



**Alfa Environmental Remediation Services, Inc.**

9000 Crow Canyon Rd. Suite S  
Danville CA 94506  
(925) 308-9200 (916) 376-9159 (714) 465-4755  
Fax: (888) 802-1634

October 28, 2013

Mr. Delong Liu  
Delong Oil, Inc.  
2501 N. Main Street  
Walnut Creek, CA 94597

RE: Closure Report - Underground Storage Tank (UST)  
Webster 76  
1716 Webster Street  
Alameda, CA 94501-2136

***Dear Mr. Liu,***

Please see attached the Closure Report requested by Mr. Steven Plunkett, Senior Hazardous Materials Specialist with the Alameda County Environmental Health Department (EHD) regarding the removal of one UST, soil sampling and analysis, and UST Closure, and Technical Reporting, at the above-referenced site.

This Closure Report was prepared in a manner consistent with the level of care and skill ordinarily exercised by professional geologists and environmental scientists.

ALFA ENVIRONMENTAL REMEDIATION SERVICES, INC.



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Valentin Constantinescu  
PG No. 7503, REPA No. 767731, CBIA No. 118  
Senior Project Manager

## CLOSURE REPORT

Webster 76  
1716 Webster Street  
Alameda, CA 94501-2136

### UST Removal

On September 6, 2013, one(1) x 1,000-gal double-wall fiberglass Underground Storage Tank (UST) was excavated, readied for removal, and removed by Iron Horse Development Co. (IHDC), who was under a contract to Delong Oil, Inc. Musco Excavators, Inc. removed the UST.

ALFA was on-site during this time to act as witness for the client, to collect soil samples, and/or to aid IHDC. The UST was dry-iced to inert the tank, checked with a meter for % Concentration of Flammable Vapor (%FV) and % Concentration Oxygen (%O<sub>2</sub>). As shown on the Hazardous Waste Tank Closure Certification (HWTCC), the %FV readings was zero and the %O<sub>2</sub> readings was 1.5% for the UST. The readings were approved by Mr. Steven Plunkett of the Alameda County Environmental Health Department (EHD). The UST was removed, inspected by EHD, and loaded on to a flatbed truck (owned and operated by Adams Services Inc.) for delivery to C&D Division - Global Materials Recovery Services in Santa Rosa, California and disposed of as garbage. No holes, sign of corrosion, spills, leaks, or any other sign of contamination was identified by EHD or by ALFA on the removed UST or on the excavated soil from around the UST or on soil inside the former UST excavation pit. However, a strong hydrocarbon odor was noted when a bucket of wet soil was collected from approximately 6-8 ft bgs in the northern portion of the excavation pit bottom.

The UST was transported as a non-hazardous waste. Attachments contain: the signed HWTCC, recycling documentation for the USTs, and disposal documentation for approximately 350-gallon "water with trace hydrocarbons" are attached. The tankpit will be backfilled with clean imported material.

Mr. Steven Plunkett, Senior Hazardous Materials Specialist of the Alameda County Environmental Health Department witnessed all removal and related sampling activities.



## Soil and Water Sampling

Brass tubes were driven into undisturbed soil, headspace was not permitted, and the bottom-end of the sample was analyzed by the laboratory to assure representative pollutant conditions of the undisturbed soil. A grab water sample designated WS was collected from approximately 6-7 ft bgs from within the excavated soil and water and collected from the excavator bucket. The soil and water samples were collected for analysis in the appropriate tubes/containers, sealed, labeled, and placed on ice until delivery to the laboratory for analysis (LUFT Manual Guidelines). Transport to the laboratory was under strict Chain-of-Custody (COC) protocols.

On September 6, 2013, ALFA collected the soil samples designated S1 and S2, and the water sample designated WS from areas immediately beneath the former UST excavation pit and at those location indicated by Mr. Steven Plunkett, Senior Hazardous Materials Specialist with the Alameda County Environmental Health Department.

Analytical results of the September 6, 2013 sampling event indicated levels well below 100 mg/kg in soil in areas beneath the former UST (see Figure 1, attached).

Levels of Total Petroleum Hydrocarbons (TPH) in the Diesel Range Organics (TPH C10-C28) were detected at 6.17 milligrams per kilogram (mg/kg) and at 7.97 mg/kg in the soil samples designated S1 and S2, respectively. Levels of Total Petroleum Hydrocarbons in the Oil Range Organics (TPH >C28-C40) were detected at 9.09 mg/kg and at 13.07 mg/kg in the soil samples designated S1 and S2, respectively.

In the grab water sample designated WS, were detected very high levels of TPH in the Diesel Range Organics (C10-C28) and TPH in the Oil Range Organics (TPH >C28-C40) at 18,200 micrograms per liter ( $\mu\text{g/L}$ ) and 46,200  $\mu\text{g/L}$ , respectively.



On October 18, 2013, soils were over-excavated in all directions as shown on Figure 2, attached, and ALFA collected the soil samples designated S3 through S10 at approximately 3-3.5 ft bgs from the excavation pit walls and from approximately 6-7 ft from the over-excavation bottom (see Figure 2, attached).

The soil sample location and designation and sample depths are presented on Figure 1 and Figure 2 and a summary of the detected values and all analytical results are attached.

The results are briefly discussed below. The laboratory reports and COC forms are attached. The analysis protocol is from the LUFT Manual Guidelines, which is followed by the Alameda County Environmental Health Department for closure of the USTs.

## **RESULTS AND CONCLUSIONS**

Excepting a soil sample designated S5 collected from wet soil in the northern portion of the excavation pit bottom where the level of Total Petroleum Hydrocarbons in the Oil Range Organics (TPH >C28-C40) was detected at 129 mg/kg, all other analytical results for the soil samples collected from the former 1,000-gallon waste oil UST over-excavation pit, documented levels of analyzed compounds well below the regulatory action levels or below the laboratory detection limits.

As mentioned above, very high levels of TPH in the Diesel Range Organics (18,200 µg/L) and of TPH in the Oil Range Organics (46,200 µg/L), above the regulatory action levels, were detected in the grab water sample collected from within the former UST excavation pit.

As reported to ALFA and documented in attachments, the UST was disposed of as a nonhazardous waste.

When the UST was removed, native soils at the wall of the tankpit and the over-excavated soils were sampled and the analytical results indicated that, excepting 129 mg/kg of TPH-Oil Range Organics, all other analyzed compounds were below the laboratory detection limits (ND) or well below any regulatory action levels.



Impacted soil/groundwater still exists beneath the northern portion of the former UST. However, in order to remove additional impacted soil, a deeper additional over-excavation should be performed which implies a wider excavation and cutting the sides of the excavation at a safe slope. Therefore, to prevent caving and existing building and fences collapse/rupture, it is our professional opinion additional excavation of impacted soil is not safe.

The stockpiled soil will be profiled for disposal to a licensed landfill. The soil will be transported under transport manifest by a licensed contractor, and the tankpit will be backfilled with clean imported soil.

## **RECOMMENDATIONS**

1. This removal project has met the requirements of the specifications and the regulatory requirements.
2. There is no further action required in relation to closing this tank.
3. The Alameda County Environmental Health Department should issue a letter indicating the closure of this UST system.



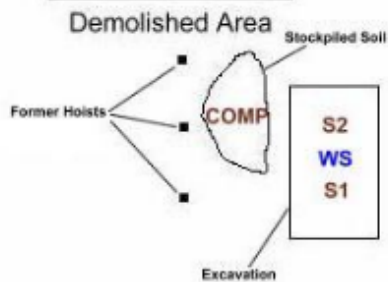
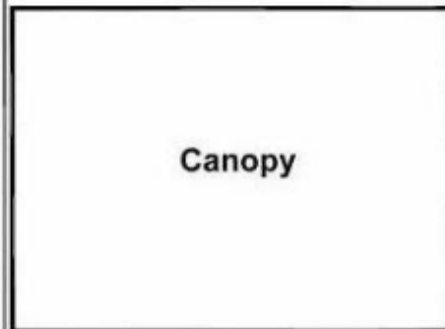
**ATTACHMENT A**

**FIGURES**



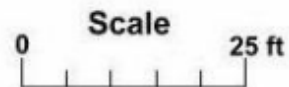
Buena Vista Avenue

Webster Street



**Analytical Results  
Summary of Hits**

- S1 - mg/kg (soil sample)**  
TPH (C10-C28) 6.17  
TPH (> C28-C40) 9.09
- S2 - mg/kg (soil sample)**  
TPH (C10-C28) 7.97  
TPH (> C28-C40) 13.7
- WS (grab water sample)**  
Acetone 7.6 ug/L  
Bromodichloromethane 0.64 ug/L  
Choloroform 12.1 ug/L  
Methyl chloride 0.39 ug/L  
TPH-GRO (C6-C10) 26.6 ug/L  
bis (2EHP) 37.0 ug/L  
TPH (C10-C28) 18.2 mg/L  
TPH (> C28-C40) 46.2 mg/L
- COMP (1-4) - mg/kg**  
TPH (C10-C28) 30.9  
TPH (> C28-C40) 213



**SITE MAP**



ALFA Environmental  
Remediation Services, Inc.

FIGURE 1  
FIRST EXCAVATION  
SEPTEMBER 6, 2013  
WEBSTER 76  
1716 WEBSTER STREET  
ALAMEDA CALIFORNIA

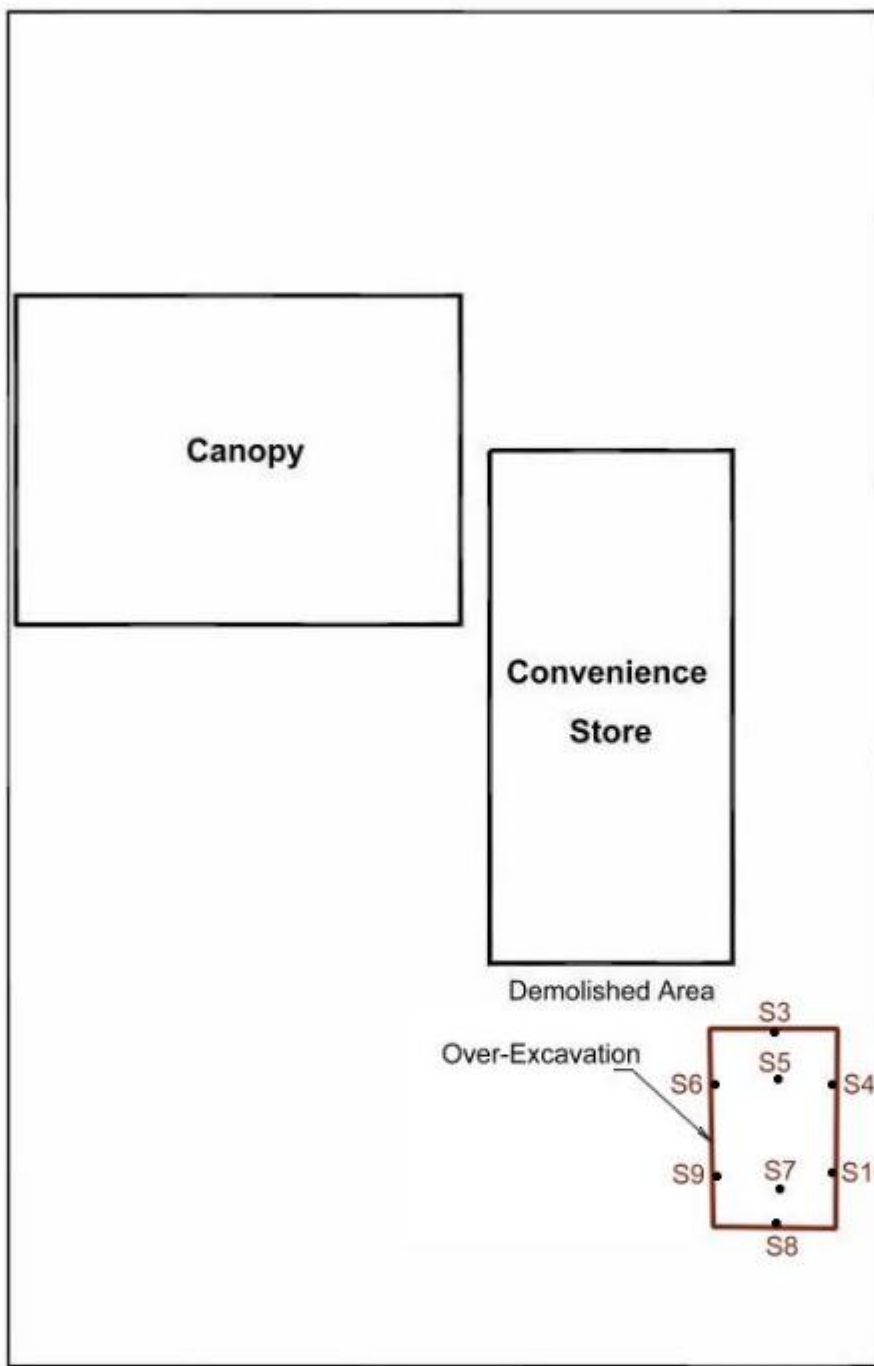
Project No.: WKP7512



Approximate Scale

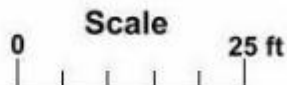
Buena Vista Avenue

Webster Street



**Summary of Hits**  
**Analytical Results**  
(mg/kg)

Sample ID	TPH (C10-C28)	TPH (> C28-C40)
<b>S3</b>	6.33	28.9
<b>S4</b>	5.77	20.0
<b>S5</b>	16.3	129
<b>S6</b>	3.43	8.19
<b>S7</b>	10.7	73.4
<b>S8</b>	3.18	8.74
<b>S9</b>	5.22	ND
<b>S10</b>	6.72	29.3



**SITE MAP**

FIGURE 2  
OVER-EXCAVATION  
OCTOBER 18, 2013  
WEBSTER 76  
1716 WEBSTER STREET  
ALAMEDA CALIFORNIA

Project No.: WKP7512



ALFA Environmental  
Remediation Services, Inc.

Approximate Scale



**ATTACHMENT B**

**SUMMARY OF HITS  
AND SAMPLING DEPTHS**

**FIRST EXCAVATION - SEPTEMBER 6, 2013  
OVER-EXCAVATION - OCTOBER 18, 2013**



**FIRST EXCAVATION  
SEPTEMBER 6, 2013**

**Summary of Hits**

**Job Number:** C29576  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 09/06/13

2

Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	RL	MDL	Units	Method
<b>C29576-1</b>	<b>S1</b>	<b>at 6 ft bgs</b>		<b>SOIL SAMPLE</b>			
TPH (C10-C28)		6.17 J		9.7	2.4	mg/kg	SW846 8015B M
TPH (> C28-C40)		9.09 J		19	4.8	mg/kg	SW846 8015B M
Chromium		16.0		0.93		mg/kg	SW846 6010B
Lead		7.0		1.9		mg/kg	SW846 6010B
Nickel		11.6		0.93		mg/kg	SW846 6010B
Zinc		46.3		1.9		mg/kg	SW846 6010B
<b>C29576-2</b>	<b>S2</b>	<b>at 6 ft bgs</b>		<b>SOIL SAMPLE</b>			
TPH (C10-C28)		7.97 J		9.7	2.4	mg/kg	SW846 8015B M
TPH (> C28-C40)		13.7 J		19	4.9	mg/kg	SW846 8015B M
Chromium		16.1		0.89		mg/kg	SW846 6010B
Lead		8.6		1.8		mg/kg	SW846 6010B
Nickel		15.9		0.89		mg/kg	SW846 6010B
Zinc		46.3		1.8		mg/kg	SW846 6010B
<b>C29576-3</b>	<b>WS</b>	<b>at 6 ft - 7 ft bgs</b>		<b>GRAB WATER SAMPLE</b>			
Acetone <sup>a</sup>		7.6 J		20	4.0	ug/l	SW846 8260B
Bromodichloromethane <sup>a</sup>		0.64 J		1.0	0.20	ug/l	SW846 8260B
Chloroform <sup>a</sup>		12.1		1.0	0.20	ug/l	SW846 8260B
Methyl chloride <sup>a</sup>		0.39 J		1.0	0.30	ug/l	SW846 8260B
TPH-GRO (C6-C10) <sup>b</sup>		26.6 J		50	25	ug/l	SW846 8260B
bis(2-Ethylhexyl)phthalate <sup>c</sup>		37.0 J		110	22	ug/l	SW846 8270C
TPH (C10-C28)		18.2		5.6	1.4	mg/l	SW846 8015B M
TPH (> C28-C40)		46.2		11	2.8	mg/l	SW846 8015B M
Cadmium <sup>d</sup>		35.6		6.0		ug/l	SW846 6010B
Chromium <sup>d</sup>		3890		30		ug/l	SW846 6010B
Lead <sup>d</sup>		4940		30		ug/l	SW846 6010B
Nickel <sup>d</sup>		5150		15		ug/l	SW846 6010B
Zinc <sup>d</sup>		8560		60		ug/l	SW846 6010B
<b>C29576-8</b>	<b>COMP(1-4)</b>	<b>composite sample</b>					
TPH (C10-C28)		30.9 J		39	9.7	mg/kg	SW846 8015B M
TPH (> C28-C40)		213		78	19	mg/kg	SW846 8015B M
Chromium		32.4		0.83		mg/kg	SW846 6010B
Lead		2.5		1.7		mg/kg	SW846 6010B
Nickel		35.5		0.83		mg/kg	SW846 6010B
Zinc		22.2		1.7		mg/kg	SW846 6010B

(a) Sample vial contained more than 0.5cm of sediment.

(b) Sample vial contained more than 0.5cm of sediment. Atypical pattern; value primarily due to chlorinated

## Summary of Hits

**Job Number:** C29576  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 09/06/13

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

- compound(s).
- (c) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).
- (d) Elevated reporting limit(s) due to matrix interference and/or dilution required for high interfering element.

**OVER-EXCAVATION  
OCTOBER 18, 2013**

**Summary of Hits**

**Job Number:** C30377  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 10/18/13

2

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
<b>C30377-1</b>	<b>S3</b>	<b>at 3.0 ft -3.5 ft bgs - excavation north wall</b>				
TPH (C10-C28)		6.33 J	9.9	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		28.9	20	5.0	mg/kg	SW846 8015B M
<b>C30377-2</b>	<b>S4</b>	<b>at 3.0 ft - 3.5 ft bgs - excavation east wall</b>				
TPH (C10-C28)		5.77 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		20.0	20	5.0	mg/kg	SW846 8015B M
<b>C30377-3</b>	<b>S5</b>	<b>at 6.0 ft - 7.0 ft bgs - excavation north bottom</b>				
TPH (C10-C28)		16.3 J	20	4.9	mg/kg	SW846 8015B M
TPH (> C28-C40)		129	40	9.9	mg/kg	SW846 8015B M
<b>C30377-4</b>	<b>S6</b>	<b>at 3.0 ft - 3.5 ft bgs - excavation west wall</b>				
TPH (C10-C28)		3.43 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		8.19 J	20	5.0	mg/kg	SW846 8015B M
<b>C30377-5</b>	<b>S7</b>	<b>at 6.0 - 7.0 ft bgs - excavation south bottom</b>				
TPH (C10-C28)		10.7	9.9	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		73.4	20	5.0	mg/kg	SW846 8015B M
<b>C30377-6</b>	<b>S8</b>	<b>at 3.0 ft - 3.5 ft bgs - excavation south wall</b>				
TPH (C10-C28)		3.18 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		8.74 J	20	5.0	mg/kg	SW846 8015B M
<b>C30377-7</b>	<b>S9</b>	<b>at 3.0 ft - 3.5 ft bgs - excavation west wall</b>				
TPH (> C28-C40)		5.22 J	20	4.9	mg/kg	SW846 8015B M
<b>C30377-8</b>	<b>S10</b>	<b>at 3.0 ft - 3.5 ft bgs - excavation east wall</b>				
TPH (C10-C28)		6.72 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		29.3	20	5.0	mg/kg	SW846 8015B M

**ATTACHMENT C**  
**TRANSPORT AND DISPOSAL DOCUMENTS**



C & D DIVISION  
 GLOBAL MATERIALS RECOVERY SERVICES  
 3899 SANTA ROSA AVE  
 SANTA ROSA, CA 95407  
 \*\*\* RECEIPT \*\*\*

DATE: 9/6/13      TIME IN: 2:16 pm      TIMEOUT: 2:24 pm      TICKET #: 185683  
 CUSTOMER: 001001 - CASH      OPERATOR: LAH2  
 REFERENCE: MUSCO- DUARTE

TRUCK:      TRAILER:      VEHICLE: CASH -T&T      ORIGIN: Santa Rosa  
 TRANSACTION: INBOUND  
 PAYMENT: Visa

	LBS	SCALE
Gross	36,780.00	
Tare	35,920.00	
Net		
Vol	860.00	

TONS	MATERIAL	RATE/UoM	FEE
0.43	Trash - Not C & D	\$99.00/TN	\$42.57

*1-1000  
 Dwr Fiberglass  
 tank - crushed*

NOTE: This is to certify that the following described commodity was weighted, measured, or counted by a weigh-master, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Ch 7 (commencing with Sec. 12700) of the Div of 5 of the Cal Business and Professional Code, administered by the Div of Measurement Stds of the Cal Dept of Food & Agriculture.

TOTAL FEE: \$42.57  
 TENDERED: \$42.57  
 CHANGE: \$0.00

GLOBAL MATERIALS (C.D)  
 P.O. BOX 2638  
 ROHNERT PARK, CA 94927

09/06/2013      14:25:04  
 Merchant ID:      00000000531991  
 Terminal ID:      03301147  
 226245002994

CREDIT CARD  
 VISA SALE

CARD #      XXXXXXXXXXXX5849  
 INVOICE      0018  
 Batch #:      000752  
 Approval Code:      051530  
 Entry Method:      Swiped  
 Mode:      Online  
 Tax Amount:      \$0.00

SALE AMOUNT      \$42.57

CUSTOMER COPY

**UNIFIED PROGRAM CONSOLIDATED FORM  
HAZARDOUS WASTE  
HAZARDOUS WASTE TANK CLOSURE CERTIFICATION**

Page 1 of 1

**I. FACILITY IDENTIFICATION**

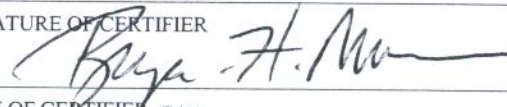
BUSINESS NAME (Same as FACILITY NAME or DBA - Doing Business As) <sup>3.</sup>	FACILITY ID#
WEBSTER 76	
TANK OWNER NAME	740.
DELONG LIU	
TANK OWNER ADDRESS	741.
2501 N. MAIN STREET	
TANK OWNER CITY	742.
WALNUT CREEK	
STATE	743.
CA	
ZIP CODE	744.
94597	

**II. TANK CLOSURE INFORMATION**

TANK INTERIOR ATMOSPHERE READINGS	Tank ID # (Attach additional copies of this page for more than three tanks)	Concentration of Flammable Vapor			Concentration of Oxygen			
		Top	Center	Bottom	Top	Center	Bottom	
		1	1	745.	0% 746a.	0% 746b.	0% 746c.	1.5% 747a.
2		748.						
3		751.						

**III. CERTIFICATION**

On examination of the tank, I certify the tank is visually free from product, sludge, scale (thin, flaky residual of tank contents), rinseate and debris. I further certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF CERTIFIER 	STATUS OR AFFILIATION OF CERTIFYING PERSON
NAME OF CERTIFIER (Print) 754.	Certifier is a representative of the CUPA, authorized agency, or LIA: 760.
BRYAN H. MUSCO	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
TITLE OF CERTIFIER 755.	Name of CUPA, authorized agency, or LIA: 761.
OWNER OF MUSCO EXCAVATORS, INC.	
ADDRESS 756.	If certifier is other than CUPA / LIA check appropriate box below: 762.
2526 GREENVALE COURT	<input type="checkbox"/> a. Certified Industrial Hygienist (CIH)
CITY 757.	<input type="checkbox"/> b. Certified Safety Professional (CSP)
SANTA ROSA	<input type="checkbox"/> c. Certified Marine Chemist (CMC)
PHONE 758.	<input type="checkbox"/> d. Registered Environmental Health Specialist (REHS)
707-579-0250	<input type="checkbox"/> e. Professional Engineer (PE)
DATE 759.	<input type="checkbox"/> f. Class II Registered Environmental Assessor
9/1/13	<input checked="" type="checkbox"/> g. Contractors' State License Board licensed contractor (with hazardous substance removal certification)
CERTIFICATION TIME	
9:30 AM	

TANK PREVIOUSLY HELD FLAMMABLE OR COMBUSTIBLE MATERIALS 763.

(If yes, the tank interior atmosphere shall be re-checked with a combustible gas indicator prior to work being conducted on the tank.)  Yes  No

CERTIFIER'S TANK MANAGEMENT INSTRUCTIONS FOR SCRAP DEALER, DISPOSAL FACILITY, ETC: 764.

The tank being disposed of has been cleaned and declared non-hazardous. The tank was removed under the guidance of Alameda County Environmental Health. The tank was crushed on-site and is being disposed of as garbage at Industrial Carting in Santa Rosa, CA, the same day as it was removed.

A copy of this certificate shall accompany the tank to the recycling/disposal facility and be provided to the agency overseeing tank closure (i.e. CUPA or other authorized local agency); the owner and/or operator of the tank system; and the tank removal contractor.

**ATTACHMENT D**  
**ANALYTICAL RESULTS**





**Technical Report for**

**Alfa Environmental**

Alameda - Webster Street, Alameda, CA

7514

Accutest Job Number: C29576

Sampling Date: 09/06/13

**Report to:**

Alfa Environmental  
9000 Crow Canyon Stes  
Danville, CA 94506  
val@alfaenv.com

ATTN: Val Constantinescu

Total number of pages in report: **111**



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.



**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-

<b>Section 1: Sample Summary</b> .....	<b>3</b>
<b>Section 2: Summary of Hits</b> .....	<b>4</b>
<b>Section 3: Sample Results</b> .....	<b>6</b>
<b>3.1:</b> C29576-1: S1 .....	7
<b>3.2:</b> C29576-2: S2 .....	16
<b>3.3:</b> C29576-3: WS .....	25
<b>3.4:</b> C29576-8: COMP(1-4) .....	33
<b>Section 4: Misc. Forms</b> .....	<b>42</b>
<b>4.1:</b> Chain of Custody .....	43
<b>Section 5: GC/MS Volatiles - QC Data Summaries</b> .....	<b>45</b>
<b>5.1:</b> Method Blank Summary .....	46
<b>5.2:</b> Blank Spike/Blank Spike Duplicate Summary .....	55
<b>5.3:</b> Laboratory Control Sample Summary .....	64
<b>5.4:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	67
<b>Section 6: GC/MS Semi-volatiles - QC Data Summaries</b> .....	<b>76</b>
<b>6.1:</b> Method Blank Summary .....	77
<b>6.2:</b> Blank Spike/Blank Spike Duplicate Summary .....	83
<b>6.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	89
<b>Section 7: GC Semi-volatiles - QC Data Summaries</b> .....	<b>92</b>
<b>7.1:</b> Method Blank Summary .....	93
<b>7.2:</b> Blank Spike/Blank Spike Duplicate Summary .....	96
<b>7.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	99
<b>Section 8: Metals Analysis - QC Data Summaries</b> .....	<b>101</b>
<b>8.1:</b> Prep QC MP6671: Cd,Cr,Pb,Ni,Zn .....	102
<b>8.2:</b> Prep QC MP6677: Cd,Cr,Pb,Ni,Zn .....	107

1

2

3

4

5

6

7

8



## Sample Summary

Alfa Environmental

**Job No:** C29576

Alameda - Webster Street, Alameda, CA  
 Project No: 7514

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C29576-1	09/06/13	10:20 VC	09/06/13	SO	Soil	S1
C29576-2	09/06/13	10:27 VC	09/06/13	SO	Soil	S2
C29576-3	09/06/13	10:35 VC	09/06/13	AQ	Surface Water	WS
C29576-4	09/06/13	10:43 VC	09/06/13	SO	Soil	COMP 1
C29576-5	09/06/13	10:43 VC	09/06/13	SO	Soil	COMP 2
C29576-6	09/06/13	10:43 VC	09/06/13	SO	Soil	COMP 3
C29576-7	09/06/13	10:43 VC	09/06/13	SO	Soil	COMP 4
C29576-8	09/06/13	00:00 VC	09/06/13	SO	Soil	COMP(1-4)

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

## Summary of Hits

**Job Number:** C29576  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 09/06/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
<b>C29576-1</b>	<b>S1</b>					
		TPH (C10-C28)	6.17 J	9.7	2.4	mg/kg SW846 8015B M
		TPH (> C28-C40)	9.09 J	19	4.8	mg/kg SW846 8015B M
		Chromium	16.0	0.93		mg/kg SW846 6010B
		Lead	7.0	1.9		mg/kg SW846 6010B
		Nickel	11.6	0.93		mg/kg SW846 6010B
		Zinc	46.3	1.9		mg/kg SW846 6010B
<b>C29576-2</b>	<b>S2</b>					
		TPH (C10-C28)	7.97 J	9.7	2.4	mg/kg SW846 8015B M
		TPH (> C28-C40)	13.7 J	19	4.9	mg/kg SW846 8015B M
		Chromium	16.1	0.89		mg/kg SW846 6010B
		Lead	8.6	1.8		mg/kg SW846 6010B
		Nickel	15.9	0.89		mg/kg SW846 6010B
		Zinc	46.3	1.8		mg/kg SW846 6010B
<b>C29576-3</b>	<b>WS</b>					
		Acetone <sup>a</sup>	7.6 J	20	4.0	ug/l SW846 8260B
		Bromodichloromethane <sup>a</sup>	0.64 J	1.0	0.20	ug/l SW846 8260B
		Chloroform <sup>a</sup>	12.1	1.0	0.20	ug/l SW846 8260B
		Methyl chloride <sup>a</sup>	0.39 J	1.0	0.30	ug/l SW846 8260B
		TPH-GRO (C6-C10) <sup>b</sup>	26.6 J	50	25	ug/l SW846 8260B
		bis(2-Ethylhexyl)phthalate <sup>c</sup>	37.0 J	110	22	ug/l SW846 8270C
		TPH (C10-C28)	18.2	5.6	1.4	mg/l SW846 8015B M
		TPH (> C28-C40)	46.2	11	2.8	mg/l SW846 8015B M
		Cadmium <sup>d</sup>	35.6	6.0		ug/l SW846 6010B
		Chromium <sup>d</sup>	3890	30		ug/l SW846 6010B
		Lead <sup>d</sup>	4940	30		ug/l SW846 6010B
		Nickel <sup>d</sup>	5150	15		ug/l SW846 6010B
		Zinc <sup>d</sup>	8560	60		ug/l SW846 6010B
<b>C29576-8</b>	<b>COMP(1-4)</b>					
		TPH (C10-C28)	30.9 J	39	9.7	mg/kg SW846 8015B M
		TPH (> C28-C40)	213	78	19	mg/kg SW846 8015B M
		Chromium	32.4	0.83		mg/kg SW846 6010B
		Lead	2.5	1.7		mg/kg SW846 6010B
		Nickel	35.5	0.83		mg/kg SW846 6010B
		Zinc	22.2	1.7		mg/kg SW846 6010B

(a) Sample vial contained more than 0.5cm of sediment.

(b) Sample vial contained more than 0.5cm of sediment. Atypical pattern; value primarily due to chlorinated

## Summary of Hits

**Job Number:** C29576  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 09/06/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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- compound(s).
- (c) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).
- (d) Elevated reporting limit(s) due to matrix interference and/or dilution required for high interfering element.

Sample Results

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Report of Analysis

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# Report of Analysis

<b>Client Sample ID:</b> S1		
<b>Lab Sample ID:</b> C29576-1		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L27247.D	1	09/06/13	XB	n/a	n/a	VL863
Run #2							

	Initial Weight
Run #1	5.08 g
Run #2	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.8	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	Bromochloromethane	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	0.98	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	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.98	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  
 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

<b>Client Sample ID:</b> S1		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-1		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> Alameda - Webster Street, Alameda, 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	
64-17-5	Ethyl alcohol	ND	490	92	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	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.98	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	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.98	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.98	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.98	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.98	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	9.8	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	0.98	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	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.98	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	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	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.98	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	0.98	ug/kg	
	TPH-GRO (C6-C10)	ND	98	49	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

<b>Client Sample ID:</b> S1		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-1		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	96%		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

<b>Client Sample ID:</b> S1		
<b>Lab Sample ID:</b> C29576-1		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8270C SW846 3550B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y22270.D	1	09/11/13	MT	09/11/13	OP8678	EY1036
Run #2							

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

**ABN Full List**

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	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	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

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

## Report of Analysis

<b>Client Sample ID:</b> S1		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-1		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8270C SW846 3550B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
123-91-1	1,4-Dioxane	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	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

<b>Client Sample ID:</b> S1 <b>Lab Sample ID:</b> C29576-1 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8270C SW846 3550B <b>Project:</b> Alameda - Webster Street, Alameda, CA	<b>Date Sampled:</b> 09/06/13 <b>Date Received:</b> 09/06/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**ABN Full List**

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		14-99%
4165-62-2	Phenol-d5	65%		18-100%
118-79-6	2,4,6-Tribromophenol	74%		25-107%
4165-60-0	Nitrobenzene-d5	54%		15-101%
321-60-8	2-Fluorobiphenyl	54%		15-104%
1718-51-0	Terphenyl-d14	77%		56-123%

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

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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

<b>Client Sample ID:</b> S1		
<b>Lab Sample ID:</b> C29576-1		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8082 SW846 3550B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP031927.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

### PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	33	17	ug/kg	
11141-16-5	Aroclor 1232	ND	33	17	ug/kg	
53469-21-9	Aroclor 1242	ND	33	17	ug/kg	
12672-29-6	Aroclor 1248	ND	33	17	ug/kg	
11097-69-1	Aroclor 1254	ND	33	17	ug/kg	
11096-82-5	Aroclor 1260	ND	33	6.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		38-109%
877-09-8	Tetrachloro-m-xylene	110% <sup>b</sup>		38-109%
2051-24-3	Decachlorobiphenyl	96%		49-138%
2051-24-3	Decachlorobiphenyl	88%		49-138%

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

(b) Outside control limits high bias.

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

3.1  
3

<b>Client Sample ID:</b> S1	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-1	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3550B	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH307695.D	1	09/16/13	AG	09/11/13	OP8668	GHH1076
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.4 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	6.17	9.7	2.4	mg/kg	J
	TPH (> C28-C40)	9.09	19	4.8	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		37-122%

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

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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

<b>Client Sample ID:</b> S1	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-1	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.93	0.93	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Chromium	16.0	0.93	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Lead	7.0	1.9	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Nickel	11.6	0.93	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Zinc	46.3	1.9	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3430

(2) Prep QC Batch: MP6677

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

RL = Reporting Limit

# Report of Analysis

<b>Client Sample ID:</b> S2		
<b>Lab Sample ID:</b> C29576-2		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L27248.D	1	09/06/13	XB	n/a	n/a	VL863
Run #2							

	Initial Weight
Run #1	5.18 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	4.8	0.48	ug/kg	
108-86-1	Bromobenzene	ND	4.8	0.48	ug/kg	
74-97-5	Bromochloromethane	ND	4.8	0.48	ug/kg	
75-27-4	Bromodichloromethane	ND	4.8	0.48	ug/kg	
75-25-2	Bromoform	ND	4.8	0.48	ug/kg	
104-51-8	n-Butylbenzene	ND	4.8	0.48	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.8	0.48	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.8	0.48	ug/kg	
108-90-7	Chlorobenzene	ND	4.8	0.48	ug/kg	
75-00-3	Chloroethane	ND	4.8	0.97	ug/kg	
67-66-3	Chloroform	ND	4.8	0.48	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.8	0.48	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.8	0.48	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.8	0.48	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.8	0.48	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.8	0.48	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.8	0.48	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.8	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.8	0.48	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.8	0.48	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.8	0.48	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.8	0.48	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.8	0.48	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.8	0.48	ug/kg	
124-48-1	Dibromochloromethane	ND	4.8	0.48	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.8	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.8	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.8	0.48	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.8	0.48	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.8	0.48	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

<b>Client Sample ID:</b> S2		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.8	0.48	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.8	0.48	ug/kg	
64-17-5	Ethyl alcohol	ND	480	90	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	0.48	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.8	0.48	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.8	0.97	ug/kg	
98-82-8	Isopropylbenzene	ND	4.8	0.48	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.8	0.48	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.8	0.97	ug/kg	
74-87-3	Methyl chloride	ND	4.8	0.97	ug/kg	
74-95-3	Methylene bromide	ND	4.8	0.48	ug/kg	
75-09-2	Methylene chloride	ND	19	4.8	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.8	0.97	ug/kg	
91-20-3	Naphthalene	ND	4.8	0.97	ug/kg	
103-65-1	n-Propylbenzene	ND	4.8	0.48	ug/kg	
100-42-5	Styrene	ND	4.8	0.48	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.8	0.48	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.8	0.48	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.8	0.48	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.8	0.48	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.8	0.48	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.8	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.48	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.8	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.8	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.8	0.58	ug/kg	
108-88-3	Toluene	ND	4.8	0.48	ug/kg	
79-01-6	Trichloroethylene	ND	4.8	0.48	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.8	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	4.8	0.97	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	0.97	ug/kg	
	TPH-GRO (C6-C10)	ND	97	48	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

<b>Client Sample ID:</b> S2		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8260B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		70-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	93%		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

<b>Client Sample ID:</b> S2		
<b>Lab Sample ID:</b> C29576-2		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8270C SW846 3550B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y22271.D	1	09/12/13	MT	09/11/13	OP8678	EY1036
Run #2							

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

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	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	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	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

<b>Client Sample ID:</b> S2		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8270C SW846 3550B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
123-91-1	1,4-Dioxane	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	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

<b>Client Sample ID:</b> S2	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8270C SW846 3550B	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

**ABN Full List**

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
367-12-4	2-Fluorophenol	58%		14-99%		
4165-62-2	Phenol-d5	63%		18-100%		
118-79-6	2,4,6-Tribromophenol	66%		25-107%		
4165-60-0	Nitrobenzene-d5	52%		15-101%		
321-60-8	2-Fluorobiphenyl	53%		15-104%		
1718-51-0	Terphenyl-d14	81%		56-123%		

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

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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

<b>Client Sample ID:</b> S2		
<b>Lab Sample ID:</b> C29576-2		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8082 SW846 3550B		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP031928.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

**PCB List**

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	33	17	ug/kg	
11141-16-5	Aroclor 1232	ND	33	17	ug/kg	
53469-21-9	Aroclor 1242	ND	33	17	ug/kg	
12672-29-6	Aroclor 1248	ND	33	17	ug/kg	
11097-69-1	Aroclor 1254	ND	33	17	ug/kg	
11096-82-5	Aroclor 1260	ND	33	6.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		38-109%
877-09-8	Tetrachloro-m-xylene	107%		38-109%
2051-24-3	Decachlorobiphenyl	94%		49-138%
2051-24-3	Decachlorobiphenyl	88%		49-138%

(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

32  
3

<b>Client Sample ID:</b> S2	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3550B	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH307696.D	1	09/16/13	AG	09/11/13	OP8668	GHH1076
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	7.97	9.7	2.4	mg/kg	J
	TPH (> C28-C40)	13.7	19	4.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		37-122%

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

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

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

## Report of Analysis

<b>Client Sample ID:</b> S2	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-2	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.89	0.89	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Chromium	16.1	0.89	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Lead	8.6	1.8	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Nickel	15.9	0.89	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Zinc	46.3	1.8	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3430

(2) Prep QC Batch: MP6677

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

RL = Reporting Limit



## Report of Analysis

<b>Client Sample ID:</b> WS		
<b>Lab Sample ID:</b> C29576-3		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> AQ - Surface Water		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	U13410.D	1	09/11/13	TF	n/a	n/a	VU520
Run #2							

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

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	7.6	20	4.0	ug/l	J
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	0.64	1.0	0.20	ug/l	J
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	12.1	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	

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

<b>Client Sample ID:</b> WS		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-3		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> AQ - Surface Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> Alameda - Webster Street, Alameda, 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	
64-17-5	Ethyl Alcohol	ND	100	21	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	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	0.39	1.0	0.30	ug/l	J
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 <sup>b</sup>	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) <sup>c</sup>	26.6	50	25	ug/l	J

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

<b>Client Sample ID:</b> WS <b>Lab Sample ID:</b> C29576-3 <b>Matrix:</b> AQ - Surface Water <b>Method:</b> SW846 8260B <b>Project:</b> Alameda - Webster Street, Alameda, CA	<b>Date Sampled:</b> 09/06/13 <b>Date Received:</b> 09/06/13 <b>Percent Solids:</b> n/a
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		70-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	96%		70-130%

- (a) Sample vial contained more than 0.5cm of sediment.
- (b) CCV outside of control limits (biased high); not detected in sample.
- (c) Atypical pattern; value primarily due to chlorinated compound(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

<b>Client Sample ID:</b> WS		
<b>Lab Sample ID:</b> C29576-3		<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> AQ - Surface Water		<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8270C SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	Y22235.D	10	09/11/13	MT	09/09/13	OP8656	EY1035
Run #2							

Run #	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	220	44	ug/l	
95-57-8	2-Chlorophenol	ND	56	16	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	56	16	ug/l	
120-83-2	2,4-Dichlorophenol	ND	56	13	ug/l	
105-67-9	2,4-Dimethylphenol	ND	56	12	ug/l	
51-28-5	2,4-Dinitrophenol	ND	220	44	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	110	14	ug/l	
95-48-7	2-Methylphenol	ND	56	19	ug/l	
	3&4-Methylphenol	ND	110	17	ug/l	
88-75-5	2-Nitrophenol	ND	56	11	ug/l	
100-02-7	4-Nitrophenol	ND	110	11	ug/l	
87-86-5	Pentachlorophenol	ND	110	19	ug/l	
108-95-2	Phenol	ND	56	11	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	56	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	56	11	ug/l	
83-32-9	Acenaphthene	ND	56	15	ug/l	
208-96-8	Acenaphthylene	ND	56	13	ug/l	
62-53-3	Aniline	ND	56	12	ug/l	
120-12-7	Anthracene	ND	56	14	ug/l	
103-33-3	Azobenzene	ND	56	13	ug/l	
92-87-5	Benzidine	ND	220	26	ug/l	
56-55-3	Benzo(a)anthracene	ND	56	16	ug/l	
50-32-8	Benzo(a)pyrene	ND	56	12	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	56	15	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	56	16	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	56	15	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	56	17	ug/l	
85-68-7	Butyl benzyl phthalate	ND	56	14	ug/l	
100-51-6	Benzyl Alcohol	ND	56	18	ug/l	
91-58-7	2-Chloronaphthalene	ND	56	15	ug/l	
106-47-8	4-Chloroaniline	ND	56	12	ug/l	
86-74-8	Carbazole	ND	56	16	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

<b>Client Sample ID:</b> WS		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-3		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> AQ - Surface Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8270C SW846 3510C		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	56	18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	56	13	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	56	12	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	56	11	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	56	17	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	56	13	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	56	14	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	56	14	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	56	14	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	56	14	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	110	23	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	56	14	ug/l	
132-64-9	Dibenzofuran	ND	56	16	ug/l	
122-39-4	Diphenylamine	ND	56	15	ug/l	
84-74-2	Di-n-butyl phthalate	ND	56	15	ug/l	
117-84-0	Di-n-octyl phthalate	ND	56	20	ug/l	
84-66-2	Diethyl phthalate	ND	56	12	ug/l	
131-11-3	Dimethyl phthalate	ND	56	20	ug/l	
123-91-1	1,4-Dioxane	ND	56	11	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	37.0	110	22	ug/l	J
206-44-0	Fluoranthene	ND	56	16	ug/l	
86-73-7	Fluorene	ND	56	17	ug/l	
118-74-1	Hexachlorobenzene	ND	56	16	ug/l	
87-68-3	Hexachlorobutadiene	ND	56	18	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	56	11	ug/l	
67-72-1	Hexachloroethane	ND	56	13	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	56	15	ug/l	
78-59-1	Isophorone	ND	56	12	ug/l	
90-12-0	1-Methylnaphthalene	ND	56	14	ug/l	
91-57-6	2-Methylnaphthalene	ND	56	15	ug/l	
88-74-4	2-Nitroaniline	ND	56	12	ug/l	
99-09-2	3-Nitroaniline	ND	56	14	ug/l	
100-01-6	4-Nitroaniline	ND	56	13	ug/l	
91-20-3	Naphthalene	ND	56	14	ug/l	
98-95-3	Nitrobenzene	ND	56	11	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	56	11	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	56	12	ug/l	
85-01-8	Phenanthrene	ND	56	15	ug/l	
129-00-0	Pyrene	ND	56	18	ug/l	
110-86-1	Pyridine	ND	110	11	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

<b>Client Sample ID:</b> WS <b>Lab Sample ID:</b> C29576-3 <b>Matrix:</b> AQ - Surface Water <b>Method:</b> SW846 8270C SW846 3510C <b>Project:</b> Alameda - Webster Street, Alameda, CA	<b>Date Sampled:</b> 09/06/13 <b>Date Received:</b> 09/06/13 <b>Percent Solids:</b> n/a
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**ABN Full List**

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	56	14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	15%		10-73%
4165-62-2	Phenol-d5	14%		10-53%
118-79-6	2,4,6-Tribromophenol	20%		10-133%
4165-60-0	Nitrobenzene-d5	34%		27-112%
321-60-8	2-Fluorobiphenyl	23% <sup>b</sup>		27-112%
1718-51-0	Terphenyl-d14	27% <sup>b</sup>		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. 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

<b>Client Sample ID:</b> WS	
<b>Lab Sample ID:</b> C29576-3	<b>Date Sampled:</b> 09/06/13
<b>Matrix:</b> AQ - Surface Water	<b>Date Received:</b> 09/06/13
<b>Method:</b> SW846 8015B M SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH307739.D	50	09/17/13	AG	09/10/13	OP8672	GHH1077
Run #2							

Run #	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

### TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	18.2	5.6	1.4	mg/l	
	TPH (> C28-C40)	46.2	11	2.8	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	31% <sup>a</sup>		32-124%

(a) 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

<b>Client Sample ID:</b> WS <b>Lab Sample ID:</b> C29576-3 <b>Matrix:</b> AQ - Surface Water <b>Project:</b> Alameda - Webster Street, Alameda, CA	<b>Date Sampled:</b> 09/06/13 <b>Date Received:</b> 09/06/13 <b>Percent Solids:</b> n/a
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### Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium <sup>a</sup>	35.6	6.0	ug/l	3	09/09/13	09/10/13 RS	SW846 6010B <sup>1</sup>	SW3010A <sup>2</sup>
Chromium <sup>a</sup>	3890	30	ug/l	3	09/09/13	09/10/13 RS	SW846 6010B <sup>1</sup>	SW3010A <sup>2</sup>
Lead <sup>a</sup>	4940	30	ug/l	3	09/09/13	09/10/13 RS	SW846 6010B <sup>1</sup>	SW3010A <sup>2</sup>
Nickel <sup>a</sup>	5150	15	ug/l	3	09/09/13	09/10/13 RS	SW846 6010B <sup>1</sup>	SW3010A <sup>2</sup>
Zinc <sup>a</sup>	8560	60	ug/l	3	09/09/13	09/10/13 RS	SW846 6010B <sup>1</sup>	SW3010A <sup>2</sup>

(1) Instrument QC Batch: MA3424

(2) Prep QC Batch: MP6671

(a) Elevated reporting limit(s) due to matrix interference and/or dilution required for high interfering element.

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RL = Reporting Limit



## Report of Analysis

<b>Client Sample ID:</b>	COMP(1-4)	<b>Date Sampled:</b>	09/06/13
<b>Lab Sample ID:</b>	C29576-8	<b>Date Received:</b>	09/06/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>b</sup>	M41678.D	1	09/06/13	XB	n/a	n/a	VM1258
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 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	Bromochloromethane	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	Dibromochloromethane	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

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

<b>Client Sample ID:</b>	COMP(1-4)	<b>Date Sampled:</b>	09/06/13
<b>Lab Sample ID:</b>	C29576-8	<b>Date Received:</b>	09/06/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	Alameda - Webster Street, Alameda, 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	
64-17-5	Ethyl alcohol	ND	25000	4700	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	1000	100	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	1000	100	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	1000	250	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1000	100	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	

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

<b>Client Sample ID:</b> COMP(1-4) <b>Lab Sample ID:</b> C29576-8 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8260B <b>Project:</b> Alameda - Webster Street, Alameda, CA	<b>Date Sampled:</b> 09/06/13 <b>Date Received:</b> 09/06/13 <b>Percent Solids:</b> n/a <sup>a</sup>
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**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	96%		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

<b>Client Sample ID:</b> COMP(1-4)		<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-8		<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8270C SW846 3550B		
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>b</sup>	Y22272.D	5	09/12/13	MT	09/11/13	OP8678	EY1036
Run #2							

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

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	3300	790	ug/kg	
95-57-8	2-Chlorophenol	ND	830	350	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	830	360	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	830	390	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	830	320	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	3300	670	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1700	310	ug/kg	
95-48-7	2-Methylphenol	ND	830	440	ug/kg	
	3&4-Methylphenol	ND	1700	390	ug/kg	
88-75-5	2-Nitrophenol	ND	830	390	ug/kg	
100-02-7	4-Nitrophenol	ND	1700	200	ug/kg	
87-86-5	Pentachlorophenol	ND	1700	170	ug/kg	
108-95-2	Phenol	ND	830	340	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	830	370	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	830	350	ug/kg	
83-32-9	Acenaphthene	ND	830	360	ug/kg	
208-96-8	Acenaphthylene	ND	830	390	ug/kg	
62-53-3	Aniline	ND	830	220	ug/kg	
120-12-7	Anthracene	ND	830	270	ug/kg	
103-33-3	Azobenzene	ND	830	300	ug/kg	
92-87-5	Benzidine	ND	3300	400	ug/kg	
56-55-3	Benzo(a)anthracene	ND	830	170	ug/kg	
50-32-8	Benzo(a)pyrene	ND	830	170	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	830	170	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	830	220	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	830	170	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	830	330	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	830	170	ug/kg	
100-51-6	Benzyl Alcohol	ND	830	440	ug/kg	
91-58-7	2-Chloronaphthalene	ND	830	380	ug/kg	
106-47-8	4-Chloroaniline	ND	830	250	ug/kg	
86-74-8	Carbazole	ND	830	170	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

<b>Client Sample ID:</b>	COMP(1-4)	<b>Date Sampled:</b>	09/06/13
<b>Lab Sample ID:</b>	C29576-8	<b>Date Received:</b>	09/06/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	Alameda - Webster Street, Alameda, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	830	170	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	830	370	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	830	330	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	830	330	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	830	380	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	830	370	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	830	370	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	830	360	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	830	360	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	830	370	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1700	350	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	830	210	ug/kg	
132-64-9	Dibenzofuran	ND	830	360	ug/kg	
122-39-4	Diphenylamine	ND	830	330	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	830	170	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	830	170	ug/kg	
84-66-2	Diethyl phthalate	ND	830	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	830	350	ug/kg	
123-91-1	1,4-Dioxane	ND	830	210	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1700	330	ug/kg	
206-44-0	Fluoranthene	ND	830	170	ug/kg	
86-73-7	Fluorene	ND	830	360	ug/kg	
118-74-1	Hexachlorobenzene	ND	830	350	ug/kg	
87-68-3	Hexachlorobutadiene	ND	830	480	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	830	460	ug/kg	
67-72-1	Hexachloroethane	ND	830	350	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	830	210	ug/kg	
78-59-1	Isophorone	ND	830	340	ug/kg	
90-12-0	1-Methylnaphthalene	ND	830	380	ug/kg	
91-57-6	2-Methylnaphthalene	ND	830	400	ug/kg	
88-74-4	2-Nitroaniline	ND	830	330	ug/kg	
99-09-2	3-Nitroaniline	ND	830	250	ug/kg	
100-01-6	4-Nitroaniline	ND	830	220	ug/kg	
91-20-3	Naphthalene	ND	830	380	ug/kg	
98-95-3	Nitrobenzene	ND	830	390	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	830	330	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	830	360	ug/kg	
85-01-8	Phenanthrene	ND	830	290	ug/kg	
129-00-0	Pyrene	ND	830	170	ug/kg	
110-86-1	Pyridine	ND	1700	230	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

<b>Client Sample ID:</b>	COMP(1-4)	<b>Date Sampled:</b>	09/06/13
<b>Lab Sample ID:</b>	C29576-8	<b>Date Received:</b>	09/06/13
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	n/a <sup>a</sup>
<b>Method:</b>	SW846 8270C SW846 3550B		
<b>Project:</b>	Alameda - Webster Street, Alameda, CA		

## ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	830	370	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		14-99%
4165-62-2	Phenol-d5	69%		18-100%
118-79-6	2,4,6-Tribromophenol	82%		25-107%
4165-60-0	Nitrobenzene-d5	56%		15-101%
321-60-8	2-Fluorobiphenyl	73%		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

<b>Client Sample ID:</b> COMP(1-4)	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-8	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8082 SW846 3550B	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	PP031929.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	10.0 ml
Run #2		

**PCB List**

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	6.6	ug/kg	
11104-28-2	Aroclor 1221	ND	33	17	ug/kg	
11141-16-5	Aroclor 1232	ND	33	17	ug/kg	
53469-21-9	Aroclor 1242	ND	33	17	ug/kg	
12672-29-6	Aroclor 1248	ND	33	17	ug/kg	
11097-69-1	Aroclor 1254	ND	33	17	ug/kg	
11096-82-5	Aroclor 1260	ND	33	6.6	ug/kg	
37324-23-5	Aroclor 1262	ND	33	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		38-109%
877-09-8	Tetrachloro-m-xylene	99%		38-109%
2051-24-3	Decachlorobiphenyl	95%		49-138%
2051-24-3	Decachlorobiphenyl	89%		49-138%

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

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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

<b>Client Sample ID:</b> COMP(1-4)	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-8	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3550B	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH307697.D	4	09/16/13	AG	09/11/13	OP8668	GHH1076
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	30.9	39	9.7	mg/kg	J
	TPH (> C28-C40)	213	78	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		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

<b>Client Sample ID:</b> COMP(1-4)	<b>Date Sampled:</b> 09/06/13
<b>Lab Sample ID:</b> C29576-8	<b>Date Received:</b> 09/06/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.83	0.83	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Chromium	32.4	0.83	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Lead	2.5	1.7	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Nickel	35.5	0.83	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>
Zinc	22.2	1.7	mg/kg	1	09/10/13	09/11/13 RS	SW846 6010B <sup>1</sup>	SW846 3050B <sup>2</sup>

(1) Instrument QC Batch: MA3430

(2) Prep QC Batch: MP6677

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

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RL = Reporting Limit

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C29576      **Client:** ALFA ENVIRONMENTAL      **Project:** ALAMEDA  
**Date / Time Received:** 9/6/2013      **Delivery Method:** Client      **Airbill #s:**

**Cooler Temps (Initial/Adjusted):** #1: (5.5/5.5): 0

<u>Cooler Security</u>	<u>Y</u> <u>or</u> <u>N</u>	<u>Y</u> <u>or</u> <u>N</u>
1. Custody Seals Present:	<input type="checkbox"/> <input checked="" type="checkbox"/>	3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/> <input type="checkbox"/>	4. Smp'l Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u> <u>or</u> <u>N</u>
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

<u>Quality Control Preservation</u>	<u>Y</u> <u>or</u> <u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
4. VOCs headspace free:	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y</u> <u>or</u> <u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u> <u>or</u> <u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/> <input type="checkbox"/>
3. Condition of sample:	Intact

<u>Sample Integrity - Instructions</u>	<u>Y</u> <u>or</u> <u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/> <input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/> <input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/> <input type="checkbox"/>	
4. Compositing instructions clear:	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments 1-Liter Amber each for TPH & 8270 for extraction.

4.1  
4

## GC/MS Volatiles

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5

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-MB	M41670.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

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	
64-17-5	Ethyl alcohol	ND	500	93	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-MB	M41670.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-MB	M41670.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 70-130%
2037-26-5	Toluene-D8	105% 70-130%
460-00-4	4-Bromofluorobenzene	98% 70-130%

5.1.1  
5



## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-MB	L27243.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

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	
64-17-5	Ethyl alcohol	ND	500	93	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-MB	L27243.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-MB	L27243.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 70-130%
2037-26-5	Toluene-D8	97% 70-130%
460-00-4	4-Bromofluorobenzene	94% 70-130%

5.1.2  
5

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-MB	U13399.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

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	
64-17-5	Ethyl Alcohol	ND	100	21	ug/l	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-MB	U13399.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	Result	RL	MDL	Units	Q
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	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	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-MB	U13399.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 70-130%
2037-26-5	Toluene-D8	108% 70-130%
460-00-4	4-Bromofluorobenzene	96% 70-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-BS	M41667.D	1	09/06/13	XB	n/a	n/a	VM1258
VM1258-BSD	M41668.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	121	76	132	83	9	62-130/24
71-43-2	Benzene	40	37.4	94	36.9	92	1	81-119/20
108-86-1	Bromobenzene	40	36.4	91	36.7	92	1	79-120/22
74-97-5	Bromochloromethane	40	36.0	90	36.7	92	2	81-120/19
75-27-4	Bromodichloromethane	40	37.1	93	37.0	93	0	79-124/20
75-25-2	Bromoform	40	39.4	99	40.9	102	4	76-128/21
104-51-8	n-Butylbenzene	40	39.5	99	38.4	96	3	79-123/26
135-98-8	sec-Butylbenzene	40	35.8	90	35.0	88	2	77-122/24
98-06-6	tert-Butylbenzene	40	35.8	90	35.4	89	1	77-121/23
108-90-7	Chlorobenzene	40	34.8	87	34.5	86	1	82-121/20
75-00-3	Chloroethane	40	36.1	90	36.0	90	0	80-126/21
67-66-3	Chloroform	40	38.9	97	39.1	98	1	82-123/20
95-49-8	o-Chlorotoluene	40	37.5	94	35.8	90	5	78-125/25
106-43-4	p-Chlorotoluene	40	34.4	86	35.1	88	2	75-125/26
56-23-5	Carbon tetrachloride	40	39.1	98	37.8	95	3	82-127/22
75-34-3	1,1-Dichloroethane	40	39.0	98	38.3	96	2	80-123/20
75-35-4	1,1-Dichloroethylene	40	37.5	94	37.0	93	1	76-123/19
563-58-6	1,1-Dichloropropene	40	39.9	100	38.7	97	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	37.1	93	38.5	96	4	64-133/23
106-93-4	1,2-Dibromoethane	40	36.5	91	37.7	94	3	80-120/20
107-06-2	1,2-Dichloroethane	40	39.1	98	39.1	98	0	76-132/21
78-87-5	1,2-Dichloropropane	40	38.2	96	38.2	96	0	80-121/20
142-28-9	1,3-Dichloropropane	40	36.4	91	37.3	93	2	78-120/20
108-20-3	Di-Isopropyl ether	40	36.1	90	37.1	93	3	78-126/19
594-20-7	2,2-Dichloropropane	40	39.3	98	38.5	96	2	77-132/22
124-48-1	Dibromochloromethane	40	37.3	93	37.6	94	1	76-121/21
75-71-8	Dichlorodifluoromethane	40	44.1	110	42.3	106	4	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	37.9	95	38.3	96	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	39.2	98	39.5	99	1	81-124/21
541-73-1	m-Dichlorobenzene	40	34.8	87	34.9	87	0	79-123/23
95-50-1	o-Dichlorobenzene	40	35.5	89	35.4	89	0	79-124/22
106-46-7	p-Dichlorobenzene	40	37.7	94	37.3	93	1	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	39.2	98	39.1	98	0	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	36.0	90	36.2	91	1	81-123/22
64-17-5	Ethyl alcohol	800	570	71	862	108	41* a	33-170/39
100-41-4	Ethylbenzene	40	37.7	94	37.2	93	1	80-119/21

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-BS	M41667.D	1	09/06/13	XB	n/a	n/a	VM1258
VM1258-BSD	M41668.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl tert-Butyl Ether	40	41.0	103	41.4	104	1	75-132/21
591-78-6	2-Hexanone	160	145	91	157	98	8	68-139/24
87-68-3	Hexachlorobutadiene	40	38.1	95	37.5	94	2	81-126/32
98-82-8	Isopropylbenzene	40	35.4	89	34.6	87	2	81-122/22
99-87-6	p-Isopropyltoluene	40	35.6	89	35.0	88	2	81-121/23
108-10-1	4-Methyl-2-pentanone	160	146	91	159	99	9	74-136/23
74-83-9	Methyl bromide	40	36.9	92	37.1	93	1	82-124/20
74-87-3	Methyl chloride	40	37.8	95	37.4	94	1	60-132/26
74-95-3	Methylene bromide	40	37.2	93	37.3	93	0	82-120/20
75-09-2	Methylene chloride	40	35.1	88	35.3	88	1	75-119/20
78-93-3	Methyl ethyl ketone	160	135	84	145	91	7	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	38.4	96	39.4	99	3	79-127/19
91-20-3	Naphthalene	40	35.9	90	38.3	96	6	78-125/23
103-65-1	n-Propylbenzene	40	35.4	89	34.6	87	2	79-124/22
100-42-5	Styrene	40	37.3	93	37.5	94	1	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	38.3	96	39.3	98	3	80-127/20
75-65-0	Tert Butyl Alcohol	200	172	86	198	99	14	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	37.9	95	37.7	94	1	82-123/21
71-55-6	1,1,1-Trichloroethane	40	40.2	101	39.2	98	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	37.3	93	39.3	98	5	77-126/20
79-00-5	1,1,2-Trichloroethane	40	36.9	92	37.7	94	2	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	35.9	90	37.1	93	3	81-122/26
96-18-4	1,2,3-Trichloropropane	40	37.6	94	39.0	98	4	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	36.0	90	36.4	91	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	38.9	97	38.3	96	2	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	39.4	99	38.7	97	2	81-123/23
127-18-4	Tetrachloroethylene	40	35.1	88	33.6	84	4	80-125/25
108-88-3	Toluene	40	37.3	93	37.0	93	1	80-117/21
79-01-6	Trichloroethylene	40	37.0	93	36.0	90	3	81-122/20
75-69-4	Trichlorofluoromethane	40	38.1	95	36.7	92	4	77-133/22
75-01-4	Vinyl chloride	40	34.9	87	34.8	87	0	71-133/23
1330-20-7	Xylene (total)	120	107	89	105	88	2	81-122/22

\* = Outside of Control Limits.

5.2.1  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-BS	M41667.D	1	09/06/13	XB	n/a	n/a	VM1258
VM1258-BSD	M41668.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	105%	70-130%
2037-26-5	Toluene-D8	101%	101%	70-130%
460-00-4	4-Bromofluorobenzene	101%	102%	70-130%

(a) Outside laboratory control limits.

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-BS	L27240.D	1	09/06/13	XB	n/a	n/a	VL863
VL863-BSD	L27241.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	122	76	112	70	9	62-130/24
71-43-2	Benzene	40	39.7	99	39.3	98	1	81-119/20
108-86-1	Bromobenzene	40	39.5	99	38.8	97	2	79-120/22
74-97-5	Bromochloromethane	40	39.5	99	38.2	96	3	81-120/19
75-27-4	Bromodichloromethane	40	38.1	95	37.5	94	2	79-124/20
75-25-2	Bromoform	40	43.3	108	42.6	107	2	76-128/21
104-51-8	n-Butylbenzene	40	38.7	97	38.5	96	1	79-123/26
135-98-8	sec-Butylbenzene	40	36.1	90	36.4	91	1	77-122/24
98-06-6	tert-Butylbenzene	40	36.4	91	36.7	92	1	77-121/23
108-90-7	Chlorobenzene	40	37.7	94	36.7	92	3	82-121/20
75-00-3	Chloroethane	40	36.5	91	34.2	86	7	80-126/21
67-66-3	Chloroform	40	39.0	98	37.9	95	3	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	34.8	87	34.5	86	1	75-125/26
56-23-5	Carbon tetrachloride	40	38.6	97	38.2	96	1	82-127/22
75-34-3	1,1-Dichloroethane	40	39.2	98	37.2	93	5	80-123/20
75-35-4	1,1-Dichloroethylene	40	39.0	98	37.3	93	4	76-123/19
563-58-6	1,1-Dichloropropene	40	40.5	101	39.7	99	2	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	35.4	89	34.5	86	3	64-133/23
106-93-4	1,2-Dibromoethane	40	39.9	100	38.8	97	3	80-120/20
107-06-2	1,2-Dichloroethane	40	38.7	97	37.6	94	3	76-132/21
78-87-5	1,2-Dichloropropane	40	40.6	102	39.8	100	2	80-121/20
142-28-9	1,3-Dichloropropane	40	38.9	97	37.9	95	3	78-120/20
108-20-3	Di-Isopropyl ether	40	39.7	99	37.7	94	5	78-126/19
594-20-7	2,2-Dichloropropane	40	38.4	96	36.5	91	5	77-132/22
124-48-1	Dibromochloromethane	40	39.8	100	38.6	97	3	76-121/21
75-71-8	Dichlorodifluoromethane	40	37.4	94	33.8	85	10	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	40.8	102	39.1	98	4	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	41.7	104	40.6	102	3	81-124/21
541-73-1	m-Dichlorobenzene	40	37.5	94	37.0	93	1	79-123/23
95-50-1	o-Dichlorobenzene	40	37.1	93	36.8	92	1	79-124/22
106-46-7	p-Dichlorobenzene	40	39.8	100	39.8	100	0	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	41.3	103	39.3	98	5	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	37.5	94	37.1	93	1	81-123/22
64-17-5	Ethyl alcohol	800	725	91	782	98	8	33-170/39
100-41-4	Ethylbenzene	40	39.8	100	39.1	98	2	80-119/21

\* = Outside of Control Limits.

5.2.2  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-BS	L27240.D	1	09/06/13	XB	n/a	n/a	VL863
VL863-BSD	L27241.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl tert-Butyl Ether	40	42.0	105	40.4	101	4	75-132/21
591-78-6	2-Hexanone	160	155	97	143	89	8	68-139/24
87-68-3	Hexachlorobutadiene	40	39.0	98	39.0	98	0	81-126/32
98-82-8	Isopropylbenzene	40	37.0	93	35.9	90	3	81-122/22
99-87-6	p-Isopropyltoluene	40	36.1	90	36.1	90	0	81-121/23
108-10-1	4-Methyl-2-pentanone	160	154	96	144	90	7	74-136/23
74-83-9	Methyl bromide	40	37.4	94	33.9	85	10	82-124/20
74-87-3	Methyl chloride	40	38.4	96	33.5	84	14	60-132/26
74-95-3	Methylene bromide	40	38.9	97	38.2	96	2	82-120/20
75-09-2	Methylene chloride	40	39.5	99	37.9	95	4	75-119/20
78-93-3	Methyl ethyl ketone	160	141	88	133	83	6	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	39.7	99	37.3	93	6	79-127/19
91-20-3	Naphthalene	40	37.9	95	38.5	96	2	78-125/23
103-65-1	n-Propylbenzene	40	35.4	89	35.4	89	0	79-124/22
100-42-5	Styrene	40	41.1	103	40.3	101	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	40.7	102	38.7	97	5	80-127/20
75-65-0	Tert Butyl Alcohol	200	163	82	168	84	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	39.6	99	38.8	97	2	82-123/21
71-55-6	1,1,1-Trichloroethane	40	38.6	97	37.4	94	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	39.5	99	39.0	98	1	77-126/20
79-00-5	1,1,2-Trichloroethane	40	40.8	102	39.8	100	2	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	38.4	96	38.7	97	1	81-122/26
96-18-4	1,2,3-Trichloropropane	40	38.7	97	37.4	94	3	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	38.2	96	37.9	95	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	39.1	98	39.2	98	0	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	39.8	100	39.6	99	1	81-123/23
127-18-4	Tetrachloroethylene	40	39.8	100	39.1	98	2	80-125/25
108-88-3	Toluene	40	39.5	99	38.8	97	2	80-117/21
79-01-6	Trichloroethylene	40	40.0	100	39.0	98	3	81-122/20
75-69-4	Trichlorofluoromethane	40	35.5	89	33.0	83	7	77-133/22
75-01-4	Vinyl chloride	40	45.7	114	42.6	107	7	71-133/23
1330-20-7	Xylene (total)	120	116	97	113	94	3	81-122/22

\* = Outside of Control Limits.

5.2.2  
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# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-BS	L27240.D	1	09/06/13	XB	n/a	n/a	VL863
VL863-BSD	L27241.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	98%	96%	70-130%
2037-26-5	Toluene-D8	100%	100%	70-130%
460-00-4	4-Bromofluorobenzene	99%	101%	70-130%

\* = Outside of Control Limits.

5.2.2  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-BS	U13395.D	1	09/11/13	TF	n/a	n/a	VU520
VU520-BSD	U13396.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	69.6	87	66.5	83	5	38-159/24
71-43-2	Benzene	20	20.4	102	20.0	100	2	77-122/25
108-86-1	Bromobenzene	20	20.4	102	20.3	102	0	76-126/17
74-97-5	Bromochloromethane	20	20.1	101	19.4	97	4	77-130/17
75-27-4	Bromodichloromethane	20	18.6	93	18.1	91	3	75-127/16
75-25-2	Bromoform	20	22.2	111	21.4	107	4	69-141/17
104-51-8	n-Butylbenzene	20	21.8	109	21.6	108	1	72-129/18
135-98-8	sec-Butylbenzene	20	21.4	107	21.4	107	0	74-128/18
98-06-6	tert-Butylbenzene	20	21.2	106	21.0	105	1	73-127/18
108-90-7	Chlorobenzene	20	19.3	97	18.8	94	3	77-122/16
75-00-3	Chloroethane	20	19.4	97	19.4	97	0	69-133/18
67-66-3	Chloroform	20	18.6	93	18.2	91	2	74-126/17
95-49-8	o-Chlorotoluene	20	20.7	104	19.7	99	5	72-127/20
106-43-4	p-Chlorotoluene	20	18.3	92	18.1	91	1	68-127/18
56-23-5	Carbon tetrachloride	20	18.0	90	17.5	88	3	71-133/19
75-34-3	1,1-Dichloroethane	20	18.7	94	18.1	91	3	71-125/17
75-35-4	1,1-Dichloroethylene	20	19.7	99	19.0	95	4	66-125/20
563-58-6	1,1-Dichloropropene	20	20.7	104	20.1	101	3	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	20	19.4	97	19.4	97	0	65-131/20
106-93-4	1,2-Dibromoethane	20	21.5	108	20.4	102	5	75-135/17
107-06-2	1,2-Dichloroethane	20	17.5	88	16.8	84	4	71-131/17
78-87-5	1,2-Dichloropropane	20	21.3	107	20.8	104	2	78-124/16
142-28-9	1,3-Dichloropropane	20	20.9	105	19.9	100	5	78-123/16
108-20-3	Di-Isopropyl ether	20	21.0	105	20.6	103	2	68-129/17
594-20-7	2,2-Dichloropropane	20	18.0	90	17.7	89	2	70-131/19
124-48-1	Dibromochloromethane	20	19.9	100	19.3	97	3	76-132/16
75-71-8	Dichlorodifluoromethane	20	14.7	74	14.1	71	4	32-168/28
156-59-2	cis-1,2-Dichloroethylene	20	20.8	104	20.3	102	2	73-126/17
10061-01-5	cis-1,3-Dichloropropene	20	22.5	113	21.8	109	3	72-130/16
541-73-1	m-Dichlorobenzene	20	19.5	98	19.5	98	0	75-124/16
95-50-1	o-Dichlorobenzene	20	19.8	99	19.8	99	0	76-124/16
106-46-7	p-Dichlorobenzene	20	20.6	103	20.6	103	0	75-124/16
156-60-5	trans-1,2-Dichloroethylene	20	20.9	105	20.2	101	3	71-126/18
10061-02-6	trans-1,3-Dichloropropene	20	19.8	99	18.8	94	5	71-126/16
100-41-4	Ethylbenzene	20	20.9	105	20.4	102	2	76-126/17
64-17-5	Ethyl Alcohol	400	480	120	424	106	12	41-180/32

\* = Outside of Control Limits.

5.2.3  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-BS	U13395.D	1	09/11/13	TF	n/a	n/a	VU520
VU520-BSD	U13396.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl Tert Butyl Ether	20	21.5	108	21.1	106	2	75-134/17
591-78-6	2-Hexanone	80	76.1	95	73.6	92	3	67-150/22
87-68-3	Hexachlorobutadiene	20	20.9	105	20.9	105	0	69-135/20
98-82-8	Isopropylbenzene	20	20.3	102	19.9	100	2	61-125/17
99-87-6	p-Isopropyltoluene	20	21.1	106	21.1	106	0	68-127/18
108-10-1	4-Methyl-2-pentanone	80	81.3	102	79.0	99	3	71-142/21
74-83-9	Methyl bromide	20	21.4	107	21.4	107	0	68-132/18
74-87-3	Methyl chloride	20	17.1	86	17.2	86	1	39-150/28
74-95-3	Methylene bromide	20	20.2	101	19.3	97	5	77-127/16
75-09-2	Methylene chloride	20	20.5	103	19.8	99	3	67-128/18
78-93-3	Methyl ethyl ketone	80	78.7	98	75.5	94	4	56-155/23
1634-04-4	Methyl Tert Butyl Ether	20	21.9	110	21.3	107	3	73-132/17
91-20-3	Naphthalene	20	23.2	116	25.8	129	11	70-136/20
103-65-1	n-Propylbenzene	20	20.4	102	20.4	102	0	71-127/17
100-42-5	Styrene	20	20.9	105	20.5	103	2	72-134/16
994-05-8	Tert-Amyl Methyl Ether	20	23.0	115	22.4	112	3	73-133/17
75-65-0	Tert-Butyl Alcohol	100	115	115	111	111	4	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	20	19.2	96	19.1	96	1	77-130/16
71-55-6	1,1,1-Trichloroethane	20	18.1	91	17.7	89	2	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	20	23.4	117	23.2	116	1	77-129/17
79-00-5	1,1,2-Trichloroethane	20	21.5	108	20.5	103	5	77-125/16
87-61-6	1,2,3-Trichlorobenzene	20	21.8	109	23.9	120	9	70-133/18
96-18-4	1,2,3-Trichloropropane	20	20.9	105	20.2	101	3	69-126/18
120-82-1	1,2,4-Trichlorobenzene	20	21.3	107	21.9	110	3	68-129/17
95-63-6	1,2,4-Trimethylbenzene	20	22.0	110	22.0	110	0	74-129/17
108-67-8	1,3,5-Trimethylbenzene	20	22.8	114	22.9	115	0	77-129/17
127-18-4	Tetrachloroethylene	20	18.3	92	17.8	89	3	69-127/20
108-88-3	Toluene	20	21.2	106	20.7	104	2	75-122/17
79-01-6	Trichloroethylene	20	19.6	98	19.3	97	2	78-123/17
75-69-4	Trichlorofluoromethane	20	19.6	98	19.3	97	2	65-136/23
75-01-4	Vinyl chloride	20	17.5	88	17.3	87	1	57-146/22
1330-20-7	Xylene (total)	60	61.1	102	59.8	100	2	77-125/17

\* = Outside of Control Limits.

5.2.3  
 5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-BS	U13395.D	1	09/11/13	TF	n/a	n/a	VU520
VU520-BSD	U13396.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	95%	97%	70-130%
2037-26-5	Toluene-D8	106%	106%	70-130%
460-00-4	4-Bromofluorobenzene	102%	101%	70-130%

\* = Outside of Control Limits.

5.2.3  
 5

# Laboratory Control Sample Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1258-LCS	M41669.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	238	95	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	105%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%

\* = Outside of Control Limits.

5.3.1  
 5



# Laboratory Control Sample Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL863-LCS	L27242.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	292	117	50-121

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

\* = Outside of Control Limits.

# Laboratory Control Sample Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU520-LCS	U13397.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	119	95	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	70-130%
2037-26-5	Toluene-D8	109%	70-130%
460-00-4	4-Bromofluorobenzene	98%	70-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29545-3MS	L27254.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3MSD	L27255.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3	L27245.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	C29545-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		157	146	93	147	94	1	62-130/24
71-43-2	Benzene	ND		39.3	34.4	88	34.7	88	1	81-119/20
108-86-1	Bromobenzene	ND		39.3	28.4	72* a	30.4	78* a	7	79-120/22
74-97-5	Bromochloromethane	ND		39.3	36.6	93	36.4	93	1	81-120/19
75-27-4	Bromodichloromethane	ND		39.3	34.2	87	34.4	88	1	79-124/20
75-25-2	Bromoform	ND		39.3	34.3	87	36.1	92	5	76-128/21
104-51-8	n-Butylbenzene	ND		39.3	21.5	55* a	24.2	62* a	12	79-123/26
135-98-8	sec-Butylbenzene	ND		39.3	23.9	61* a	26.5	68* a	10	77-122/24
98-06-6	tert-Butylbenzene	ND		39.3	25.6	65* a	27.9	71* a	9	77-121/23
108-90-7	Chlorobenzene	ND		39.3	29.2	74* a	30.4	78* a	4	82-121/20
75-00-3	Chloroethane	ND		39.3	32.4	82	31.6	81	2	80-126/21
67-66-3	Chloroform	ND		39.3	34.4	88	34.6	88	1	82-123/20
95-49-8	o-Chlorotoluene	ND		39.3	29.1	74* a	31.3	80	7	78-125/25
106-43-4	p-Chlorotoluene	ND		39.3	25.0	64* a	27.0	69* a	8	75-125/26
56-23-5	Carbon tetrachloride	ND		39.3	31.9	81* a	32.3	82	1	82-127/22
75-34-3	1,1-Dichloroethane	ND		39.3	35.2	90	34.9	89	1	80-123/20
75-35-4	1,1-Dichloroethylene	ND		39.3	34.5	88	34.1	87	1	76-123/19
563-58-6	1,1-Dichloropropene	ND		39.3	31.8	81	32.2	82	1	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		39.3	30.2	77	33.0	84	9	64-133/23
106-93-4	1,2-Dibromoethane	ND		39.3	35.6	91	36.3	93	2	80-120/20
107-06-2	1,2-Dichloroethane	ND		39.3	35.7	91	35.9	92	1	76-132/21
78-87-5	1,2-Dichloropropane	ND		39.3	35.8	91	35.6	91	1	80-121/20
142-28-9	1,3-Dichloropropane	ND		39.3	35.7	91	36.2	92	1	78-120/20
108-20-3	Di-Isopropyl ether	ND		39.3	37.0	94	37.3	95	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		39.3	33.0	84	32.6	83	1	77-132/22
124-48-1	Dibromochloromethane	ND		39.3	33.6	86	34.5	88	3	76-121/21
75-71-8	Dichlorodifluoromethane	ND		39.3	23.8	61	22.3	57	7	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		39.3	34.6	88	34.4	88	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		39.3	31.2	79* a	32.0	82	3	81-124/21
541-73-1	m-Dichlorobenzene	ND		39.3	24.4	62* a	26.7	68* a	9	79-123/23
95-50-1	o-Dichlorobenzene	ND		39.3	24.6	63* a	26.6	68* a	8	79-124/22
106-46-7	p-Dichlorobenzene	ND		39.3	24.1	61* a	26.9	69* a	11	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		39.3	33.7	86	34.0	87	1	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		39.3	32.3	82	32.7	83	1	81-123/22
64-17-5	Ethyl alcohol	ND		786	842	107	988	126	16	33-170/39
100-41-4	Ethylbenzene	ND		39.3	29.5	75* a	30.4	78* a	3	80-119/21

\* = Outside of Control Limits.

5.4.1  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29545-3MS	L27254.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3MSD	L27255.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3	L27245.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Compound	C29545-3 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl tert-Butyl Ether	ND		39.3	37.5	95	37.6	96	0	75-132/21
591-78-6	2-Hexanone	ND		157	147	94	149	95	1	68-139/24
87-68-3	Hexachlorobutadiene	ND		39.3	16.0	41* a	19.9	51* a	22	81-126/32
98-82-8	Isopropylbenzene	ND		39.3	27.2	69* a	29.0	74* a	6	81-122/22
99-87-6	p-Isopropyltoluene	ND		39.3	23.7	60* a	26.3	67* a	10	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		157	161	102	165	105	2	74-136/23
74-83-9	Methyl bromide	ND		39.3	27.2	69* a	26.9	69* a	1	82-124/20
74-87-3	Methyl chloride	ND		39.3	35.7	91	30.1	77	17	60-132/26
74-95-3	Methylene bromide	ND		39.3	36.4	93	36.6	93	1	82-120/20
75-09-2	Methylene chloride	ND		39.3	34.3	87	34.7	88	1	75-119/20
78-93-3	Methyl ethyl ketone	ND		157	156	99	160	102	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		39.3	37.3	95	38.2	97	2	79-127/19
91-20-3	Naphthalene	ND		39.3	22.4	57* a	25.3	65* a	12	78-125/23
103-65-1	n-Propylbenzene	ND		39.3	26.2	67* a	28.1	72* a	7	79-124/22
100-42-5	Styrene	ND		39.3	28.7	73* a	30.0	77* a	4	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		39.3	36.8	94	37.6	96	2	80-127/20
75-65-0	Tert Butyl Alcohol	ND		196	211	107	219	112	4	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		39.3	31.3	80* a	32.0	82	2	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		39.3	33.3	85	32.8	84	2	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		39.3	35.1	89	36.8	94	5	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		39.3	37.5	95	37.6	96	0	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		39.3	17.9	46* a	21.1	54* a	16	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		39.3	33.0	84	34.5	88	4	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		39.3	18.1	46* a	21.1	54* a	15	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		39.3	26.0	66* a	28.1	72* a	8	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		39.3	26.2	67* a	27.9	71* a	6	81-123/23
127-18-4	Tetrachloroethylene	ND		39.3	29.1	74* a	30.2	77* a	4	80-125/25
108-88-3	Toluene	ND		39.3	31.7	81	32.2	82	2	80-117/21
79-01-6	Trichloroethylene	ND		39.3	31.8	81	32.4	83	2	81-122/20
75-69-4	Trichlorofluoromethane	ND		39.3	34.3	87	33.0	84	4	77-133/22
75-01-4	Vinyl chloride	ND		39.3	50.1	128	47.1	120	6	71-133/23
1330-20-7	Xylene (total)	ND		118	88.3	75* a	91.9	78* a	4	81-122/22

\* = Outside of Control Limits.

5.4.1  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29545-3MS	L27254.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3MSD	L27255.D	1	09/06/13	XB	n/a	n/a	VL863
C29545-3	L27245.D	1	09/06/13	XB	n/a	n/a	VL863

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-1, C29576-2

CAS No.	Surrogate Recoveries	MS	MSD	C29545-3	Limits
1868-53-7	Dibromofluoromethane	101%	102%	102%	70-130%
2037-26-5	Toluene-D8	100%	98%	99%	70-130%
460-00-4	4-Bromofluorobenzene	99%	99%	93%	70-130%

(a) Outside control limits due to matrix interference.

\* = Outside of Control Limits.

5.4.1  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29574-5MS	M41684.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5MSD	M41685.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5 <sup>a</sup>	M41677.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	C29574-5 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		8000	6370	80	6300	79	1	62-130/24
71-43-2	Benzene	ND		2000	1840	92	1790	90	3	81-119/20
108-86-1	Bromobenzene	ND		2000	1850	93	1820	91	2	79-120/22
74-97-5	Bromochloromethane	ND		2000	1820	91	1800	90	1	81-120/19
75-27-4	Bromodichloromethane	ND		2000	1690	85	1650	83	2	79-124/20
75-25-2	Bromoform	ND		2000	1690	85	1670	84	1	76-128/21
104-51-8	n-Butylbenzene	ND		2000	1830	92	1780	89	3	79-123/26
135-98-8	sec-Butylbenzene	ND		2000	1850	93	1800	90	3	77-122/24
98-06-6	tert-Butylbenzene	ND		2000	1840	92	1810	91	2	77-121/23
108-90-7	Chlorobenzene	ND		2000	1820	91	1760	88	3	82-121/20
75-00-3	Chloroethane	ND		2000	1470	74* b	1540	77* b	5	80-126/21
67-66-3	Chloroform	ND		2000	1760	88	1740	87	1	82-123/20
95-49-8	o-Chlorotoluene	ND		2000	1880	94	1860	93	1	78-125/25
106-43-4	p-Chlorotoluene	ND		2000	1720	86	1680	84	2	75-125/26
56-23-5	Carbon tetrachloride	ND		2000	1620	81* b	1600	80* b	1	82-127/22
75-34-3	1,1-Dichloroethane	ND		2000	1800	90	1770	89	2	80-123/20
75-35-4	1,1-Dichloroethylene	ND		2000	1840	92	1800	90	2	76-123/19
563-58-6	1,1-Dichloropropene	ND		2000	1770	89	1720	86	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		2000	1680	84	1600	80	5	64-133/23
106-93-4	1,2-Dibromoethane	ND		2000	1790	90	1750	88	2	80-120/20
107-06-2	1,2-Dichloroethane	ND		2000	1650	83	1630	82	1	76-132/21
78-87-5	1,2-Dichloropropane	ND		2000	1860	93	1800	90	3	80-121/20
142-28-9	1,3-Dichloropropane	ND		2000	1780	89	1730	87	3	78-120/20
108-20-3	Di-Isopropyl ether	ND		2000	1840	92	1830	92	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		2000	1620	81	1600	80	1	77-132/22
124-48-1	Dibromochloromethane	ND		2000	1690	85	1670	84	1	76-121/21
75-71-8	Dichlorodifluoromethane	ND		2000	1070	54	1090	55	2	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		2000	1830	92	1820	91	1	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		2000	1760	88	1690	85	4	81-124/21
541-73-1	m-Dichlorobenzene	ND		2000	1810	91	1780	89	2	79-123/23
95-50-1	o-Dichlorobenzene	ND		2000	1820	91	1800	90	1	79-124/22
106-46-7	p-Dichlorobenzene	ND		2000	1810	91	1770	89	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		2000	1840	92	1810	91	2	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		2000	1690	85	1690	85	0	81-123/22
64-17-5	Ethyl alcohol	ND		40000	24800	62	27800	70	11	33-170/39
100-41-4	Ethylbenzene	ND		2000	1770	89	1730	87	2	80-119/21

\* = Outside of Control Limits.

5.4.2  
 5

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29574-5MS	M41684.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5MSD	M41685.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5 <sup>a</sup>	M41677.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Compound	C29574-5 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl tert-Butyl Ether	ND		2000	1780	89	1760	88	1	75-132/21
591-78-6	2-Hexanone	ND		8000	6750	84	6420	80	5	68-139/24
87-68-3	Hexachlorobutadiene	ND		2000	1770	89	1700	85	4	81-126/32
98-82-8	Isopropylbenzene	ND		2000	1780	89	1730	87	3	81-122/22
99-87-6	p-Isopropyltoluene	ND		2000	1830	92	1790	90	2	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		8000	7010	88	6660	83	5	74-136/23
74-83-9	Methyl bromide	ND		2000	1490	75* b	1530	77* b	3	82-124/20
74-87-3	Methyl chloride	ND		2000	1370	69	1400	70	2	60-132/26
74-95-3	Methylene bromide	ND		2000	1750	88	1710	86	2	82-120/20
75-09-2	Methylene chloride	ND		2000	1700	85	1670	84	2	75-119/20
78-93-3	Methyl ethyl ketone	ND		8000	7140	89	6900	86	3	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		2000	1740	87	1720	86	1	79-127/19
91-20-3	Naphthalene	ND		2000	1770	89	1740	87	2	78-125/23
103-65-1	n-Propylbenzene	ND		2000	1860	93	1820	91	2	79-124/22
100-42-5	Styrene	ND		2000	1800	90	1760	88	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		2000	1750	88	1740	87	1	80-127/20
75-65-0	Tert Butyl Alcohol	ND		10000	7670	77	7900	79	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		2000	1730	87	1690	85	2	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		2000	1680	84	1670	84	1	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		2000	1870	94	1830	92	2	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		2000	1800	90	1740	87	3	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		2000	1760	88	1720	86	2	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		2000	1720	86	1680	84	2	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		2000	1770	89	1730	87	2	81-121/26
95-63-6	1,2,4-Trimethylbenzene	ND		2000	1830	92	1810	91	1	82-121/24
108-67-8	1,3,5-Trimethylbenzene	ND		2000	1850	93	1800	90	3	81-123/23
127-18-4	Tetrachloroethylene	ND		2000	1710	86	1630	82	5	80-125/25
108-88-3	Toluene	ND		2000	1810	91	1780	89	2	80-117/21
79-01-6	Trichloroethylene	ND		2000	1820	91	1740	87	4	81-122/20
75-69-4	Trichlorofluoromethane	ND		2000	1540	77	1570	79	2	77-133/22
75-01-4	Vinyl chloride	ND		2000	1170	59* b	1140	57* b	3	71-133/23
1330-20-7	Xylene (total)	ND		6000	5380	90	5220	87	3	81-122/22

\* = Outside of Control Limits.

5.4.2  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29574-5MS	M41684.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5MSD	M41685.D	1	09/06/13	XB	n/a	n/a	VM1258
C29574-5 <sup>a</sup>	M41677.D	1	09/06/13	XB	n/a	n/a	VM1258

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-8

CAS No.	Surrogate Recoveries	MS	MSD	C29574-5	Limits
1868-53-7	Dibromofluoromethane	98%	99%	93%	70-130%
2037-26-5	Toluene-D8	101%	100%	103%	70-130%
460-00-4	4-Bromofluorobenzene	97%	96%	98%	70-130%

(a) 4:1 composite

(b) Outside control limits due to matrix interference.

\* = Outside of Control Limits.

5.4.2  
**5**



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29575-1MS	U13414.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1MSD	U13415.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1	U13404.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	C29575-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	6.1	J	80	59.1	66	62.3	70	5	38-159/24
71-43-2	Benzene	ND		20	20.0	100	19.6	98	2	77-122/16
108-86-1	Bromobenzene	ND		20	19.9	100	20.0	100	1	76-126/17
74-97-5	Bromochloromethane	ND		20	19.4	97	18.7	94	4	77-130/17
75-27-4	Bromodichloromethane	ND		20	18.9	95	17.9	90	5	75-127/16
75-25-2	Bromoform	ND		20	20.8	104	19.4	97	7	69-141/17
104-51-8	n-Butylbenzene	ND		20	21.5	108	21.6	108	0	72-129/18
135-98-8	sec-Butylbenzene	ND		20	21.3	107	21.7	109	2	74-128/18
98-06-6	tert-Butylbenzene	ND		20	21.2	106	21.4	107	1	73-127/18
108-90-7	Chlorobenzene	ND		20	19.3	97	18.9	95	2	77-122/16
75-00-3	Chloroethane	0.37	J	20	19.0	93	18.7	92	2	69-133/18
67-66-3	Chloroform	ND		20	19.1	96	18.3	92	4	74-126/17
95-49-8	o-Chlorotoluene	ND		20	17.6	88	19.6	98	11	72-127/20
106-43-4	p-Chlorotoluene	ND		20	17.8	89	17.9	90	1	68-127/18
56-23-5	Carbon tetrachloride	ND		20	19.5	98	18.6	93	5	71-133/19
75-34-3	1,1-Dichloroethane	ND		20	18.6	93	17.9	90	4	71-125/17
75-35-4	1,1-Dichloroethylene	ND		20	19.4	97	19.2	96	1	66-125/20
563-58-6	1,1-Dichloropropene	ND		20	21.0	105	20.6	103	2	75-124/18
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	18.5	93	18.5	93	0	65-131/20
106-93-4	1,2-Dibromoethane	ND		20	20.5	103	20.0	100	2	75-135/17
107-06-2	1,2-Dichloroethane	ND		20	18.3	92	17.2	86	6	71-131/17
78-87-5	1,2-Dichloropropane	ND		20	20.5	103	20.2	101	1	78-124/16
142-28-9	1,3-Dichloropropane	ND		20	19.9	100	19.5	98	2	78-123/16
108-20-3	Di-Isopropyl ether	ND		20	19.4	97	19.0	95	2	68-129/17
594-20-7	2,2-Dichloropropane	ND		20	18.2	91	17.1	86	6	70-131/19
124-48-1	Dibromochloromethane	ND		20	19.8	99	18.4	92	7	76-132/16
75-71-8	Dichlorodifluoromethane	ND		20	14.2	71	13.4	67	6	32-168/28
156-59-2	cis-1,2-Dichloroethylene	ND		20	20.7	104	19.8	99	4	73-126/17
10061-01-5	cis-1,3-Dichloropropene	ND		20	21.3	107	20.6	103	3	72-130/16
541-73-1	m-Dichlorobenzene	ND		20	19.3	97	19.2	96	1	75-124/16
95-50-1	o-Dichlorobenzene	ND		20	19.5	98	19.4	97	1	76-124/16
106-46-7	p-Dichlorobenzene	ND		20	20.4	102	20.3	102	0	75-124/16
156-60-5	trans-1,2-Dichloroethylene	ND		20	20.6	103	19.8	99	4	71-126/18
10061-02-6	trans-1,3-Dichloropropene	ND		20	19.0	95	18.2	91	4	71-126/16
100-41-4	Ethylbenzene	ND		20	21.2	106	20.7	104	2	76-126/17
64-17-5	Ethyl Alcohol	ND		400	218	55	319	80	38* a	41-180/32

\* = Outside of Control Limits.

5.4.3  
**5**

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29575-1MS	U13414.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1MSD	U13415.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1	U13404.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Compound	C29575-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl Tert Butyl Ether	ND		20	20.5	103	19.9	100	3	75-134/17
591-78-6	2-Hexanone	ND		80	67.7	85	68.6	86	1	67-150/22
87-68-3	Hexachlorobutadiene	ND		20	20.0	100	20.7	104	3	69-135/20
98-82-8	Isopropylbenzene	ND		20	20.9	105	20.3	102	3	61-125/17
99-87-6	p-Isopropyltoluene	ND		20	20.8	104	21.0	105	1	68-127/18
108-10-1	4-Methyl-2-pentanone	ND		80	71.7	90	72.4	91	1	71-142/21
74-83-9	Methyl bromide	ND		20	20.5	103	20.0	100	2	68-132/18
74-87-3	Methyl chloride	ND		20	16.7	84	15.9	80	5	39-150/28
74-95-3	Methylene bromide	ND		20	19.8	99	19.0	95	4	77-127/16
75-09-2	Methylene chloride	ND		20	19.4	97	18.7	94	4	67-128/18
78-93-3	Methyl ethyl ketone	ND		80	65.1	81	66.3	83	2	56-155/23
1634-04-4	Methyl Tert Butyl Ether	ND		20	20.7	104	20.1	101	3	73-132/17
91-20-3	Naphthalene	ND		20	21.3	107	24.3	122	13	70-136/20
103-65-1	n-Propylbenzene	ND		20	20.2	101	20.5	103	1	71-127/17
100-42-5	Styrene	ND		20	20.5	103	19.9	100	3	72-134/16
994-05-8	Tert-Amyl Methyl Ether	ND		20	21.5	108	20.9	105	3	73-133/17
75-65-0	Tert-Butyl Alcohol	ND	100	91.1	91	94.8	95	95	4	60-149/26
630-20-6	1,1,1,2-Tetrachloroethane	ND		20	20.2	101	19.2	96	5	77-130/16
71-55-6	1,1,1-Trichloroethane	ND		20	19.3	97	18.4	92	5	74-128/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	21.7	109	22.1	111	2	77-129/17
79-00-5	1,1,2-Trichloroethane	ND		20	20.6	103	20.2	101	2	77-125/16
87-61-6	1,2,3-Trichlorobenzene	ND		20	20.0	100	22.4	112	11	70-133/18
96-18-4	1,2,3-Trichloropropane	ND		20	19.5	98	18.5	93	5	69-126/18
120-82-1	1,2,4-Trichlorobenzene	ND		20	19.9	100	20.6	103	3	68-129/17
95-63-6	1,2,4-Trimethylbenzene	ND		20	21.7	109	21.6	108	0	74-129/17
108-67-8	1,3,5-Trimethylbenzene	ND		20	22.6	113	22.7	114	0	77-129/17
127-18-4	Tetrachloroethylene	ND		20	18.1	91	17.8	89	2	69-127/20
108-88-3	Toluene	ND		20	21.3	107	20.8	104	2	75-122/17
79-01-6	Trichloroethylene	ND		20	19.9	100	19.6	98	2	78-123/17
75-69-4	Trichlorofluoromethane	ND		20	20.7	104	19.8	99	4	65-136/23
75-01-4	Vinyl chloride	0.71	J	20	17.9	86	17.1	82	5	57-146/22
1330-20-7	Xylene (total)	ND		60	61.2	102	60.1	100	2	77-125/17

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C29575-1MS	U13414.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1MSD	U13415.D	1	09/11/13	TF	n/a	n/a	VU520
C29575-1	U13404.D	1	09/11/13	TF	n/a	n/a	VU520

The QC reported here applies to the following samples:

Method: SW846 8260B

C29576-3

CAS No.	Surrogate Recoveries	MS	MSD	C29575-1	Limits
1868-53-7	Dibromofluoromethane	100%	96%	105%	70-130%
2037-26-5	Toluene-D8	106%	107%	107%	70-130%
460-00-4	4-Bromofluorobenzene	105%	103%	95%	70-130%

(a) Outside control limits.

\* = Outside of Control Limits.

## GC/MS Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MB	Y22179.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	20	4.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	1.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.4	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.2	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	4.0	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.3	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.7	ug/l	
	3&4-Methylphenol	ND	10	1.6	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.0	ug/l	
87-86-5	Pentachlorophenol	ND	10	1.7	ug/l	
108-95-2	Phenol	ND	5.0	1.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	1.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.3	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.2	ug/l	
62-53-3	Aniline	ND	5.0	1.1	ug/l	
120-12-7	Anthracene	ND	5.0	1.3	ug/l	
103-33-3	Azobenzene	ND	5.0	1.2	ug/l	
92-87-5	Benzidine	ND	20	2.4	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	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.5	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.7	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.4	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	1.1	ug/l	
86-74-8	Carbazole	ND	5.0	1.5	ug/l	
218-01-9	Chrysene	ND	5.0	1.6	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	1.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MB	Y22179.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.3	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	1.2	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	1.3	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.4	ug/l	
122-39-4	Diphenylamine	ND	5.0	1.4	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	1.4	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.8	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	1.8	ug/l	
123-91-1	1,4-Dioxane	ND	5.0	1.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.5	ug/l	
86-73-7	Fluorene	ND	5.0	1.5	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.4	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	1.6	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	1.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	1.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	1.4	ug/l	
78-59-1	Isophorone	ND	5.0	1.1	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	
88-74-4	2-Nitroaniline	ND	5.0	1.1	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	1.3	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	1.1	ug/l	
91-20-3	Naphthalene	ND	5.0	1.2	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	1.1	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.3	ug/l	
129-00-0	Pyrene	ND	5.0	1.6	ug/l	
110-86-1	Pyridine	ND	10	1.0	ug/l	

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MB	Y22179.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.2	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	35%	10-73%
4165-62-2	Phenol-d5	28%	10-53%
118-79-6	2,4,6-Tribromophenol	97%	10-133%
4165-60-0	Nitrobenzene-d5	82%	27-112%
321-60-8	2-Fluorobiphenyl	85%	27-112%
1718-51-0	Terphenyl-d14	111%	45-128%

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-MB	Y22266.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	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	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	



## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-MB	Y22266.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
123-91-1	1,4-Dioxane	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	

# Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-MB	Y22266.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Result	RL	MDL	Units	Q
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	64%	14-99%
4165-62-2	Phenol-d5	72%	18-100%
118-79-6	2,4,6-Tribromophenol	71%	25-107%
4165-60-0	Nitrobenzene-d5	57%	15-101%
321-60-8	2-Fluorobiphenyl	59%	15-104%
1718-51-0	Terphenyl-d14	100%	56-123%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-BS	Y22177.D	1	09/09/13	MT	09/09/13	OP8656	EY1033
OP8656-BSD	Y22178.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	21.1	42	19.5	39	8	10-52/47
95-57-8	2-Chlorophenol	25	17.3	69	16.6	66	4	61-96/17
59-50-7	4-Chloro-3-methyl phenol	25	21.6	86	21.0	84	3	66-103/18
120-83-2	2,4-Dichlorophenol	25	21.5	86	20.8	83	3	68-105/15
105-67-9	2,4-Dimethylphenol	25	20.6	82	19.9	80	3	61-97/23
51-28-5	2,4-Dinitrophenol	25	23.9	96	23.1	92	3	10-135/44
534-52-1	4,6-Dinitro-o-cresol	25	25.3	101	25.1	100	1	38-130/27
95-48-7	2-Methylphenol	25	16.4	66	15.4	62	6	55-96/21
	3&4-Methylphenol	25	16.0	64	14.6	58	9	49-90/18
88-75-5	2-Nitrophenol	25	21.4	86	21.2	85	1	67-108/27
100-02-7	4-Nitrophenol	25	10.2	41	8.6	34	17	17-52/27
87-86-5	Pentachlorophenol	25	25.2	101	25.2	101	0	47-131/32
108-95-2	Phenol	25	8.2	33	7.8	31	5	18-59/19
95-95-4	2,4,5-Trichlorophenol	25	24.5	98	24.0	96	2	65-112/21
88-06-2	2,4,6-Trichlorophenol	25	24.0	96	24.2	97	1	64-107/22
83-32-9	Acenaphthene	25	23.2	93	23.8	95	3	68-105/26
208-96-8	Acenaphthylene	25	23.1	92	23.5	94	2	68-110/26
62-53-3	Aniline	25	11.4	46	11.8	47	3	42-86/27
120-12-7	Anthracene	25	24.9	100	24.9	100	0	71-109/14
103-33-3	Azobenzene	25	24.1	96	24.7	99	2	64-112/26
92-87-5	Benzidine	50	19.0	38	23.1	46	19	32-125/39
56-55-3	Benzo(a)anthracene	25	24.9	100	25.2	101	1	76-118/26
50-32-8	Benzo(a)pyrene	25	24.5	98	24.6	98	0	77-112/26
205-99-2	Benzo(b)fluoranthene	25	25.0	100	24.9	100	0	73-117/18
191-24-2	Benzo(g,h,i)perylene	25	24.4	98	24.7	99	1	60-129/28
207-08-9	Benzo(k)fluoranthene	25	25.4	102	26.0	104	2	78-121/27
101-55-3	4-Bromophenyl phenyl ether	25	24.0	96	24.0	96	0	67-108/26
85-68-7	Butyl benzyl phthalate	25	26.0	104	26.1	104	0	72-115/26
100-51-6	Benzyl Alcohol	25	16.9	68	16.4	66	3	52-97/27
91-58-7	2-Chloronaphthalene	25	22.0	88	22.6	90	3	68-103/27
106-47-8	4-Chloroaniline	25	16.9	68	17.2	69	2	65-103/23
86-74-8	Carbazole	25	25.0	100	25.0	100	0	71-120/27
218-01-9	Chrysene	25	24.6	98	24.7	99	0	75-123/25
111-91-1	bis(2-Chloroethoxy)methane	25	22.0	88	22.3	89	1	70-106/27
111-44-4	bis(2-Chloroethyl)ether	25	20.3	81	20.6	82	1	57-109/20
108-60-1	bis(2-Chloroisopropyl)ether	25	20.3	81	20.9	84	3	65-108/29

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-BS	Y22177.D	1	09/09/13	MT	09/09/13	OP8656	EY1033
OP8656-BSD	Y22178.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	25	23.6	94	24.0	96	2	67-108/16
95-50-1	1,2-Dichlorobenzene	25	19.4	78	19.8	79	2	55-97/28
541-73-1	1,3-Dichlorobenzene	25	18.9	76	19.4	78	3	53-94/30
106-46-7	1,4-Dichlorobenzene	25	19.1	76	19.5	78	2	54-96/29
121-14-2	2,4-Dinitrotoluene	25	25.3	101	25.2	101	0	67-113/26
606-20-2	2,6-Dinitrotoluene	25	24.5	98	24.3	97	1	68-112/18
91-94-1	3,3'-Dichlorobenzidine	50	53.1	106	54.5	109	3	66-121/27
53-70-3	Dibenzo(a,h)anthracene	25	24.0	96	23.8	95	1	64-125/27
132-64-9	Dibenzofuran	25	23.5	94	24.0	96	2	69-108/26
122-39-4	Diphenylamine	25	25.1	100	25.1	100	0	68-110/26
84-74-2	Di-n-butyl phthalate	25	26.2	105	26.3	105	0	63-107/27
117-84-0	Di-n-octyl phthalate	25	25.7	103	26.1	104	2	60-125/23
84-66-2	Diethyl phthalate	25	25.1	100	25.2	101	0	46-109/27
131-11-3	Dimethyl phthalate	25	24.6	98	24.9	100	1	25-107/34
123-91-1	1,4-Dioxane	25	8.5	34	9.0	36	6	17-61/22
117-81-7	bis(2-Ethylhexyl)phthalate	25	25.2	101	25.6	102	2	69-127/26
206-44-0	Fluoranthene	25	25.4	102	25.7	103	1	72-114/28
86-73-7	Fluorene	25	24.1	96	24.5	98	2	69-108/16
118-74-1	Hexachlorobenzene	25	23.5	94	23.6	94	0	67-109/26
87-68-3	Hexachlorobutadiene	25	19.4	78	19.3	77	1	66-110/29
77-47-4	Hexachlorocyclopentadiene	25	20.0	80	19.2	77	4	23-104/29
67-72-1	Hexachloroethane	25	18.9	76	19.1	76	1	51-97/29
193-39-5	Indeno(1,2,3-cd)pyrene	25	24.8	99	25.1	100	1	62-125/28
78-59-1	Isophorone	25	23.0	92	23.7	95	3	66-105/16
90-12-0	1-Methylnaphthalene	25	21.8	87	22.1	88	1	59-102/26
91-57-6	2-Methylnaphthalene	25	22.0	88	22.3	89	1	59-100/27
88-74-4	2-Nitroaniline	25	24.7	99	24.9	100	1	59-114/20
99-09-2	3-Nitroaniline	25	21.0	84	20.8	83	1	64-112/27
100-01-6	4-Nitroaniline	25	24.3	97	24.1	96	1	63-127/30
91-20-3	Naphthalene	25	20.7	83	21.2	85	2	61-114/27
98-95-3	Nitrobenzene	25	21.0	84	21.4	86	2	58-103/28
62-75-9	N-Nitrosodimethylamine	25	11.7	47	11.7	47	0	44-68/27
621-64-7	N-Nitroso-di-n-propylamine	25	22.1	88	22.9	92	4	67-106/27
85-01-8	Phenanthrene	25	24.6	98	24.7	99	0	71-111/26
129-00-0	Pyrene	25	24.4	98	24.4	98	0	64-121/28
110-86-1	Pyridine	25	5.5	22* a	5.9	24* a	7	32-54/35

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-BS	Y22177.D	1	09/09/13	MT	09/09/13	OP8656	EY1033
OP8656-BSD	Y22178.D	1	09/09/13	MT	09/09/13	OP8656	EY1033

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
120-82-1	1,2,4-Trichlorobenzene	25	20.1	80	20.3	81	1	64-100/29

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	36%	36%	10-73%
4165-62-2	Phenol-d5	29%	28%	10-53%
118-79-6	2,4,6-Tribromophenol	102%	102%	10-133%
4165-60-0	Nitrobenzene-d5	82%	83%	27-112%
321-60-8	2-Fluorobiphenyl	86%	87%	27-112%
1718-51-0	Terphenyl-d14	98%	97%	45-128%

(a) Outside laboratory control limits; but within marginal exceedence criteria. AZ:L2

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-BS	Y22264.D	1	09/11/13	MT	09/11/13	OP8678	EY1036
OP8678-BSD	Y22265.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1670	1450	87	1380	83	5	25-112/32
95-57-8	2-Chlorophenol	833	617	74	592	71	4	31-110/31
59-50-7	4-Chloro-3-methyl phenol	833	735	88	709	85	4	33-118/27
120-83-2	2,4-Dichlorophenol	833	675	81	643	77	5	30-115/30
105-67-9	2,4-Dimethylphenol	833	661	79	625	75	6	30-116/30
51-28-5	2,4-Dinitrophenol	833	785	94	735	88	7	11-139/30
534-52-1	4,6-Dinitro-o-cresol	833	814	98	788	95	3	30-139/24
95-48-7	2-Methylphenol	833	654	78	640	77	2	30-113/31
	3&4-Methylphenol	833	677	81	655	79	3	30-113/30
88-75-5	2-Nitrophenol	833	621	75	586	70	6	29-112/32
100-02-7	4-Nitrophenol	833	880	106	848	102	4	40-127/23
87-86-5	Pentachlorophenol	833	776	93	799	96	3	43-140/20
108-95-2	Phenol	833	667	80	642	77	4	30-112/30
95-95-4	2,4,5-Trichlorophenol	833	738	89	722	87	2	33-121/27
88-06-2	2,4,6-Trichlorophenol	833	724	87	697	84	4	31-115/29
83-32-9	Acenaphthene	833	694	83	668	80	4	34-112/28
208-96-8	Acenaphthylene	833	677	81	654	78	3	33-115/28
62-53-3	Aniline	833	569	68	557	67	2	30-93/27
120-12-7	Anthracene	833	789	95	791	95	0	59-111/21
103-33-3	Azobenzene	833	731	88	718	86	2	39-114/22
92-87-5	Benzidine	1670	703	42	749	45	6	10-96/39
56-55-3	Benzo(a)anthracene	833	844	101	846	102	0	72-122/22
50-32-8	Benzo(a)pyrene	833	838	101	834	100	0	71-120/22
205-99-2	Benzo(b)fluoranthene	833	865	104	866	104	0	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	772	93	763	92	1	57-134/24
207-08-9	Benzo(k)fluoranthene	833	855	103	830	100	3	74-126/25
101-55-3	4-Bromophenyl phenyl ether	833	744	89	729	87	2	45-110/22
85-68-7	Butyl benzyl phthalate	833	814	98	836	100	3	68-129/20
100-51-6	Benzyl Alcohol	833	682	82	661	79	3	25-116/31
91-58-7	2-Chloronaphthalene	833	647	78	612	73	6	33-110/30
106-47-8	4-Chloroaniline	833	554	66	555	67	0	27-92/25
86-74-8	Carbazole	833	810	97	811	97	0	64-125/21
218-01-9	Chrysene	833	848	102	846	102	0	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	833	639	77	608	73	5	31-112/31
111-44-4	bis(2-Chloroethyl)ether	833	591	71	565	68	4	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	833	570	68	542	65	5	30-111/32

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-BS	Y22264.D	1	09/11/13	MT	09/11/13	OP8678	EY1036
OP8678-BSD	Y22265.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	833	727	87	699	84	4	40-111/25
95-50-1	1,2-Dichlorobenzene	833	535	64	500	60	7	28-102/32
541-73-1	1,3-Dichlorobenzene	833	521	63	486	58	7	26-99/32
106-46-7	1,4-Dichlorobenzene	833	544	65	503	60	8	27-100/32
121-14-2	2,4-Dinitrotoluene	833	801	96	801	96	0	55-115/21
606-20-2	2,6-Dinitrotoluene	833	764	92	747	90	2	45-115/21
91-94-1	3,3'-Dichlorobenzidine	1670	1820	109	1810	109	1	53-115/24
53-70-3	Dibenzo(a,h)anthracene	833	781	94	761	91	3	59-132/23
132-64-9	Dibenzofuran	833	699	84	674	81	4	37-113/26
122-39-4	Diphenylamine	833	776	93	778	93	0	51-112/24
84-74-2	Di-n-butyl phthalate	833	864	104	866	104	0	67-114/22
117-84-0	Di-n-octyl phthalate	833	850	102	849	102	0	62-138/24
84-66-2	Diethyl phthalate	833	751	90	750	90	0	52-111/22
131-11-3	Dimethyl phthalate	833	760	91	754	90	1	42-113/23
123-91-1	1,4-Dioxane	833	269	32	248	30	8	10-55/36
117-81-7	bis(2-Ethylhexyl)phthalate	833	820	98	838	101	2	66-130/20
206-44-0	Fluoranthene	833	853	102	855	103	0	69-117/21
86-73-7	Fluorene	833	728	87	704	84	3	42-112/24
118-74-1	Hexachlorobenzene	833	760	91	757	91	0	50-110/24
87-68-3	Hexachlorobutadiene	833	570	68	536	64	6	30-116/33
77-47-4	Hexachlorocyclopentadiene	833	526	63	481	58	9	10-108/33
67-72-1	Hexachloroethane	833	527	63	492	59	7	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	833	780	94	794	95	2	60-131/21
78-59-1	Isophorone	833	654	78	622	75	5	32-108/30
90-12-0	1-Methylnaphthalene	833	631	76	590	71	7	33-110/30
91-57-6	2-Methylnaphthalene	833	619	74	581	70	6	33-107/30
88-74-4	2-Nitroaniline	833	747	90	718	86	4	39-120/24
99-09-2	3-Nitroaniline	833	694	83	694	83	0	41-107/24
100-01-6	4-Nitroaniline	833	794	95	810	97	2	48-132/24
91-20-3	Naphthalene	833	606	73	560	67	8	32-121/31
98-95-3	Nitrobenzene	833	598	72	567	68	5	30-109/31
62-75-9	N-Nitrosodimethylamine	833	580	70	554	66	5	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	833	609	73	591	71	3	29-111/32
85-01-8	Phenanthrene	833	782	94	780	94	0	57-113/21
129-00-0	Pyrene	833	784	94	811	97	3	63-120/20
110-86-1	Pyridine	833	401	48	382	46	5	16-75/34

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8678-BS	Y22264.D	1	09/11/13	MT	09/11/13	OP8678	EY1036
OP8678-BSD	Y22265.D	1	09/11/13	MT	09/11/13	OP8678	EY1036

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
120-82-1	1,2,4-Trichlorobenzene	833	581	70	543	65	7	29-104/32

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	71%	68%	14-99%
4165-62-2	Phenol-d5	77%	73%	18-100%
118-79-6	2,4,6-Tribromophenol	92%	92%	25-107%
4165-60-0	Nitrobenzene-d5	68%	64%	15-101%
321-60-8	2-Fluorobiphenyl	73%	69%	15-104%
1718-51-0	Terphenyl-d14	93%	95%	56-123%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MS	Y22232.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
OP8656-MSD	Y22233.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
C29566-6	Y22231.D	1	09/10/13	MT	09/09/13	OP8656	EY1035

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	C29566-6		MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q						
65-85-0	Benzoic Acid	ND	94.3	33.6	36	31.7	34	6	10-52/47
95-57-8	2-Chlorophenol	ND	47.2	31.5	67	32.0	68	2	61-96/17
59-50-7	4-Chloro-3-methyl phenol	ND	47.2	39.2	83	39.3	83	0	66-103/18
120-83-2	2,4-Dichlorophenol	ND	47.2	38.9	82	37.9	80	3	68-105/15
105-67-9	2,4-Dimethylphenol	ND	47.2	37.2	79	36.5	77	2	61-97/23
51-28-5	2,4-Dinitrophenol	ND	47.2	45.5	96	44.6	95	2	10-135/44
534-52-1	4,6-Dinitro-o-cresol	ND	47.2	46.0	98	45.7	97	1	38-130/27
95-48-7	2-Methylphenol	ND	47.2	30.0	64	30.4	64	1	55-96/21
	3&4-Methylphenol	ND	47.2	28.5	60	29.2	62	2	49-90/18
88-75-5	2-Nitrophenol	ND	47.2	37.7	80	36.9	78	2	67-108/27
100-02-7	4-Nitrophenol	ND	47.2	18.2	39	18.3	39	1	17-52/27
87-86-5	Pentachlorophenol	ND	47.2	45.2	96	44.7	95	1	47-131/32
108-95-2	Phenol	ND	47.2	14.9	32	14.8	31	1	18-59/19
95-95-4	2,4,5-Trichlorophenol	ND	47.2	42.7	91	41.6	88	3	65-112/21
88-06-2	2,4,6-Trichlorophenol	ND	47.2	42.3	90	41.0	87	3	64-107/22
83-32-9	Acenaphthene	ND	47.2	42.1	89	40.6	86	4	68-105/26
208-96-8	Acenaphthylene	ND	47.2	41.3	88	40.1	85	3	68-110/26
62-53-3	Aniline	ND	47.2	28.8	61	30.5	65	6	42-86/27
120-12-7	Anthracene	ND	47.2	44.3	94	44.2	94	0	71-109/14
103-33-3	Azobenzene	ND	47.2	42.9	91	42.5	90	1	64-112/26
92-87-5	Benzidine	ND	94.3	49.4	52	68.1	72	32	32-125/39
56-55-3	Benzo(a)anthracene	ND	47.2	45.2	96	45.9	97	2	76-118/26
50-32-8	Benzo(a)pyrene	ND	47.2	44.7	95	45.3	96	1	77-112/26
205-99-2	Benzo(b)fluoranthene	ND	47.2	45.5	96	44.3	94	3	73-117/18
191-24-2	Benzo(g,h,i)perylene	ND	47.2	44.2	94	43.7	93	1	60-129/28
207-08-9	Benzo(k)fluoranthene	ND	47.2	44.5	94	46.4	98	4	78-121/27
101-55-3	4-Bromophenyl phenyl ether	ND	47.2	42.8	91	42.5	90	1	67-108/26
85-68-7	Butyl benzyl phthalate	ND	47.2	44.9	95	45.7	97	2	72-115/26
100-51-6	Benzyl Alcohol	ND	47.2	32.0	68	32.1	68	0	52-97/27
91-58-7	2-Chloronaphthalene	ND	47.2	39.9	85	39.2	83	2	68-103/27
106-47-8	4-Chloroaniline	ND	47.2	39.0	83	38.9	82	0	65-103/23
86-74-8	Carbazole	ND	47.2	46.7	99	47.7	101	2	71-120/27
218-01-9	Chrysene	ND	47.2	45.4	96	45.9	97	1	75-123/25
111-91-1	bis(2-Chloroethoxy)methane	ND	47.2	38.5	82	37.4	79	3	70-106/27
111-44-4	bis(2-Chloroethyl)ether	ND	47.2	35.5	75	34.9	74	2	57-109/20
108-60-1	bis(2-Chloroisopropyl)ether	ND	47.2	35.9	76	35.3	75	2	65-108/29

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MS	Y22232.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
OP8656-MSD	Y22233.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
C29566-6	Y22231.D	1	09/10/13	MT	09/09/13	OP8656	EY1035

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	C29566-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND	47.2	42.9	91	41.9	89	2	67-108/16
95-50-1	1,2-Dichlorobenzene	ND	47.2	34.3	73	33.9	72	1	55-97/28
541-73-1	1,3-Dichlorobenzene	ND	47.2	33.3	71	33.4	71	0	53-94/30
106-46-7	1,4-Dichlorobenzene	ND	47.2	33.9	72	33.8	72	0	54-96/29
121-14-2	2,4-Dinitrotoluene	ND	47.2	44.5	94	44.2	94	1	67-113/26
606-20-2	2,6-Dinitrotoluene	ND	47.2	44.0	93	43.4	92	1	68-112/18
91-94-1	3,3'-Dichlorobenzidine	ND	94.3	96.5	102	95.4	101	1	66-121/27
53-70-3	Dibenzo(a,h)anthracene	ND	47.2	44.0	93	43.5	92	1	64-125/27
132-64-9	Dibenzofuran	ND	47.2	41.7	88	40.7	86	2	69-108/26
122-39-4	Diphenylamine	ND	47.2	44.0	93	44.0	93	0	68-110/26
84-74-2	Di-n-butyl phthalate	ND	47.2	46.8	99	47.2	100	1	63-107/27
117-84-0	Di-n-octyl phthalate	ND	47.2	43.4	92	44.3	94	2	60-125/23
84-66-2	Diethyl phthalate	ND	47.2	42.2	89	42.7	91	1	46-109/27
131-11-3	Dimethyl phthalate	ND	47.2	43.5	92	43.1	91	1	25-107/34
123-91-1	1,4-Dioxane	ND	47.2	17.9	38	17.8	38	1	17-61/22
117-81-7	bis(2-Ethylhexyl)phthalate	ND	47.2	44.0	93	45.1	96	2	69-127/26
206-44-0	Fluoranthene	ND	47.2	45.8	97	46.1	98	1	72-114/28
86-73-7	Fluorene	ND	47.2	43.2	92	42.1	89	3	69-108/16
118-74-1	Hexachlorobenzene	ND	47.2	43.4	92	42.6	90	2	67-109/26
87-68-3	Hexachlorobutadiene	ND	47.2	35.3	75	34.5	73	2	66-110/29
77-47-4	Hexachlorocyclopentadiene	ND	47.2	34.2	73	33.8	72	1	23-104/29
67-72-1	Hexachloroethane	ND	47.2	33.5	71	33.8	72	1	51-97/29
193-39-5	Indeno(1,2,3-cd)pyrene	ND	47.2	42.8	91	42.6	90	0	62-125/28
78-59-1	Isophorone	ND	47.2	40.7	86	39.2	83	4	66-105/16
90-12-0	1-Methylnaphthalene	ND	47.2	39.4	84	38.5	82	2	59-102/26
91-57-6	2-Methylnaphthalene	ND	47.2	39.2	83	38.2	81	3	59-100/27
88-74-4	2-Nitroaniline	ND	47.2	43.6	92	42.1	89	4	59-114/20
99-09-2	3-Nitroaniline	ND	47.2	41.1	87	41.0	87	0	64-112/27
100-01-6	4-Nitroaniline	ND	47.2	45.1	96	46.1	98	2	63-127/30
91-20-3	Naphthalene	ND	47.2	37.2	79	36.3	77	2	61-114/27
98-95-3	Nitrobenzene	ND	47.2	36.5	77	36.2	77	1	58-103/28
62-75-9	N-Nitrosodimethylamine	ND	47.2	23.3	49	23.7	50	2	44-68/27
621-64-7	N-Nitroso-di-n-propylamine	ND	47.2	38.8	82	38.1	81	2	67-106/27
85-01-8	Phenanthrene	ND	47.2	43.8	93	44.3	94	1	71-111/26
129-00-0	Pyrene	ND	47.2	42.3	90	44.0	93	4	64-121/28
110-86-1	Pyridine	ND	47.2	16.3	35	19.4	41	17	32-54/35

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8656-MS	Y22232.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
OP8656-MSD	Y22233.D	1	09/10/13	MT	09/09/13	OP8656	EY1035
C29566-6	Y22231.D	1	09/10/13	MT	09/09/13	OP8656	EY1035

The QC reported here applies to the following samples:

Method: SW846 8270C

C29576-3

CAS No.	Compound	C29566-6 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
120-82-1	1,2,4-Trichlorobenzene	ND	47.2	36.3	77	35.1	74	3	64-100/29

CAS No.	Surrogate Recoveries	MS	MSD	C29566-6	Limits
367-12-4	2-Fluorophenol	36%	39%	32%	10-73%
4165-62-2	Phenol-d5	28%	29%	25%	10-53%
118-79-6	2,4,6-Tribromophenol	96%	98%	91%	10-133%
4165-60-0	Nitrobenzene-d5	77%	77%	79%	27-112%
321-60-8	2-Fluorobiphenyl	83%	83%	84%	27-112%
1718-51-0	Terphenyl-d14	93%	97%	103%	45-128%

\* = Outside of Control Limits.

## GC Semi-volatiles

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## QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8724-MB	PP031919.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057

The QC reported here applies to the following samples:

Method: SW846 8082

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	6.7	ug/kg	
11104-28-2	Aroclor 1221	ND	33	17	ug/kg	
11141-16-5	Aroclor 1232	ND	33	17	ug/kg	
53469-21-9	Aroclor 1242	ND	33	17	ug/kg	
12672-29-6	Aroclor 1248	ND	33	17	ug/kg	
11097-69-1	Aroclor 1254	ND	33	17	ug/kg	
11096-82-5	Aroclor 1260	ND	33	6.7	ug/kg	
37324-23-5	Aroclor 1262	ND	33	17	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	99%	38-109%
877-09-8	Tetrachloro-m-xylene	123%* a	38-109%
2051-24-3	Decachlorobiphenyl	100%	49-138%
2051-24-3	Decachlorobiphenyl	93%	49-138%

(a) Outside control limits high bias.

## Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8668-MB	HH307476.D1		09/10/13	AG	09/10/13	OP8668	GHH1070

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29576-1, C29576-2, C29576-8

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	97% 37-122%

# Method Blank Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8672-MB	GG46727.D	1	09/11/13	NN	09/10/13	OP8672	GGG1261

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29576-3

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	73% 32-124%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8724-BS	PP031920.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057
OP8724-BSD	PP031921.D	1	09/19/13	RV	09/18/13	OP8724	GPP1057

The QC reported here applies to the following samples: Method: SW846 8082

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	118	89	122	92	3	46-114/22
11096-82-5	Aroclor 1260	133	123	92	129	97	5	54-127/21

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	93%	91%	38-109%
877-09-8	Tetrachloro-m-xylene	113%* <sup>a</sup>	109%	38-109%
2051-24-3	Decachlorobiphenyl	94%	98%	49-138%
2051-24-3	Decachlorobiphenyl	88%	91%	49-138%

(a) Outside control limits high bias.

\* = Outside of Control Limits.

7.2.1  
7



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8668-BS	HH307474.D1		09/10/13	AG	09/10/13	OP8668	GHH1070
OP8668-BSD	HH307475.D1		09/10/13	AG	09/10/13	OP8668	GHH1070

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29576-1, C29576-2, C29576-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	91.8	92	90.1	90	2	39-102/29
	TPH (> C28-C40)	100	110	110	106	106	4	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	97%	95%	37-122%

\* = Outside of Control Limits.

7.2.2  
7

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8672-BS	GG46725.D	1	09/10/13	NN	09/10/13	OP8672	GGG1261
OP8672-BSD	GG46726.D	1	09/10/13	NN	09/10/13	OP8672	GGG1261

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29576-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.636	64	0.691	69	8	38-115/22
	TPH (> C28-C40)	1	0.719	72	0.783	78	9	45-114/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	73%	74%	32-124%

\* = Outside of Control Limits.

7.2.3  
 7

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8724-MS	PP031917.D	3	09/19/13	RV	09/18/13	OP8724	GPP1057
OP8724-MSD	PP031918.D	3	09/19/13	RV	09/18/13	OP8724	GPP1057
C29722-18	PP031911.D	1	09/18/13	RV	09/18/13	OP8724	GPP1057

The QC reported here applies to the following samples:

Method: SW846 8082

C29576-1, C29576-2, C29576-8

CAS No.	Compound	C29722-18 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		133	109	82	123	92	12	46-114/22
11096-82-5	Aroclor 1260	10.6	J	133	116	79	129	89	11	54-127/21

CAS No.	Surrogate Recoveries	MS	MSD	C29722-18	Limits
877-09-8	Tetrachloro-m-xylene	79%	92%	72%	38-109%
877-09-8	Tetrachloro-m-xylene	92%	113% * a	75%	38-109%
2051-24-3	Decachlorobiphenyl	81%	85%	80%	49-138%
2051-24-3	Decachlorobiphenyl	77%	83%	76%	49-138%

(a) Outside control limits high bias.

\* = Outside of Control Limits.

7.3.1  
 7

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C29576  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8672-MS	HH307760.D1		09/18/13	AG	09/10/13	OP8672	GHH1077
OP8672-MSD	HH307761.D1		09/18/13	AG	09/10/13	OP8672	GHH1077
C29604-2	HH307757.D1		09/18/13	AG	09/10/13	OP8672	GHH1077

The QC reported here applies to the following samples:

Method: SW846 8015B M

C29576-3

CAS No.	Compound	C29604-2 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.281	0.962	1.04	79	1.02	78	2	38-115/22
	TPH (> C28-C40)	ND	0.962	0.986	103	1.03	109	4	45-114/20

CAS No.	Surrogate Recoveries	MS	MSD	C29604-2	Limits
630-01-3	Hexacosane	78%	84%	80%	32-124%

\* = Outside of Control Limits.

## Metals Analysis

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### QC Data Summaries

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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: C29576  
Account: ALFAECAS - Alfa Environmental  
Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6671  
Matrix Type: AQUEOUS

Methods: SW846 6010B  
Units: ug/l

Prep Date: 09/09/13

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	0.60	<10
Cobalt	5.0	.2	.3		
Copper	10	1.2	3		
Iron	200	6.4	12		
Lead	10	.7	.85	0.90	<10
Lithium	50		2		
Magnesium	5000	27	36		
Manganese	15	.1	1.3		
Molybdenum	20	.2	.22		
Nickel	5.0	.2	.12	-0.70	<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	0.90	<20

Associated samples MP6671: C29576-3

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: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6671  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 09/09/13

Metal	C29513-1F Original MS		SpikeLot MPIR4A	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Bismuth					
Boron	anr				
Cadmium	0.40	529	500	105.7	75-125
Calcium					
Chromium	6.1	534	500	105.6	75-125
Cobalt	anr				
Copper	anr				
Iron					
Lead	4.1	534	500	106.0	75-125
Lithium					
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	1.8	513	500	102.2	75-125
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	8.2	528	500	104.0	75-125

Associated samples MP6671: C29576-3

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: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6671  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 09/09/13

Metal	C29513-1F Original MSD		SpikeLot MPIR4A % Rec		MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron	anr					
Cadmium	0.40	529	500	105.7	0.0	20
Calcium						
Chromium	6.1	535	500	105.8	0.2	20
Cobalt	anr					
Copper	anr					
Iron						
Lead	4.1	534	500	106.0	0.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	1.8	514	500	102.4	0.2	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	8.2	529	500	104.2	0.2	20

Associated samples MP6671: C29576-3

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: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6671  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 09/09/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron	anr			
Cadmium	518	500	103.6	80-120
Calcium				
Chromium	547	500	109.4	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	535	500	107.0	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	527	500	105.4	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	551	500	110.2	80-120

Associated samples MP6671: C29576-3

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: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6671  
 Matrix Type: AQUEOUS

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 09/09/13

Metal	C29513-1F Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron	anr			
Cadmium	0.400	0.00	100.0(a)	0-10
Calcium				
Chromium	6.10	4.80	21.3 (a)	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	4.10	0.00	100.0(a)	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	1.80	0.00	100.0(a)	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	8.20	7.40	9.8	0-10

Associated samples MP6671: C29576-3

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).

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: C29576  
Account: ALFAECAS - Alfa Environmental  
Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6677  
Matrix Type: SOLID

Methods: SW846 6010B  
Units: mg/kg

Prep Date: 09/10/13

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	0.050	<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	0.13	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024	-0.070	<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	0.52	<2.0

Associated samples MP6677: C29576-1, C29576-2, C29576-8

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

8.2.1  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6677  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 09/10/13

Metal	C29583-1 Original MS		SpikeLot MPIR4A		QC Limits
			%	Rec	
Aluminum					
Antimony					
Arsenic	anr				
Barium	anr				
Beryllium					
Boron					
Cadmium	0.27	41.3	42.7	96.0	75-125
Calcium					
Chromium	21.4	64.3	42.7	100.4	75-125
Cobalt					
Copper					
Iron					
Lead	20.7	62.4	42.7	97.6	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel	24.7	128	42.7	241.7N(a)	75-125
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc	76.9	113	42.7	84.5	75-125

Associated samples MP6677: C29576-1, C29576-2, C29576-8

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 and/or sample nonhomogeneity.

8.2.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6677  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 09/10/13

Metal	C29583-1 Original MSD		SpikeLot MPIR4A % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Boron						
Cadmium	0.27	41.1	42.7	95.5	0.5	20
Calcium						
Chromium	21.4	63.4	42.7	98.3	1.4	20
Cobalt						
Copper						
Iron						
Lead	20.7	62.5	42.7	97.8	0.2	20
Magnesium						
Manganese						
Molybdenum						
Nickel	24.7	129	42.7	244.1N(a)	0.8	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	76.9	114	42.7	86.8	0.9	20

Associated samples MP6677: C29576-1, C29576-2, C29576-8

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 and/or sample nonhomogeneity.

8.2.2  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6677  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: mg/kg

Prep Date: 09/10/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	48.6	50	97.2	80-120
Calcium				
Chromium	50.8	50	101.6	80-120
Cobalt				
Copper				
Iron				
Lead	49.5	50	99.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel	50.1	50	100.2	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	51.4	50	102.8	80-120

Associated samples MP6677: C29576-1, C29576-2, C29576-8

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: C29576  
 Account: ALFAECAS - Alfa Environmental  
 Project: Alameda - Webster Street, Alameda, CA

QC Batch ID: MP6677  
 Matrix Type: SOLID

Methods: SW846 6010B  
 Units: ug/l

Prep Date: 09/10/13

Metal	C29583-1 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	3.20	3.70	15.6 (a)	0-10
Calcium				
Chromium	255	226	11.5*(b)	0-10
Cobalt				
Copper				
Iron				
Lead	247	196	20.6*(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	294	231	21.5*(b)	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	915	823	10.1*(b)	0-10

Associated samples MP6677: C29576-1, C29576-2, C29576-8

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.

8.2.4  
8

Technical Report for

Alfa Environmental

Alameda - Webster Street, Alameda, CA

7514-2

Accutest Job Number: C30377

Sampling Date: 10/18/13

Report to:

Alfa Environmental  
9000 Crow Canyon Stes  
Danville, CA 94506  
val@alfaenv.com

ATTN: Val Constantinescu

Total number of pages in report: **21**



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.



James J. Rhudy  
Lab Director

Client Service contact: Tony Vega 408-588-0200

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

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Test results relate only to samples analyzed.



# Table of Contents

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Summary of Hits .....</b>	<b>4</b>
<b>Section 3: Sample Results .....</b>	<b>5</b>
<b>3.1: C30377-1: S3 .....</b>	<b>6</b>
<b>3.2: C30377-2: S4 .....</b>	<b>7</b>
<b>3.3: C30377-3: S5 .....</b>	<b>8</b>
<b>3.4: C30377-4: S6 .....</b>	<b>9</b>
<b>3.5: C30377-5: S7 .....</b>	<b>10</b>
<b>3.6: C30377-6: S8 .....</b>	<b>11</b>
<b>3.7: C30377-7: S9 .....</b>	<b>12</b>
<b>3.8: C30377-8: S10 .....</b>	<b>13</b>
<b>Section 4: Misc. Forms .....</b>	<b>14</b>
<b>4.1: Chain of Custody .....</b>	<b>15</b>
<b>Section 5: GC Semi-volatiles - QC Data Summaries .....</b>	<b>17</b>
<b>5.1: Method Blank Summary .....</b>	<b>18</b>
<b>5.2: Blank Spike/Blank Spike Duplicate Summary .....</b>	<b>20</b>
<b>5.3: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	<b>21</b>



## Sample Summary

Alfa Environmental

**Job No:** C30377

Alameda - Webster Street, Alameda, CA  
 Project No: 7514-2

Sample Number	Collected		Matrix Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C30377-1	10/18/13	11:20 VC	10/18/13	SO	Soil	S3
C30377-2	10/18/13	11:30 VC	10/18/13	SO	Soil	S4
C30377-3	10/18/13	11:35 VC	10/18/13	SO	Soil	S5
C30377-4	10/18/13	11:37 VC	10/18/13	SO	Soil	S6
C30377-5	10/18/13	11:45 VC	10/18/13	SO	Soil	S7
C30377-6	10/18/13	11:50 VC	10/18/13	SO	Soil	S8
C30377-7	10/18/13	11:55 VC	10/18/13	SO	Soil	S9
C30377-8	10/18/13	11:59 VC	10/18/13	SO	Soil	S10

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

## Summary of Hits

**Job Number:** C30377  
**Account:** Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, CA  
**Collected:** 10/18/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>C30377-1</b>	<b>S3</b>					
TPH (C10-C28)		6.33 J	9.9	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		28.9	20	5.0	mg/kg	SW846 8015B M
<b>C30377-2</b>	<b>S4</b>					
TPH (C10-C28)		5.77 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		20.0	20	5.0	mg/kg	SW846 8015B M
<b>C30377-3</b>	<b>S5</b>					
TPH (C10-C28)		16.3 J	20	4.9	mg/kg	SW846 8015B M
TPH (> C28-C40)		129	40	9.9	mg/kg	SW846 8015B M
<b>C30377-4</b>	<b>S6</b>					
TPH (C10-C28)		3.43 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		8.19 J	20	5.0	mg/kg	SW846 8015B M
<b>C30377-5</b>	<b>S7</b>					
TPH (C10-C28)		10.7	9.9	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		73.4	20	5.0	mg/kg	SW846 8015B M
<b>C30377-6</b>	<b>S8</b>					
TPH (C10-C28)		3.18 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		8.74 J	20	5.0	mg/kg	SW846 8015B M
<b>C30377-7</b>	<b>S9</b>					
TPH (> C28-C40)		5.22 J	20	4.9	mg/kg	SW846 8015B M
<b>C30377-8</b>	<b>S10</b>					
TPH (C10-C28)		6.72 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		29.3	20	5.0	mg/kg	SW846 8015B M

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> S3	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-1	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308707.D	1	10/21/13	AG	10/18/13	OP8891	GHH1109
Run #2							

Run #	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)	6.33	9.9	2.5	mg/kg	J
	TPH (> C28-C40)	28.9	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	91%		37-122%

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

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

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

## Report of Analysis

32  
3

<b>Client Sample ID:</b> S4	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-2	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308708.D	1	10/21/13	AG	10/18/13	OP8891	GHH1109
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	5.77	10	2.5	mg/kg	J
	TPH (> C28-C40)	20.0	20	5.0	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      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

<b>Client Sample ID:</b> S5		
<b>Lab Sample ID:</b> C30377-3		<b>Date Sampled:</b> 10/18/13
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 10/18/13
<b>Method:</b> SW846 8015B M SW846 3545A		<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308679.D	2	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	16.3	20	4.9	mg/kg	J
	TPH (> C28-C40)	129	40	9.9	mg/kg	

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

3.4  
3

<b>Client Sample ID:</b> S6	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-4	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308680.D	1	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	3.43	10	2.5	mg/kg	J
	TPH (> C28-C40)	8.19	20	5.0	mg/kg	J

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

<b>Client Sample ID:</b> S7	
<b>Lab Sample ID:</b> C30377-5	<b>Date Sampled:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 10/18/13
<b>Method:</b> SW846 8015B M SW846 3545A	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308681.D	1	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	10.7	9.9	2.5	mg/kg	
	TPH (> C28-C40)	73.4	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		37-122%

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

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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

<b>Client Sample ID:</b> S8	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-6	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308682.D	1	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	3.18	10	2.5	mg/kg	J
	TPH (> C28-C40)	8.74	20	5.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	91%		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

<b>Client Sample ID:</b> S9	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-7	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308683.D	1	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	ND	9.9	2.5	mg/kg	
	TPH (> C28-C40)	5.22	20	4.9	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	92%		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

<b>Client Sample ID:</b> S10	<b>Date Sampled:</b> 10/18/13
<b>Lab Sample ID:</b> C30377-8	<b>Date Received:</b> 10/18/13
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Method:</b> SW846 8015B M SW846 3545A	
<b>Project:</b> Alameda - Webster Street, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH308684.D	1	10/19/13	AG	10/18/13	OP8891	GHH1108
Run #2							

Run #	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)	6.72	10	2.5	mg/kg	J
	TPH (> C28-C40)	29.3	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		37-122%

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

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

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

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C30377      **Client:** ALFA ENVIRONMENTAL      **Project:** ALAMEDA  
**Date / Time Received:** 10/18/2013      **Delivery Method:** Client      **Airbill #s:**  
**Cooler Temps (Initial/Adjusted):** #1: (10.5/9); 0

<u>Cooler Security</u>	<u>Y</u> or <u>N</u>	<u>Y</u> or <u>N</u>
1. Custody Seals Present:	<input type="checkbox"/> <input checked="" type="checkbox"/>	3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/> <input type="checkbox"/>	4. Smp'l Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u> or <u>N</u>
1. Temp criteria achieved:	<input type="checkbox"/> <input checked="" type="checkbox"/>
2. Cooler temp verification:	IR1 Plastic;
3. Cooler media:	Ice (Bag)
4. No. Coolers:	1

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments Samples delivered ON ICE

4.1  
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## GC Semi-volatiles

5

### QC Data Summaries

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Includes the following where applicable:

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



## Method Blank Summary

**Job Number:** C30377  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, 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

C30377-1, C30377-2, C30377-3, C30377-4, C30377-5, C30377-6, C30377-7, C30377-8

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

**Job Number:** C30377  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, 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

C30377-1, C30377-2, C30377-3, C30377-4, C30377-5, C30377-6, C30377-7, C30377-8

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

**Job Number:** C30377  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, 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

C30377-1, C30377-2, C30377-3, C30377-4, C30377-5, C30377-6, C30377-7, C30377-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits 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.

5.2.1  
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# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C30377  
**Account:** ALFAECAS Alfa Environmental  
**Project:** Alameda - Webster Street, Alameda, 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

C30377-1, C30377-2, C30377-3, C30377-4, C30377-5, C30377-6, C30377-7, C30377-8

CAS No.	Compound	C30335-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits 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.

5.3.1  
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