/-0.1): 0					
Cooler Security		Y or N	Y or N	Sample Integrity - Documentation	
1. Custody Seals Present:	<input type="checkbox"/> <input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	1. Sample labels present on bottles:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>	2. Container labeling complete:	<input checked="" type="checkbox"/> <input type="checkbox"/>
Cooler Temperature		Y or N	Y or N	3. Sample container label / COC agree:	<input checked="" type="checkbox"/> <input type="checkbox"/>
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>				
2. Cooler temp verification:	IR1 Plastic;				
3. Cooler media:	Ice (Bag)				
4. No. Coolers:	1				
Quality Control Preservation		Y or N	N/A	Sample Integrity - Condition	
1. Trip Blank present / cooler:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			1. Sample recvd within HT:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>			2. All containers accounted for:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Samples preserved properly:	<input type="checkbox"/> <input type="checkbox"/>			3. Condition of sample:	<input type="checkbox"/>
4. VOCs headspace free:	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>				
Intact					

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

C30144: Chain of Custody

Page 2 of 2



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-MB	L27917.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-MB	L27917.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

5.1.1
5

Method Blank Summary

Page 3 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-MB	L27917.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-BS	L27914.D	1	10/07/13	XB	n/a	n/a	VL883
VL883-BSD	L27915.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	137	86	134	84	2	62-130/24
71-43-2	Benzene	40	37.3	93	35.9	90	4	81-119/20
108-86-1	Bromobenzene	40	35.2	88	33.9	85	4	79-120/22
74-97-5	Bromochloromethane	40	36.6	92	36.5	91	0	81-120/19
75-27-4	Bromodichloromethane	40	38.7	97	37.9	95	2	79-124/20
75-25-2	Bromoform	40	38.1	95	37.6	94	1	76-128/21
104-51-8	n-Butylbenzene	40	35.4	89	33.9	85	4	79-123/26
135-98-8	sec-Butylbenzene	40	35.8	90	34.3	86	4	77-122/24
98-06-6	tert-Butylbenzene	40	35.9	90	34.6	87	4	77-121/23
108-90-7	Chlorobenzene	40	36.2	91	35.1	88	3	82-121/20
75-00-3	Chloroethane	40	36.5	91	36.7	92	1	80-126/21
67-66-3	Chloroform	40	37.6	94	36.3	91	4	82-123/20
95-49-8	o-Chlorotoluene	40	33.5	84	31.9	80	5	78-125/25
106-43-4	p-Chlorotoluene	40	35.6	89	34.5	86	3	75-125/26
56-23-5	Carbon tetrachloride	40	39.5	99	37.5	94	5	82-127/22
75-34-3	1,1-Dichloroethane	40	37.0	93	35.7	89	4	80-123/20
75-35-4	1,1-Dichloroethylene	40	36.3	91	34.5	86	5	76-123/19
563-58-6	1,1-Dichloropropene	40	37.9	95	35.9	90	5	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	37.3	93	36.5	91	2	64-133/23
106-93-4	1,2-Dibromoethane	40	37.2	93	36.4	91	2	80-120/20
107-06-2	1,2-Dichloroethane	40	38.9	97	38.3	96	2	76-132/21
78-87-5	1,2-Dichloropropane	40	37.3	93	36.2	91	3	80-121/20
142-28-9	1,3-Dichloropropane	40	37.1	93	36.1	90	3	78-120/20
108-20-3	Di-Isopropyl ether	40	37.2	93	36.1	90	3	78-126/19
594-20-7	2,2-Dichloropropane	40	37.9	95	35.9	90	5	77-132/22
124-48-1	Dibromochloromethane	40	37.7	94	37.0	93	2	76-121/21
75-71-8	Dichlorodifluoromethane	40	33.8	85	35.7	89	5	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	36.1	90	35.4	89	2	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	37.9	95	37.1	93	2	81-124/21
541-73-1	m-Dichlorobenzene	40	35.3	88	33.8	85	4	79-123/23
95-50-1	o-Dichlorobenzene	40	35.3	88	34.4	86	3	79-124/22
106-46-7	p-Dichlorobenzene	40	35.0	88	34.0	85	3	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	36.5	91	34.5	86	6	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	37.5	94	36.7	92	2	81-123/22
100-41-4	Ethylbenzene	40	36.9	92	35.6	89	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	37.4	94	36.7	92	2	75-132/21

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-BS	L27914.D	1	10/07/13	XB	n/a	n/a	VL883
VL883-BSD	L27915.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	153	96	151	94	1	68-139/24
87-68-3	Hexachlorobutadiene	40	35.6	89	34.1	85	4	81-126/32
98-82-8	Isopropylbenzene	40	36.9	92	35.4	89	4	81-122/22
99-87-6	p-Isopropyltoluene	40	35.8	90	34.5	86	4	81-121/23
108-10-1	4-Methyl-2-pentanone	160	158	99	156	98	1	74-136/23
74-83-9	Methyl bromide	40	36.0	90	36.2	91	1	82-124/20
74-87-3	Methyl chloride	40	35.2	88	36.4	91	3	60-132/26
74-95-3	Methylene bromide	40	38.8	97	37.7	94	3	82-120/20
75-09-2	Methylene chloride	40	36.9	92	35.3	88	4	75-119/20
78-93-3	Methyl ethyl ketone	160	151	94	147	92	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	37.7	94	37.0	93	2	79-127/19
91-20-3	Naphthalene	40	36.6	92	36.4	91	1	78-125/23
103-65-1	n-Propylbenzene	40	35.7	89	34.1	85	5	79-124/22
100-42-5	Styrene	40	36.8	92	36.1	90	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	37.4	94	36.7	92	2	80-127/20
75-65-0	Tert Butyl Alcohol	200	211	106	182	91	15	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	36.3	91	36.0	90	1	82-123/21
71-55-6	1,1,1-Trichloroethane	40	38.5	96	36.5	91	5	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	36.2	91	35.6	89	2	77-126/20
79-00-5	1,1,2-Trichloroethane	40	37.5	94	37.0	93	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	35.4	89	34.9	87	1	81-122/26
96-18-4	1,2,3-Trichloropropane	40	38.5	96	38.3	96	1	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	34.9	87	34.5	86	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	35.9	90	34.9	87	3	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	36.2	91	34.6	87	5	81-123/23
127-18-4	Tetrachloroethylene	40	36.1	90	34.2	86	5	80-125/25
108-88-3	Toluene	40	36.2	91	35.1	88	3	80-117/21
79-01-6	Trichloroethylene	40	37.5	94	36.0	90	4	81-122/20
75-69-4	Trichlorofluoromethane	40	37.5	94	38.3	96	2	77-133/22
75-01-4	Vinyl chloride	40	33.3	83	36.0	90	8	71-133/23
1330-20-7	Xylene (total)	120	110	92	107	89	3	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	94%	93%	70-130%

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-BS	L27914.D	1	10/07/13	XB	n/a	n/a	VL883
VL883-BSD	L27915.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	100%	98%	70-130%
460-00-4	4-Bromofluorobenzene	106%	105%	70-130%

* = Outside of Control Limits.

5.2.1
5

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL883-LCS	L27916.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	226	90	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30144-1MS	L27924.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1MSD	L27925.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1	L27923.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	C30144-1		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
67-64-1	Acetone	ND		156	159	102	155	97	3	62-130/24
71-43-2	Benzene	ND		39.1	34.5	88	33.8	85	2	81-119/20
108-86-1	Bromobenzene	ND		39.1	33.1	85	32.5	82	2	79-120/22
74-97-5	Bromochloromethane	ND		39.1	35.2	90	35.0	88	1	81-120/19
75-27-4	Bromodichloromethane	ND		39.1	37.6	96	36.8	93	2	79-124/20
75-25-2	Bromoform	ND		39.1	38.9	100	38.2	96	2	76-128/21
104-51-8	n-Butylbenzene	ND		39.1	31.8	81	29.6	74* a	7	79-123/26
135-98-8	sec-Butylbenzene	ND		39.1	32.8	84	30.7	77	7	77-122/24
98-06-6	tert-Butylbenzene	ND		39.1	33.4	86	31.8	80	5	77-121/23
108-90-7	Chlorobenzene	ND		39.1	34.5	88	33.5	84	3	82-121/20
75-00-3	Chloroethane	ND		39.1	33.8	87	33.9	85	0	80-126/21
67-66-3	Chloroform	ND		39.1	35.7	91	35.2	89	1	82-123/20
95-49-8	o-Chlorotoluene	ND		39.1	31.2	80	33.1	83	6	78-125/25
106-43-4	p-Chlorotoluene	ND		39.1	33.9	87	32.2	81	5	75-125/26
56-23-5	Carbon tetrachloride	ND		39.1	36.5	93	35.5	89	3	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.1	33.7	86	33.0	83	2	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.1	26.6	68* a	26.2	66* a	2	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.1	34.9	89	33.9	85	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.1	36.0	92	36.6	92	2	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.1	37.3	95	36.7	92	2	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.1	37.6	96	37.5	94	0	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.1	35.8	92	35.2	89	2	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.1	36.6	94	35.9	90	2	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.1	35.4	91	35.1	88	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.1	33.9	87	33.0	83	3	77-132/22
124-48-1	Dibromochloromethane	ND		39.1	38.1	98	36.8	93	3	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.1	36.7	94	37.4	94	2	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.1	34.3	88	33.0	83	4	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.1	36.4	93	35.8	90	2	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.1	32.7	84	31.5	79	4	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.1	33.1	85	32.0	80	3	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.1	32.8	84	31.6	79	4	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.1	31.7	81	31.2	78	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.1	36.6	94	36.1	91	1	81-123/22
100-41-4	Ethylbenzene	ND		39.1	35.5	91	33.9	85	5	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		39.1	36.4	93	36.0	91	1	75-132/21

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30144-1MS	L27924.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1MSD	L27925.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1	L27923.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Compound	C30144-1		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
591-78-6	2-Hexanone	ND		156	169	108	166	104	2	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.1	28.0	72* a	25.3	64* a	10	81-126/32
98-82-8	Isopropylbenzene	ND		39.1	35.4	91	33.4	84	6	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.1	32.6	83	30.7	77* a	6	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		156	166	106	167	105	1	74-136/23
74-83-9	Methyl bromide	ND		39.1	36.6	94	36.5	92	0	82-124/20
74-87-3	Methyl chloride	ND		39.1	34.0	87	33.9	85	0	60-132/26
74-95-3	Methylene bromide	ND		39.1	38.3	98	38.2	96	0	82-120/20
75-09-2	Methylene chloride	ND		39.1	31.7	81	30.8	77	3	75-119/20
78-93-3	Methyl ethyl ketone	ND		156	165	106	164	103	1	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.1	36.1	92	36.0	91	0	79-127/19
91-20-3	Naphthalene	ND		39.1	35.8	92	34.8	88	3	78-125/23
103-65-1	n-Propylbenzene	ND		39.1	33.4	86	31.7	80	5	79-124/22
100-42-5	Styrene	ND		39.1	35.4	91	34.0	86	4	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.1	37.0	95	36.9	93	0	80-127/20
75-65-0	Tert Butyl Alcohol	ND		195	224	115	217	109	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.1	35.8	92	34.6	87	3	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.1	35.8	92	34.8	88	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.1	37.3	95	36.8	93	1	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.1	37.6	96	36.7	92	2	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.1	32.2	82	30.4	76* a	6	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.1	39.8	102	38.7	97	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.1	31.5	81	29.5	74* a	7	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.1	33.7	86	32.1	81* a	5	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.1	33.6	86	31.9	80* a	5	81-123/23
127-18-4	Tetrachloroethylene	ND		39.1	36.8	94	35.3	89	4	80-125/25
108-88-3	Toluene	ND		39.1	34.7	89	33.8	85	3	80-117/21
79-01-6	Trichloroethylene	ND		39.1	35.7	91	34.3	86	4	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.1	38.9	100	38.6	97	1	77-133/22
75-01-4	Vinyl chloride	ND		39.1	34.6	89	34.2	86	1	71-133/23
1330-20-7	Xylene (total)	ND		117	106	90	101	85	5	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C30144-1	Limits
1868-53-7	Dibromofluoromethane	99%	101%	98%	70-130%

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30144-1MS	L27924.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1MSD	L27925.D	1	10/07/13	XB	n/a	n/a	VL883
C30144-1	L27923.D	1	10/07/13	XB	n/a	n/a	VL883

The QC reported here applies to the following samples:

Method: SW846 8260B

C30144-1

CAS No.	Surrogate Recoveries	MS	MSD	C30144-1	Limits
2037-26-5	Toluene-D8	98%	98%	96%	70-130%
460-00-4	4-Bromofluorobenzene	104%	105%	103%	70-130%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

5.4.1
5



GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8846-MB	Y22859.D	1	10/08/13	MT	10/08/13	OP8846	EY1053

The QC reported here applies to the following samples:

Method: SW846 8270C

C30144-1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	66% 14-99%
4165-62-2	Phenol-d5	71% 18-100%
118-79-6	2,4,6-Tribromophenol	79% 25-107%
4165-60-0	Nitrobenzene-d5	70% 15-101%
321-60-8	2-Fluorobiphenyl	69% 15-104%
1718-51-0	Terphenyl-d14	84% 56-123%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8846-BS	Y22860.D	1	10/08/13	MT	10/08/13	OP8846	EY1053
OP8846-BSD	Y22861.D	1	10/08/13	MT	10/08/13	OP8846	EY1053

The QC reported here applies to the following samples:

Method: SW846 8270C

C30144-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	833	648	78	663	80	2	34-112/28
208-96-8	Acenaphthylene	833	641	77	640	77	0	33-115/28
120-12-7	Anthracene	833	706	85	726	87	3	59-111/21
56-55-3	Benzo(a)anthracene	833	724	87	757	91	4	72-122/22
50-32-8	Benzo(a)pyrene	833	750	90	762	91	2	71-120/22
205-99-2	Benzo(b)fluoranthene	833	680	82	727	87	7	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	771	93	722	87	7	57-134/24
207-08-9	Benzo(k)fluoranthene	833	733	88	768	92	5	74-126/25
218-01-9	Chrysene	833	702	84	724	87	3	73-125/22
53-70-3	Dibenz(a,h)anthracene	833	850	102	787	94	8	59-132/23
206-44-0	Fluoranthene	833	776	93	795	95	2	69-117/21
86-73-7	Fluorene	833	703	84	703	84	0	42-112/24
193-39-5	Indeno(1,2,3-cd)pyrene	833	817	98	756	91	8	60-131/21
90-12-0	1-Methylnaphthalene	833	645	77	649	78	1	33-110/30
91-57-6	2-Methylnaphthalene	833	618	74	628	75	2	33-107/30
91-20-3	Naphthalene	833	592	71	592	71	0	32-121/31
85-01-8	Phenanthrene	833	706	85	719	86	2	57-113/21
129-00-0	Pyrene	833	643	77	682	82	6	63-120/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	72%	71%	14-99%
4165-62-2	Phenol-d5	77%	78%	18-100%
118-79-6	2,4,6-Tribromophenol	88%	90%	25-107%
4165-60-0	Nitrobenzene-d5	76%	76%	15-101%
321-60-8	2-Fluorobiphenyl	77%	78%	15-104%
1718-51-0	Terphenyl-d14	78%	84%	56-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8846-MS	Y22872.D	1	10/08/13	MT	10/08/13	OP8846	EY1053
OP8846-MSD	Y22873.D	1	10/08/13	MT	10/08/13	OP8846	EY1053
C30157-3	Y22871.D	1	10/08/13	MT	10/08/13	OP8846	EY1053

The QC reported here applies to the following samples:

Method: SW846 8270C

C30144-1

CAS No.	Compound	C30157-3		Spike	MS	MS	MSD	MSD	Limits	
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%	RPD	Rec/RPD
83-32-9	Acenaphthene	170	U	832	546	66	525	63	4	34-112/28
208-96-8	Acenaphthylene	170	U	832	521	63	506	61	3	33-115/28
120-12-7	Anthracene	170	U	832	700	84	661	79	6	59-111/21
56-55-3	Benzo(a)anthracene	170	U	832	771	93	711	85	8	72-122/22
50-32-8	Benzo(a)pyrene	170	U	832	773	93	709	85	9	71-120/22
205-99-2	Benzo(b)fluoranthene	170	U	832	780	94	716	86	9	67-123/24
191-24-2	Benzo(g,h,i)perylene	170	U	832	640	77	590	71	8	57-134/24
207-08-9	Benzo(k)fluoranthene	170	U	832	796	96	743	89	7	74-126/25
218-01-9	Chrysene	170	U	832	740	89	677	81	9	73-125/22
53-70-3	Dibenz(a,h)anthracene	170	U	832	652	78	613	74	6	59-132/23
206-44-0	Fluoranthene	170	U	832	828	100	728	88	13	69-117/21
86-73-7	Fluorene	170	U	832	616	74	603	73	2	42-112/24
193-39-5	Indeno(1,2,3-cd)pyrene	170	U	832	669	80	624	75	7	60-131/21
90-12-0	1-Methylnaphthalene	170	U	832	509	61	487	59	4	33-110/30
91-57-6	2-Methylnaphthalene	170	U	832	488	59	463	56	5	33-107/30
91-20-3	Naphthalene	170	U	832	472	57	444	53	6	32-121/31
85-01-8	Phenanthrene	170	U	832	738	89	661	79	11	57-113/21
129-00-0	Pyrene	170	U	832	798	96	701	84	13	63-120/20

CAS No.	Surrogate Recoveries	MS	MSD	C30157-3	Limits
367-12-4	2-Fluorophenol	56%	53%	62%	14-99%
4165-62-2	Phenol-d5	61%	59%	69%	18-100%
118-79-6	2,4,6-Tribromophenol	85%	86%	86%	25-107%
4165-60-0	Nitrobenzene-d5	60%	58%	66%	15-101%
321-60-8	2-Fluorobiphenyl	61%	60%	69%	15-104%
1718-51-0	Terphenyl-d14	90%	88%	84%	56-123%

* = Outside of Control Limits.

6.3.1
6



GC Semi-volatiles

QC Data Summaries

7

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8837-MB	GG47635.D	1	10/07/13	NN	10/07/13	OP8837	GGG1299

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30144-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	74% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8837-BS	GG47633.D	1	10/07/13	NN	10/07/13	OP8837	GGG1299
OP8837-BSD	GG47634.D	1	10/07/13	NN	10/07/13	OP8837	GGG1299

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30144-1

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	Limits	
		mg/kg	mg/kg	%	mg/kg	%	RPD	Rec/RPD
	TPH (C10-C28)	100	72.6	73	72.2	72	1	39-102/29
	TPH (> C28-C40)	100	98.2	98	94.7	95	4	42-111/26
CAS No.	Surrogate Recoveries		BSP	BSD		Limits		
630-01-3	Hexacosane		77%	78%		37-122%		

* = Outside of Control Limits.

7.2.1

7

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C30144

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8837-MS	GG47696.D	1	10/08/13	NN	10/08/13	OP8837	GGG1300
OP8837-MSD	GG47697.D	1	10/08/13	NN	10/08/13	OP8837	GGG1300
C30145-2	GG47693.D	1	10/08/13	NN	10/08/13	OP8837	GGG1300

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30144-1

7.3.1

CAS No.	Compound	C30145-2		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		mg/kg	Q	mg/kg	mg/kg	%	mg/kg	%		
	TPH (C10-C28)	30.3		99.3	91.0	61	85.1	55	7	39-102/29
	TPH (> C28-C40)	76.2		99.3	151	75	141	65	7	42-111/26
<hr/>										
CAS No.	Surrogate Recoveries	MS	MSD	C30145-2		Limits				
630-01-3	Hexacosane	87%	84%	82%		37-122%				

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

∞

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C30144
Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6833
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

10/08/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015	0.040	<1.0
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054	-0.030	<1.0
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.37	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024	0.050	<1.0
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098	0.45	<2.0

Associated samples MP6833: C30144-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C30144

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6833
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 10/08/13

Metal	C30103-1 Original MS	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	0.073	37.1	40.3	91.8 75-125
Calcium				
Chromium	14.8	51.8	40.3	91.8 75-125
Cobalt	anr			
Copper	anr			
Iron				
Lead	5.7	42.5	40.3	91.3 75-125
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	11.4	48.5	40.3	92.0 75-125
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	35.9	72.1	40.3	89.8 75-125

Associated samples MP6833: C30144-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C30144

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6833
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date:

10/08/13

Metal	C30103-1 Original	MSD	Spikelot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.073	38.6	41	94.0	4.0	20
Calcium						
Chromium	14.8	53.5	41	94.4	3.2	20
Cobalt	anr					
Copper	anr					
Iron						
Lead	5.7	44.6	41	94.9	4.8	20
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	11.4	50.4	41	95.2	3.8	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	35.9	74.0	41	93.0	2.6	20

Associated samples MP6833: C30144-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.12
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C30144

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6833
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 10/08/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	46.4	50	92.8	80-120
Calcium				
Chromium	48.1	50	96.2	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	47.3	50	94.6	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	47.3	50	94.6	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	48.7	50	97.4	80-120

Associated samples MP6833: C30144-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: C30144

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6833
Matrix Type: SOLIDMethods: SW846 6010B
Units: ug/l

Prep Date: 10/08/13

Metal	C30103-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	0.900	0.00	100.0(a)	0-10
Calcium				
Chromium	182	233	27.7*(b)	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	70.6	76.9	8.9	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	140	161	15.4*(b)	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	442	532	20.3*(b)	0-10

Associated samples MP6833: C30144-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

8.1.4
8



10/24/13

Technical Report for

Golden Gate Tank Removal

2915 Broadway - Oakland, CA

9378

Accutest Job Number: C30355

Sampling Date: 10/16/13

Report to:

Golden Gate Tank Removal
1455 Yosemite Avenue
San Francisco, CA 94124
Data@ggtr.com; b.wheeler@ggtr.com;
annettechen@ggtr.com; tim@ggtr.com;
ATTN: Tim Hallen

Total number of pages in report: **80**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "James J. Rhudy".

James J. Rhudy
Lab Director

Client Service contact: Tony Vega 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3	1
Section 2: Summary of Hits	4	2
Section 3: Sample Results	6	3
3.1: C30355-1: 9378-EX-N-13	7	4
3.2: C30355-2: 9378-EX-S-13	13	5
3.3: C30355-3: 9378-GW-11.5	19	6
Section 4: Misc. Forms	24	7
4.1: Chain of Custody	25	8
Section 5: GC/MS Volatiles - QC Data Summaries	27	
5.1: Method Blank Summary	28	
5.2: Blank Spike/Blank Spike Duplicate Summary	38	
5.3: Laboratory Control Sample Summary	48	
5.4: Matrix Spike/Matrix Spike Duplicate Summary	52	
Section 6: GC/MS Semi-volatiles - QC Data Summaries	61	
6.1: Method Blank Summary	62	
6.2: Blank Spike/Blank Spike Duplicate Summary	64	
6.3: Matrix Spike/Matrix Spike Duplicate Summary	66	
Section 7: GC Semi-volatiles - QC Data Summaries	67	
7.1: Method Blank Summary	68	
7.2: Blank Spike/Blank Spike Duplicate Summary	71	
7.3: Matrix Spike/Matrix Spike Duplicate Summary	73	
Section 8: Metals Analysis - QC Data Summaries	75	
8.1: Prep QC MP6888: Cd,Cr,Pb,Ni,Zn	76	



Sample Summary

Golden Gate Tank Removal

Job No: C303552915 Broadway - Oakland, CA
Project No: 9378

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C30355-1	10/16/13	15:30 RL	10/18/13	SO	Soil	9378-EX-N-13
C30355-2	10/16/13	15:30 RL	10/18/13	SO	Soil	9378-EX-S-13
C30355-3	10/16/13	15:45 RL	10/18/13	AQ	Ground Water	9378-GW-11.5

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C30355
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 10/16/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

C30355-1 9378-EX-N-13

Acetone	20.1 J	40	9.9	ug/kg	SW846 8260B
Benzene	1.7 J	5.0	0.50	ug/kg	SW846 8260B
n-Butylbenzene	3.7 J	5.0	0.50	ug/kg	SW846 8260B
sec-Butylbenzene	25.8	5.0	0.50	ug/kg	SW846 8260B
tert-Butylbenzene	1.9 J	5.0	0.50	ug/kg	SW846 8260B
Chlorobenzene	1290	190	19	ug/kg	SW846 8260B
Ethylbenzene	1.8 J	5.0	0.50	ug/kg	SW846 8260B
Isopropylbenzene	13.1	5.0	0.50	ug/kg	SW846 8260B
n-Propylbenzene	22.8	5.0	0.50	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	29400	3800	1900	ug/kg	SW846 8260B
TPH (C10-C28)	99.9	40	9.9	mg/kg	SW846 8015B M
TPH (> C28-C40)	302	79	20	mg/kg	SW846 8015B M
Chromium	75.0	0.92		mg/kg	SW846 6010B
Lead	7.5	1.8		mg/kg	SW846 6010B
Nickel	69.7	0.92		mg/kg	SW846 6010B
Zinc	70.5	1.8		mg/kg	SW846 6010B

C30355-2 9378-EX-S-13

sec-Butylbenzene	44.1 J	180	18	ug/kg	SW846 8260B
Chlorobenzene	504	180	18	ug/kg	SW846 8260B
Isopropylbenzene	21.3 J	180	18	ug/kg	SW846 8260B
n-Propylbenzene	55.8 J	180	18	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	25300	3500	1800	ug/kg	SW846 8260B
Pyrene	33.8 J	170	33	ug/kg	SW846 8270C
TPH (C10-C28)	202	98	25	mg/kg	SW846 8015B M
TPH (> C28-C40)	626	200	49	mg/kg	SW846 8015B M
Chromium	79.6	0.86		mg/kg	SW846 6010B
Lead	8.3	1.7		mg/kg	SW846 6010B
Nickel	73.4	0.86		mg/kg	SW846 6010B
Zinc	69.9	1.7		mg/kg	SW846 6010B

C30355-3 9378-GW-11.5

Acetone ^b	8.9 J	20	4.0	ug/l	SW846 8260B
Benzene ^b	0.26 J	1.0	0.20	ug/l	SW846 8260B
n-Butylbenzene ^b	1.3 J	2.0	0.20	ug/l	SW846 8260B
sec-Butylbenzene ^b	0.70 J	2.0	0.20	ug/l	SW846 8260B
Chlorobenzene ^b	35.2	1.0	0.20	ug/l	SW846 8260B
o-Chlorotoluene ^b	1.3 J	2.0	0.20	ug/l	SW846 8260B
p-Chlorotoluene ^b	0.68 J	2.0	0.26	ug/l	SW846 8260B
Isopropylbenzene ^b	0.24 J	1.0	0.20	ug/l	SW846 8260B
Methyl Tert Butyl Ether ^b	0.60 J	1.0	0.20	ug/l	SW846 8260B

Summary of Hits

Job Number: C30355
Account: Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA
Collected: 10/16/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Naphthalene ^b	0.90 J	5.0	0.50	ug/l	SW846 8260B	
n-Propylbenzene ^b	1.0 J	2.0	0.20	ug/l	SW846 8260B	
Tert-Butyl Alcohol ^b	7.2 J	10	2.4	ug/l	SW846 8260B	
1,2,4-Trimethylbenzene ^b	1.3 J	2.0	0.20	ug/l	SW846 8260B	
1,3,5-Trimethylbenzene ^b	0.36 J	2.0	0.20	ug/l	SW846 8260B	
Xylene (total) ^b	1.5 J	2.0	0.46	ug/l	SW846 8260B	
TPH-GRO (C6-C10) ^c	116	100	50	ug/l	SW846 8260B	
TPH (C10-C28)	1.86	0.19	0.047	mg/l	SW846 8015B M	
TPH (> C28-C40)	0.374 J	0.38	0.094	mg/l	SW846 8015B M	

- (a) Atypical pattern; heavier hydrocarbons contributing to quantitation.
- (b) Sample vial contained floating product. Results may not be reproducible. Sample was not preserved to a pH < 2.
- (c) Sample vial contained floating product. Results may not be reproducible. Sample was not preserved to a pH < 2. Atypical pattern; heavier hydrocarbons contributing to quantitation.



Sample Results

Report of Analysis

Report of Analysis

Page 1 of 3

3

Client Sample ID: 9378-EX-N-13
Lab Sample ID: C30355-1
Matrix: SO - Soil
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 10/16/13
Date Received: 10/18/13
Percent Solids: n/a^a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L28181.D	1	10/19/13	XB	n/a	n/a	VL891
Run #2	L28216.D	1	10/22/13	XB	n/a	n/a	VL892

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g		
Run #2	6.53 g	5.0 ml	100 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	20.1	40	9.9	ug/kg	J
71-43-2	Benzene	1.7	5.0	0.50	ug/kg	J
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromo(chloromethane)	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	3.7	5.0	0.50	ug/kg	J
135-98-8	sec-Butylbenzene	25.8	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	1.9	5.0	0.50	ug/kg	J
108-90-7	Chlorobenzene	1290 ^b	190	19	ug/kg	
75-00-3	Chloroethane	ND	5.0	0.99	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	0.99	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-EX-N-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-1	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	1.8	5.0	0.50	ug/kg	J
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	0.99	ug/kg	
98-82-8	Isopropylbenzene	13.1	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	0.99	ug/kg	
74-87-3	Methyl chloride	ND	5.0	0.99	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
91-20-3	Naphthalene	ND	5.0	0.99	ug/kg	
103-65-1	n-Propylbenzene	22.8	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	9.9	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.99	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.99	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.99	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.59	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane ^c	ND	5.0	0.99	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	0.99	ug/kg	
	TPH-GRO (C6-C10) ^d	29400 ^b	3800	1900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	93%	70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

3-1
3

Client Sample ID:	9378-EX-N-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-1	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%	99%	70-130%
460-00-4	4-Bromofluorobenzene	105%	116%	70-130%

- (a) All results reported on a wet weight basis.
- (b) Result is from Run# 2
- (c) CCV outside of control limits (biased high); not detected in sample.
- (d) Atypical pattern; heavier hydrocarbons contributing to quantitation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-EX-N-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-1	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y23119.D	1	10/23/13	MT	10/21/13	OP8898	EY1063
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	52%		15-101%
321-60-8	2-Fluorobiphenyl	63%		15-104%
1718-51-0	Terphenyl-d14	95%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-EX-N-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-1	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3545A		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308705.D	4	10/21/13	AG	10/18/13	OP8891	GHH1109
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	99.9	40	9.9	mg/kg	
	TPH (> C28-C40)	302	79	20	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	87%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

3

Client Sample ID:	9378-EX-N-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-1	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.92	0.92	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	75.0	0.92	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	7.5	1.8	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	69.7	0.92	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	70.5	1.8	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3527

(2) Prep QC Batch: MP6888

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Page 1 of 3

32
3

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L28217.D	1	10/22/13	XB	n/a	n/a	VL892
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.05 g	5.0 ml	100 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	1400	350	ug/kg	
71-43-2	Benzene	ND	180	18	ug/kg	
108-86-1	Bromobenzene	ND	180	18	ug/kg	
74-97-5	Bromo(chloromethane)	ND	180	18	ug/kg	
75-27-4	Bromodichloromethane	ND	180	18	ug/kg	
75-25-2	Bromoform	ND	180	18	ug/kg	
104-51-8	n-Butylbenzene	ND	180	18	ug/kg	
135-98-8	sec-Butylbenzene	44.1	180	18	ug/kg	J
98-06-6	tert-Butylbenzene	ND	180	18	ug/kg	
108-90-7	Chlorobenzene	504	180	18	ug/kg	
75-00-3	Chloroethane	ND	180	35	ug/kg	
67-66-3	Chloroform	ND	180	18	ug/kg	
95-49-8	o-Chlorotoluene	ND	180	18	ug/kg	
106-43-4	p-Chlorotoluene	ND	180	18	ug/kg	
56-23-5	Carbon tetrachloride	ND	180	18	ug/kg	
75-34-3	1,1-Dichloroethane	ND	180	18	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	180	18	ug/kg	
563-58-6	1,1-Dichloropropene	ND	180	18	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	180	50	ug/kg	
106-93-4	1,2-Dibromoethane	ND	180	18	ug/kg	
107-06-2	1,2-Dichloroethane	ND	180	18	ug/kg	
78-87-5	1,2-Dichloropropane	ND	180	18	ug/kg	
142-28-9	1,3-Dichloropropane	ND	180	18	ug/kg	
108-20-3	Di-Isopropyl ether	ND	180	18	ug/kg	
594-20-7	2,2-Dichloropropane	ND	180	18	ug/kg	
124-48-1	Dibromo(chloromethane)	ND	180	18	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	180	35	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	180	39	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	180	18	ug/kg	
541-73-1	m-Dichlorobenzene	ND	180	18	ug/kg	
95-50-1	o-Dichlorobenzene	ND	180	18	ug/kg	
106-46-7	p-Dichlorobenzene	ND	180	18	ug/kg	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	180	18	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	180	18	ug/kg	
100-41-4	Ethylbenzene	ND	180	18	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	180	18	ug/kg	
591-78-6	2-Hexanone	ND	710	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	180	35	ug/kg	
98-82-8	Isopropylbenzene	21.3	180	18	ug/kg	J
99-87-6	p-Isopropyltoluene	ND	180	18	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	710	71	ug/kg	
74-83-9	Methyl bromide	ND	180	35	ug/kg	
74-87-3	Methyl chloride	ND	180	35	ug/kg	
74-95-3	Methylene bromide	ND	180	18	ug/kg	
75-09-2	Methylene chloride	ND	710	180	ug/kg	
78-93-3	Methyl ethyl ketone	ND	710	71	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	180	35	ug/kg	
91-20-3	Naphthalene	ND	180	35	ug/kg	
103-65-1	n-Propylbenzene	55.8	180	18	ug/kg	J
100-42-5	Styrene	ND	180	18	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	180	18	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	1400	350	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	180	18	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	180	18	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	180	18	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	180	18	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	180	18	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	180	35	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	180	18	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	180	35	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	180	35	ug/kg	
127-18-4	Tetrachloroethylene	ND	180	21	ug/kg	
108-88-3	Toluene	ND	180	18	ug/kg	
79-01-6	Trichloroethylene	ND	180	18	ug/kg	
75-69-4	Trichlorofluoromethane	ND	180	35	ug/kg	
75-01-4	Vinyl chloride	ND	180	35	ug/kg	
1330-20-7	Xylene (total)	ND	350	35	ug/kg	
	TPH-GRO (C6-C10) ^b	25300	3500	1800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 3 of 3

32
3

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	108%		70-130%

(a) All results reported on a wet weight basis.

(b) Atypical pattern; heavier hydrocarbons contributing to quantitation.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y23120.D	1	10/23/13	MT	10/21/13	OP8898	EY1063
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	33.8	170	33	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	46%		15-101%
321-60-8	2-Fluorobiphenyl	65%		15-104%
1718-51-0	Terphenyl-d14	92%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8015B M SW846 3545A		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308706.D	10	10/21/13	AG	10/18/13	OP8891	GHH1109
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	202	98	25	mg/kg	
	TPH (> C28-C40)	626	200	49	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	68%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

32
3

Client Sample ID:	9378-EX-S-13	Date Sampled:	10/16/13
Lab Sample ID:	C30355-2	Date Received:	10/18/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Project:	2915 Broadway - Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.86	0.86	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	79.6	0.86	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Lead	8.3	1.7	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	73.4	0.86	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	69.9	1.7	mg/kg	1	10/22/13	10/22/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3527

(2) Prep QC Batch: MP6888

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: 9378-GW-11.5
Lab Sample ID: C30355-3
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: 2915 Broadway - Oakland, CA

Date Sampled: 10/16/13
Date Received: 10/18/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	U14511.D	1	10/21/13	TF	n/a	n/a	VU562
Run #2 ^a	U14536.D	2	10/22/13	TF	n/a	n/a	VU563

Purge Volume	
Run #1	10.0 ml
Run #2	10.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.9	20	4.0	ug/l	J
71-43-2	Benzene	0.26	1.0	0.20	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromo(chloromethane)	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	1.3	2.0	0.20	ug/l	J
135-98-8	sec-Butylbenzene	0.70	2.0	0.20	ug/l	J
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	35.2	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	1.3	2.0	0.20	ug/l	J
106-43-4	p-Chlorotoluene	0.68	2.0	0.26	ug/l	J
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropene	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromo(chloromethane)	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 2 of 3

33
3

Client Sample ID:	9378-GW-11.5	Date Sampled:	10/16/13
Lab Sample ID:	C30355-3	Date Received:	10/18/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	0.24	1.0	0.20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.60	1.0	0.20	ug/l	J
91-20-3	Naphthalene	0.90	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	1.0	2.0	0.20	ug/l	J
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	7.2	10	2.4	ug/l	J
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.3	2.0	0.20	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.36	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	1.5	2.0	0.46	ug/l	J
	TPH-GRO (C6-C10) ^b	116 ^c	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	100%	70-130%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	9378-GW-11.5	Date Sampled:	10/16/13
Lab Sample ID:	C30355-3	Date Received:	10/18/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2915 Broadway - Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%	97%	70-130%
460-00-4	4-Bromofluorobenzene	111%	100%	70-130%

- (a) Sample vial contained floating product. Results may not be reproducible. Sample was not preserved to a pH < 2.
 (b) Atypical pattern; heavier hydrocarbons contributing to quantitation.
 (c) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33

Client Sample ID:	9378-GW-11.5	Date Sampled:	10/16/13
Lab Sample ID:	C30355-3	Date Received:	10/18/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	Y23122.D	4	10/23/13	MT	10/21/13	OP8896	EY1063
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	19	5.2	ug/l	
208-96-8	Acenaphthylene	ND	19	4.5	ug/l	
120-12-7	Anthracene	ND	19	4.8	ug/l	
56-55-3	Benzo(a)anthracene	ND	19	5.5	ug/l	
50-32-8	Benzo(a)pyrene	ND	19	4.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	19	5.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	19	5.7	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	19	5.3	ug/l	
218-01-9	Chrysene	ND	19	6.3	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	19	4.9	ug/l	
206-44-0	Fluoranthene	ND	19	5.6	ug/l	
86-73-7	Fluorene	ND	19	5.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	19	5.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	19	4.9	ug/l	
91-57-6	2-Methylnaphthalene	ND	19	5.1	ug/l	
91-20-3	Naphthalene	ND	19	4.7	ug/l	
85-01-8	Phenanthrene	ND	19	5.1	ug/l	
129-00-0	Pyrene	ND	19	6.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	40%		27-112%
321-60-8	2-Fluorobiphenyl	23% ^b		27-112%
1718-51-0	Terphenyl-d14	23% ^b		45-128%

(a) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

(b) Surrogate outside control limits due to matrix interference. Heavy emulsion formed during extraction process.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

33

Client Sample ID:	9378-GW-11.5	Date Sampled:	10/16/13
Lab Sample ID:	C30355-3	Date Received:	10/18/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015B M SW846 3510C		
Project:	2915 Broadway - Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308667.D	2	10/18/13	AG	10/18/13	OP8890	GHH1107
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.86	0.19	0.047	mg/l	
	TPH (> C28-C40)	0.374	0.38	0.094	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	78%		32-124%

ND = Not detected MDL - Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131
(408) 588-0200 FAX: (408) 588-0201

CGTRUSF5522

Client / Reporting Information		Project Information		FED-EX Tracking #		Bottle Order Control #														
Company Name GOLDEN GATE TRUNK Removals	Project Name:	Accutest Quote #	Accutest NC Job #: C			C30355														
Address 1455 YOSEMITE AVE	Street 2915 BROADWAY																			
City SAN FRANCISCO, CA 94124	State CA	City OAKLAND	State CA																	
Project Contact: JIM HALLEN	Project # 9378																			
Phone # 415-512-1585	EMAIL: AHJEN@GGTR.COM																			
Samplers Name RUBEN LIMON		Client Purchase Order #																		
Accutest Sample ID	Sample ID / Field Point / Point of Collection	Collection		Number of preserved Bottles						Matrix Codes										
		Date	Time	Sampled by	Matrix	# of bottles	O	T	N		P	Hg	As	None	Ni	Mo	Cr	Sn	As	U
1	9378-EX-N-13	10/13/13	1530	R.L.	SO	1 BT	X	X	X	X	X	X	X	X	X	X	X	X	X	
2	9378-EX-S-13	10/13/13	1530	R.L.	SO	1 BT	X	X	X	X	X	X	X	X	X	X	X	X	X	
3	9378-GW-11.5	10/13/13	1545	R.L.	GW	LP 4	Z	X	X	X	X	X	X	X	X	X	X	X	X	
Turnaround Time (Business days)				Data Deliverable Information						Comments / Remarks										
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day (125% markup) <input type="checkbox"/> 2 Day (150% markup) <input type="checkbox"/> 1 Day (200% markup) <input type="checkbox"/> Same Day (300% markup)		STANDARD 4 DAY TAT		<input type="checkbox"/> Commercial "A" - Results only <input checked="" type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B*" - Results, QC, and chromatograms <input type="checkbox"/> FULT1 - Level 4 data package <input type="checkbox"/> EDF for Geotacker <input type="checkbox"/> EDD Format Provide EDF Global ID _____ Provide EDF Logcode: _____						BT = BRASS TUBE										
Emergency T/A data available VIA Lablink																				
				Sample Custody must be documented below each time samples change possession, including courier delivery.																
Relinquished by Sample:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	RLW FOR RUBEN LIMON	10/13/13 1530	1	10/13/13 1005	2	10/13/13 1005	10/13/13 1005	2	10/13/13 1005	3	10/13/13 1005	4	10/13/13 1005	4	10/13/13 1005	5	10/13/13 1005	5	10/13/13 1005	6
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3																				
5																				

C30355: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C30355 **Client:** GOLDEN GATE TANK REMOVAL **Project:** 2915 BROADWAY, OAKLAND, CA
Date / Time Received: 10/18/2013 **Delivery Method:** Accutest Courier **Airbill #'s:** _____

Cooler Temps (Initial/Adjusted): #1: (3/2.5); 0

Cooler Security		Y or N	Y or N	Sample Integrity - Documentation		Y or N
1. Custody Seals Present:		<input type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present:		<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:		<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Smpl Dates/Time OK		<input checked="" type="checkbox"/> <input type="checkbox"/>
Cooler Temperature		Y or N				
1. Temp criteria achieved:		<input checked="" type="checkbox"/> <input type="checkbox"/>				
2. Cooler temp verification:		IR1 Glass;				<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Cooler media:		Ice (Bag)				<input checked="" type="checkbox"/> <input type="checkbox"/>
4. No. Coolers:		1				<input checked="" type="checkbox"/> <input type="checkbox"/>
Quality Control Preservation		Y or N	N/A	Sample Integrity - Condition		Y or N
1. Trip Blank present / cooler:		<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Sample received within HT:		<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Trip Blank listed on COC:		<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>	2. All containers accounted for:		<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Samples preserved properly:		<input checked="" type="checkbox"/> <input type="checkbox"/>	3. Condition of sample:		Intact	
4. VOCs headspace free:		<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5. Filtering instructions clear:		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

4.1

4

C30355: Chain of Custody

Page 2 of 2



GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-MB	L28165.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-MB	L28165.D	1	10/18/13	XB	n/a	n/a	VL891

5.1.1

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	102%	70-130%

Method Blank Summary

Page 3 of 3

Job Number: C30355
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-MB	L28165.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	104% 70-130%

5.1.1
5

Method Blank Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-MB	U14499.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-MB	U14499.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No. Surrogate Recoveries Limits

1868-53-7 Dibromofluoromethane 97% 70-130%

5.1.2
5

Method Blank Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-MB	U14499.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Surrogate Recoveries	Limits
---------	----------------------	--------

2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	95%	70-130%

Method Blank Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-MB	L28207.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-MB	L28207.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Page 3 of 3

Job Number: C30355
Account: GGTRCASF Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-MB	L28207.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No. Surrogate Recoveries Limits

1868-53-7	Dibromofluoromethane	93%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	106%	70-130%

5.1.3
5

Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU563-MB	U14526.D	1	10/22/13	TF	n/a	n/a	VU563

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	96%
2037-26-5	Toluene-D8	97%
460-00-4	4-Bromofluorobenzene	96%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-BS	L28162.D	1	10/18/13	XB	n/a	n/a	VL891
VL891-BSD	L28163.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	128	80	135	84	5	62-130/24
71-43-2	Benzene	40	39.9	100	40.9	102	2	81-119/20
108-86-1	Bromobenzene	40	36.1	90	38.3	96	6	79-120/22
74-97-5	Bromochloromethane	40	39.5	99	40.8	102	3	81-120/19
75-27-4	Bromodichloromethane	40	41.9	105	43.5	109	4	79-124/20
75-25-2	Bromoform	40	44.6	112	45.9	115	3	76-128/21
104-51-8	n-Butylbenzene	40	39.3	98	41.0	103	4	79-123/26
135-98-8	sec-Butylbenzene	40	36.6	92	38.3	96	5	77-122/24
98-06-6	tert-Butylbenzene	40	37.4	94	39.1	98	4	77-121/23
75-00-3	Chloroethane	40	38.0	95	39.0	98	3	80-126/21
67-66-3	Chloroform	40	43.3	108	44.5	111	3	82-123/20
95-49-8	o-Chlorotoluene	40	34.8	87	40.7	102	16	78-125/25
106-43-4	p-Chlorotoluene	40	35.3	88	37.8	95	7	75-125/26
56-23-5	Carbon tetrachloride	40	47.4	119	47.8	120	1	82-127/22
75-34-3	1,1-Dichloroethane	40	40.9	102	41.3	103	1	80-123/20
75-35-4	1,1-Dichloroethylene	40	40.5	101	40.3	101	0	76-123/19
563-58-6	1,1-Dichloropropene	40	43.6	109	44.5	111	2	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	38.2	96	41.0	103	7	64-133/23
106-93-4	1,2-Dibromoethane	40	39.4	99	41.1	103	4	80-120/20
107-06-2	1,2-Dichloroethane	40	45.5	114	47.6	119	5	76-132/21
78-87-5	1,2-Dichloropropane	40	38.8	97	40.3	101	4	80-121/20
142-28-9	1,3-Dichloropropane	40	38.7	97	40.6	102	5	78-120/20
108-20-3	Di-Isopropyl ether	40	39.2	98	40.7	102	4	78-126/19
594-20-7	2,2-Dichloropropane	40	44.1	110	44.2	111	0	77-132/22
124-48-1	Dibromochloromethane	40	41.5	104	43.9	110	6	76-121/21
75-71-8	Dichlorodifluoromethane	40	44.8	112	45.0	113	0	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	40.2	101	41.4	104	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	42.1	105	43.9	110	4	81-124/21
541-73-1	m-Dichlorobenzene	40	35.7	89	37.0	93	4	79-123/23
95-50-1	o-Dichlorobenzene	40	35.1	88	37.3	93	6	79-124/22
106-46-7	p-Dichlorobenzene	40	37.8	95	40.2	101	6	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	41.5	104	42.1	105	1	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	39.5	99	40.9	102	3	81-123/22
100-41-4	Ethylbenzene	40	41.0	103	42.3	106	3	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	44.8	112	47.0	118	5	75-132/21
591-78-6	2-Hexanone	160	163	102	172	108	5	68-139/24

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-BS	L28162.D	1	10/18/13	XB	n/a	n/a	VL891
VL891-BSD	L28163.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	40	40.1	100	42.3	106	5	81-126/32
98-82-8	Isopropylbenzene	40	38.7	97	39.5	99	2	81-122/22
99-87-6	p-Isopropyltoluene	40	36.9	92	38.5	96	4	81-121/23
108-10-1	4-Methyl-2-pentanone	160	166	104	168	105	1	74-136/23
74-83-9	Methyl bromide	40	37.3	93	39.5	99	6	82-124/20
74-87-3	Methyl chloride	40	42.9	107	45.6	114	6	60-132/26
74-95-3	Methylene bromide	40	41.2	103	42.4	106	3	82-120/20
75-09-2	Methylene chloride	40	39.4	99	41.1	103	4	75-119/20
78-93-3	Methyl ethyl ketone	160	157	98	160	100	2	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	43.5	109	45.4	114	4	79-127/19
91-20-3	Naphthalene	40	38.1	95	41.4	104	8	78-125/23
103-65-1	n-Propylbenzene	40	35.7	89	37.3	93	4	79-124/22
100-42-5	Styrene	40	40.7	102	41.7	104	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	42.9	107	44.7	112	4	80-127/20
75-65-0	Tert Butyl Alcohol	200	230	115	239	120	4	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	41.5	104	43.3	108	4	82-123/21
71-55-6	1,1,1-Trichloroethane	40	46.2	116	47.0	118	2	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	37.8	95	40.8	102	8	77-126/20
79-00-5	1,1,2-Trichloroethane	40	39.6	99	41.2	103	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	37.4	94	39.9	100	6	81-122/26
96-18-4	1,2,3-Trichloropropane	40	41.3	103	43.8	110	6	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	36.9	92	39.1	98	6	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	40.1	100	42.2	106	5	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	41.0	103	43.2	108	5	81-123/23
127-18-4	Tetrachloroethylene	40	39.6	99	39.5	99	0	80-125/25
108-88-3	Toluene	40	39.8	100	41.0	103	3	80-117/21
79-01-6	Trichloroethylene	40	41.8	105	41.9	105	0	81-122/20
75-69-4	Trichlorofluoromethane	40	45.5	114	46.2	116	2	77-133/22
75-01-4	Vinyl chloride	40	37.3	93	38.4	96	3	71-133/23
1330-20-7	Xylene (total)	120	116	97	119	99	3	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	104%	103%	70-130%
2037-26-5	Toluene-D8	100%	99%	70-130%

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-BS	L28162.D	1	10/18/13	XB	n/a	n/a	VL891
VL891-BSD	L28163.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	105%	106%	70-130%

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-BS	U14496.D	1	10/21/13	TF	n/a	n/a	VU562
VU562-BSD	U14497.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	80.8	101	81.8	102	1	38-159/24
71-43-2	Benzene	20	18.8	94	19.5	98	4	77-122/25
108-86-1	Bromobenzene	20	18.8	94	19.4	97	3	76-126/17
74-97-5	Bromochloromethane	20	19.6	98	20.2	101	3	77-130/17
75-27-4	Bromodichloromethane	20	18.5	93	19.0	95	3	75-127/16
75-25-2	Bromoform	20	19.7	99	20.1	101	2	69-141/17
104-51-8	n-Butylbenzene	20	19.0	95	19.6	98	3	72-129/18
135-98-8	sec-Butylbenzene	20	18.0	90	18.5	93	3	74-128/18
98-06-6	tert-Butylbenzene	20	17.9	90	18.4	92	3	73-127/18
108-90-7	Chlorobenzene	20	17.8	89	18.5	93	4	77-122/16
75-00-3	Chloroethane	20	20.7	104	20.6	103	0	69-133/18
67-66-3	Chloroform	20	19.4	97	20.2	101	4	74-126/17
95-49-8	o-Chlorotoluene	20	18.4	92	19.1	96	4	72-127/20
106-43-4	p-Chlorotoluene	20	17.5	88	18.1	91	3	68-127/18
56-23-5	Carbon tetrachloride	20	18.7	94	19.1	96	2	71-133/19
75-34-3	1,1-Dichloroethane	20	18.5	93	19.2	96	4	71-125/17
75-35-4	1,1-Dichloroethylene	20	18.7	94	19.0	95	2	66-125/20
563-58-6	1,1-Dichloropropene	20	19.2	96	19.7	99	3	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	19.0	95	19.2	96	1	65-131/20
106-93-4	1,2-Dibromoethane	20	19.4	97	20.0	100	3	75-135/17
107-06-2	1,2-Dichloroethane	20	18.0	90	18.4	92	2	71-131/17
78-87-5	1,2-Dichloropropane	20	19.2	96	19.8	99	3	78-124/16
142-28-9	1,3-Dichloropropane	20	18.8	94	19.4	97	3	78-123/16
108-20-3	Di-Isopropyl ether	20	17.8	89	18.4	92	3	68-129/17
594-20-7	2,2-Dichloropropane	20	19.6	98	20.2	101	3	70-131/19
124-48-1	Dibromochloromethane	20	19.0	95	19.6	98	3	76-132/16
75-71-8	Dichlorodifluoromethane	20	24.9	125	23.7	119	5	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	19.9	100	20.7	104	4	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	20.8	104	21.4	107	3	72-130/16
541-73-1	m-Dichlorobenzene	20	17.9	90	18.4	92	3	75-124/16
95-50-1	o-Dichlorobenzene	20	17.9	90	18.4	92	3	76-124/16
106-46-7	p-Dichlorobenzene	20	19.1	96	19.8	99	4	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	19.9	100	20.6	103	3	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	18.8	94	19.5	98	4	71-126/16
100-41-4	Ethylbenzene	20	19.0	95	19.8	99	4	76-126/17
637-92-3	Ethyl Tert Butyl Ether	20	22.0	110	22.8	114	4	75-134/17

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-BS	U14496.D	1	10/21/13	TF	n/a	n/a	VU562
VU562-BSD	U14497.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	79.7	100	80.7	101	1	67-150/22
87-68-3	Hexachlorobutadiene	20	16.6	83	17.7	89	6	69-135/20
98-82-8	Isopropylbenzene	20	17.7	89	18.4	92	4	61-125/17
99-87-6	p-Isopropyltoluene	20	17.6	88	18.2	91	3	68-127/18
108-10-1	4-Methyl-2-pentanone	80	77.8	97	78.4	98	1	71-142/21
74-83-9	Methyl bromide	20	23.4	117	23.3	117	0	68-132/18
74-87-3	Methyl chloride	20	18.6	93	18.9	95	2	39-150/28
74-95-3	Methylene bromide	20	19.3	97	19.6	98	2	77-127/16
75-09-2	Methylene chloride	20	19.2	96	19.8	99	3	67-128/18
78-93-3	Methyl ethyl ketone	80	87.6	110	88.8	111	1	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	21.5	108	22.0	110	2	73-132/17
91-20-3	Naphthalene	20	20.4	102	21.2	106	4	70-136/20
103-65-1	n-Propylbenzene	20	17.8	89	18.3	92	3	71-127/17
100-42-5	Styrene	20	19.2	96	20.0	100	4	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	23.1	116	23.9	120	3	73-133/17
75-65-0	Tert-Butyl Alcohol	100	117	117	113	113	3	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	19.3	97	20.1	101	4	77-130/16
71-55-6	1,1,1-Trichloroethane	20	19.2	96	19.9	100	4	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	20.6	103	20.9	105	1	77-129/17
79-00-5	1,1,2-Trichloroethane	20	19.9	100	20.5	103	3	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	19.3	97	20.4	102	6	70-133/18
96-18-4	1,2,3-Trichloropropane	20	20.4	102	20.8	104	2	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	18.7	94	19.5	98	4	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	19.4	97	20.1	101	4	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	19.9	100	20.5	103	3	77-129/17
127-18-4	Tetrachloroethylene	20	18.2	91	18.9	95	4	69-127/20
108-88-3	Toluene	20	19.0	95	19.7	99	4	75-122/17
79-01-6	Trichloroethylene	20	19.1	96	19.7	99	3	78-123/17
75-69-4	Trichlorofluoromethane	20	22.1	111	21.8	109	1	65-136/23
75-01-4	Vinyl chloride	20	22.4	112	22.8	114	2	57-146/22
1330-20-7	Xylene (total)	60	54.1	90	56.6	94	5	77-125/17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	101%	102%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-BS	U14496.D	1	10/21/13	TF	n/a	n/a	VU562
VU562-BSD	U14497.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	98%	98%	70-130%
460-00-4	4-Bromofluorobenzene	97%	98%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-BS	L28204.D	1	10/21/13	XB	n/a	n/a	VL892
VL892-BSD	L28205.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	112	70	114	71	2	62-130/24
71-43-2	Benzene	40	36.9	92	35.2	88	5	81-119/20
108-86-1	Bromobenzene	40	32.8	82	32.1	80	2	79-120/22
74-97-5	Bromochloromethane	40	34.9	87	34.9	87	0	81-120/19
75-27-4	Bromodichloromethane	40	39.2	98	38.5	96	2	79-124/20
75-25-2	Bromoform	40	38.7	97	37.7	94	3	76-128/21
104-51-8	n-Butylbenzene	40	36.0	90	34.7	87	4	79-123/26
135-98-8	sec-Butylbenzene	40	33.8	85	32.1	80	5	77-122/24
98-06-6	tert-Butylbenzene	40	34.4	86	33.0	83	4	77-121/23
108-90-7	Chlorobenzene	40	33.3	83	31.8	80* ^a	5	82-121/20
75-00-3	Chloroethane	40	32.5	81	34.3	86	5	80-126/21
67-66-3	Chloroform	40	39.6	99	38.9	97	2	82-123/20
95-49-8	o-Chlorotoluene	40	35.8	90	31.1	78	14	78-125/25
106-43-4	p-Chlorotoluene	40	32.2	81	32.1	80	0	75-125/26
56-23-5	Carbon tetrachloride	40	45.1	113	42.7	107	5	82-127/22
75-34-3	1,1-Dichloroethane	40	37.3	93	35.9	90	4	80-123/20
75-35-4	1,1-Dichloroethylene	40	37.3	93	36.0	90	4	76-123/19
563-58-6	1,1-Dichloropropene	40	40.6	102	37.9	95	7	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	33.4	84	32.7	82	2	64-133/23
106-93-4	1,2-Dibromoethane	40	34.6	87	33.9	85	2	80-120/20
107-06-2	1,2-Dichloroethane	40	42.6	107	41.7	104	2	76-132/21
78-87-5	1,2-Dichloropropane	40	36.0	90	34.8	87	3	80-121/20
142-28-9	1,3-Dichloropropane	40	33.9	85	33.5	84	1	78-120/20
108-20-3	Di-Isopropyl ether	40	36.0	90	35.5	89	1	78-126/19
594-20-7	2,2-Dichloropropane	40	41.9	105	40.3	101	4	77-132/22
124-48-1	Dibromochloromethane	40	37.4	94	36.5	91	2	76-121/21
75-71-8	Dichlorodifluoromethane	40	43.9	110	45.8	115	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	36.5	91	36.0	90	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	39.1	98	38.4	96	2	81-124/21
541-73-1	m-Dichlorobenzene	40	31.8	80	30.9	77* ^a	3	79-123/23
95-50-1	o-Dichlorobenzene	40	31.8	80	31.5	79	1	79-124/22
106-46-7	p-Dichlorobenzene	40	34.1	85	33.7	84	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	37.5	94	36.9	92	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	35.4	89	34.5	86	3	81-123/22
100-41-4	Ethylbenzene	40	37.2	93	35.4	89	5	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	41.1	103	41.3	103	0	75-132/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-BS	L28204.D	1	10/21/13	XB	n/a	n/a	VL892
VL892-BSD	L28205.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	137	86	135	84	1	68-139/24
87-68-3	Hexachlorobutadiene	40	37.7	94	35.5	89	6	81-126/32
98-82-8	Isopropylbenzene	40	35.0	88	33.2	83	5	81-122/22
99-87-6	p-Isopropyltoluene	40	33.7	84	32.4	81	4	81-121/23
108-10-1	4-Methyl-2-pentanone	160	142	89	145	91	2	74-136/23
74-83-9	Methyl bromide	40	35.9	90	37.6	94	5	82-124/20
74-87-3	Methyl chloride	40	39.4	99	41.3	103	5	60-132/26
74-95-3	Methylene bromide	40	37.3	93	36.8	92	1	82-120/20
75-09-2	Methylene chloride	40	36.4	91	36.1	90	1	75-119/20
78-93-3	Methyl ethyl ketone	160	132	83	134	84	2	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	39.9	100	39.9	100	0	79-127/19
91-20-3	Naphthalene	40	33.9	85	34.2	86	1	78-125/23
103-65-1	n-Propylbenzene	40	32.8	82	31.5	79	4	79-124/22
100-42-5	Styrene	40	36.3	91	34.9	87	4	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	39.0	98	39.5	99	1	80-127/20
75-65-0	Tert Butyl Alcohol	200	191	96	195	98	2	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	37.1	93	36.3	91	2	82-123/21
71-55-6	1,1,1-Trichloroethane	40	44.4	111	41.9	105	6	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	32.6	82	32.8	82	1	77-126/20
79-00-5	1,1,2-Trichloroethane	40	35.5	89	34.1	85	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	33.6	84	33.6	84	0	81-122/26
96-18-4	1,2,3-Trichloropropane	40	36.0	90	35.4	89	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	33.5	84	32.9	82	2	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	36.9	92	35.6	89	4	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	37.7	94	36.4	91	4	81-123/23
127-18-4	Tetrachloroethylene	40	36.0	90	33.7	84	7	80-125/25
108-88-3	Toluene	40	36.1	90	34.4	86	5	80-117/21
79-01-6	Trichloroethylene	40	38.4	96	36.5	91	5	81-122/20
75-69-4	Trichlorofluoromethane	40	42.0	105	44.5	111	6	77-133/22
75-01-4	Vinyl chloride	40	33.9	85	34.7	87	2	71-133/23
1330-20-7	Xylene (total)	120	103	86	98.6	82	4	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	94%	95%	70-130%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-BS	L28204.D	1	10/21/13	XB	n/a	n/a	VL892
VL892-BSD	L28205.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	100%	98%	70-130%
460-00-4	4-Bromofluorobenzene	108%	106%	70-130%

(a) Outside of in-house control limits; but within method acceptance limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU563-BS	U14523.D	1	10/22/13	TF	n/a	n/a	VU563
VU563-BSD	U14524.D	1	10/22/13	TF	n/a	n/a	VU563

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
---------	----------	---------------	-------------	----------	-------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	100%	70-130%
2037-26-5	Toluene-D8	97%	96%	70-130%
460-00-4	4-Bromofluorobenzene	98%	98%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL891-LCS	L28164.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
---------	----------	----------------	--------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
---------	----------------------	-----	--------

1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	102%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU562-LCS	U14498.D	1	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
---------	----------	---------------	-------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
---------	----------------------	-----	--------

1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	96%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL892-LCS	L28206.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	219	88	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	70-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	104%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU563-LCS	U14525.D	1	10/22/13	TF	n/a	n/a	VU563

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	124	99	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	97%	70-130%

* = Outside of Control Limits.

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30347-3MS	L28171.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3MSD	L28172.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3	L28170.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	C30347-3		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
67-64-1	Acetone	ND		154	132	85	153	96	15	62-130/24
71-43-2	Benzene	ND		38.6	33.7	87	35.9	90	6	81-119/20
108-86-1	Bromobenzene	ND		38.6	31.0	80	33.1	83	7	79-120/22
74-97-5	Bromochloromethane	ND		38.6	35.1	91	38.1	96	8	81-120/19
75-27-4	Bromodichloromethane	ND		38.6	36.9	96	40.3	101	9	79-124/20
75-25-2	Bromoform	ND		38.6	40.9	106	44.6	112	9	76-128/21
104-51-8	n-Butylbenzene	ND		38.6	30.1	78* a	32.1	81	6	79-123/26
135-98-8	sec-Butylbenzene	ND		38.6	29.2	76* a	31.3	79	7	77-122/24
98-06-6	tert-Butylbenzene	ND		38.6	30.6	79	33.3	84	8	77-121/23
75-00-3	Chloroethane	ND		38.6	32.0	83	33.9	85	6	80-126/21
67-66-3	Chloroform	ND		38.6	36.6	95	40.0	101	9	82-123/20
95-49-8	o-Chlorotoluene	ND		38.6	28.8	75* a	31.0	78	7	78-125/25
106-43-4	p-Chlorotoluene	ND		38.6	29.4	76	31.3	79	6	75-125/26
56-23-5	Carbon tetrachloride	ND		38.6	39.6	103	43.0	108	8	82-127/22
75-34-3	1,1-Dichloroethane	ND		38.6	34.4	89	37.3	94	8	80-123/20
75-35-4	1,1-Dichloroethylene	ND		38.6	33.1	86	36.3	91	9	76-123/19
563-58-6	1,1-Dichloropropene	ND		38.6	36.2	94	39.3	99	8	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		38.6	38.2	99	42.7	107	11	64-133/23
106-93-4	1,2-Dibromoethane	ND		38.6	35.7	92	40.1	101	12	80-120/20
107-06-2	1,2-Dichloroethane	ND		38.6	41.6	108	44.7	112	7	76-132/21
78-87-5	1,2-Dichloropropane	ND		38.6	33.7	87	36.5	92	8	80-121/20
142-28-9	1,3-Dichloropropane	ND		38.6	34.9	90	39.2	99	12	78-120/20
108-20-3	Di-Isopropyl ether	ND		38.6	34.1	88	37.5	94	9	78-126/19
594-20-7	2,2-Dichloropropane	ND		38.6	36.7	95	39.4	99	7	77-132/22
124-48-1	Dibromochloromethane	ND		38.6	36.7	95	40.7	102	10	76-121/21
75-71-8	Dichlorodifluoromethane	ND		38.6	39.2	102	42.7	107	9	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		38.6	33.7	87	36.7	92	9	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		38.6	36.8	95	39.9	100	8	81-124/21
541-73-1	m-Dichlorobenzene	ND		38.6	28.7	74* a	30.7	77* a	7	79-123/23
95-50-1	o-Dichlorobenzene	ND		38.6	29.9	77* a	31.6	79	6	79-124/22
106-46-7	p-Dichlorobenzene	ND		38.6	30.9	80	33.2	83	7	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		38.6	33.9	88	37.1	93	9	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		38.6	34.6	90	38.4	97	10	81-123/22
100-41-4	Ethylbenzene	ND		38.6	33.5	87	36.9	93	10	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		38.6	40.0	104	44.3	111	10	75-132/21
591-78-6	2-Hexanone	ND		154	159	103	181	114	13	68-139/24

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30347-3MS	L28171.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3MSD	L28172.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3	L28170.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Compound	C30347-3		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
87-68-3	Hexachlorobutadiene	ND		38.6	28.9	75* a	31.0	78* a	7	81-126/32
98-82-8	Isopropylbenzene	ND		38.6	31.0	80* a	34.2	86	10	81-122/22
99-87-6	p-Isopropyltoluene	ND		38.6	29.5	76* a	31.4	79* a	6	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		154	163	106	184	116	12	74-136/23
74-83-9	Methyl bromide	ND		38.6	35.0	91	37.2	94	6	82-124/20
74-87-3	Methyl chloride	ND		38.6	35.1	91	37.6	95	7	60-132/26
74-95-3	Methylene bromide	ND		38.6	37.5	97	40.9	103	9	82-120/20
75-09-2	Methylene chloride	ND		38.6	34.6	90	38.0	96	9	75-119/20
78-93-3	Methyl ethyl ketone	ND		154	153	99	173	109	12	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		38.6	40.1	104	44.6	112	11	79-127/19
91-20-3	Naphthalene	ND		38.6	34.0	88	37.2	94	9	78-125/23
103-65-1	n-Propylbenzene	ND		38.6	29.2	76* a	31.3	79	7	79-124/22
100-42-5	Styrene	ND		38.6	33.0	85	36.5	92	10	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		38.6	39.3	102	43.1	108	9	80-127/20
75-65-0	Tert Butyl Alcohol	ND		193	226	117	259	130	14	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		38.6	35.8	93	39.1	98	9	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		38.6	39.1	101	42.7	107	9	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		38.6	36.3	94	40.1	101	10	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		38.6	36.2	94	39.4	99	8	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		38.6	29.8	77* a	31.2	78* a	5	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		38.6	39.0	101	44.6	112	13	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		38.6	28.5	74* a	29.6	74* a	4	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		38.6	33.1	86	35.8	90	8	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		38.6	33.6	87	36.3	91	8	81-123/23
127-18-4	Tetrachloroethylene	ND		38.6	34.1	88	39.1	98	14	80-125/25
108-88-3	Toluene	ND		38.6	32.8	85	36.1	91	10	80-117/21
79-01-6	Trichloroethylene	ND		38.6	34.6	90	37.2	94	7	81-122/20
75-69-4	Trichlorofluoromethane	ND		38.6	40.5	105	43.3	109	7	77-133/22
75-01-4	Vinyl chloride	ND		38.6	32.2	83	32.5	82	1	71-133/23
1330-20-7	Xylene (total)	ND		116	94.3	81	103	86	9	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C30347-3	Limits
1868-53-7	Dibromofluoromethane	104%	106%	103%	70-130%
2037-26-5	Toluene-D8	97%	100%	99%	70-130%

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30347-3MS	L28171.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3MSD	L28172.D	1	10/18/13	XB	n/a	n/a	VL891
C30347-3	L28170.D	1	10/18/13	XB	n/a	n/a	VL891

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1

CAS No.	Surrogate Recoveries	MS	MSD	C30347-3	Limits
460-00-4	4-Bromofluorobenzene	104%	107%	102%	70-130%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30359-6MS	U14516.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6MSD	U14517.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6	U14512.D	10	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	C30359-6		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/l	Q	ug/l	ug/l	%	ug/l	%		
67-64-1	Acetone	ND		800	942	118	956	120	1	38-159/24
71-43-2	Benzene	6.4	J	200	204	99	196	95	4	77-122/16
108-86-1	Bromobenzene	ND		200	195	98	194	97	1	76-126/17
74-97-5	Bromochloromethane	ND		200	220	110	218	109	1	77-130/17
75-27-4	Bromodichloromethane	ND		200	195	98	191	96	2	75-127/16
75-25-2	Bromoform	ND		200	188	94	184	92	2	69-141/17
104-51-8	n-Butylbenzene	ND		200	192	96	179	90	7	72-129/18
135-98-8	sec-Butylbenzene	ND		200	182	91	168	84	8	74-128/18
98-06-6	tert-Butylbenzene	ND		200	200	100	187	94	7	73-127/18
108-90-7	Chlorobenzene	ND		200	183	92	181	91	1	77-122/16
75-00-3	Chloroethane	ND		200	230	115	227	114	1	69-133/18
67-66-3	Chloroform	ND		200	213	107	208	104	2	74-126/17
95-49-8	o-Chlorotoluene	ND		200	170	85	162	81	5	72-127/20
106-43-4	p-Chlorotoluene	ND		200	178	89	171	86	4	68-127/18
56-23-5	Carbon tetrachloride	ND		200	190	95	171	86	11	71-133/19
75-34-3	1,1-Dichloroethane	ND		200	200	100	194	97	3	71-125/17
75-35-4	1,1-Dichloroethylene	ND		200	198	99	179	90	10	66-125/20
563-58-6	1,1-Dichloropropene	ND		200	195	98	179	90	9	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	ND		200	192	96	193	97	1	65-131/20
106-93-4	1,2-Dibromoethane	ND		200	202	101	205	103	1	75-135/17
107-06-2	1,2-Dichloroethane	12.9		200	206	97	205	96	0	71-131/17
78-87-5	1,2-Dichloropropane	ND		200	206	103	201	101	2	78-124/16
142-28-9	1,3-Dichloropropane	ND		200	196	98	198	99	1	78-123/16
108-20-3	Di-Isopropyl ether	14.0	J	200	213	100	212	99	0	68-129/17
594-20-7	2,2-Dichloropropane	ND		200	189	95	175	88	8	70-131/19
124-48-1	Dibromochloromethane	ND		200	190	95	188	94	1	76-132/16
75-71-8	Dichlorodifluoromethane	ND		200	269	135	253	127	6	32-168/28
156-59-2	cis-1,2-Dichloroethylene	ND		200	218	109	212	106	3	73-126/17
10061-01-5	cis-1,3-Dichloropropene	ND		200	216	108	213	107	1	72-130/16
541-73-1	m-Dichlorobenzene	ND		200	182	91	176	88	3	75-124/16
95-50-1	o-Dichlorobenzene	ND		200	183	92	180	90	2	76-124/16
106-46-7	p-Dichlorobenzene	ND		200	196	98	191	96	3	75-124/16
156-60-5	trans-1,2-Dichloroethylene	ND		200	214	107	201	101	6	71-126/18
10061-02-6	trans-1,3-Dichloropropene	ND		200	188	94	189	95	1	71-126/16
100-41-4	Ethylbenzene	46.6		200	242	98	232	93	4	76-126/17
637-92-3	Ethyl Tert Butyl Ether	ND		200	250	125	249	125	0	75-134/17

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30359-6MS	U14516.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6MSD	U14517.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6	U14512.D	10	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Compound	C30359-6		Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
591-78-6	2-Hexanone	ND		800	812	102	822	103	1	67-150/22
87-68-3	Hexachlorobutadiene	ND		200	156	78	156	78	0	69-135/20
98-82-8	Isopropylbenzene	2.4	J	200	180	89	168	83	7	61-125/17
99-87-6	p-Isopropyltoluene	ND		200	178	89	165	83	8	68-127/18
108-10-1	4-Methyl-2-pentanone	ND		800	825	103	821	103	0	71-142/21
74-83-9	Methyl bromide	ND		200	256	128	255	128	0	68-132/18
74-87-3	Methyl chloride	ND		200	248	124	194	97	24	39-150/28
74-95-3	Methylene bromide	ND		200	206	103	206	103	0	77-127/16
75-09-2	Methylene chloride	ND		200	219	110	214	107	2	67-128/18
78-93-3	Methyl ethyl ketone	ND		800	995	124	1010	126	1	56-155/23
1634-04-4	Methyl Tert Butyl Ether	618		200	935	159* a	940	161* a	1	73-132/17
91-20-3	Naphthalene	12.2	J	200	198	93	210	99	6	70-136/20
103-65-1	n-Propylbenzene	4.4	J	200	183	89	170	83	7	71-127/17
100-42-5	Styrene	ND		200	204	102	200	100	2	72-134/16
994-05-8	Tert-Amyl Methyl Ether	ND		200	268	134* b	269	135* b	0	73-133/17
75-65-0	Tert-Butyl Alcohol	600		1000	2210	161* b	2250	165* b	2	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	ND		200	200	100	197	99	2	77-130/16
71-55-6	1,1,1-Trichloroethane	ND		200	207	104	191	96	8	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		200	214	107	213	107	0	77-129/17
79-00-5	1,1,2-Trichloroethane	ND		200	210	105	211	106	0	77-125/16
87-61-6	1,2,3-Trichlorobenzene	ND		200	171	86	180	90	5	70-133/18
96-18-4	1,2,3-Trichloropropane	ND		200	202	101	202	101	0	69-126/18
120-82-1	1,2,4-Trichlorobenzene	ND		200	175	88	175	88	0	68-129/17
95-63-6	1,2,4-Trimethylbenzene	99.5		200	309	105	297	99	4	74-129/17
108-67-8	1,3,5-Trimethylbenzene	68.3		200	283	107	270	101	5	77-129/17
127-18-4	Tetrachloroethylene	ND		200	180	90	168	84	7	69-127/20
108-88-3	Toluene	118		200	315	99	309	96	2	75-122/17
79-01-6	Trichloroethylene	ND		200	200	100	190	95	5	78-123/17
75-69-4	Trichlorofluoromethane	ND		200	249	125	243	122	2	65-136/23
75-01-4	Vinyl chloride	ND		200	252	126	239	120	5	57-146/22
1330-20-7	Xylene (total)	468		600	1060	99	1040	95	2	77-125/17

CAS No.	Surrogate Recoveries	MS	MSD	C30359-6	Limits
1868-53-7	Dibromofluoromethane	107%	108%	99%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30359-6MS	U14516.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6MSD	U14517.D	10	10/21/13	TF	n/a	n/a	VU562
C30359-6	U14512.D	10	10/21/13	TF	n/a	n/a	VU562

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-3

CAS No.	Surrogate Recoveries	MS	MSD	C30359-6	Limits
2037-26-5	Toluene-D8	95%	96%	99%	70-130%
460-00-4	4-Bromofluorobenzene	98%	99%	99%	70-130%

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside laboratory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30381-7MS	L28214.D	1	10/21/13	XB	n/a	n/a	VL892
C30381-7MSD	L28215.D	1	10/22/13	XB	n/a	n/a	VL892
C30381-7 ^a	L28213.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	C30381-7		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
67-64-1	Acetone	ND		160	135	84	122	78	10	62-130/24
71-43-2	Benzene	ND		40	36.0	90	33.1	85	8	81-119/20
108-86-1	Bromobenzene	ND		40	30.5	76* ^b	29.1	74* ^b	5	79-120/22
74-97-5	Bromochloromethane	ND		40	35.7	89	33.2	85	7	81-120/19
75-27-4	Bromodichloromethane	ND		40	39.9	100	36.8	94	8	79-124/20
75-25-2	Bromoform	ND		40	40.8	102	39.5	101	3	76-128/21
104-51-8	n-Butylbenzene	ND		40	30.7	77* ^b	28.9	74* ^b	6	79-123/26
135-98-8	sec-Butylbenzene	ND		40	30.0	75* ^b	27.8	71* ^b	8	77-122/24
98-06-6	tert-Butylbenzene	ND		40	31.0	78	28.9	74* ^b	7	77-121/23
108-90-7	Chlorobenzene	ND		40	31.5	79* ^b	30.0	77* ^b	5	82-121/20
75-00-3	Chloroethane	ND		40	33.4	84	30.2	77* ^b	10	80-126/21
67-66-3	Chloroform	ND		40	38.5	96	35.3	90	9	82-123/20
95-49-8	o-Chlorotoluene	ND		40	29.4	74* ^b	30.3	78	3	78-125/25
106-43-4	p-Chlorotoluene	ND		40	28.6	72* ^b	27.2	70* ^b	5	75-125/26
56-23-5	Carbon tetrachloride	ND		40	43.1	108	39.7	102	8	82-127/22
75-34-3	1,1-Dichloroethane	ND		40	35.3	88	32.5	83	8	80-123/20
75-35-4	1,1-Dichloroethylene	ND		40	35.2	88	32.1	82	9	76-123/19
563-58-6	1,1-Dichloropropene	ND		40	38.8	97	35.7	91	8	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		40	36.8	92	34.8	89	6	64-133/23
106-93-4	1,2-Dibromoethane	ND		40	36.9	92	35.1	90	5	80-120/20
107-06-2	1,2-Dichloroethane	ND		40	44.4	111	41.2	105	7	76-132/21
78-87-5	1,2-Dichloropropane	ND		40	36.2	91	33.1	85	9	80-121/20
142-28-9	1,3-Dichloropropane	ND		40	35.1	88	33.7	86	4	78-120/20
108-20-3	Di-Isopropyl ether	ND		40	35.5	89	32.7	84	8	78-126/19
594-20-7	2,2-Dichloropropane	ND		40	37.3	93	34.1	87	9	77-132/22
124-48-1	Dibromochloromethane	ND		40	37.9	95	36.1	92	5	76-121/21
75-71-8	Dichlorodifluoromethane	ND		40	45.4	114	40.4	103	12	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		40	35.0	88	32.2	82	8	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		40	39.1	98	36.0	92	8	81-124/21
541-73-1	m-Dichlorobenzene	ND		40	28.4	71* ^b	26.9	69* ^b	5	79-123/23
95-50-1	o-Dichlorobenzene	ND		40	29.5	74* ^b	28.0	72* ^b	5	79-124/22
106-46-7	p-Dichlorobenzene	ND		40	30.6	77* ^b	29.0	74* ^b	5	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		40	35.5	89	32.8	84	8	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		40	35.3	88	33.4	86	6	81-123/22
100-41-4	Ethylbenzene	ND		40	34.2	86	32.9	84	4	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		40	41.8	105	38.6	99	8	75-132/21

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30381-7MS	L28214.D	1	10/21/13	XB	n/a	n/a	VL892
C30381-7MSD	L28215.D	1	10/22/13	XB	n/a	n/a	VL892
C30381-7 ^a	L28213.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Compound	C30381-7		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
591-78-6	2-Hexanone	ND		160	159	99	152	97	5	68-139/24
87-68-3	Hexachlorobutadiene	ND		40	31.8	80* ^b	29.2	75* ^b	9	81-126/32
98-82-8	Isopropylbenzene	ND		40	32.5	81	30.9	79* ^b	5	81-122/22
99-87-6	p-Isopropyltoluene	ND		40	29.8	75* ^b	27.9	71* ^b	7	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		160	171	107	155	99	10	74-136/23
74-83-9	Methyl bromide	ND		40	36.8	92	32.8	84	11	82-124/20
74-87-3	Methyl chloride	ND		40	39.4	99	38.1	98	3	60-132/26
74-95-3	Methylene bromide	ND		40	39.8	100	37.3	95	6	82-120/20
75-09-2	Methylene chloride	ND		40	35.9	90	33.0	84	8	75-119/20
78-93-3	Methyl ethyl ketone	ND		160	155	97	141	90	9	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		40	41.8	105	38.5	99	8	79-127/19
91-20-3	Naphthalene	ND		40	34.4	86	33.1	85	4	78-125/23
103-65-1	n-Propylbenzene	ND		40	29.1	73* ^b	27.1	69* ^b	7	79-124/22
100-42-5	Styrene	ND		40	34.3	86	32.5	83	5	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		40	40.2	101	37.3	95	7	80-127/20
75-65-0	Tert Butyl Alcohol	ND		200	238	119	218	112	9	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		40	36.2	91	34.3	88	5	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		40	41.5	104	37.5	96	10	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		40	35.5	89	33.2	85	7	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		40	36.5	91	34.5	88	6	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		40	30.5	76* ^b	28.7	73* ^b	6	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		40	39.4	99	38.2	98	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		40	28.1	70* ^b	26.8	69* ^b	5	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		40	33.2	83	31.0	79* ^b	7	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		40	33.8	85	31.6	81	7	81-123/23
127-18-4	Tetrachloroethylene	ND		40	35.8	90	33.7	86	6	80-125/25
108-88-3	Toluene	ND		40	33.9	85	32.4	83	5	80-117/21
79-01-6	Trichloroethylene	ND		40	36.8	92	34.2	88	7	81-122/20
75-69-4	Trichlorofluoromethane	ND		40	43.1	108	38.0	97	13	77-133/22
75-01-4	Vinyl chloride	ND		40	32.4	81	28.1	72	14	71-133/23
1330-20-7	Xylene (total)	ND		120	96.9	81	92.5	79* ^b	5	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C30381-7	Limits
1868-53-7	Dibromofluoromethane	99%	98%	97%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 3 of 3

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C30381-7MS	L28214.D	1	10/21/13	XB	n/a	n/a	VL892
C30381-7MSD	L28215.D	1	10/22/13	XB	n/a	n/a	VL892
C30381-7 ^a	L28213.D	1	10/21/13	XB	n/a	n/a	VL892

The QC reported here applies to the following samples:

Method: SW846 8260B

C30355-1, C30355-2

CAS No.	Surrogate Recoveries	MS	MSD	C30381-7	Limits
2037-26-5	Toluene-D8	97%	100%	99%	70-130%
460-00-4	4-Bromofluorobenzene	107%	109%	104%	70-130%

- (a) Analysis performed using soil jar due to excessive sample volume collected in terracore kit vials; analysis from vial was not possible.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.



GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8896-MB	Y23105.D	1	10/22/13	MT	10/21/13	OP8896	EY1063

The QC reported here applies to the following samples:

Method: SW846 8270C

C30355-3

6.1

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.0	1.3	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.2	ug/l	
120-12-7	Anthracene	ND	5.0	1.3	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.4	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.3	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	1.5	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.4	ug/l	
218-01-9	Chrysene	ND	5.0	1.6	ug/l	
53-70-3	Dibenz(a,h)anthracene	ND	5.0	1.3	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.5	ug/l	
86-73-7	Fluorene	ND	5.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	1.4	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	1.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.3	ug/l	
91-20-3	Naphthalene	ND	5.0	1.2	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.3	ug/l	
129-00-0	Pyrene	ND	5.0	1.6	ug/l	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	87%
321-60-8	2-Fluorobiphenyl	95%
1718-51-0	Terphenyl-d14	126%

Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8898-MB	Y23108.D	1	10/22/13	MT	10/21/13	OP8898	EY1063

The QC reported here applies to the following samples:

Method: SW846 8270C

C30355-1, C30355-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
53-70-3	Dibenz(a,h)anthracene	ND	170	41	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	74% 15-101%
321-60-8	2-Fluorobiphenyl	82% 15-104%
1718-51-0	Terphenyl-d14	117% 56-123%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8896-BS	Y23106.D	1	10/22/13	MT	10/21/13	OP8896	EY1063
OP8896-BSD	Y23107.D	1	10/22/13	MT	10/21/13	OP8896	EY1063

The QC reported here applies to the following samples:

Method: SW846 8270C

C30355-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	25	23.5	94	22.9	92	3	68-105/26
208-96-8	Acenaphthylene	25	23.2	93	22.7	91	2	68-110/26
120-12-7	Anthracene	25	25.7	103	25.7	103	0	71-109/14
56-55-3	Benzo(a)anthracene	25	27.6	110	28.1	112	2	76-118/26
50-32-8	Benzo(a)pyrene	25	28.1	112	28.1	112	0	77-112/26
205-99-2	Benzo(b)fluoranthene	25	26.1	104	26.9	108	3	73-117/18
191-24-2	Benzo(g,h,i)perylene	25	28.0	112	26.2	105	7	60-129/28
207-08-9	Benzo(k)fluoranthene	25	27.9	112	28.5	114	2	78-121/27
218-01-9	Chrysene	25	25.5	102	25.6	102	0	75-123/25
53-70-3	Dibenz(a,h)anthracene	25	28.2	113	25.4	102	10	64-125/27
206-44-0	Fluoranthene	25	27.4	110	28.0	112	2	72-114/28
86-73-7	Fluorene	25	25.3	101	24.9	100	2	69-108/16
193-39-5	Indeno(1,2,3-cd)pyrene	25	28.2	113	27.2	109	4	62-125/28
90-12-0	1-Methylnaphthalene	25	22.0	88	21.1	84	4	59-102/26
91-57-6	2-Methylnaphthalene	25	21.4	86	20.4	82	5	59-100/27
91-20-3	Naphthalene	25	21.3	85	20.5	82	4	61-114/27
85-01-8	Phenanthrene	25	24.9	100	24.9	100	0	71-111/26
129-00-0	Pyrene	25	27.2	109	27.5	110	1	64-121/28

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	88%	86%	27-112%
321-60-8	2-Fluorobiphenyl	94%	92%	27-112%
1718-51-0	Terphenyl-d14	110%	113%	45-128%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8898-BS	Y23109.D	1	10/22/13	MT	10/21/13	OP8898	EY1063
OP8898-BSD	Y23110.D	1	10/22/13	MT	10/21/13	OP8898	EY1063

The QC reported here applies to the following samples:

Method: SW846 8270C

C30355-1, C30355-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	833	747	90	747	90	0	34-112/28
208-96-8	Acenaphthylene	833	728	87	734	88	1	33-115/28
120-12-7	Anthracene	833	858	103	848	102	1	59-111/21
56-55-3	Benzo(a)anthracene	833	926	111	914	110	1	72-122/22
50-32-8	Benzo(a)pyrene	833	940	113	933	112	1	71-120/22
205-99-2	Benzo(b)fluoranthene	833	919	110	904	108	2	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	885	106	971	117	9	57-134/24
207-08-9	Benzo(k)fluoranthene	833	910	109	897	108	1	74-126/25
218-01-9	Chrysene	833	853	102	838	101	2	73-125/22
53-70-3	Dibenz(a,h)anthracene	833	899	108	942	113	5	59-132/23
206-44-0	Fluoranthene	833	940	113	924	111	2	69-117/21
86-73-7	Fluorene	833	816	98	810	97	1	42-112/24
193-39-5	Indeno(1,2,3-cd)pyrene	833	903	108	981	118	8	60-131/21
90-12-0	1-Methylnaphthalene	833	701	84	690	83	2	33-110/30
91-57-6	2-Methylnaphthalene	833	678	81	672	81	1	33-107/30
91-20-3	Naphthalene	833	657	79	661	79	1	32-121/31
85-01-8	Phenanthrene	833	839	101	823	99	2	57-113/21
129-00-0	Pyrene	833	879	105	856	103	3	63-120/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	84%	85%	15-101%
321-60-8	2-Fluorobiphenyl	88%	89%	15-104%
1718-51-0	Terphenyl-d14	108%	106%	56-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8898-MS	Y23115.D	1	10/22/13	MT	10/21/13	OP8898	EY1063
OP8898-MSD	Y23116.D	1	10/23/13	MT	10/21/13	OP8898	EY1063
C30354-2	Y23118.D	1	10/23/13	MT	10/21/13	OP8898	EY1063

The QC reported here applies to the following samples:

Method: SW846 8270C

C30355-1, C30355-2

CAS No.	Compound	C30354-2		Spike	MS	MS	MSD	MSD	RPD	Limits Rec/RPD
		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%		
83-32-9	Acenaphthene	ND		830	551	66	492	59	11	34-112/28
208-96-8	Acenaphthylene	ND		830	541	65	481	58	12	33-115/28
120-12-7	Anthracene	ND		830	753	91	665	80	12	59-111/21
56-55-3	Benzo(a)anthracene	ND		830	846	102	744	90	13	72-122/22
50-32-8	Benzo(a)pyrene	ND		830	847	102	763	92	10	71-120/22
205-99-2	Benzo(b)fluoranthene	ND		830	812	98	724	87	11	67-123/24
191-24-2	Benzo(g,h,i)perylene	ND		830	819	99	783	94	4	57-134/24
207-08-9	Benzo(k)fluoranthene	ND		830	859	104	761	92	12	74-126/25
218-01-9	Chrysene	ND		830	778	94	685	83	13	73-125/22
53-70-3	Dibenz(a,h)anthracene	ND		830	799	96	750	90	6	59-132/23
206-44-0	Fluoranthene	ND		830	830	100	746	90	11	69-117/21
86-73-7	Fluorene	ND		830	657	79	581	70	12	42-112/24
193-39-5	Indeno(1,2,3-cd)pyrene	ND		830	805	97	789	95	2	60-131/21
90-12-0	1-Methylnaphthalene	ND		830	477	57	426	51	11	33-110/30
91-57-6	2-Methylnaphthalene	ND		830	466	56	408	49	13	33-107/30
91-20-3	Naphthalene	ND		830	453	55	400	48	12	32-121/31
85-01-8	Phenanthrene	ND		830	736	89	651	78	12	57-113/21
129-00-0	Pyrene	ND		830	845	102	721	87	16	63-120/20

CAS No.	Surrogate Recoveries	MS	MSD	C30354-2	Limits
4165-60-0	Nitrobenzene-d5	55%	51%	44%	15-101%
321-60-8	2-Fluorobiphenyl	62%	58%	52%	15-104%
1718-51-0	Terphenyl-d14	104%	93%	101%	56-123%

* = Outside of Control Limits.

6.3.1
6



GC Semi-volatiles

QC Data Summaries

7

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8890-MB	HH308646.D1		10/17/13	AG	10/17/13	OP8890	GHH1106

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No. Surrogate Recoveries Limits

630-01-3	Hexacosane	92%	32-124%
----------	------------	-----	---------

7

Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8891-MB	HH308654.D1		10/18/13	AG	10/17/13	OP8891	GHH1107

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-1, C30355-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	90% 37-122%

Method Blank Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8891-MB	GG47945.D	1	10/18/13	NN	10/17/13	OP8891	GGG1311

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-1, C30355-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	73% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8890-BS	HH308644.D1		10/17/13	AG	10/17/13	OP8890	GHH1106
OP8890-BSD	HH308645.D1		10/17/13	AG	10/17/13	OP8890	GHH1106

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.905	91	0.859	86	5	38-115/22
	TPH (> C28-C40)	1	1.08	108	1.09	109	1	45-114/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	94%	87%	32-124%

* = Outside of Control Limits.

7.2.1

7

Blank Spike/Blank Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8891-BS	HH308655.D1		10/18/13	AG	10/17/13	OP8891	GHH1107
OP8891-BSD	HH308656.D1		10/18/13	AG	10/17/13	OP8891	GHH1107

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-1, C30355-2

CAS No.	Compound	Spike	BSP	BSP	BSD	BSD	RPD	Limits
		mg/kg	mg/kg	%	mg/kg	%		Rec/RPD
	TPH (C10-C28)	100	74.0	74	77.2	77	4	39-102/29
	TPH (> C28-C40)	100	93.7	94	99.3	99	6	42-111/26
CAS No.	Surrogate Recoveries	BSP		BSD		Limits		
630-01-3	Hexacosane	76%		78%		37-122%		

* = Outside of Control Limits.

7.2.2
7

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8890-MS	HH308648.D1		10/17/13	AG	10/17/13	OP8890	GHH1106
OP8890-MSD	HH308649.D1		10/17/13	AG	10/17/13	OP8890	GHH1106
C30345-1	HH308647.D1		10/17/13	AG	10/17/13	OP8890	GHH1106

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-3

7.3.1
7

CAS No.	Compound	C30345-1		Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
		mg/l	Q							
	TPH (C10-C28)	0.097	U	0.971	0.835	86	0.834	86	0	38-115/22
	TPH (> C28-C40)	0.19	U	0.971	1.07	110	1.07	110	0	45-114/20
CAS No.	Surrogate Recoveries	MS		MSD		C30345-1		Limits		
630-01-3	Hexacosane	90%		95%		89%		32-124%		

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: C30355

Account: GGTRCASF Golden Gate Tank Removal

Project: 2915 Broadway - Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8891-MS	GG47940.D	1	10/18/13	NN	10/17/13	OP8891	GGG1311
OP8891-MSD	GG47941.D	1	10/18/13	NN	10/17/13	OP8891	GGG1311
C30335-1	GG47938.D	1	10/18/13	NN	10/17/13	OP8891	GGG1311

The QC reported here applies to the following samples:

Method: SW846 8015B M

C30355-1, C30355-2

7.3.2
7

CAS No.	Compound	C30335-1		Spike	MS	MS	MSD	MSD	Limits	
		mg/kg	Q	mg/kg	mg/kg	%	mg/kg	%	RPD	Rec/RPD
	TPH (C10-C28)	3.52	J	98.2	68.5	66	70.2	68	2	39-102/29
	TPH (> C28-C40)	17.7	J	98.2	95.3	79	99.1	83	4	42-111/26
CAS No.	Surrogate Recoveries	MS		MSD		C30335-1		Limits		
630-01-3	Hexacosane	65%		70%		64%		37-122%		

* = Outside of Control Limits.



Metals Analysis

QC Data Summaries

88

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C30355
Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CA

QC Batch ID: MP6888
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

10/22/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015	0.0	<1.0
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054	0.070	<1.0
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.15	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024	0.020	<1.0
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098	0.51	<2.0

Associated samples MP6888: C30355-1, C30355-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C30355

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6888
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 10/22/13

Metal	C30355-2 Original MS	Spikelot MPIR4	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	0.11	37.8	43.5	86.7
Calcium	anr			
Chromium	79.6	116	43.5	83.7
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	8.3	45.1	43.5	84.6
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	73.4	114	43.5	93.4
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	69.9	103	43.5	76.1
				75-125

Associated samples MP6888: C30355-1, C30355-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C30355

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6888
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date:

10/22/13

Metal	C30355-2 Original	MSD	Spikelot MPIR4	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron	anr					
Cadmium	0.11	39.6	43.9	90.0	4.7	20
Calcium	anr					
Chromium	79.6	124	43.9	101.2	6.7	20
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	8.3	52.2	43.9	100.1	14.6	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	73.4	121	43.9	108.5	6.0	20
Potassium	anr					
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	69.9	103	43.9	75.5	0.0	20

Associated samples MP6888: C30355-1, C30355-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

8.12
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C30355

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6888
Matrix Type: SOLIDMethods: SW846 6010B
Units: mg/kg

Prep Date: 10/22/13

Metal	BSP Result	Spikelot MPIR4	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	45.3	50	90.6	80-120
Calcium	anr			
Chromium	45.9	50	91.8	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	43.6	50	87.2	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	42.7	50	85.4	80-120
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	45.5	50	91.0	80-120

Associated samples MP6888: C30355-1, C30355-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested8.1.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: C30355

Account: GGTRCASF - Golden Gate Tank Removal
Project: 2915 Broadway - Oakland, CAQC Batch ID: MP6888
Matrix Type: SOLIDMethods: SW846 6010B
Units: ug/l

Prep Date: 10/22/13

Metal	C30355-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron	anr			
Cadmium	1.30	0.00	100.0(a)	0-10
Calcium	anr			
Chromium	923	1110	20.0*(b)	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	96.6	105	9.1	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	851	849	0.2	0-10
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	811	902	11.2*(b)	0-10

Associated samples MP6888: C30355-1, C30355-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

8.1.4
8

OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address:	2910 Broadway	Name of Facility:	(415) 512-1555 Merced & Benz of Oakton
Inspector:	Keith Matthews	Contact on site:	Mike Blund, Maintenance Sup.
Date and Time of Arrival:	9/16 23 Sept 95	Contractor/Consultant:	CGTR Brent

General Requirements	Yes	No	N/A
Approved closure plan on site.	X		
Changes to approved plan noted.	X		
Residuals properly stored/transported.	X		
Receipt for adequate dry ice noted.	X		

Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)	600			
Material last stored	W.O.			
Dry ice used (pounds)	N/A			
Combustible gas concentration as %LEL. (Note time & sampling point)				
(1)	OK			
(2)				
(3)				
Oxygen concentration as % volume. (Note time & sampling point.)				
(1)	21.8%			
(2)				
(3)				
Tank Material				
Wrapping/Coating, if any				
Obvious holes?				

General Requirements	Yes	No	N/A
Site Safety Plan properly signed.			
40B:C fire extinguisher on site.			
"No Smoking" signs posted.		X	
Gas detector challenged by inspector.			

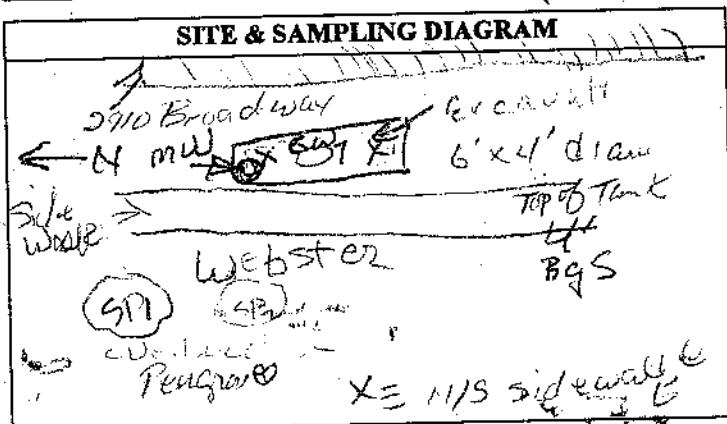
Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?	X/0			
Obvious odors from tank?	N/0			
Seams intact?	Y/0			
Tank bed backfill material	Y/0			
Obvious discoloration?	Y/0			
Obvious odors ex tank bed?	Y/0			
Water in excavation?	Y/0			
Sheen/product on water?	N/0			
Tank tagged by transporter?	Y/0			
Tank wrapped for transport?	N/0			
Tank plugged w/ vent cap?	N/0			
Date/time tank hauled off?	9/13/95	10/21/95		
No. of soil samples taken?	2			
Depth of soil samples (ft. bgs)	4			

2 overburden SP

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?		X	
Obvious holes on pipes?		X	
Obvious odors from pipes?			
Obvious soil discoloration in piping trench?			
Obvious odors from piping trench?			
Water in piping trench?			
Number & depth of soil samples from piping trench?			
Number & depth of water samples from piping trench?		16 7'	

General Observations	Yes	No	N/A
Leak from any tank suspected?		X	
"Leak Report" form given to the operator?			
Obviously contaminated soil excavated?		X	
Soil stockpile sampled?		X	
Stockpile lined AND covered?		X	
Water in excavation sampled?		X	
Number/depth of water samples taken?		2 @ 6'	
All samples properly preserved for transport?		X	

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?	X		
Sampling "chain of custody" noted?	X		
Tank pit filled in or covered?	X		
Tank pit fenced or barricaded?	X		
Transporter a registered HW hauler?	X		
Uniform HW Manifest completed?	X		X
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?			
Date/Time removal/closure operations completed?			
OT hours or additional charges due from contractor?	X		



Notes/Comments: TPHd off lnt metals - oxygenate TPHd B104, PTHd
 1/20 samples from monitoring well; gw is 20 ft; gw sample from
 bottom pit @ 6'; 2 soil sample
 Water sample after recovery
 Top gravel @ Soil water interface R.H.
 compiled
 CGTR

OAKLAND FIRE DEPARTMENT/FIRE PREVENTION BUREAU
HAZARDOUS MATERIALS UNIT

250 FRANK H. OGAWA PLAZA, SUITE 3341, OAKLAND, CA 94612-2032 • (510) 238-3927

HAZARDOUS MATERIALS INSPECTION REPORT

Site Number	Facility Name	Facility Address	Zip Code
	Mercedes Benz of Oakland 2915 Broadway		
Inspection Report <i>11:30 arrived <input checked="" type="checkbox"/> PERMISSION TO INSPECT GRANTED 12:30 departure</i> <i>Mercedes Benz of Oakland</i> <i>Side Walk</i> <i>Webster Street</i> <i>North</i> <i>Golden Gate Tank Removal performed</i> <i>Over excavation of the tank pit.</i> <i>The pit bottom was 10.5 ft + consisted of</i> <i>gravels... All gravel was removed</i> <i>@ 11:40 AM + to 13:00 PM about 300 bags of ground</i> <i>water was encountered. A heavy film of</i> <i>oil contamination. The water is @ 12" Bas</i> <i>The tanks of Piping removed on 9/23/13 had</i> <i>No holes. The water will be pumped back</i> <i>& a water sample will be taken early on the</i> <i>recharged excavation pit @ 15:00</i>			

Facility Contact/Print Name:	Facility Contact/Signature:
Ruben Liman	Ruben Liman

Inspected By:	<input checked="" type="checkbox"/> AFM Griffin	238-7759
	<input checked="" type="checkbox"/> Insp. Matthews	238-2396
	<input type="checkbox"/> Insp. Skillern	238-7253
	<input type="checkbox"/>	238-3927

Date: 16 Oct 13



CERTIFICATE OF DISPOSAL

DATE: September 23, 2013

PROJECT NUMBER: 9378

PROJECT ADDRESS: 2915 Broadway Street, Oakland, CA 94607

TANK SIZE: 600 gallons

ORIGINAL TANK CONTENTS: Waste Oil

Golden Gate Tank Removal, Inc. hereby issues CERTIFICATION that:

- This tank was cleaned by triple rinsing. The rinsate was sampled and analyzed for Total Petroleum Hydrocarbons and found to be below the City of Oakland limit of 100 parts per million allowable for disposal as scrap metal.
- The Oxygen content of the Tank was 21.8%
- The Lower Explosive Limit was 0%
- The above tank was rendered harmless by cutting and disposed of as scrap metal at Circosta Iron and Metal, Inc.
- The above method of tank destruction is suitable for the materials involved and is accepted by the City of Oakland and County of Alameda as an appropriate disposal method.

Copies of the analytical certificate the chain-of-custody prepared for the rinsate sample and the scrap metal receipt are attached to this Certification. If there are any questions regarding this tank, please contact this office.

Golden Gate Tank Removal, Inc.

#9378

Circosta Iron and Metal Company Inc.

415-282-8568
1801 Evans Avenue
San Francisco CA 94124

RC2707

Tick#	75642	By	Sam	2:07:08 PM	9/23/2013
Gross		Tare		Net Lbs	Price
HMS - HMS #1					(SC=\$210.00)
10,120.00	8,920.00	1,200.00		210.00	126.00
Amt (Before Tax)					126.00
Sales Tax (0.08%)					0.00
Amt (After Tax)					\$126.00

Ticket Total 126.00

* ONE HUNDRED TWENTY-SIX AND XX / 100

Date	Mode	Trn #	Amount
9/23/2013	Cash		126.00

Print Name: JULIAN MORENO MALDONADO

CUSTOMER COPY

Address: 28289 CARDINAL ST

City/ST/Zip: HAYWARD/CA/94545

ID#: V9079601 Vehicle: 8k69189

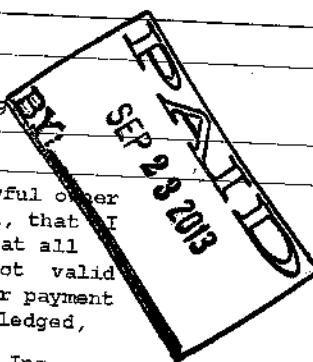
State of issuance:

I hereby state that I'm the lawful owner of the material described herein, that I have a right to sell same, that all REDEMPTION material is in fact valid REDEMPTION material and that for payment received in full, hereby acknowledged,

Circosta Iron and Metal Company Inc.

X

You must return this receipt 3 days or later to receive money. THANK YOU!



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

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number C A D 0 9 0 2 4 8 6 7 1 4	2. Page 1 of 1	3. Emergency Response Phone NRC 510-744-1331	4. Manifest Tracking Number 010957990 JJK
5. Generator's Name and Mailing Address MERCEDEZ-BENZ OF OAKLAND 2115 BROADWAY OAKLAND CA 94611		5. Generator's Site Address (if different than mailing address) AT GARLAND STEELING			
Generator's Phone: 8 1 0 2 8 7 - 8 6 2 0		6. U.S. EPA ID Number C A R 0 0 0 0 3 0 1 1 4			
6. Transporter 1 Company Name NRC Environmental Services		7. Transporter 2 Company Name 			
8. Designated Facility Name and Site Address 2100 S. GLENDALE, INC. 1690 W. 17th Street Long Beach CA 90813		9. U.S. EPA ID Number C A D 0 2 8 3 0 9 0 1 0			
Facility's Phone: 602 432-6445		10. Containers No. Type 101 DRUMS 003 DRUMS 004 DRUMS			
9a. HM		11. Total Pounds Quantity 8500 0700 0700			
9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (If any)) 1. NON-HAZARDOUS WASTE, LIQUID (OIL, WATER)		12. Units Wt/Vol. 221 323			
13.		13. Waste Codes 			
14. Special Handling Instructions and Additional Information WEAR WATER PROTECTIVE EQUIPMENT, JOB/POT # 7772 NRC 1605 FERRY POINT, ALAMEDA, CA 94501 8811 PROFILEX 16296, X55G					
15. GENERATOR/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.		Signature Kylee J. Miller Month Day Year 09 23 13			
Generator/Offeror's Printed/Typed Name Kylee J. Miller					
16. International Shipments <input checked="" type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit Port of Los Angeles California USA Date leaving U.S. 10/23/13			
Transporter signature (for exports only): 					
17. Transporter Acknowledgment of Receipt of Materials		Signature M. B. Month Day Year 10/23/13			
Transporter 1 Printed/Typed Name Merced Benzogen					
Transporter 2 Printed/Typed Name 					
18. Discrepancy		Signature Month Day Year 			
18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		Manifest Reference Number U.S. EPA ID Number 			
18b. Alternate Facility (or Generator)		Signature Month Day Year 			
Facility's Phone: 					
18c. Signature of Alternate Facility (or Generator)		Signature Month Day Year 			
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)					
1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/>					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest, except as noted in item 18a		Signature Month Day Year 			
Printed/Typed Name 					

NON-HAZARDOUS WASTE MANIFEST		1. Generator ID Number C A D 0 0 2 4 0 0 7 1 4	2. Page 1 of 1	3. Emergency Response Phone N R C 5 1 0 7 4 0 - 1 2 0 0	4. Waste Tracking Number 7 7 8 7 2 - 0 1	
5. Generator's Name and Mailing Address MERCEDES-BENZ OF OAKLAND 2010 BROADWAY OAKLAND CA 94611		Generator's Site Address (if different than mailing address) A E GARLAND STEIDING				
Generator's Phone: 510 267-9520						
6. Transporter 1 Company Name N R C Environmental Services		U.S. EPA ID Number C A R 0 0 0 0 2 0 1 1				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address Riverbank Oil Transfer, LLC 6300 Claus Road, Bldg. 11 Riverbank CA 95367		U.S. EPA ID Number C A L 0 0 0 1 9 0 0 1 5				
Facility's Phone: 209 593-0181						
GENERATOR	9. Waste Shipping Name and Description 1 NON-HAZARDOUS WASTE, LIQUID (WATER, TRACE HYDROCARBONS)	10. Containers No.	11. Total Quantity	12. Unit Wt./Vol.		
		0 0 1	TT 350	G		
13. Special Handling Instructions and Additional Information WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT, JCB/PO#77872 NMC 1808 FERRY POINT, ALAMEDA, CA 94501						
14. GENERATOR/SHIPPER'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.						
Generator/Shipper's Printed/Typed Name K. L. BLOOM		Signature John L. Bloom		Month	Day	Year
15. International Shipments <input type="checkbox"/> Export to U.S.		<input type="checkbox"/> Export from U.S.		Port of entry/exit:		
Transporter Signature (for exports only): John L. Bloom						Date leaving U.S.:
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name S P M V E L D M I N O L		Signature Donald M. Snel		Month	Day	Year
Transporter 2 Printed/Typed Name		Signature				
17. Discrepancy						
17a. Discrepancy Indication Space		<input type="checkbox"/> Quantity	<input type="checkbox"/> Type	<input type="checkbox"/> Residue	<input type="checkbox"/> Partial Rejection	<input type="checkbox"/> Full Rejection
Manifest Reference Number:						
17b. Alternate Facility (or Generator)		U.S. EPA ID Number				
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)						
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest, except as noted in Item 17a						
Printed/Typed Name John L. Bloom		Signature John L. Bloom		Month	Day	Year



NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
 If waste is NOT asbestos waste, complete Sections I, II and III

I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A	b. Manifest Document Number	c. Page 1 of 1		
d. Generator's Name and Location: Mercedes-Benz of Oakland 2915 Broadway Oakland, CA 94607 f. Phone: 415-760-9096		e. Generator's Mailing Address: Mercedes-Benz of Oakland 2915 Broadway Oakland, CA 94607 g. Phone: 415-760-9096		
If owner of the generating facility differs from the generator, provide:		i. Owner's Phone No.:		
h. Owner's Name:				
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity
42121317504	12/31/13	Soil		Tons

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

Annette Chen *OC* *10/15/13*

p. Generator Authorized Agent Name (Print) q. Signature r. Date

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Golden Gate Tank Removal, Inc. 1455 Yosemite Ave San Francisco, CA 94124	b. Phone: 415-512-1555	504-5529490		
<i>Julian Maldonado</i>		<i>Julian Maldonado</i> <i>10-17-13</i>		
c. Driver Name (Print)	d. Signature	e. Date		

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Keller Canyon Landfill 901 Bailey Rd. Pittsburg, CA 94565	b. Phone: 925-458-9800	c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:		
b. Phone:	d. Phone:		
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	i. Date
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

If waste is asbestos waste, complete Sections I, II, III and IV
 If waste is NOT asbestos waste, complete Sections I, II and III

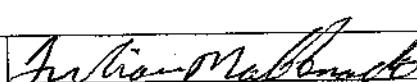
I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A	b. Manifest Document Number	c. Page 1 of 1			
d. Generator's Name and Location: Mercedes-Benz of Oakland 2915 Broadway Oakland, CA 94607 f. Phone: 415-760-9096		e. Generator's Mailing Address: Mercedes-Benz of Oakland 2915 Broadway Oakland, CA 94607 g. Phone: 415-760-9096			
If owner of the generating facility differs from the generator, provide: h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile # 42121317504	k. Exp. Date 12/31/13	l. Waste Shipping Name and Description Soil	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol Tons

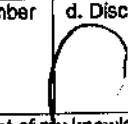
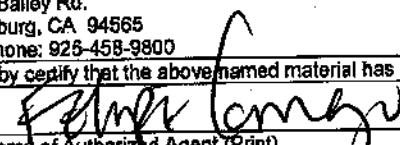
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

Annette Chen		10/15/13
p. Generator Authorized Agent Name (Print)	q. Signature	r. Date

II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Golden Gate Tank Removal, Inc. 1455 Yosemite Ave San Francisco, CA 94124 b. Phone: 415-512-1555	Truck Number - 501 - 5J29490			e. Date 10-16-13
Julian Maldonado		d. Signature	c. Driver Name (Print)	f. Date

III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Keller Canyon Landfill 901 Bailey Rd. Pittsburg, CA 94565 b. Phone: 925-458-9800	c. US EPA Number	d. Discrepancy Indication Space: 		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate. 				
e. Name of Authorized Agent (Print)	f. Signature	g. Date 10-16-13		

IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:	c. Responsible Agency Name and Address:		
b. Phone:	d. Phone:		
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)	h. Signature	i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	KELLER CANYON LANDFILL		SITE	TICKET #	CELL
			01	928112	
CUSTOMER	Pittsburg, CA 9 -458-9800		WEIGHMASTER	Felipe C.	
674678 Golden Gate Tank Removal, Inc. 1455 Yosemite Ave San Francisco, CA 94124 42121317504			DATE/TIME IN	DATE/TIME OUT	
			10-17-2013 10:54 am	10-17-2013 10:54 am	
			VEHICLE	CONTAINER	
			GGTR501		
			REFERENCE	INVOICE	
			BILL OF LADING		

SCALE IN GROSS WEIGHT 48,460 NET TONS 13.30
TARE OUT TARE WEIGHT 21,860 NET WEIGHT 26,600 INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	TRACKING QTY				
13.30	TN	SW-CONT SOIL OAKLAND				
1.00		ENVIRONMENTAL FEE 1				
1.00		FUEL RECOVERY FEE				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accurate, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

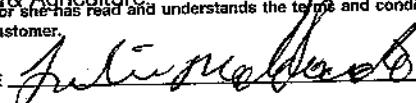
NET AMOUNT

TENDERED

CHANGE

CHECK#

RS-F042UPR (07/12)

SIGNATURE 

SITE	KELLER CANYON LANDFILL		SITE	TICKET #	CELL
			01	927987	
CUSTOMER	Pittsburg, CA 9 -458-9800		WEIGHMASTER	Felipe C.	
674678 Golden Gate Tank Removal, Inc. 1455 Yosemite Ave San Francisco, CA 94124 42121317504			DATE/TIME IN	DATE/TIME OUT	
			10-16-2013 1:06 pm	10-16-2013 1:06 pm	
			VEHICLE	CONTAINER	
			GGTR501		
			REFERENCE	INVOICE	
			BILL OF LADING		

SCALE IN GROSS WEIGHT 44,300 NET TONS 11.22
TARE OUT TARE WEIGHT 21,860 NET WEIGHT 22,440 INBOUND

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
20.00	YD	TRACKING QTY				
11.22	TN	SW-CONT SOIL OAKLAND				
1.00		ENVIRONMENTAL FEE 1				
1.00		FUEL RECOVERY FEE				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accurate, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

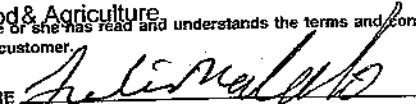
The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT

TENDERED

CHANGE

CHECK#

SIGNATURE 

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/ CONTAMINATION SITE REPORT

EMERGENCY		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED?		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PERSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE. <small>SIGNED _____ DATE _____</small>	
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No			
REPORT DATE		CASE #			
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT		PHONE	SIGNATURE	
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> OTHER...		COMPANY OR AGENCY NAME		
RESPONSIBLE PARTY	ADDRESS STREET		CITY	STATE	ZIP
	NAME <input type="checkbox"/> Unknown				PHONE
SITE LOCATION	ADDRESS STREET		CITY	STATE	ZIP
	FACILITY NAME (IF APPLICABLE)		OPERATOR		PHONE
IMPLEMENTING AGENCIES	CROSS STREET		CITY	COUNTY	ZIP
	LOCAL AGENCY AGENCY NAME				PHONE
SUBSTANCES INVOLVED	REGIONAL BOARD				PHONE
	(1) NAME	QUANTITY LOST (GALLONS) <input type="checkbox"/> Unknown			
(2)	<input type="checkbox"/> Unknown				
DISCOVERY/ABATEMENT	DATE DISCOVERED		HOW DISCOVERED <input type="checkbox"/> Tank Test <input type="checkbox"/> Tank Removal <input type="checkbox"/> Nuisance Conditions <input type="checkbox"/> Inventory Control <input type="checkbox"/> Subsurface Monitoring <input checked="" type="checkbox"/> Other...		
	DATE DISCHARGE BEGAN		<input type="checkbox"/> Unknown METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> Remove Contents <input type="checkbox"/> Close Tank <input type="checkbox"/> Repair Tank <input type="checkbox"/> Change Procedure <input type="checkbox"/> Replace Tank <input type="checkbox"/> Other... <input type="checkbox"/> Repair Piping		
SOURCE/CAUSE	HAS DISCHARGE BEEN STOPPED? <input type="checkbox"/> Yes <input type="checkbox"/> No IF YES, DATE				
	SOURCE OF DISCHARGE <input type="checkbox"/> Tank Leak <input type="checkbox"/> Piping Leak <input type="checkbox"/> Unknown <input type="checkbox"/> Other...		CAUSE(S) <input type="checkbox"/> Overfill <input type="checkbox"/> Corrosion <input type="checkbox"/> Rupture/Failure <input type="checkbox"/> Unknown <input type="checkbox"/> Spill <input type="checkbox"/> Other...		
CASE TYPE	CHECK ONE ONLY <input type="checkbox"/> Undetermined <input type="checkbox"/> Soil Only <input type="checkbox"/> Groundwater <input type="checkbox"/> Drinking Water - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> No Action Taken <input type="checkbox"/> Case Closed (Cleanup Completed or Unnecessary) <input type="checkbox"/> Leak Being Confirmed <input type="checkbox"/> Pollution Characterization <input type="checkbox"/> Remediation Plan <input type="checkbox"/> Post Cleanup Monitoring in Progress <input type="checkbox"/> Preliminary Site Assessment Workplan Submitted <input type="checkbox"/> Cleanup Underway <input type="checkbox"/> Preliminary Site Assessment Underway				
REMEDIATION ACTION	CHECK APPROPRIATE ACTION(S) <input type="checkbox"/> Cap Site (CD) <input type="checkbox"/> Excavate & Treat (ET) <input type="checkbox"/> Treatment at Hookup (HU) <input type="checkbox"/> Other... <input type="checkbox"/> Contamination Barrier (CB) <input type="checkbox"/> No Action Required (NA) <input type="checkbox"/> Enhanced Bio Degradation (IT) <input type="checkbox"/> Vacuum Extract (VE) <input type="checkbox"/> Remove Free Product (FP) <input type="checkbox"/> Replace Supply (RS) <input type="checkbox"/> Excavate & Dispose (ED) <input type="checkbox"/> Pump & Treat Groundwater (GT) <input type="checkbox"/> Vent Soil (VS)				
COMMENTS					



**Oakland Fire Department, Fire Prevention Bureau
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032**



(510) 238-3851
TTY (510) 238-6884

Fire/Life Safety System Proceed With Removal Permit

Occupancy Mailing Address
Golden gate tank removal
1455 Yosemite Ave.
San Francisco, CA 94124

Contractor

Golden Gate Tank Removal

1455 Yosemite Avenue

San Francisco

Permit Ref #

CA

UST Removal

The C.U.P.A. Tanks for the Fireworks; Manu., Store, Prossess, or Sell has been completed and the project/permit has been.

APPROVED projects may proceed with installation, following the detailed list of comments below:
DENIED projects shall have the items listed below corrected and plans must be resubmitted for further review:

<u>Code</u>	<u>Requirements</u>	<u>Requirement Condition</u>	<u>Status</u>
-------------	---------------------	------------------------------	---------------

To schedule/cancel an inspection, call 510-238-3851. Any inspection not cancelled prior to 4 pm on the previous business day will be charged a fee equivalent to the 1-hr inspection fee charge. Occupancy is prohibited until all applicable provisions of the Fire Code have been met or when written approval is obtained by both building and fire official.

Should you have any questions, please call (510) 238-3651 or you may send e-mail to or send email to kmatthews@oaklandnet.com.

Oakland Fire Department
Fire Prevention Bureau

Inspection Ref #

2013-33330

Effective Date:

09/17/2013

Permit Ref #:

Expires:

03/17/2014



Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# X1302388

Job Site 2915 BROADWAY

Parcel# 009 -0701-008-00

Descr Remove UG storage tank in SIDEWALK AREA ONLY.

Permit Issued 09/11/13

FIRE MARSHAL review required. 3rd FLOOR.

Call PWA INSPECTION prior to start: 510-238-3651. 4th FLOOR.

Non-Metered

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #

Acctg#:

Util Fund #:

Applicant Phone# Lic# --License Classes--

Owner GAB ASSOCIATES LLC

Contractor GOLDEN GATE TANK REMOVAL

X (415) 512-1555 616521 A C8

Arch/Engr

Agent

Applic Addr 1455 YOSEMITE AVENUE, SAN FRANCISCO, CA, 94124

\$436.05 FEES TO BE PAID AT ISSUANCE	
\$71.00 Applic	\$309.00 Permit
\$.00 Process	\$36.10 Rec Mgmt
\$.00 Gen Plan	\$.00 Invstg
\$.00 Other	\$19.95 Tech Enh

JOB SITE

Permit Issued By

0

Date:

Inspection Routing:

Units Date

FLD-CHK/Pre-Con

Excavation/Anchor Installation

Sidewalk repair mark-out

Concrete repair

Finalled

ADDRESS:

DIST:

P A I D

9/10/13 [initials]

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Permit No. X1302388 Parcel #: 009 -0701-008-00
Project Address: 2915 BROADWAY

Page 2 of 2

Licensed Contractors' Declaration

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Construction Lending Agency Declaration

I hereby affirm under penalty of perjury that there is a construction-lending agency for the performance of the work for which this permit is issued, as provided by Section 3097 of the Business and Professions Code. N/A under Lender implies No Lending Agency.

Lender _____ Address _____

Workers' Compensation Declaration

I hereby affirm under penalty of perjury one of the following declarations:

[] I have and will maintain a certificate of consent to self-insure for workers' compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

[] I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

CARRIER: _____ POLICY NO. _____

[] I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California, and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS, IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3707 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

Hazardous Materials Declaration

I hereby affirm that the intended occupancy [] WILL [] WILL NOT use, handle or store any hazardous, or acutely hazardous, materials. (Checking "WILL" acknowledges that Sections 25505, 25533, & 25534 of the Health & Safety Code, as well as filing instructions, were made available to you.)

I HEREBY CERTIFY THE FOLLOWING: That I have read this document; that the above information is correct; and that I have truthfully affirmed all applicable declarations contained in this document. I agree to comply with all city and county ordinances and state laws relating to building construction, and hereby authorize representatives of this city to enter upon the above-mentioned property for inspection. I am fully authorized by the owner and to perform the work authorized by this permit.

PRINT NAME _____

Signature [] Contractor, or [] Agent

Date _____

ADDRESS: _____

DIST: _____