

Environmental Restoration Services

Site Investigations * Fuel Tank Closures and Installations * Site Remediation * Regulatory Reporting

UNDERGROUND TANK TECHNICAL CLOSURE REPORT

RECEIVED

By Alameda County Environmental Health 9:59 am, Nov 30, 2016

Client name: A.S. McDonald Trust

Mailing address: 1273 Laurel Lane
Lafayette, CA 94549

Job Site address: 2449 Santa Clara St., Alameda

Removal date: 5-23-16

EPA # CAC002858018

ERS supervisor: Ben Halsted

Transporter Product : Maximum Oil Service
EPA # : CAL000188867
Telephone # : 888-609-2629

Product destination : Riverbank Oil Transfer
EPA # : CAL000190816
Address : 5300 Claus Rd.
Riverbank, CA 95367
Telephone # : 209-863-8181
Manifest # : 010510880 JJK,

Tank transporter : ERS
EPA # : Non-Haz
Mailing address : PO Box 2006.
Menlo Park, CA 94026

Tank Destination : Alco Iron & Metal
EPA # : Non-Haz
TSD # : Non-Haz
Address : 1091 Doolittle St., San Leandro , CA 94577
Manifest # : Non-Haz (see Closure Cert.).

Inspector : Barbara Jakub Date: 5-23-16
Agency : ACEH Time: 9:00 am

Did inspector grant permission to remove tanks? yes
Did inspector specify soil sample locations? yes
Did inspector specify analysis required? yes

PO Box 2006 * Menlo Park California 94026 * Phone 408/655-9434 * Ben@envirest.com

Tests required

EPA Method 8015M	TPH as Diesel and motor oil
EPA Method 8270	SVOCs, PAHs and PNAs
EPA Method 8082	PCBs
EPA Method 6010B	LUFT five metals
EPA Method 8260B	VOCs

Lab name : Accutest Laboratories
 Address : 2105 Lundy Ave., San Jose, CA 95131
 Telephone # : 408 588-0200

Was additional excavation ordered by inspector? no
 Final excavation dimensions: 6 by 5 by 7 deep

How were samples (soil) obtained: Bullet-Sampler driven liner,
 How were samples (water) obtained: New, disposable bailer

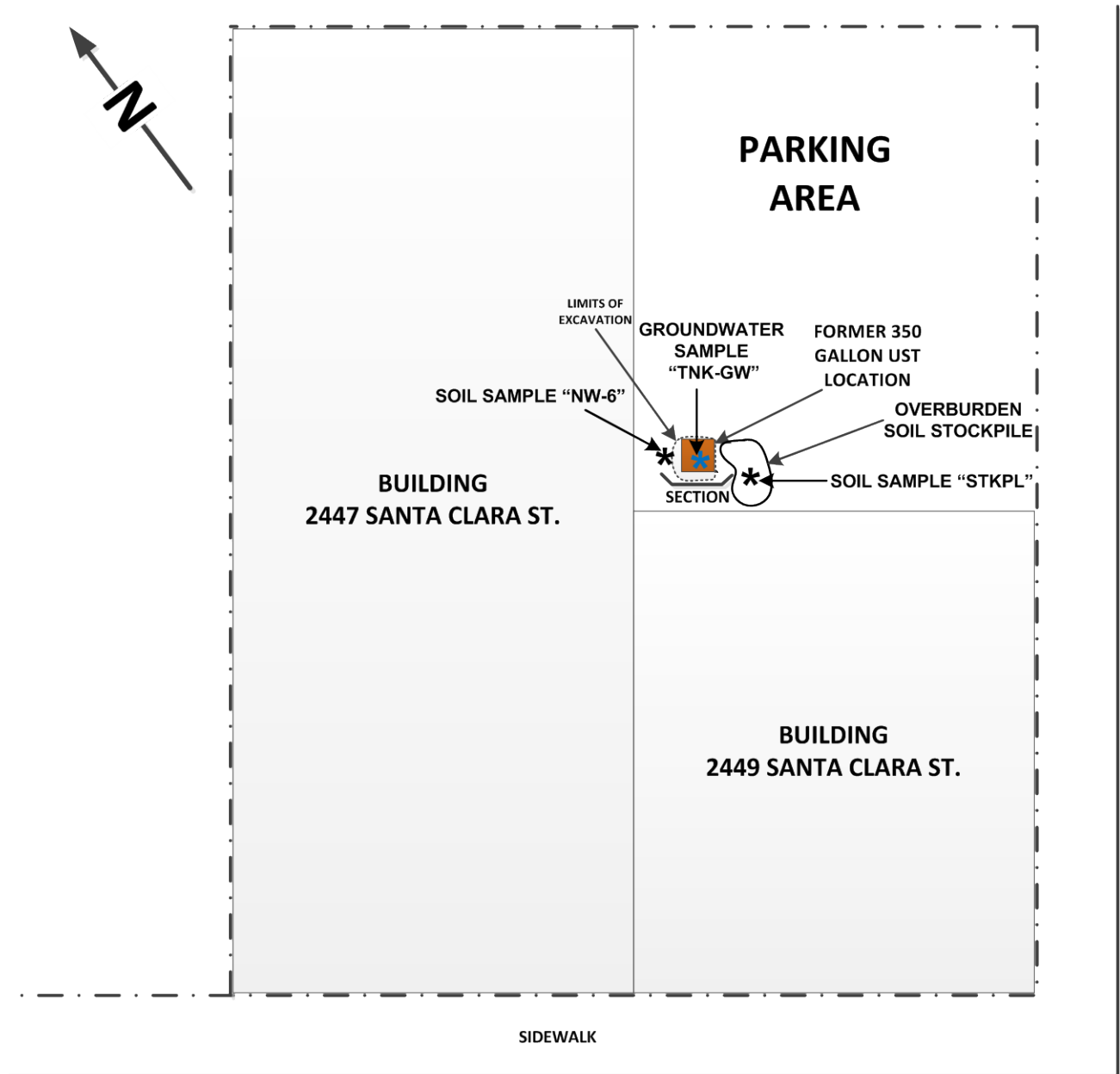
Sample #	Depth Location	Analysis
TNK-GW (water)	excavation top of groundwater @6'	8260B, 6010B, 8015M , 8270, 8082
NW-6 (soil)	northwest excavation sidewall @6'	8260B, 6010B, 8015M , 8270, 8082

Was excavated material sampled? yes
 How were samples (soil) obtained: Teflon gloved hand driven liner, one discrete location

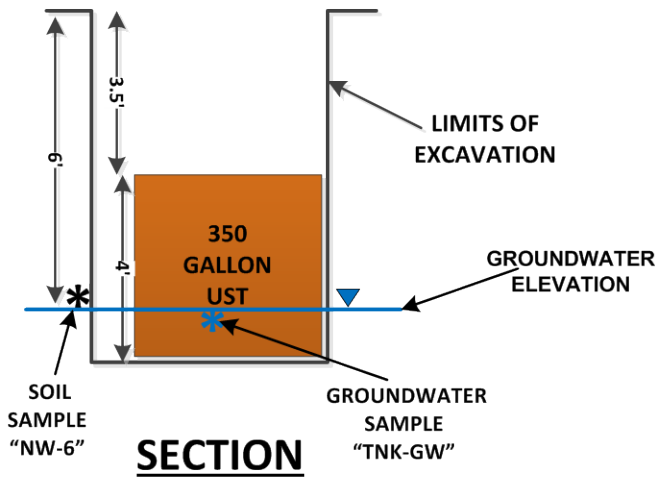
Sample #s : STKPL
 Analysis : 8260B, 6010B 8015M, 8270, 8082,

TANK INFO (Used Oil)

Tank location	: see page 3	Tank coating	: none
Tank age	: unknown	Condition of tank	: poor
Tank material	: steel	Backfill material	: native
Depth to tank top	: 3.5 feet	Water in excavation	: yes
Tank dimensions	: 4 by 4	Sample Locations	: see page 3
Tank capacity	: 350 gallons	# of soil samples	: 1
Tank usage	: used oil	Container	: 6" brass
LEL reading	: 0%	# of water samples	: 1
Oxygen reading	: 20.9%	Type of soil	: silty sand



SANTA CLARA STREET



PROJECT OVERVIEW

Environmental Restoration Services (ERS) removed one 350 gallon underground storage tank, last containing used oil, at 2449 Santa Clara St., Alameda, California. The scope of work included the following items:

1. Obtain Removal Permits from the Alameda County Environmental Health Dept. and the Alameda Fire Dept.
2. Provide for the removal of the tank. Inspect the tank for signs of leakage. Provide for the proper disposal of the tank.
3. Obtain samples at the direction of the County Health Inspector. Have the samples analyzed at a State Certified Laboratory.
4. Preparation and submittal of a Tank Closure Report.

TANK HISTORY AND DESCRIPTION

The tank was of undetermined age but based on Fire Department data, may have been installed around 1947. The used oil tank size was 4 feet long by 4 feet in diameter with an approximate capacity of 350 gallons.

EXCAVATION AND CLEANING OF TANK

Prior to removal on May 22, 2016, the top of the tank was exposed and opened. All remaining tank product was removed and stored on-site in a 55-gallon drum. The tank was then vacuumed cleaned and dried.

On May 23, 2016, Ben Halsted., Licensed Haz Materials Removal Contractor, reexamined the interior of the tank to ensure that they were visually free from product, sludge, scale, rinsate and debris. The oxygen (O₂) level and lower explosive limit (LEL) within the tank was then checked using a Hydrocarbon Surveyor. LEL and O₂ measurements were taken at the bottom, center and top of the tank. The LEL measurements were zero, with the O₂ measurement at 20.9%.

Ben Halsted then certified the tank as being rendered non-hazardous by completing the Unified Program Consolidated Form (UPCF) "Hazardous Waste Tank Closure Certification" for tanks. A copy of the certificate accompanied the tanks to the final destination location and is attached to this report.

The tank was then transported as non-regulated to Alco Iron & Metal Co. (Alco) at 1091 Doolittle St., San Leandro, CA, and were recycled as scrap steel. The Alco weight certificate is attached to this report.

On May 25, 2016, approximately 50 gallons of tank liquid from the UST was removed by Maximum Oil Service (EPA # CAL000188867) of Vallejo, CA under consolidated manifest #010510880 JJK. These tank contents were transported to Riverbank Oil Transfer EPA # (CAL000190816) of Riverbank, CA for recycling. The disposal receipt is attached to this report.

SAMPLING PROCEDURE

On May 23, 2016, ERS recovered one soil sample (NW-6) from the northwestern excavation sidewall, (see SITE PLAN, page 3) slightly above the groundwater interface (approximately 6' bgs.). Soil from the sample location was brought to the surface using a 2" diameter by 6" long brass tube, within a bullet sampler. At the desired sample location, the bullet sampler was driven into the excavation sidewall using extension rods and a slide hammer, until the tube/liner had completely filled. The liner was removed from the bullet sampler and sealed with Teflon sheet and plastic caps.

On May 23, 2016, ERS recovered one groundwater sample (TNK-GW) from the top of groundwater within the former UST excavation. The groundwater grab sample was recovered by immersing a new, disposable bailer into the top of groundwater that had collected within the excavation. The groundwater was emptied into sample containers obtained directly from the analytical laboratory.

On May 23, 2016, ERS recovered one discrete stockpile sample (STKPL) from the approximate three cubic yard stockpile representing the tank excavation soils. The sample was recovered from one discrete location at the stockpile, by filling a 2" by 6" stainless steel tube completely, using a Teflon gloved hand. The liner was then sealed with Teflon sheet and plastic caps.

All samples were collected under the direction of, and as instructed by the Health Inspector. All samples were transported on ice to Accutest Laboratory (Accutest) of San Jose, CA, under proper Chain-of-Custody procedures. The following analysis were performed by Accutest on the soil and groundwater sample(s) recovered from the excavation and stockpile:

VOCs (EPA Method 8260B), SVOCs (EPA Method 8270), TPH (EPA Method 8015M), PCBs (EPA Method 8082), LUFT 5 Metals (EPA Method 6010B)

The analytical results for analytes found to have concentrations above the laboratory detection limits are as follows:

Sample ID TNK-GW

Analyte	Result	RL	MDL	Units	Method
Acetone	38.6	20	4.0	ug/l	SW846 8260B
4-Methyl-2-pentanone	5.1 J	10	1.0	ug/l	SW846 8260B
Methyl ethyl ketone	5.0 J	10	2.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	0.52 J	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	0.56 J	2.0	0.20	ug/l	SW846 8260B
Toluene	0.25 J	1.0	0.20	ug/l	SW846 8260B
Xylene (total)	0.84 J	2.0	0.46	ug/l	SW846 8260B
Benzoic Acid	1.8 J	9.5	0.48	ug/l	SW846 8270C
TPH (C10-C28)	0.391	0.096	0.058	mg/l	SW846 8015B M
TPH (>C28-C40)	0.773	0.096	0.055	mg/l	SW846 8015B M

Sample ID NW-6

Analyte	Result	RL	MDL	Units	Method
TPH (C10-C28)	2.50 J	3.3	1.5	mg/kg	SW846 8015B M
TPH (>C28-C40)	3.40	3.3	1.3	mg/kg	SW846 8015B M
Chromium	56.2	0.90		mg/kg	SW846 6010B
Lead	2.9	1.8		mg/kg	SW846 6010B
Nickel	39.5	0.90		mg/kg	SW846 6010B
Zinc	30.0	1.8		mg/kg	SW846 6010B

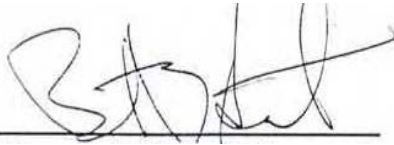
Sample ID TNK-GW

Analyte	Result	RL	MDL	Units	Method
TPH (C10-C28)	15.1 J	17	7.3	mg/kg	SW846 8015B M
TPH (>C28-C40)	80.5	17	6.5	mg/kg	SW846 8015B M
Chromium	30.1	0.92		mg/kg	SW846 6010B
Lead	18.6	1.8		mg/kg	SW846 6010B
Nickel	16.9	0.92		mg/kg	SW846 6010B
Zinc	85.8	1.8		mg/kg	SW846 6010B

The Chain-of-Custody, laboratory analytical report is attached to this report.

If there are any questions regarding this report, please call Ben Halsted at 408 655-9434.

Respectfully submitted,



Ben Halsted
Project Manager

ATTACHMENTS:

TANK CLOSURE CERTIFICATE and

WEIGHT CERTIFICATE

TANK CONTENTS DISPOSAL RECEIPT

**LABORATORY ANALYTICAL RESULTS w/
CHAINS-OF-CUSTODY**

**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) ^{3.}	FACILITY ID#
McDonald Trust Property	
TANK OWNER NAME	740.
A.S. MacDonald Trust	
TANK OWNER ADDRESS	741.
2449 Santa Clara St.	
TANK OWNER CITY	742.
Alameda	
STATE	743.
CA	
ZIP CODE	744.
94501	

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	350WO ^{745.}	0.0 ^{746a.}	0.0 ^{746b.}	0.0 ^{746c.}	20.9 ^{747a.}	20.9 ^{747b.}	20.9 ^{747c.}
2	^{748.}	^{749a.}	^{749b.}	^{749c.}	^{750a.}	^{750b.}	^{750c.}
3	^{751.}	^{752a.}	^{752b.}	^{752c.}	^{753a.}	^{753b.}	^{753c.}

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.}
BENNETT T HALSTED	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
TITLE OF CERTIFIER ^{755.}	Name of CUPA, authorized agency, or LIA: ^{761.}
HAZ REMOVAL CONTRACTOR	N/A
ADDRESS ^{756.}	If certifier is other than CUPA / LIA check appropriate box below: ^{762.}
PO BOX 2006	<input type="checkbox"/> a. Certified Industrial Hygienist (CIH)
CITY ^{757.}	<input type="checkbox"/> b. Certified Safety Professional (CSP)
MENLO PARK	<input type="checkbox"/> c. Certified Marine Chemist (CMC)
PHONE ^{758.}	<input type="checkbox"/> d. Registered Environmental Health Specialist (REHS)
408 655 9434	<input type="checkbox"/> e. Professional Engineer (PE)
DATE ^{759.}	<input type="checkbox"/> f. Class II Registered Environmental Assessor
5/23/16	<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.

Safe for man, safe for fire.

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.

WEIGHMASTER CERTIFICATE Number E-313886 Customer

Date/Time: 05/23/16 11:34:40 AM



Dealers in Ferrous and Non-Ferrous Metals

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

WEIGHMASTER:

Alco Iron & Metal Co.
1091 Doolittle Dr.
San Leandro, CA 94577

Delivered To: (Buyer)
Alco Iron & Metal Co

Carrier: **SELLER**
Truck ID:
License: **3X11745**
Trailers: **N\A N\A**

Weighed For: (Seller)
BENNETT THOMPSON HALSTED
6103 SHADYGROVE DR
CUPERTINO, CA 95014

Commodity: **1-UNPREP**

4,040 LB Gross E 05/23/16 11:25:33 AM
3,440 LB Tare E 05/23/16 11:34:39 AM
600 LB Net

Nicanor Reyes

Notes:

Deputy SIGNATURE

Driver SELLER 1

BILL OF SALE

I hereby state that I am the lawful owner of the material described herein, that have a right to sell same and that for payment received in full, hereby acknowledge I sell and convey title of same to Alco Iron & Metal Co.

HOLD HARMLESS AGREEMENT:

Seller will indemnify and hold buyer harmless from damages, demands, and liabilities, including reasonable attorney's fees resulting from the breach of any warranty hereunder and driver agrees to be responsible for damage to vehicle during unloading.
I represent and warrant that this material does not contain a hazardous substance as defined by Federal or State Law, and I agree to indemnify Alco Iron & Metal Co. against all claims

MAXIMUM OIL SERVICE

1-888-609-2629

Send Payment to:
Maximum Oil Service
 164 Robles Way #207
 Vallejo, CA 94591

Invoice No. **38983**
 Date **5-25-16**

GENERATOR	Name	AS Mc Donald Trust	Bill to	FRS
	Address	2449 Santa Clara Ave	Address	PO Box 2006
	City State Zip	Alameda Ca 95014	City State Zip	M.P. Ca 94025
	Phone Fax	95-523-4424	Phone	488-655-9434
	Customer EPA #	CAL002858018	Contact	R. H. H. H.

DESCRIPTION	WASTE CODE	MANIFEST #	QTY	RATE	AMOUNT
Non RCRA Hazardous Waste, Liquid (Used Oil) <input type="checkbox"/> Industrial <input type="checkbox"/> Lubricating	CA 221	010510880	JJK 50	5/c	125.00
Non RCRA Hazardous Waste, Liquid (Oily Water)	CA 223		JJK		
Non RCRA Hazardous Waste, Liquid (Used Antifreeze)	CA 133		JJK		
Transportation					
Clor-D-Tec Test					
Drained Used Oil Filters					

PLEASE PAY FROM THIS INVOICE **TERMS: NET 15 DAYS**

A service charge of 1.5% per month shall be charged on past due accounts.

TOTAL \$ 125.00

Consolidated Manifest Source: Collection Station Industrial Marine Agricultural Govt.

PO # 6106
 Check # 6106

TSDF: Some facilities may ship oil out of state for processing and recycling

<input type="checkbox"/> Ramos Environmental Services 1515 So. River Road W Sacramento, CA 95691 CAD 044 003 556	<input checked="" type="checkbox"/> Riverbank Oil Transfer 5300 Claus Road Riverbank, CA 95367 CAL 000 190 816	<input type="checkbox"/> BEST 2430 Almond Dr Silver Springs, NV 89429 NVD 982 358 483	<input type="checkbox"/> Bango Oil 22211 Bango Rd. Fallon, NV 89426 NVR 000 080 655
<input type="checkbox"/> DK DIXON 7300 Chevron Way Dixon, CA 95620 CAT 080 012 602	<input type="checkbox"/> Bayside Oil II, Inc. 210 Encinal Street Santa Cruz, CA 95060 CAD 088 838 222	<input type="checkbox"/> Thermo Fluids 655 So. Stanford Way Sparks, NV 89431 NVD 982 510 711	Generator certifies that the above named waste stream has not been mixed with any other waste. Furthermore it has established a program to reduce the volume & toxicity of waste generated where economically practicable.

Driver Signature Billy D Truck # _____ Generator Signature [Signature] Print _____

Please keep a copy of this invoice in a "Hazardous Waste" file for three (3) years as required by State law.

EPA # CAL000188867 DTSC # 3670 CA339919
Maximum Oil Service, LLC Fax 707-648-2804
1-888-609-2MAX or 1-888-700-4MAX

Technical Report for

Environmental Restoration Services

A.S. MacDonald Trust - Santa Clara St., Alameda, CA

SGS Accutest Job Number: C45913R

Sampling Date: 05/23/16

Report to:

Environmental Restoration Services
500 Santa Cruz Avenue
Menlo Park, CA 94025
Ben@envirest.com

ATTN: Ben Halsted

Total number of pages in report: 17



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

James J. Rhudy
Lab Director

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)
DoD ELAP (L-A-B L2242)

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

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3

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Sample Summary

Environmental Restoration Services

Job No: C45913R

A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
C45913-3R	05/23/16	10:10 BH	05/23/16	SO	Soil	STKPL

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

Summary of Hits

Job Number: C45913R
Account: Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA
Collected: 05/23/16

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

C45913-3R **STKPL**

TPH (C10-C28)	15.1 J	17	7.3	mg/kg	SW846 8015B M
TPH (> C28-C40)	80.5	17	6.5	mg/kg	SW846 8015B M
Chromium	30.1	0.92		mg/kg	SW846 6010B
Lead	18.6	1.8		mg/kg	SW846 6010B
Nickel	16.9	0.92		mg/kg	SW846 6010B
Zinc	85.8	1.8		mg/kg	SW846 6010B

Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: STKPL	Date Sampled: 05/23/16
Lab Sample ID: C45913-3R	Date Received: 05/23/16
Matrix: SO - Soil	Percent Solids: n/a
Method: SW846 8015B M SW846 3550B	
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB3848.D	5	05/23/16	MT	05/23/16	OP14404	GBB140
Run #2							

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

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	15.1	17	7.3	mg/kg	J
	TPH (> C28-C40)	80.5	17	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	64%		38-146%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: STKPL	Date Sampled: 05/23/16
Lab Sample ID: C45913-3R	Date Received: 05/23/16
Matrix: SO - Soil	Percent Solids: n/a
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.92	0.92	mg/kg	1	05/24/16	05/24/16 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	30.1	0.92	mg/kg	1	05/24/16	05/24/16 RS	SW846 6010B ¹	SW846 3050B ²
Lead	18.6	1.8	mg/kg	1	05/24/16	05/24/16 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	16.9	0.92	mg/kg	1	05/24/16	05/24/16 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	85.8	1.8	mg/kg	1	05/24/16	05/24/16 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA5892

(2) Prep QC Batch: MP11363

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS Accutest Sample Receipt Summary

Job Number: C45913

Client: ERS

Project: A.S MACDONALD TRUST

Date / Time Received: 5/23/2016 12:35:00 PM

Delivery Method: Client

Airbill #s:

Cooler Temps (Initial/Adjusted): #1: (3.1/4.1):

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|--------------------------|-------------------------------------|-----------------------|-------------------------------------|--------------------------|
| 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. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|----------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Therm ID: | IR3; | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 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"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 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 | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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

C45913R: Chain of Custody

Page 2 of 2

4.1
4

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C45913R

Account: ERSCAMP Environmental Restoration Services

Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-MB	BB3847.D	1	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-3R

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	1.5	mg/kg	
	TPH (> C28-C40)	ND	3.3	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	61% 38-146%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913R

Account: ERSCAMP Environmental Restoration Services

Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-BS	BB3845.D	1	05/23/16	MT	05/23/16	OP14404	GBB140
OP14404-BSD	BB3846.D	1	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-3R

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	28.6	86	29.6	89	3	53-107/12
	TPH (> C28-C40)	33.3	32.2	97	32.7	98	2	59-120/14

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	64%	62%	38-146%

* = Outside of Control Limits.

5.2.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913R
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-MS	BB3842.D	5	05/23/16	MT	05/23/16	OP14404	GBB140
OP14404-MSD	BB3843.D	5	05/23/16	MT	05/23/16	OP14404	GBB140
C45913-3R	BB3848.D	5	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-3R

CAS No.	Compound	C45913-3R mg/kg	Spike Q mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	15.1	J 33.2	61.0	138* a	33.2	51.7	110* a	17* a	53-107/12
	TPH (> C28-C40)	80.5	33.2	184	312* b	33.2	165	255* b	11	59-120/14

CAS No.	Surrogate Recoveries	MS	MSD	C45913-3R	Limits
630-01-3	Hexacosane	68%	56%	64%	38-146%

(a) Outside laboratory control limits.

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

* = Outside of Control Limits.

5.3.1
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Metals Analysis

QC Data Summaries

Includes the following where applicable:

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C45913R
Account: ERSCAMP - Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/24/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	1.5		
Antimony	2.0	.12	.18		
Arsenic	2.0	.16	.17		
Barium	20	.02	.09		
Beryllium	1.0	.02	.01		
Boron	10	.18	.15		
Cadmium	1.0	.02	.031	0.010	<1.0
Calcium	500	2.8	4.5		
Chromium	1.0	.04	.054	0.0	<1.0
Cobalt	1.0	.03	.025		
Copper	2.5	.12	.15		
Iron	20	.53	.76		
Lead	2.0	.1	.14	-0.16	<2.0
Magnesium	500	1.6	2.1		
Manganese	1.5	.02	.026		
Molybdenum	2.0	.05	.04		
Nickel	1.0	.04	.047	0.0	<1.0
Potassium	1000	3.5	4.6		
Selenium	2.0	.17	.33		
Silicon	20	.24	.43		
Silver	1.0	.05	.067		
Sodium	1000	1.1	1.2		
Strontium	1.0	.01	.018		
Thallium	2.0	.17	.12		
Tin	50	.08	.28		
Titanium	1.0	.08	.13		
Vanadium	1.0	.06	.074		
Zinc	2.0	.05	.22	0.050	<2.0

Associated samples MP11363: C45913-3R

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C45913R
 Account: ERSCAMP - Environmental Restoration Services
 Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/24/16

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	46.8	50	93.6	80-120
Calcium				
Chromium	51.0	50	102.0	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	45.5	50	91.0	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	45.6	50	91.2	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	48.7	50	97.4	80-120

Associated samples MP11363: C45913-3R

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

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Technical Report for

Environmental Restoration Services

A.S. MacDonald Trust - Santa Clara St., Alameda, CA

SGS Accutest Job Number: C45913

Sampling Date: 05/23/16

Report to:

Environmental Restoration Services
500 Santa Cruz Avenue
Menlo Park, CA 94025
Ben@envirest.com

ATTN: Ben Halsted

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



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

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)
DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.

James J. Rhudy
Lab Director

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Sample Summary

Environmental Restoration Services

Job No: C45913

A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C45913-1	05/23/16	09:30 BH	05/23/16	AQ	Ground Water	TNK-GW
C45913-2	05/23/16	09:50 BH	05/23/16	SO	Soil	NW-6
C45913-3	05/23/16	10:10 BH	05/23/16	SO	Soil	STKPL

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

Summary of Hits

Job Number: C45913
Account: Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA
Collected: 05/23/16

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

C45913-1 TNK-GW

Acetone	38.6	20	4.0	ug/l	SW846 8260B
4-Methyl-2-pentanone	5.1 J	10	1.0	ug/l	SW846 8260B
Methyl ethyl ketone	5.0 J	10	2.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	0.52 J	2.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	0.56 J	2.0	0.20	ug/l	SW846 8260B
Toluene	0.25 J	1.0	0.20	ug/l	SW846 8260B
Xylene (total)	0.84 J	2.0	0.46	ug/l	SW846 8260B
Benzoic Acid	1.8 J	9.5	0.48	ug/l	SW846 8270C
TPH (C10-C28)	0.391	0.096	0.058	mg/l	SW846 8015B M
TPH (> C28-C40)	0.773	0.096	0.055	mg/l	SW846 8015B M

C45913-2 NW-6

TPH (C10-C28)	2.50 J	3.3	1.5	mg/kg	SW846 8015B M
TPH (> C28-C40)	3.40	3.3	1.3	mg/kg	SW846 8015B M
Chromium	56.2	0.90		mg/kg	SW846 6010B
Lead	2.9	1.8		mg/kg	SW846 6010B
Nickel	39.5	0.90		mg/kg	SW846 6010B
Zinc	30.0	1.8		mg/kg	SW846 6010B

C45913-3 STKPL

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: TNK-GW		Date Sampled: 05/23/16
Lab Sample ID: C45913-1		Date Received: 05/23/16
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U34909.D	1	05/31/16	MV	n/a	n/a	VU1432
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	38.6	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	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TNK-GW	Date Sampled:	05/23/16
Lab Sample ID:	C45913-1	Date Received:	05/23/16
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	A.S. MacDonald Trust - Santa Clara St., 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	
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	5.1	10	1.0	ug/l	J
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	5.0	10	2.0	ug/l	J
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	0.52	2.0	0.20	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.56	2.0	0.20	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	0.25	1.0	0.20	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	0.84	2.0	0.46	ug/l	J
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-123%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TNK-GW		Date Sampled: 05/23/16
Lab Sample ID: C45913-1		Date Received: 05/23/16
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		88-112%
460-00-4	4-Bromofluorobenzene	92%		79-114%

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

Client Sample ID: TNK-GW		Date Sampled: 05/23/16
Lab Sample ID: C45913-1		Date Received: 05/23/16
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8270C SW846 3510C		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z14210.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	1.8	9.5	0.48	ug/l	J
95-57-8	2-Chlorophenol	ND	4.8	0.46	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	4.8	0.45	ug/l	
120-83-2	2,4-Dichlorophenol	ND	4.8	0.41	ug/l	
105-67-9	2,4-Dimethylphenol	ND	4.8	0.39	ug/l	
51-28-5	2,4-Dinitrophenol	ND	4.8	0.24	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	4.8	0.24	ug/l	
95-48-7	2-Methylphenol	ND	4.8	0.41	ug/l	
	3&4-Methylphenol	ND	4.8	0.41	ug/l	
88-75-5	2-Nitrophenol	ND	4.8	0.29	ug/l	
100-02-7	4-Nitrophenol	ND	4.8	0.24	ug/l	
87-86-5	Pentachlorophenol	ND	4.8	0.24	ug/l	
108-95-2	Phenol	ND	4.8	0.24	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	4.8	0.32	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	4.8	0.29	ug/l	
83-32-9	Acenaphthene	ND	4.8	0.24	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.29	ug/l	
62-53-3	Aniline	ND	4.8	0.33	ug/l	
120-12-7	Anthracene	ND	4.8	0.24	ug/l	
103-33-3	Azobenzene	ND	4.8	0.24	ug/l	
92-87-5	Benzidine	ND	9.5	4.7	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.24	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.25	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.24	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	0.33	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	4.8	0.33	ug/l	
85-68-7	Butyl benzyl phthalate	ND	4.8	0.24	ug/l	
100-51-6	Benzyl Alcohol	ND	4.8	0.31	ug/l	
91-58-7	2-Chloronaphthalene	ND	4.8	0.28	ug/l	
106-47-8	4-Chloroaniline	ND	4.8	0.39	ug/l	
86-74-8	Carbazole	ND	4.8	1.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TNK-GW	Date Sampled: 05/23/16
Lab Sample ID: C45913-1	Date Received: 05/23/16
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8270C SW846 3510C	
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	4.8	0.24	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	4.8	0.24	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	4.8	0.24	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	4.8	0.24	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	4.8	0.28	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.8	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.8	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.8	0.25	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	4.8	0.28	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	4.8	0.26	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	9.5	1.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	0.43	ug/l	
132-64-9	Dibenzofuran	ND	4.8	0.24	ug/l	
122-39-4	Diphenylamine	ND	4.8	0.29	ug/l	
84-74-2	Di-n-butyl phthalate	ND	4.8	0.24	ug/l	
117-84-0	Di-n-octyl phthalate	ND	4.8	0.34	ug/l	
84-66-2	Diethyl phthalate	ND	4.8	0.30	ug/l	
131-11-3	Dimethyl phthalate	ND	4.8	0.40	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	4.8	0.29	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.33	ug/l	
86-73-7	Fluorene	ND	4.8	0.26	ug/l	
118-74-1	Hexachlorobenzene	ND	4.8	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.8	0.30	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	4.8	0.24	ug/l	
67-72-1	Hexachloroethane	ND	4.8	0.24	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	0.54	ug/l	
78-59-1	Isophorone	ND	4.8	0.24	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.27	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.25	ug/l	
88-74-4	2-Nitroaniline	ND	4.8	0.24	ug/l	
99-09-2	3-Nitroaniline	ND	4.8	0.78	ug/l	
100-01-6	4-Nitroaniline	ND	4.8	0.76	ug/l	
91-20-3	Naphthalene	ND	4.8	0.25	ug/l	
98-95-3	Nitrobenzene	ND	4.8	0.24	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	4.8	0.24	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	4.8	0.24	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.24	ug/l	
129-00-0	Pyrene	ND	4.8	0.25	ug/l	
110-86-1	Pyridine	ND	4.8	0.24	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	4.8	0.27	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TNK-GW		Date Sampled: 05/23/16
Lab Sample ID: C45913-1		Date Received: 05/23/16
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8270C SW846 3510C		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	41%		10-110%
4165-62-2	Phenol-d5	29%		10-110%
118-79-6	2,4,6-Tribromophenol	89%		10-169%
4165-60-0	Nitrobenzene-d5	72%		24-120%
321-60-8	2-Fluorobiphenyl	79%		28-128%
1718-51-0	Terphenyl-d14	88%		54-147%

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

3.1
3

Client Sample ID: TNK-GW	Date Sampled: 05/23/16
Lab Sample ID: C45913-1	Date Received: 05/23/16
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8082 SW846 3510C	
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	OO385683.D	2	05/26/16	SY	05/24/16	OP14409	GOO1652
Run #2							

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

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.096	0.011	ug/l	
11104-28-2	Aroclor 1221	ND	0.096	0.040	ug/l	
11141-16-5	Aroclor 1232	ND	0.096	0.011	ug/l	
53469-21-9	Aroclor 1242	ND	0.096	0.021	ug/l	
12672-29-6	Aroclor 1248	ND	0.096	0.027	ug/l	
11097-69-1	Aroclor 1254	ND	0.096	0.0087	ug/l	
11096-82-5	Aroclor 1260	ND	0.096	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		10-134%
877-09-8	Tetrachloro-m-xylene	68%		10-134%
2051-24-3	Decachlorobiphenyl	18%		10-139%
2051-24-3	Decachlorobiphenyl	11%		10-139%

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

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

3.1
3

Client Sample ID: TNK-GW	Date Sampled: 05/23/16
Lab Sample ID: C45913-1	Date Received: 05/23/16
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015B M SW846 3510C	
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB3884.D	1	05/24/16	FL	05/24/16	OP14408	GBB141
Run #2	BB3909.D	1	05/25/16	FL	05/24/16	OP14408	GBB142

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

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.391	0.096	0.058	mg/l	
	TPH (> C28-C40)	0.773	0.096	0.055	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	21% ^b	21% ^a	40-134%

(a) Confirmation run for surrogate failure.

(b) Outside control limits due to matrix interference (heavy emulsion formed during extraction process and yellow oily extract). Insufficient sample volume for re-extraction and re-analyze. Confirmation by re-analysis.

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

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

Report of Analysis

Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L49217.D	1	05/26/16	JT	n/a	n/a	VL1473
Run #2							

Run #1	Initial Weight
Run #1	5.09 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 ^b	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 J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NW-6	Date Sampled:	05/23/16
Lab Sample ID:	C45913-2	Date Received:	05/23/16
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8260B		
Project:	A.S. MacDonald Trust - Santa Clara St., 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	
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 ^b	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	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		72-140%

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

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Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		87-113%
460-00-4	4-Bromofluorobenzene	98%		81-115%

- (a) All results reported on a wet weight basis.
- (b) CCV outside of control limits (biased high); not detected in sample.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z14184.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
Run #2							

Run #	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	330	43	ug/kg	
95-57-8	2-Chlorophenol	ND	170	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	29	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	48	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	44	ug/kg	
95-48-7	2-Methylphenol	ND	170	19	ug/kg	
	3&4-Methylphenol	ND	170	17	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	170	27	ug/kg	
87-86-5	Pentachlorophenol	ND	170	47	ug/kg	
108-95-2	Phenol	ND	170	8.3	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	39	ug/kg	
83-32-9	Acenaphthene	ND	170	27	ug/kg	
208-96-8	Acenaphthylene	ND	170	26	ug/kg	
62-53-3	Aniline	ND	170	22	ug/kg	
120-12-7	Anthracene	ND	170	21	ug/kg	
103-33-3	Azobenzene	ND	170	23	ug/kg	
92-87-5	Benzidine	ND	660	240	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	31	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	24	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	34	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	19	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	26	ug/kg	
106-47-8	4-Chloroaniline	ND	170	29	ug/kg	
86-74-8	Carbazole	ND	170	29	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	NW-6	Date Sampled:	05/23/16
Lab Sample ID:	C45913-2	Date Received:	05/23/16
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	25	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	27	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	26	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	53	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	26	ug/kg	
132-64-9	Dibenzofuran	ND	170	26	ug/kg	
122-39-4	Diphenylamine	ND	170	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate	ND	170	31	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	170	35	ug/kg	
206-44-0	Fluoranthene	ND	170	18	ug/kg	
86-73-7	Fluorene	ND	170	22	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	32	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	30	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	28	ug/kg	
78-59-1	Isophorone	ND	170	29	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	32	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	29	ug/kg	
88-74-4	2-Nitroaniline	ND	170	26	ug/kg	
99-09-2	3-Nitroaniline	ND	170	28	ug/kg	
100-01-6	4-Nitroaniline	ND	170	35	ug/kg	
91-20-3	Naphthalene	ND	170	28	ug/kg	
98-95-3	Nitrobenzene	ND	170	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	32	ug/kg	
85-01-8	Phenanthrene	ND	170	21	ug/kg	
129-00-0	Pyrene	ND	170	22	ug/kg	
110-86-1	Pyridine	ND	170	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	28	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%		23-116%
4165-62-2	Phenol-d5	58%		28-119%
118-79-6	2,4,6-Tribromophenol	64%		24-160%
4165-60-0	Nitrobenzene-d5	50%		20-115%
321-60-8	2-Fluorobiphenyl	54%		31-123%
1718-51-0	Terphenyl-d14	81%		58-149%

(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

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Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8082 SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OO385598.D	1	05/24/16	SY	05/23/16	OP14403	GOO1648
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	81%		10-156%
877-09-8	Tetrachloro-m-xylene	72%		10-156%
2051-24-3	Decachlorobiphenyl	91%		10-188%
2051-24-3	Decachlorobiphenyl	90%		10-188%

(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

Client Sample ID: NW-6	Date Sampled: 05/23/16
Lab Sample ID: C45913-2	Date Received: 05/23/16
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3550B	
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB3841.D	1	05/23/16	MT	05/23/16	OP14404	GBB140
Run #2							

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

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	2.50	3.3	1.5	mg/kg	J
	TPH (> C28-C40)	3.40	3.3	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	59%		38-146%

(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

32
3

Client Sample ID: NW-6		Date Sampled: 05/23/16
Lab Sample ID: C45913-2		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Cadmium	< 0.90	0.90	mg/kg	1	05/24/16	05/25/16 RS	SW846 6010B ¹	SW846 3050B ²
Chromium	56.2	0.90	mg/kg	1	05/24/16	05/25/16 RS	SW846 6010B ¹	SW846 3050B ²
Lead	2.9	1.8	mg/kg	1	05/24/16	05/25/16 RS	SW846 6010B ¹	SW846 3050B ²
Nickel	39.5	0.90	mg/kg	1	05/24/16	05/25/16 RS	SW846 6010B ¹	SW846 3050B ²
Zinc	30.0	1.8	mg/kg	1	05/24/16	05/25/16 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA5892

(2) Prep QC Batch: MP11363

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

RL = Reporting Limit

Report of Analysis

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	M60862.D	1	05/24/16	JT	n/a	n/a	VM1829

Run #1	Initial Weight
Run #2	5.10 g

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

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., 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	
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	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%		72-140%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	99%		81-115%

(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

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Z14179.D	5	05/24/16	MT	05/23/16	OP14405	EZ710
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	1700	210	ug/kg	
95-57-8	2-Chlorophenol	ND	830	110	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	830	110	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	830	140	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	830	240	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	830	210	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	830	220	ug/kg	
95-48-7	2-Methylphenol	ND	830	95	ug/kg	
	3&4-Methylphenol	ND	830	83	ug/kg	
88-75-5	2-Nitrophenol	ND	830	140	ug/kg	
100-02-7	4-Nitrophenol	ND	830	140	ug/kg	
87-86-5	Pentachlorophenol	ND	830	240	ug/kg	
108-95-2	Phenol	ND	830	42	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	830	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	830	200	ug/kg	
83-32-9	Acenaphthene	ND	830	130	ug/kg	
208-96-8	Acenaphthylene	ND	830	130	ug/kg	
62-53-3	Aniline	ND	830	110	ug/kg	
120-12-7	Anthracene	ND	830	100	ug/kg	
103-33-3	Azobenzene	ND	830	120	ug/kg	
92-87-5	Benzidine	ND	3300	1200	ug/kg	
56-55-3	Benzo(a)anthracene	ND	830	58	ug/kg	
50-32-8	Benzo(a)pyrene	ND	830	65	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	830	73	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	830	150	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	830	73	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	830	120	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	830	170	ug/kg	
100-51-6	Benzyl Alcohol	ND	830	94	ug/kg	
91-58-7	2-Chloronaphthalene	ND	830	130	ug/kg	
106-47-8	4-Chloroaniline	ND	830	140	ug/kg	
86-74-8	Carbazole	ND	830	150	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	STKPL	Date Sampled:	05/23/16
Lab Sample ID:	C45913-3	Date Received:	05/23/16
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	830	69	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	830	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	830	140	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	830	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	830	130	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	830	120	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	830	130	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	830	130	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	830	110	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	830	120	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1700	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	830	130	ug/kg	
132-64-9	Dibenzofuran	ND	830	130	ug/kg	
122-39-4	Diphenylamine	ND	830	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	830	130	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	830	160	ug/kg	
84-66-2	Diethyl phthalate	ND	830	160	ug/kg	
131-11-3	Dimethyl phthalate	ND	830	210	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	830	180	ug/kg	
206-44-0	Fluoranthene	ND	830	90	ug/kg	
86-73-7	Fluorene	ND	830	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	830	87	ug/kg	
87-68-3	Hexachlorobutadiene	ND	830	160	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	830	150	ug/kg	
67-72-1	Hexachloroethane	ND	830	120	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	830	140	ug/kg	
78-59-1	Isophorone	ND	830	150	ug/kg	
90-12-0	1-Methylnaphthalene	ND	830	160	ug/kg	
91-57-6	2-Methylnaphthalene	ND	830	150	ug/kg	
88-74-4	2-Nitroaniline	ND	830	130	ug/kg	
99-09-2	3-Nitroaniline	ND	830	140	ug/kg	
100-01-6	4-Nitroaniline	ND	830	180	ug/kg	
91-20-3	Naphthalene	ND	830	140	ug/kg	
98-95-3	Nitrobenzene	ND	830	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	830	82	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	830	160	ug/kg	
85-01-8	Phenanthrene	ND	830	100	ug/kg	
129-00-0	Pyrene	ND	830	110	ug/kg	
110-86-1	Pyridine	ND	830	63	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	830	140	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		23-116%
4165-62-2	Phenol-d5	67%		28-119%
118-79-6	2,4,6-Tribromophenol	83%		24-160%
4165-60-0	Nitrobenzene-d5	57%		20-115%
321-60-8	2-Fluorobiphenyl	70%		31-123%
1718-51-0	Terphenyl-d14	89%		58-149%

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

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: STKPL		Date Sampled: 05/23/16
Lab Sample ID: C45913-3		Date Received: 05/23/16
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8082 SW846 3550B		
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	OO385597.D	5	05/24/16	SY	05/23/16	OP14403	GOO1648
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	170	33	ug/kg	
11104-28-2	Aroclor 1221	ND	170	83	ug/kg	
11141-16-5	Aroclor 1232	ND	170	83	ug/kg	
53469-21-9	Aroclor 1242	ND	170	83	ug/kg	
12672-29-6	Aroclor 1248	ND	170	83	ug/kg	
11097-69-1	Aroclor 1254	ND	170	83	ug/kg	
11096-82-5	Aroclor 1260	ND	170	33	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		10-156%
877-09-8	Tetrachloro-m-xylene	110%		10-156%
2051-24-3	Decachlorobiphenyl	104%		10-188%
2051-24-3	Decachlorobiphenyl	101%		10-188%

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

(b) Dilution required due to matrix interference (light brown and viscous extract).

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS Accutest Sample Receipt Summary

Job Number: C45913

Client: ERS

Project: A.S MACDONALD TRUST

Date / Time Received: 5/23/2016 12:35:00 PM

Delivery Method: Client

Airbill #s:

Cooler Temps (Initial/Adjusted): #1: (3.1/4.1):

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|--------------------------|-------------------------------------|-----------------------|-------------------------------------|--------------------------|
| 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. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|----------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Therm ID: | IR3; | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 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"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 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"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 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 | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 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

C45913: Chain of Custody

Page 2 of 2

4.1
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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-MB	M60860.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-MB	M60860.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-MB	M60860.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	113%	72-140%
2037-26-5	Toluene-D8	95%	87-113%
460-00-4	4-Bromofluorobenzene	100%	81-115%

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-MB	L49215.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-MB	L49215.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-MB	L49215.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 72-140%
2037-26-5	Toluene-D8	97% 87-113%
460-00-4	4-Bromofluorobenzene	97% 81-115%

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Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-MB	U34893.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-MB	U34893.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.20	2.0	0.20	ug/l	J
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: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-MB	U34893.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	106%	80-123%
2037-26-5	Toluene-D8	102%	88-112%
460-00-4	4-Bromofluorobenzene	91%	79-114%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-BS	M60857.D	1	05/24/16	JT	n/a	n/a	VM1829
VM1829-BSD	M60858.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	159	99	171	107	7	47-163/30
71-43-2	Benzene	40	37.0	93	36.2	91	2	72-122/18
108-86-1	Bromobenzene	40	36.0	90	33.0	83	9	68-122/19
74-97-5	Bromochloromethane	40	35.8	90	34.9	87	3	71-129/18
75-27-4	Bromodichloromethane	40	35.5	89	35.1	88	1	68-122/18
75-25-2	Bromoform	40	35.8	90	35.5	89	1	69-126/18
104-51-8	n-Butylbenzene	40	35.8	90	33.4	84	7	66-121/20
135-98-8	sec-Butylbenzene	40	36.6	92	34.4	86	6	69-118/20
98-06-6	tert-Butylbenzene	40	36.5	91	34.9	87	4	69-117/20
108-90-7	Chlorobenzene	40	35.3	88	34.1	85	3	68-117/17
75-00-3	Chloroethane	40	36.9	92	38.5	96	4	66-134/18
67-66-3	Chloroform	40	35.7	89	34.4	86	4	68-124/18
95-49-8	o-Chlorotoluene	40	32.3	81	30.2	76	7	65-120/22
106-43-4	p-Chlorotoluene	40	39.6	99	35.4	89	11	64-123/24
56-23-5	Carbon tetrachloride	40	40.5	101	38.6	97	5	68-130/20
75-34-3	1,1-Dichloroethane	40	36.1	90	34.2	86	5	69-122/19
75-35-4	1,1-Dichloroethylene	40	34.2	86	34.0	85	1	69-120/20
563-58-6	1,1-Dichloropropene	40	37.4	94	36.6	92	2	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	40	38.2	96	34.3	86	11	64-132/25
106-93-4	1,2-Dibromoethane	40	35.3	88	34.8	87	1	70-122/17
107-06-2	1,2-Dichloroethane	40	37.5	94	36.7	92	2	69-125/18
78-87-5	1,2-Dichloropropane	40	35.9	90	34.4	86	4	71-122/18
142-28-9	1,3-Dichloropropane	40	36.0	90	35.5	89	1	74-123/17
108-20-3	Di-Isopropyl ether	40	35.1	88	33.3	83	5	69-122/19
594-20-7	2,2-Dichloropropane	40	38.1	95	36.7	92	4	63-132/24
124-48-1	Dibromochloromethane	40	35.5	89	35.3	88	1	68-121/16
75-71-8	Dichlorodifluoromethane	40	30.8	77	29.0	73	6	53-119/22
156-59-2	cis-1,2-Dichloroethylene	40	36.8	92	36.9	92	0	72-130/18
10061-01-5	cis-1,3-Dichloropropene	40	37.8	95	37.7	94	0	71-130/18
541-73-1	m-Dichlorobenzene	40	34.9	87	32.8	82	6	67-119/18
95-50-1	o-Dichlorobenzene	40	34.8	87	32.2	81	8	68-119/17
106-46-7	p-Dichlorobenzene	40	34.5	86	32.4	81	6	67-119/17
156-60-5	trans-1,2-Dichloroethylene	40	33.0	83	32.4	81	2	66-113/19
10061-02-6	trans-1,3-Dichloropropene	40	35.1	88	34.0	85	3	70-118/17
100-41-4	Ethylbenzene	40	36.4	91	35.1	88	4	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	35.8	90	34.9	87	3	69-125/19

* = Outside of Control Limits.

5.2.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-BS	M60857.D	1	05/24/16	JT	n/a	n/a	VM1829
VM1829-BSD	M60858.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	160	100	155	97	3	53-153/27
87-68-3	Hexachlorobutadiene	40	37.4	94	34.2	86	9	65-125/22
98-82-8	Isopropylbenzene	40	36.4	91	36.0	90	1	70-119/19
99-87-6	p-Isopropyltoluene	40	37.2	93	34.4	86	8	68-120/20
108-10-1	4-Methyl-2-pentanone	160	163	102	160	100	2	60-145/26
74-83-9	Methyl bromide	40	35.3	88	36.3	91	3	66-130/18
74-87-3	Methyl chloride	40	38.4	96	36.1	90	6	50-140/25
74-95-3	Methylene bromide	40	37.8	95	36.3	91	4	72-127/17
75-09-2	Methylene chloride	40	34.5	86	34.5	86	0	69-121/18
78-93-3	Methyl ethyl ketone	160	162	101	160	100	1	59-147/30
1634-04-4	Methyl Tert Butyl Ether	40	35.1	88	34.6	87	1	68-121/19
91-20-3	Naphthalene	40	36.5	91	34.1	85	7	68-129/22
103-65-1	n-Propylbenzene	40	35.3	88	32.8	82	7	67-116/20
100-42-5	Styrene	40	37.0	93	34.5	86	7	68-120/17
994-05-8	Tert-Amyl Methyl Ether	40	37.9	95	36.2	91	5	70-129/20
75-65-0	Tert Butyl Alcohol	200	176	88	182	91	3	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	40	35.8	90	35.1	88	2	70-123/18
71-55-6	1,1,1-Trichloroethane	40	39.0	98	37.6	94	4	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	40	36.8	92	33.8	85	8	69-126/18
79-00-5	1,1,2-Trichloroethane	40	34.9	87	34.2	86	2	70-120/17
87-61-6	1,2,3-Trichlorobenzene	40	34.0	85	32.6	82	4	65-125/23
96-18-4	1,2,3-Trichloropropane	40	37.7	94	37.3	93	1	69-128/18
120-82-1	1,2,4-Trichlorobenzene	40	34.4	86	31.4	79	9	65-125/22
95-63-6	1,2,4-Trimethylbenzene	40	36.3	91	33.2	83	9	67-118/19
108-67-8	1,3,5-Trimethylbenzene	40	37.1	93	33.8	85	9	68-120/20
127-18-4	Tetrachloroethylene	40	37.7	94	36.2	91	4	66-125/18
108-88-3	Toluene	40	35.9	90	35.2	88	2	72-116/18
79-01-6	Trichloroethylene	40	39.1	98	38.2	96	2	70-126/18
75-69-4	Trichlorofluoromethane	40	40.3	101	39.4	99	2	70-138/19
75-01-4	Vinyl chloride	40	42.3	106	39.2	98	8	55-146/22
1330-20-7	Xylene (total)	120	107	89	104	87	3	68-118/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	101%	103%	72-140%

* = Outside of Control Limits.

5.2.1
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-BS	M60857.D	1	05/24/16	JT	n/a	n/a	VM1829
VM1829-BSD	M60858.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	97%	96%	87-113%
460-00-4	4-Bromofluorobenzene	97%	99%	81-115%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-BS	L49212.D	1	05/26/16	JT	n/a	n/a	VL1473
VL1473-BSD	L49213.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	195	122	210	131	7	47-163/30
71-43-2	Benzene	40	39.5	99	40.6	102	3	72-122/18
108-86-1	Bromobenzene	40	40.1	100	40.7	102	1	68-122/19
74-97-5	Bromochloromethane	40	42.6	107	44.0	110	3	71-129/18
75-27-4	Bromodichloromethane	40	39.6	99	39.9	100	1	68-122/18
75-25-2	Bromoform	40	40.3	101	42.3	106	5	69-126/18
104-51-8	n-Butylbenzene	40	38.7	97	40.9	102	6	66-121/20
135-98-8	sec-Butylbenzene	40	38.6	97	40.9	102	6	69-118/20
98-06-6	tert-Butylbenzene	40	38.1	95	40.4	101	6	69-117/20
108-90-7	Chlorobenzene	40	38.4	96	39.8	100	4	68-117/17
75-00-3	Chloroethane	40	40.3	101	40.2	101	0	66-134/18
67-66-3	Chloroform	40	39.4	99	40.8	102	3	68-124/18
95-49-8	o-Chlorotoluene	40	38.1	95	39.0	98	2	65-120/22
106-43-4	p-Chlorotoluene	40	39.7	99	40.7	102	2	64-123/24
56-23-5	Carbon tetrachloride	40	38.5	96	41.3	103	7	68-130/20
75-34-3	1,1-Dichloroethane	40	39.3	98	41.1	103	4	69-122/19
75-35-4	1,1-Dichloroethylene	40	36.6	92	39.4	99	7	69-120/20
563-58-6	1,1-Dichloropropene	40	37.6	94	39.9	100	6	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	40	38.4	96	39.6	99	3	64-132/25
106-93-4	1,2-Dibromoethane	40	40.2	101	41.8	105	4	70-122/17
107-06-2	1,2-Dichloroethane	40	40.9	102	40.9	102	0	69-125/18
78-87-5	1,2-Dichloropropane	40	40.7	102	41.6	104	2	71-122/18
142-28-9	1,3-Dichloropropane	40	40.8	102	42.1	105	3	74-123/17
108-20-3	Di-Isopropyl ether	40	40.1	100	40.9	102	2	69-122/19
594-20-7	2,2-Dichloropropane	40	39.0	98	41.3	103	6	63-132/24
124-48-1	Dibromochloromethane	40	39.9	100	40.3	101	1	68-121/16
75-71-8	Dichlorodifluoromethane	40	30.3	76	32.0	80	5	53-119/22
156-59-2	cis-1,2-Dichloroethylene	40	41.8	105	43.3	108	4	72-130/18
10061-01-5	cis-1,3-Dichloropropene	40	42.4	106	43.5	109	3	71-130/18
541-73-1	m-Dichlorobenzene	40	38.9	97	40.5	101	4	67-119/18
95-50-1	o-Dichlorobenzene	40	38.9	97	39.8	100	2	68-119/17
106-46-7	p-Dichlorobenzene	40	39.0	98	39.9	100	2	67-119/17
156-60-5	trans-1,2-Dichloroethylene	40	36.7	92	38.8	97	6	66-113/19
10061-02-6	trans-1,3-Dichloropropene	40	38.7	97	39.8	100	3	70-118/17
100-41-4	Ethylbenzene	40	38.7	97	40.8	102	5	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	41.3	103	42.4	106	3	69-125/19

* = Outside of Control Limits.

5.2.2
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-BS	L49212.D	1	05/26/16	JT	n/a	n/a	VL1473
VL1473-BSD	L49213.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	169	106	183	114	8	53-153/27
87-68-3	Hexachlorobutadiene	40	36.5	91	39.9	100	9	65-125/22
98-82-8	Isopropylbenzene	40	38.4	96	40.9	102	6	70-119/19
99-87-6	p-Isopropyltoluene	40	39.3	98	41.2	103	5	68-120/20
108-10-1	4-Methyl-2-pentanone	160	177	111	189	118	7	60-145/26
74-83-9	Methyl bromide	40	37.5	94	37.7	94	1	66-130/18
74-87-3	Methyl chloride	40	38.1	95	37.4	94	2	50-140/25
74-95-3	Methylene bromide	40	41.5	104	41.9	105	1	72-127/17
75-09-2	Methylene chloride	40	37.9	95	39.6	99	4	69-121/18
78-93-3	Methyl ethyl ketone	160	178	111	192	120	8	59-147/30
1634-04-4	Methyl Tert Butyl Ether	40	39.5	99	40.2	101	2	68-121/19
91-20-3	Naphthalene	40	39.0	98	40.7	102	4	68-129/22
103-65-1	n-Propylbenzene	40	37.8	95	39.7	99	5	67-116/20
100-42-5	Styrene	40	39.3	98	40.9	102	4	68-120/17
994-05-8	Tert-Amyl Methyl Ether	40	42.4	106	43.9	110	3	70-129/20
75-65-0	Tert Butyl Alcohol	200	186	93	223	112	18	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	40	39.2	98	40.4	101	3	70-123/18
71-55-6	1,1,1-Trichloroethane	40	39.7	99	42.4	106	7	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	40	43.1	108	39.3	98	9	69-126/18
79-00-5	1,1,2-Trichloroethane	40	39.4	99	40.9	102	4	70-120/17
87-61-6	1,2,3-Trichlorobenzene	40	38.3	96	40.2	101	5	65-125/23
96-18-4	1,2,3-Trichloropropane	40	40.9	102	43.0	108	5	69-128/18
120-82-1	1,2,4-Trichlorobenzene	40	37.9	95	40.0	100	5	65-125/22
95-63-6	1,2,4-Trimethylbenzene	40	38.8	97	39.6	99	2	67-118/19
108-67-8	1,3,5-Trimethylbenzene	40	39.6	99	40.6	102	2	68-120/20
127-18-4	Tetrachloroethylene	40	37.8	95	45.6	114	19* a	66-125/18
108-88-3	Toluene	40	38.4	96	40.3	101	5	72-116/18
79-01-6	Trichloroethylene	40	39.0	98	41.8	105	7	70-126/18
75-69-4	Trichlorofluoromethane	40	38.5	96	39.4	99	2	70-138/19
75-01-4	Vinyl chloride	40	39.9	100	40.8	102	2	55-146/22
1330-20-7	Xylene (total)	120	116	97	122	102	5	68-118/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	103%	100%	72-140%

* = Outside of Control Limits.

5.2.2
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-BS	L49212.D	1	05/26/16	JT	n/a	n/a	VL1473
VL1473-BSD	L49213.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	97%	98%	87-113%
460-00-4	4-Bromofluorobenzene	100%	100%	81-115%

(a) RPD exceeded laboratory acceptance limit; BS/BSD recoveries met acceptance criteria. AZ:R7

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-BS	U34890.D	1	05/31/16	MV	n/a	n/a	VU1432
VU1432-BSD	U34891.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	72.5	91	66.1	83	9	55-147/17
71-43-2	Benzene	20	19.7	99	18.8	94	5	76-120/10
108-86-1	Bromobenzene	20	20.9	105	19.8	99	5	80-123/10
74-97-5	Bromochloromethane	20	20.4	102	19.3	97	6	79-124/10
75-27-4	Bromodichloromethane	20	19.8	99	18.7	94	6	75-121/10
75-25-2	Bromoform	20	19.9	100	18.8	94	6	62-127/10
104-51-8	n-Butylbenzene	20	20.3	102	19.4	97	5	74-129/10
135-98-8	sec-Butylbenzene	20	20.1	101	19.4	97	4	75-128/11
98-06-6	tert-Butylbenzene	20	20.1	101	19.4	97	4	74-127/11
108-90-7	Chlorobenzene	20	19.8	99	18.8	94	5	79-119/10
75-00-3	Chloroethane	20	17.6	88	17.1	86	3	60-115/14
67-66-3	Chloroform	20	18.9	95	17.9	90	5	75-122/10
95-49-8	o-Chlorotoluene	20	20.2	101	18.2	91	10	76-125/12
106-43-4	p-Chlorotoluene	20	19.4	97	18.4	92	5	76-126/11
56-23-5	Carbon tetrachloride	20	20.4	102	19.2	96	6	72-128/13
75-34-3	1,1-Dichloroethane	20	19.1	96	17.9	90	6	70-121/10
75-35-4	1,1-Dichloroethylene	20	19.3	97	18.3	92	5	62-125/13
563-58-6	1,1-Dichloropropene	20	19.7	99	18.8	94	5	68-116/11
96-12-8	1,2-Dibromo-3-chloropropane	20	17.3	87	16.9	85	2	64-129/11
106-93-4	1,2-Dibromoethane	20	21.2	106	20.1	101	5	81-124/10
107-06-2	1,2-Dichloroethane	20	19.9	100	18.7	94	6	74-122/10
78-87-5	1,2-Dichloropropane	20	19.9	100	18.7	94	6	75-123/10
142-28-9	1,3-Dichloropropane	20	20.9	105	19.8	99	5	81-127/11
108-20-3	Di-Isopropyl ether	20	17.9	90	16.8	84	6	69-126/10
594-20-7	2,2-Dichloropropane	20	18.5	93	17.4	87	6	66-130/12
124-48-1	Dibromochloromethane	20	17.8	89	16.8	84	6	76-124/10
75-71-8	Dichlorodifluoromethane	20	14.3	72	13.9	70	3	26-163/26
156-59-2	cis-1,2-Dichloroethylene	20	20.1	101	19.1	96	5	75-128/10
10061-01-5	cis-1,3-Dichloropropene	20	21.7	109	20.4	102	6	76-131/10
541-73-1	m-Dichlorobenzene	20	20.0	100	19.1	96	5	79-121/10
95-50-1	o-Dichlorobenzene	20	20.1	101	19.2	96	5	79-120/10
106-46-7	p-Dichlorobenzene	20	20.1	101	19.2	96	5	79-120/10
156-60-5	trans-1,2-Dichloroethylene	20	18.0	90	16.9	85	6	67-116/11
10061-02-6	trans-1,3-Dichloropropene	20	17.0	85	16.3	82	4	73-125/10
100-41-4	Ethylbenzene	20	20.2	101	19.1	96	6	78-123/10
637-92-3	Ethyl Tert Butyl Ether	20	18.5	93	17.4	87	6	75-126/11

* = Outside of Control Limits.

5.2.3
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-BS	U34890.D	1	05/31/16	MV	n/a	n/a	VU1432
VU1432-BSD	U34891.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	74.7	93	71.2	89	5	71-145/12
87-68-3	Hexachlorobutadiene	20	20.2	101	19.7	99	3	70-130/12
98-82-8	Isopropylbenzene	20	20.3	102	19.3	97	5	77-125/10
99-87-6	p-Isopropyltoluene	20	20.6	103	19.7	99	4	76-126/10
108-10-1	4-Methyl-2-pentanone	80	62.2	78	59.5	74	4	70-142/11
74-83-9	Methyl bromide	20	16.1	81	15.5	78	4	65-124/13
74-87-3	Methyl chloride	20	16.1	81	15.4	77	4	47-143/20
74-95-3	Methylene bromide	20	20.7	104	19.4	97	6	80-125/10
75-09-2	Methylene chloride	20	17.6	88	16.5	83	6	65-124/15
78-93-3	Methyl ethyl ketone	80	72.5	91	68.1	85	6	66-145/12
1634-04-4	Methyl Tert Butyl Ether	20	17.8	89	16.9	85	5	73-120/10
91-20-3	Naphthalene	20	18.7	94	19.0	95	2	66-120/12
103-65-1	n-Propylbenzene	20	19.5	98	18.6	93	5	75-125/10
100-42-5	Styrene	20	19.4	97	18.3	92	6	73-126/10
994-05-8	Tert-Amyl Methyl Ether	20	19.2	96	18.1	91	6	77-126/10
75-65-0	Tert-Butyl Alcohol	100	83.9	84	80.2	80	5	52-148/18
630-20-6	1,1,1,2-Tetrachloroethane	20	17.0	85	16.3	82	4	79-126/10
71-55-6	1,1,1-Trichloroethane	20	19.6	98	18.7	94	5	73-125/11
79-34-5	1,1,2,2-Tetrachloroethane	20	20.7	104	19.7	99	5	78-127/10
79-00-5	1,1,2-Trichloroethane	20	19.8	99	18.7	94	6	79-122/10
87-61-6	1,2,3-Trichlorobenzene	20	19.1	96	19.2	96	1	70-128/12
96-18-4	1,2,3-Trichloropropane	20	21.0	105	19.8	99	6	66-127/10
120-82-1	1,2,4-Trichlorobenzene	20	19.3	97	18.9	95	2	72-125/11
95-63-6	1,2,4-Trimethylbenzene	20	20.0	100	19.1	96	5	76-124/10
108-67-8	1,3,5-Trimethylbenzene	20	20.5	103	19.5	98	5	79-130/10
127-18-4	Tetrachloroethylene	20	21.1	106	19.6	98	7	72-124/13
108-88-3	Toluene	20	19.8	99	18.7	94	6	78-121/10
79-01-6	Trichloroethylene	20	19.9	100	18.9	95	5	75-119/10
75-69-4	Trichlorofluoromethane	20	18.2	91	17.9	90	2	68-130/19
75-01-4	Vinyl chloride	20	16.9	85	16.3	82	4	57-137/18
1330-20-7	Xylene (total)	60	53.3	89	50.4	84	6	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	96%	80-123%

* = Outside of Control Limits.

5.2.3
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Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-BS	U34890.D	1	05/31/16	MV	n/a	n/a	VU1432
VU1432-BSD	U34891.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	99%	99%	88-112%
460-00-4	4-Bromofluorobenzene	99%	98%	79-114%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1829-LCS	M60859.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	267	107	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	72-140%
2037-26-5	Toluene-D8	99%	87-113%
460-00-4	4-Bromofluorobenzene	95%	81-115%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1473-LCS	L49214.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	287	115	70-123

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	72-140%
2037-26-5	Toluene-D8	97%	87-113%
460-00-4	4-Bromofluorobenzene	99%	81-115%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1432-LCS	U34892.D	1	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	122	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	80-123%
2037-26-5	Toluene-D8	101%	88-112%
460-00-4	4-Bromofluorobenzene	95%	79-114%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45779-169MS	M60877.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169MSD	M60878.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169 ^a	M60865.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Compound	C45779-169 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	6690	5800	87	6690	4520	68	25	47-163/30
71-43-2	Benzene	ND	1670	1760	105	1670	1620	97	8	72-122/18
108-86-1	Bromobenzene	ND	1670	1650	99	1670	1620	97	2	68-122/19
74-97-5	Bromochloromethane	ND	1670	1750	105	1670	1530	91	13	71-129/18
75-27-4	Bromodichloromethane	ND	1670	1720	103	1670	1570	94	9	68-122/18
75-25-2	Bromoform	ND	1670	1600	96	1670	1460	87	9	69-126/18
104-51-8	n-Butylbenzene	ND	1670	1610	96	1670	1540	92	4	66-121/20
135-98-8	sec-Butylbenzene	ND	1670	1620	97	1670	1510	90	7	69-118/20
98-06-6	tert-Butylbenzene	ND	1670	1680	100	1670	1590	95	6	69-117/20
108-90-7	Chlorobenzene	ND	1670	1630	97	1670	1530	91	6	68-117/17
75-00-3	Chloroethane	ND	1670	1840	110	1670	1480	89	22* ^b	66-134/18
67-66-3	Chloroform	ND	1670	1760	105	1670	1540	92	13	68-124/18
95-49-8	o-Chlorotoluene	ND	1670	1570	94	1670	1460	87	7	65-120/22
106-43-4	p-Chlorotoluene	ND	1670	1640	98	1670	1660	99	1	64-123/24
56-23-5	Carbon tetrachloride	ND	1670	1770	106	1670	1630	97	8	68-130/20
75-34-3	1,1-Dichloroethane	ND	1670	1740	104	1670	1460	87	18	69-122/19
75-35-4	1,1-Dichloroethylene	ND	1670	1670	100	1670	1350	81	21* ^b	69-120/20
563-58-6	1,1-Dichloropropene	ND	1670	1700	102	1670	1580	94	7	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	1670	1640	98	1670	1420	85	14	64-132/25
106-93-4	1,2-Dibromoethane	ND	1670	1710	102	1670	1530	91	11	70-122/17
107-06-2	1,2-Dichloroethane	ND	1670	1780	106	1670	1600	96	11	69-125/18
78-87-5	1,2-Dichloropropane	ND	1670	1740	104	1670	1590	95	9	71-122/18
142-28-9	1,3-Dichloropropane	ND	1670	1760	105	1670	1660	99	6	74-123/17
108-20-3	Di-Isopropyl ether	ND	1670	1760	105	1670	1520	91	15	69-122/19
594-20-7	2,2-Dichloropropane	ND	1670	1550	93	1670	1400	84	10	63-132/24
124-48-1	Dibromochloromethane	ND	1670	1690	101	1670	1540	92	9	68-121/16
75-71-8	Dichlorodifluoromethane	ND	1670	1390	83	1670	1110	66	22	53-119/22
156-59-2	cis-1,2-Dichloroethylene	ND	1670	1820	109	1670	1630	97	11	72-130/18
10061-01-5	cis-1,3-Dichloropropene	ND	1670	1860	111	1670	1680	100	10	71-130/18
541-73-1	m-Dichlorobenzene	ND	1670	1600	96	1670	1500	90	6	67-119/18
95-50-1	o-Dichlorobenzene	ND	1670	1650	99	1670	1520	91	8	68-119/17
106-46-7	p-Dichlorobenzene	ND	1670	1610	96	1670	1460	87	10	67-119/17
156-60-5	trans-1,2-Dichloroethylene	ND	1670	1620	97	1670	1390	83	15	66-113/19
10061-02-6	trans-1,3-Dichloropropene	ND	1670	1630	97	1670	1500	90	8	70-118/17
100-41-4	Ethylbenzene	ND	1670	1690	101	1670	1550	93	9	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND	1670	1810	108	1670	1600	96	12	69-125/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45779-169MS	M60877.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169MSD	M60878.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169 ^a	M60865.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Compound	C45779-169 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	6690	6860	103	6690	5860	88	16	53-153/27
87-68-3	Hexachlorobutadiene	ND	1670	1730	103	1670	1580	94	9	65-125/22
98-82-8	Isopropylbenzene	ND	1670	1680	100	1670	1610	96	4	70-119/19
99-87-6	p-Isopropyltoluene	ND	1670	1630	97	1670	1530	91	6	68-120/20
108-10-1	4-Methyl-2-pentanone	ND	6690	7280	109	6690	6020	90	19	60-145/26
74-83-9	Methyl bromide	ND	1670	1710	102	1670	1430	86	18	66-130/18
74-87-3	Methyl chloride	ND	1670	1710	102	1670	1420	85	19	50-140/25
74-95-3	Methylene bromide	ND	1670	1830	109	1670	1600	96	13	72-127/17
75-09-2	Methylene chloride	ND	1670	1810	108	1670	1520	91	17	69-121/18
78-93-3	Methyl ethyl ketone	ND	6690	6710	100	6690	5630	84	18	59-147/30
1634-04-4	Methyl Tert Butyl Ether	ND	1670	1740	104	1670	1400	84	22* ^b	68-121/19
91-20-3	Naphthalene	ND	1670	1760	105	1670	1650	99	6	68-129/22
103-65-1	n-Propylbenzene	ND	1670	1570	94	1670	1540	92	2	67-116/20
100-42-5	Styrene	ND	1670	1710	102	1670	1580	94	8	68-120/17
994-05-8	Tert-Amyl Methyl Ether	ND	1670	1820	109	1670	1520	91	18	70-129/20
75-65-0	Tert Butyl Alcohol	ND	8360	7780	93	8360	6000	72	26	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	1670	1670	100	1670	1550	93	7	70-123/18
71-55-6	1,1,1-Trichloroethane	ND	1670	1780	106	1670	1560	93	13	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	ND	1670	1650	99	1670	1530	91	8	69-126/18
79-00-5	1,1,2-Trichloroethane	ND	1670	1710	102	1670	1560	93	9	70-120/17
87-61-6	1,2,3-Trichlorobenzene	ND	1670	1730	103	1670	1590	95	8	65-125/23
96-18-4	1,2,3-Trichloropropane	ND	1670	1710	102	1670	1540	92	10	69-128/18
120-82-1	1,2,4-Trichlorobenzene	ND	1670	1620	97	1670	1540	92	5	65-125/22
95-63-6	1,2,4-Trimethylbenzene	ND	1670	1620	97	1670	1520	91	6	67-118/19
108-67-8	1,3,5-Trimethylbenzene	ND	1670	1630	97	1670	1610	96	1	68-120/20
127-18-4	Tetrachloroethylene	ND	1670	1750	105	1670	1560	93	11	66-125/18
108-88-3	Toluene	ND	1670	1690	101	1670	1590	95	6	72-116/18
79-01-6	Trichloroethylene	ND	1670	1780	106	1670	1590	95	11	70-126/18
75-69-4	Trichlorofluoromethane	ND	1670	1770	106	1670	1470	88	19	70-138/19
75-01-4	Vinyl chloride	ND	1670	1250	75	1670	1040	62	18	55-146/22
1330-20-7	Xylene (total)	ND	5020	5030	100	5020	4570	91	10	68-118/18

CAS No.	Surrogate Recoveries	MS	MSD	C45779-169	Limits
1868-53-7	Dibromofluoromethane	101%	100%	115%	72-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45779-169MS	M60877.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169MSD	M60878.D	1	05/24/16	JT	n/a	n/a	VM1829
C45779-169 ^a	M60865.D	1	05/24/16	JT	n/a	n/a	VM1829

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-3

CAS No.	Surrogate Recoveries	MS	MSD	C45779-169	Limits
2037-26-5	Toluene-D8	99%	102%	99%	87-113%
460-00-4	4-Bromofluorobenzene	98%	103%	106%	81-115%

(a) Dilution required due to nature of sample matrix.

(b) RPD exceeded laboratory acceptance limit; MS/MSD recoveries met acceptance criteria. AZ:R5

* = Outside of Control Limits.

5.4.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45860-6MS	L49232.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6MSD	L49233.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6	L49221.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Compound	C45860-6 ug/kg	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	7890	8010	101	7890	8360	106	4	47-163/30
71-43-2	Benzene	ND	1970	1900	96	1970	1980	100	4	72-122/18
108-86-1	Bromobenzene	ND	1970	1890	96	1970	1900	96	1	68-122/19
74-97-5	Bromochloromethane	ND	1970	2020	102	1970	2020	102	0	71-129/18
75-27-4	Bromodichloromethane	ND	1970	1860	94	1970	1860	94	0	68-122/18
75-25-2	Bromoform	ND	1970	1810	92	1970	1850	94	2	69-126/18
104-51-8	n-Butylbenzene	ND	1970	1840	93	1970	1860	94	1	66-121/20
135-98-8	sec-Butylbenzene	ND	1970	1860	94	1970	1890	96	2	69-118/20
98-06-6	tert-Butylbenzene	ND	1970	1780	90	1970	1870	95	5	69-117/20
108-90-7	Chlorobenzene	ND	1970	1850	94	1970	1880	95	2	68-117/17
75-00-3	Chloroethane	ND	1970	1880	95	1970	1840	93	2	66-134/18
67-66-3	Chloroform	ND	1970	1940	98	1970	1940	98	0	68-124/18
95-49-8	o-Chlorotoluene	ND	1970	1820	92	1970	1860	94	2	65-120/22
106-43-4	p-Chlorotoluene	ND	1970	1890	96	1970	1910	97	1	64-123/24
56-23-5	Carbon tetrachloride	ND	1970	1860	94	1970	1880	95	1	68-130/20
75-34-3	1,1-Dichloroethane	ND	1970	1960	99	1970	1980	100	1	69-122/19
75-35-4	1,1-Dichloroethylene	ND	1970	1770	90	1970	1870	95	5	69-120/20
563-58-6	1,1-Dichloropropene	ND	1970	1850	94	1970	1880	95	2	69-120/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	1970	1820	92	1970	1700	86	7	64-132/25
106-93-4	1,2-Dibromoethane	ND	1970	1910	97	1970	1870	95	2	70-122/17
107-06-2	1,2-Dichloroethane	ND	1970	1900	96	1970	1910	97	1	69-125/18
78-87-5	1,2-Dichloropropane	ND	1970	1970	100	1970	1990	101	1	71-122/18
142-28-9	1,3-Dichloropropane	ND	1970	1930	98	1970	1930	98	0	74-123/17
108-20-3	Di-Isopropyl ether	ND	1970	1950	99	1970	1980	100	2	69-122/19
594-20-7	2,2-Dichloropropane	ND	1970	1750	89	1970	1740	88	1	63-132/24
124-48-1	Dibromochloromethane	ND	1970	1810	92	1970	1820	92	1	68-121/16
75-71-8	Dichlorodifluoromethane	ND	1970	1490	76	1970	1400	71	6	53-119/22
156-59-2	cis-1,2-Dichloroethylene	ND	1970	2040	103	1970	2070	105	1	72-130/18
10061-01-5	cis-1,3-Dichloropropene	ND	1970	1990	101	1970	2010	102	1	71-130/18
541-73-1	m-Dichlorobenzene	ND	1970	1820	92	1970	1850	94	2	67-119/18
95-50-1	o-Dichlorobenzene	ND	1970	1800	91	1970	1860	94	3	68-119/17
106-46-7	p-Dichlorobenzene	ND	1970	1810	92	1970	1860	94	3	67-119/17
156-60-5	trans-1,2-Dichloroethylene	ND	1970	1790	91	1970	1830	93	2	66-113/19
10061-02-6	trans-1,3-Dichloropropene	ND	1970	1830	93	1970	1790	91	2	70-118/17
100-41-4	Ethylbenzene	ND	1970	1920	97	1970	1920	97	0	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND	1970	1970	100	1970	1990	101	1	69-125/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45860-6MS	L49232.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6MSD	L49233.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6	L49221.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Compound	C45860-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	7890	7710	98	7890	7860	100	2	53-153/27
87-68-3	Hexachlorobutadiene	ND	1970	1820	92	1970	1810	92	1	65-125/22
98-82-8	Isopropylbenzene	ND	1970	1890	96	1970	1900	96	1	70-119/19
99-87-6	p-Isopropyltoluene	ND	1970	1840	93	1970	1890	96	3	68-120/20
108-10-1	4-Methyl-2-pentanone	ND	7890	8070	102	7890	8390	106	4	60-145/26
74-83-9	Methyl bromide	ND	1970	1720	87	1970	1660	84	4	66-130/18
74-87-3	Methyl chloride	ND	1970	1820	92	1970	1750	89	4	50-140/25
74-95-3	Methylene bromide	ND	1970	1930	98	1970	1950	99	1	72-127/17
75-09-2	Methylene chloride	ND	1970	1870	95	1970	1890	96	1	69-121/18
78-93-3	Methyl ethyl ketone	ND	7890	8650	110	7890	9020	114	4	59-147/30
1634-04-4	Methyl Tert Butyl Ether	ND	1970	1830	93	1970	1870	95	2	68-121/19
91-20-3	Naphthalene	ND	1970	1840	93	1970	1850	94	1	68-129/22
103-65-1	n-Propylbenzene	ND	1970	1800	91	1970	1850	94	3	67-116/20
100-42-5	Styrene	ND	1970	1910	97	1970	1910	97	0	68-120/17
994-05-8	Tert-Amyl Methyl Ether	ND	1970	1990	101	1970	2030	103	2	70-129/20
75-65-0	Tert Butyl Alcohol	ND	9870	8990	91	9870	9320	94	4	50-163/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	1970	1850	94	1970	1860	94	1	70-123/18
71-55-6	1,1,1-Trichloroethane	ND	1970	1970	100	1970	1970	100	0	71-128/20
79-34-5	1,1,2,2-Tetrachloroethane	ND	1970	1870	95	1970	1910	97	2	69-126/18
79-00-5	1,1,2-Trichloroethane	ND	1970	1880	95	1970	1890	96	1	70-120/17
87-61-6	1,2,3-Trichlorobenzene	ND	1970	1810	92	1970	1790	91	1	65-125/23
96-18-4	1,2,3-Trichloropropane	ND	1970	1870	95	1970	1860	94	1	69-128/18
120-82-1	1,2,4-Trichlorobenzene	ND	1970	1760	89	1970	1770	90	1	65-125/22
95-63-6	1,2,4-Trimethylbenzene	ND	1970	1830	93	1970	1860	94	2	67-118/19
108-67-8	1,3,5-Trimethylbenzene	ND	1970	1870	95	1970	1900	96	2	68-120/20
127-18-4	Tetrachloroethylene	ND	1970	1860	94	1970	1950	99	5	66-125/18
108-88-3	Toluene	ND	1970	1890	96	1970	1890	96	0	72-116/18
79-01-6	Trichloroethylene	ND	1970	1890	96	1970	1960	99	4	70-126/18
75-69-4	Trichlorofluoromethane	ND	1970	1850	94	1970	1730	88	7	70-138/19
75-01-4	Vinyl chloride	ND	1970	1670	85	1970	1530	78	9	55-146/22
1330-20-7	Xylene (total)	ND	5920	5670	96	5920	5700	96	1	68-118/18

CAS No.	Surrogate Recoveries	MS	MSD	C45860-6	Limits
1868-53-7	Dibromofluoromethane	103%	99%	95%	72-140%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45860-6MS	L49232.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6MSD	L49233.D	1	05/26/16	JT	n/a	n/a	VL1473
C45860-6	L49221.D	1	05/26/16	JT	n/a	n/a	VL1473

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-2

CAS No.	Surrogate Recoveries	MS	MSD	C45860-6	Limits
2037-26-5	Toluene-D8	97%	96%	98%	87-113%
460-00-4	4-Bromofluorobenzene	100%	97%	100%	81-115%

* = Outside of Control Limits.

5.4.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45886-13MS	U34913.D	10	05/31/16	MV	n/a	n/a	VU1432
C45886-13MSD	U34914.D	10	06/01/16	MV	n/a	n/a	VU1432
C45886-13	U34905.D	10	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	C45886-13 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	800	783	98	800	752	94	4	55-147/17
71-43-2	Benzene	ND	200	211	106	200	207	104	2	76-120/10
108-86-1	Bromobenzene	ND	200	206	103	200	206	103	0	80-123/10
74-97-5	Bromochloromethane	ND	200	218	109	200	209	105	4	79-124/10
75-27-4	Bromodichloromethane	ND	200	194	97	200	192	96	1	75-121/10
75-25-2	Bromoform	ND	200	144	72	200	152	76	5	62-127/10
104-51-8	n-Butylbenzene	ND	200	209	105	200	213	107	2	74-129/10
135-98-8	sec-Butylbenzene	ND	200	209	105	200	214	107	2	75-128/11
98-06-6	tert-Butylbenzene	ND	200	206	103	200	211	106	2	74-127/11
108-90-7	Chlorobenzene	ND	200	203	102	200	203	102	0	79-119/10
75-00-3	Chloroethane	ND	200	192	96	200	205	103	7	60-115/14
67-66-3	Chloroform	ND	200	206	103	200	200	100	3	75-122/10
95-49-8	o-Chlorotoluene	ND	200	198	99	200	200	100	1	76-125/12
106-43-4	p-Chlorotoluene	ND	200	195	98	200	199	100	2	76-126/11
56-23-5	Carbon tetrachloride	ND	200	213	107	200	213	107	0	72-128/13
75-34-3	1,1-Dichloroethane	ND	200	205	103	200	202	101	1	70-121/10
75-35-4	1,1-Dichloroethylene	ND	200	207	104	200	207	104	0	62-125/13
563-58-6	1,1-Dichloropropene	ND	200	209	105	200	206	103	1	68-116/11
96-12-8	1,2-Dibromo-3-chloropropane	ND	200	174	87	200	175	88	1	64-129/11
106-93-4	1,2-Dibromoethane	ND	200	214	107	200	211	106	1	81-124/10
107-06-2	1,2-Dichloroethane	ND	200	212	106	200	204	102	4	74-122/10
78-87-5	1,2-Dichloropropane	ND	200	212	106	200	206	103	3	75-123/10
142-28-9	1,3-Dichloropropane	ND	200	216	108	200	213	107	1	81-127/11
108-20-3	Di-Isopropyl ether	ND	200	191	96	200	187	94	2	69-126/10
594-20-7	2,2-Dichloropropane	ND	200	187	94	200	185	93	1	66-130/12
124-48-1	Dibromochloromethane	ND	200	148	74* a	200	152	76	3	76-124/10
75-71-8	Dichlorodifluoromethane	ND	200	170	85	200	181	91	6	26-163/26
156-59-2	cis-1,2-Dichloroethylene	376	200	578	101	200	555	90	4	75-128/10
10061-01-5	cis-1,3-Dichloropropene	ND	200	215	108	200	211	106	2	76-131/10
541-73-1	m-Dichlorobenzene	ND	200	202	101	200	203	102	0	79-121/10
95-50-1	o-Dichlorobenzene	ND	200	206	103	200	204	102	1	79-120/10
106-46-7	p-Dichlorobenzene	ND	200	204	102	200	203	102	0	79-120/10
156-60-5	trans-1,2-Dichloroethylene	9.1	200	198	94	200	198	94	0	67-116/11
10061-02-6	trans-1,3-Dichloropropene	ND	200	167	84	200	165	83	1	73-125/10
100-41-4	Ethylbenzene	ND	200	209	105	200	211	106	1	78-123/10
637-92-3	Ethyl Tert Butyl Ether	ND	200	193	97	200	191	96	1	75-126/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45886-13MS	U34913.D	10	05/31/16	MV	n/a	n/a	VU1432
C45886-13MSD	U34914.D	10	06/01/16	MV	n/a	n/a	VU1432
C45886-13	U34905.D	10	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Compound	C45886-13 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	800	799	100	800	778	97	3	71-145/12
87-68-3	Hexachlorobutadiene	ND	200	197	99	200	204	102	3	70-130/12
98-82-8	Isopropylbenzene	ND	200	211	106	200	212	106	0	77-125/10
99-87-6	p-Isopropyltoluene	ND	200	212	106	200	216	108	2	76-126/10
108-10-1	4-Methyl-2-pentanone	ND	800	676	85	800	649	81	4	70-142/11
74-83-9	Methyl bromide	ND	200	167	84	200	179	90	7	65-124/13
74-87-3	Methyl chloride	ND	200	188	94	200	199	100	6	47-143/20
74-95-3	Methylene bromide	ND	200	219	110	200	212	106	3	80-125/10
75-09-2	Methylene chloride	ND	200	191	96	200	186	93	3	65-124/15
78-93-3	Methyl ethyl ketone	ND	800	787	98	800	757	95	4	66-145/12
1634-04-4	Methyl Tert Butyl Ether	ND	200	185	93	200	183	92	1	73-120/10
91-20-3	Naphthalene	ND	200	193	97	200	203	102	5	66-120/12
103-65-1	n-Propylbenzene	ND	200	200	100	200	204	102	2	75-125/10
100-42-5	Styrene	ND	200	195	98	200	194	97	1	73-126/10
994-05-8	Tert-Amyl Methyl Ether	ND	200	200	100	200	196	98	2	77-126/10
75-65-0	Tert-Butyl Alcohol	ND	1000	917	92	1000	886	89	3	52-148/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	200	173	87	200	175	88	1	79-126/10
71-55-6	1,1,1-Trichloroethane	ND	200	212	106	200	213	107	0	73-125/11
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	216	108	200	215	108	0	78-127/10
79-00-5	1,1,2-Trichloroethane	ND	200	209	105	200	203	102	3	79-122/10
87-61-6	1,2,3-Trichlorobenzene	ND	200	193	97	200	204	102	6	70-128/12
96-18-4	1,2,3-Trichloropropane	ND	200	220	110	200	215	108	2	66-127/10
120-82-1	1,2,4-Trichlorobenzene	ND	200	194	97	200	198	99	2	72-125/11
95-63-6	1,2,4-Trimethylbenzene	ND	200	206	103	200	209	105	1	76-124/10
108-67-8	1,3,5-Trimethylbenzene	ND	200	209	105	200	213	107	2	79-130/10
127-18-4	Tetrachloroethylene	33.0	200	235	101	200	231	99	2	72-124/13
108-88-3	Toluene	ND	200	203	102	200	204	102	0	78-121/10
79-01-6	Trichloroethylene	327	200	513	93	200	491	82	4	75-119/10
75-69-4	Trichlorofluoromethane	ND	200	194	97	200	210	105	8	68-130/19
75-01-4	Vinyl chloride	470	200	605	68	200	588	59	3	57-137/18
1330-20-7	Xylene (total)	ND	600	548	91	600	548	91	0	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C45886-13	Limits
1868-53-7	Dibromofluoromethane	101%	100%	100%	80-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C45886-13MS	U34913.D	10	05/31/16	MV	n/a	n/a	VU1432
C45886-13MSD	U34914.D	10	06/01/16	MV	n/a	n/a	VU1432
C45886-13	U34905.D	10	05/31/16	MV	n/a	n/a	VU1432

The QC reported here applies to the following samples:

Method: SW846 8260B

C45913-1

CAS No.	Surrogate Recoveries	MS	MSD	C45886-13	Limits
2037-26-5	Toluene-D8	98%	100%	101%	88-112%
460-00-4	4-Bromofluorobenzene	100%	100%	91%	79-114%

(a) Outside laboratory control limits.

* = Outside of Control Limits.

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C45913

Account: ERSCAMP Environmental Restoration Services

Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14178.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	330	43	ug/kg	
95-57-8	2-Chlorophenol	ND	170	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	29	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	48	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	44	ug/kg	
95-48-7	2-Methylphenol	ND	170	19	ug/kg	
	3&4-Methylphenol	ND	170	17	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	170	27	ug/kg	
87-86-5	Pentachlorophenol	ND	170	47	ug/kg	
108-95-2	Phenol	ND	170	8.3	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	39	ug/kg	
83-32-9	Acenaphthene	ND	170	27	ug/kg	
208-96-8	Acenaphthylene	ND	170	26	ug/kg	
62-53-3	Aniline	ND	170	22	ug/kg	
120-12-7	Anthracene	ND	170	21	ug/kg	
103-33-3	Azobenzene	ND	170	24	ug/kg	
92-87-5	Benzidine	ND	670	240	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	31	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	24	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	34	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	19	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	27	ug/kg	
106-47-8	4-Chloroaniline	ND	170	29	ug/kg	
86-74-8	Carbazole	ND	170	29	ug/kg	
218-01-9	Chrysene	ND	170	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	25	ug/kg	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14178.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	27	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	26	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	53	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	26	ug/kg	
132-64-9	Dibenzofuran	ND	170	26	ug/kg	
122-39-4	Diphenylamine	ND	170	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate ^a	101	170	32	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	170	35	ug/kg	
206-44-0	Fluoranthene	ND	170	18	ug/kg	
86-73-7	Fluorene	ND	170	22	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	32	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	31	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	29	ug/kg	
78-59-1	Isophorone	ND	170	29	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	32	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	30	ug/kg	
88-74-4	2-Nitroaniline	ND	170	26	ug/kg	
99-09-2	3-Nitroaniline	ND	170	28	ug/kg	
100-01-6	4-Nitroaniline	ND	170	35	ug/kg	
91-20-3	Naphthalene	ND	170	28	ug/kg	
98-95-3	Nitrobenzene	ND	170	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	32	ug/kg	
85-01-8	Phenanthrene	ND	170	21	ug/kg	
129-00-0	Pyrene	ND	170	22	ug/kg	
110-86-1	Pyridine	ND	170	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	28	ug/kg	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14178.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	78%	23-116%
4165-62-2	Phenol-d5	81%	28-119%
118-79-6	2,4,6-Tribromophenol	87%	24-160%
4165-60-0	Nitrobenzene-d5	76%	20-115%
321-60-8	2-Fluorobiphenyl	80%	31-123%
1718-51-0	Terphenyl-d14	99%	58-149%

(a) Associated sample(s) with "B" qualifiers indicate analyte is found at concentrations less than 10 times of method blank.

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14206.D	1	05/25/16	MT	05/23/16	OP14405	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	330	43	ug/kg	
95-57-8	2-Chlorophenol	ND	170	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	22	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	29	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	48	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	42	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	44	ug/kg	
95-48-7	2-Methylphenol	ND	170	19	ug/kg	
	3&4-Methylphenol	ND	170	17	ug/kg	
88-75-5	2-Nitrophenol	ND	170	29	ug/kg	
100-02-7	4-Nitrophenol	ND	170	27	ug/kg	
87-86-5	Pentachlorophenol	ND	170	47	ug/kg	
108-95-2	Phenol	ND	170	8.3	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	29	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	39	ug/kg	
83-32-9	Acenaphthene	ND	170	27	ug/kg	
208-96-8	Acenaphthylene	ND	170	26	ug/kg	
62-53-3	Aniline	ND	170	22	ug/kg	
120-12-7	Anthracene	ND	170	21	ug/kg	
103-33-3	Azobenzene	ND	170	24	ug/kg	
92-87-5	Benzidine	ND	670	240	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	12	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	13	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	31	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	15	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	24	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	34	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	19	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	27	ug/kg	
106-47-8	4-Chloroaniline	ND	170	29	ug/kg	
86-74-8	Carbazole	ND	170	29	ug/kg	
218-01-9	Chrysene	ND	170	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	29	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	28	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	25	ug/kg	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14206.D	1	05/25/16	MT	05/23/16	OP14405	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	27	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	25	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	26	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	22	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	25	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	53	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	26	ug/kg	
132-64-9	Dibenzofuran	ND	170	26	ug/kg	
122-39-4	Diphenylamine	ND	170	23	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	33	ug/kg	
84-66-2	Diethyl phthalate ^a	103	170	32	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	43	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	170	35	ug/kg	
206-44-0	Fluoranthene	ND	170	18	ug/kg	
86-73-7	Fluorene	ND	170	22	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	17	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	32	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	31	ug/kg	
67-72-1	Hexachloroethane	ND	170	25	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	29	ug/kg	
78-59-1	Isophorone	ND	170	29	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	32	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	30	ug/kg	
88-74-4	2-Nitroaniline	ND	170	26	ug/kg	
99-09-2	3-Nitroaniline	ND	170	28	ug/kg	
100-01-6	4-Nitroaniline	ND	170	35	ug/kg	
91-20-3	Naphthalene	ND	170	28	ug/kg	
98-95-3	Nitrobenzene	ND	170	30	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	32	ug/kg	
85-01-8	Phenanthrene	ND	170	21	ug/kg	
129-00-0	Pyrene	ND	170	22	ug/kg	
110-86-1	Pyridine	ND	170	13	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	28	ug/kg	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MB	Z14206.D	1	05/25/16	MT	05/23/16	OP14405	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	78%	23-116%
4165-62-2	Phenol-d5	80%	28-119%
118-79-6	2,4,6-Tribromophenol	87%	24-160%
4165-60-0	Nitrobenzene-d5	76%	20-115%
321-60-8	2-Fluorobiphenyl	80%	31-123%
1718-51-0	Terphenyl-d14	102%	58-149%

(a) Associated sample(s) with "B" qualifiers indicate analyte is found at concentrations less than 10 times of method blank.

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Y35772.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	0.50	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.48	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.41	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	0.25	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.25	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.43	ug/l	
	3&4-Methylphenol	ND	5.0	0.43	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.31	ug/l	
100-02-7	4-Nitrophenol	ND	5.0	0.25	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	0.25	ug/l	
108-95-2	Phenol	ND	5.0	0.25	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.34	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.31	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.26	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.30	ug/l	
62-53-3	Aniline	ND	5.0	0.34	ug/l	
120-12-7	Anthracene	ND	5.0	0.25	ug/l	
103-33-3	Azobenzene	ND	5.0	0.25	ug/l	
92-87-5	Benzidine	ND	10	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.27	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.25	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.41	ug/l	
86-74-8	Carbazole	ND	5.0	1.1	ug/l	
218-01-9	Chrysene	ND	5.0	0.25	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.25	ug/l	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Y35772.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.29	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.28	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	1.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.45	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.25	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.25	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.35	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.31	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.42	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	0.31	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.35	ug/l	
86-73-7	Fluorene	ND	5.0	0.28	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.25	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.25	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.25	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.25	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.82	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.80	ug/l	
91-20-3	Naphthalene	ND	5.0	0.27	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.25	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.25	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	5.0	0.26	ug/l	
110-86-1	Pyridine	ND	5.0	0.25	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Y35772.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	45%	10-110%
4165-62-2	Phenol-d5	32%	10-110%
118-79-6	2,4,6-Tribromophenol	95%	10-169%
4165-60-0	Nitrobenzene-d5	80%	24-120%
321-60-8	2-Fluorobiphenyl	82%	28-128%
1718-51-0	Terphenyl-d14	111%	54-147%

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Z14207.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	10	0.50	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	0.48	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.47	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.43	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	0.41	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	0.25	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	0.25	ug/l	
95-48-7	2-Methylphenol	ND	5.0	0.43	ug/l	
	3&4-Methylphenol	ND	5.0	0.43	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.31	ug/l	
100-02-7	4-Nitrophenol	ND	5.0	0.25	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	0.25	ug/l	
108-95-2	Phenol	ND	5.0	0.25	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.34	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.31	ug/l	
83-32-9	Acenaphthene	ND	5.0	0.26	ug/l	
208-96-8	Acenaphthylene	ND	5.0	0.30	ug/l	
62-53-3	Aniline	ND	5.0	0.34	ug/l	
120-12-7	Anthracene	ND	5.0	0.25	ug/l	
103-33-3	Azobenzene	ND	5.0	0.25	ug/l	
92-87-5	Benzidine	ND	10	4.9	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	0.27	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	0.27	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	0.35	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	0.25	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	0.33	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.41	ug/l	
86-74-8	Carbazole	ND	5.0	1.1	ug/l	
218-01-9	Chrysene	ND	5.0	0.25	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	0.25	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	0.25	ug/l	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Z14207.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	0.29	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	0.27	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	0.26	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	0.29	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.28	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	1.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	0.45	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.25	ug/l	
122-39-4	Diphenylamine	ND	5.0	0.30	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	0.25	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	0.35	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	0.31	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	0.42	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	0.31	ug/l	
206-44-0	Fluoranthene	ND	5.0	0.35	ug/l	
86-73-7	Fluorene	ND	5.0	0.28	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	0.43	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.32	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	0.25	ug/l	
67-72-1	Hexachloroethane	ND	5.0	0.25	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	0.57	ug/l	
78-59-1	Isophorone	ND	5.0	0.25	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	0.27	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.25	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.82	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.80	ug/l	
91-20-3	Naphthalene	ND	5.0	0.27	ug/l	
98-95-3	Nitrobenzene	ND	5.0	0.25	ug/l	
62-75-9	N-Nitrosodimethylamine	ND	5.0	0.25	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	0.25	ug/l	
85-01-8	Phenanthrene	ND	5.0	0.25	ug/l	
129-00-0	Pyrene	ND	5.0	0.26	ug/l	
110-86-1	Pyridine	ND	5.0	0.25	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.29	ug/l	

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MB	Z14207.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	45% 10-110%
4165-62-2	Phenol-d5	32% 10-110%
118-79-6	2,4,6-Tribromophenol	90% 10-169%
4165-60-0	Nitrobenzene-d5	75% 24-120%
321-60-8	2-Fluorobiphenyl	83% 28-128%
1718-51-0	Terphenyl-d14	96% 54-147%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-BS	Z14180.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-BSD	Z14181.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1670	1880	113	1790	107	5	40-144/22
95-57-8	2-Chlorophenol	833	672	81	672	81	0	39-110/19
59-50-7	4-Chloro-3-methyl phenol	833	812	97	801	96	1	62-112/15
120-83-2	2,4-Dichlorophenol	833	749	90	750	90	0	48-107/17
105-67-9	2,4-Dimethylphenol	833	729	87	736	88	1	46-105/18
51-28-5	2,4-Dinitrophenol	833	768	92	754	90	2	24-134/26
534-52-1	4,6-Dinitro-o-cresol	833	764	92	761	91	0	37-128/19
95-48-7	2-Methylphenol	833	710	85	709	85	0	42-101/20
	3&4-Methylphenol	833	736	88	731	88	1	46-107/20
88-75-5	2-Nitrophenol	833	705	85	702	84	0	40-103/20
100-02-7	4-Nitrophenol	833	884	106	864	104	2	50-137/14
87-86-5	Pentachlorophenol	833	849	102	814	98	4	36-138/19
108-95-2	Phenol	833	708	85	702	84	1	44-104/21
95-95-4	2,4,5-Trichlorophenol	833	821	99	810	97	1	63-115/15
88-06-2	2,4,6-Trichlorophenol	833	787	94	794	95	1	56-112/16
83-32-9	Acenaphthene	833	735	88	754	90	3	51-105/16
208-96-8	Acenaphthylene	833	736	88	757	91	3	52-105/15
62-53-3	Aniline	833	604	72	597	72	1	34-110/19
120-12-7	Anthracene	833	850	102	839	101	1	73-111/10
103-33-3	Azobenzene	833	802	96	808	97	1	61-109/12
92-87-5	Benzidine	1670	830	50	753	45	10	10-151/30
56-55-3	Benzo(a)anthracene	833	860	103	850	102	1	77-118/10
50-32-8	Benzo(a)pyrene	833	875	105	876	105	0	77-121/10
205-99-2	Benzo(b)fluoranthene	833	858	103	870	104	1	72-121/11
191-24-2	Benzo(g,h,i)perylene	833	966	116	954	114	1	66-131/19
207-08-9	Benzo(k)fluoranthene	833	877	105	874	105	0	77-120/12
101-55-3	4-Bromophenyl phenyl ether	833	816	98	801	96	2	67-108/12
85-68-7	Butyl benzyl phthalate	833	899	108	897	108	0	70-130/14
100-51-6	Benzyl Alcohol	833	719	86	721	87	0	46-105/21
91-58-7	2-Chloronaphthalene	833	712	85	712	85	0	45-102/17
106-47-8	4-Chloroaniline	833	600	72	605	73	1	31-110/17
86-74-8	Carbazole	833	884	106	866	104	2	63-139/10
218-01-9	Chrysene	833	870	104	860	103	1	76-117/10
111-91-1	bis(2-Chloroethoxy)methane	833	697	84	688	83	1	41-110/18
111-44-4	bis(2-Chloroethyl)ether	833	639	77	644	77	1	35-110/19
108-60-1	bis(2-Chloroisopropyl)ether	833	662	79	674	81	2	23-103/23

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-BS	Z14180.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-BSD	Z14181.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

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	786	94	794	95	1	62-107/14
95-50-1	1,2-Dichlorobenzene	833	591	71	598	72	1	32-110/20
541-73-1	1,3-Dichlorobenzene	833	578	69	578	69	0	31-110/20
106-46-7	1,4-Dichlorobenzene	833	584	70	597	72	2	31-110/20
121-14-2	2,4-Dinitrotoluene	833	880	106	869	104	1	73-120/11
606-20-2	2,6-Dinitrotoluene	833	823	99	818	98	1	66-113/12
91-94-1	3,3'-Dichlorobenzidine	1670	1830	110	1870	112	2	73-160/11
53-70-3	Dibenzo(a,h)anthracene	833	967	116	952	114	2	65-133/20
132-64-9	Dibenzofuran	833	766	92	761	91	1	57-106/14
122-39-4	Diphenylamine	833	842	101	843	101	0	71-112/10
84-74-2	Di-n-butyl phthalate	833	913	110	912	109	0	79-124/10
117-84-0	Di-n-octyl phthalate	833	845	101	875	105	3	53-144/20
84-66-2	Diethyl phthalate	833	936	112	950	114	1	72-119/15
131-11-3	Dimethyl phthalate	833	813	98	824	99	1	67-111/11
117-81-7	bis(2-Ethylhexyl)phthalate	833	878	105	892	107	2	65-133/12
206-44-0	Fluoranthene	833	881	106	864	104	2	74-123/12
86-73-7	Fluorene	833	795	95	792	95	0	62-108/13
118-74-1	Hexachlorobenzene	833	787	94	782	94	1	65-111/12
87-68-3	Hexachlorobutadiene	833	631	76	634	76	0	29-110/20
77-47-4	Hexachlorocyclopentadiene	833	603	72	572	69	5	20-103/27
67-72-1	Hexachloroethane	833	598	72	593	71	1	30-110/21
193-39-5	Indeno(1,2,3-cd)pyrene	833	984	118	971	117	1	67-133/18
78-59-1	Isophorone	833	718	86	708	85	1	43-103/20
90-12-0	1-Methylnaphthalene	833	704	84	696	84	1	40-100/17
91-57-6	2-Methylnaphthalene	833	703	84	701	84	0	42-102/18
88-74-4	2-Nitroaniline	833	841	101	834	100	1	61-116/15
99-09-2	3-Nitroaniline	833	727	87	755	91	4	59-106/11
100-01-6	4-Nitroaniline	833	878	105	871	105	1	64-131/17
91-20-3	Naphthalene	833	677	81	676	81	0	37-110/18
98-95-3	Nitrobenzene	833	664	80	666	80	0	37-110/20
62-75-9	N-Nitrosodimethylamine	833	599	72	603	72	1	34-110/20
621-64-7	N-Nitroso-di-n-propylamine	833	705	85	695	83	1	40-100/20
85-01-8	Phenanthrene	833	840	101	821	99	2	73-110/10
129-00-0	Pyrene	833	837	100	830	100	1	68-124/16
110-86-1	Pyridine	833	422	51	433	52	3	17-110/21
120-82-1	1,2,4-Trichlorobenzene	833	636	76	634	76	0	37-110/19

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-BS	Z14180.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-BSD	Z14181.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	74%	75%	23-116%
4165-62-2	Phenol-d5	79%	78%	28-119%
118-79-6	2,4,6-Tribromophenol	98%	96%	24-160%
4165-60-0	Nitrobenzene-d5	75%	74%	20-115%
321-60-8	2-Fluorobiphenyl	79%	80%	31-123%
1718-51-0	Terphenyl-d14	95%	94%	58-149%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-BS	Y35773.D	1	05/25/16	MT	05/24/16	OP14407	EY1678
OP14407-BSD	Y35774.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	50	11.0	22	18.8	38	52* a	10-110/30
95-57-8	2-Chlorophenol	25	17.7	71	18.4	74	4	27-110/25
59-50-7	4-Chloro-3-methyl phenol	25	22.6	90	21.9	88	3	39-112/23
120-83-2	2,4-Dichlorophenol	25	21.9	88	23.1	92	5	37-115/21
105-67-9	2,4-Dimethylphenol	25	20.0	80	19.5	78	3	32-104/23
51-28-5	2,4-Dinitrophenol	25	15.5	62	24.4	98	45* a	6-116/30
534-52-1	4,6-Dinitro-o-cresol	25	18.4	74	25.7	103	33* a	20-121/30
95-48-7	2-Methylphenol	25	16.8	67	16.2	65	4	25-110/25
	3&4-Methylphenol	25	15.6	62	14.9	60	5	22-110/26
88-75-5	2-Nitrophenol	25	22.2	89	23.9	96	7	32-118/18
100-02-7	4-Nitrophenol	25	7.5	30	9.4	38	22	10-110/31
87-86-5	Pentachlorophenol	25	18.9	76	24.9	100	27* a	18-126/25
108-95-2	Phenol	25	8.1	32	8.4	34	4	10-110/24
95-95-4	2,4,5-Trichlorophenol	25	22.2	89	25.5	102	14	43-124/18
88-06-2	2,4,6-Trichlorophenol	25	21.3	85	24.8	99	15	40-122/19
83-32-9	Acenaphthene	25	22.1	88	22.2	89	0	41-111/18
208-96-8	Acenaphthylene	25	22.1	88	22.3	89	1	43-110/18
62-53-3	Aniline	25	15.0	60	14.9	60	1	28-110/26
120-12-7	Anthracene	25	25.3	101	25.5	102	1	62-114/10
103-33-3	Azobenzene	25	24.3	97	24.3	97	0	46-116/15
92-87-5	Nitridine	50	66.8	134	63.2	126	6	10-190/30
56-55-3	Benzo(a)anthracene	25	26.5	106	27.0	108	2	71-115/10
50-32-8	Benzo(a)pyrene	25	26.9	108	27.5	110	2	69-119/10
205-99-2	Benzo(b)fluoranthene	25	26.9	108	27.5	110	2	66-118/13
191-24-2	Benzo(g,h,i)perylene	25	26.3	105	27.7	111	5	62-120/17
207-08-9	Benzo(k)fluoranthene	25	26.9	108	27.0	108	0	67-120/13
101-55-3	4-Bromophenyl phenyl ether	25	24.2	97	24.6	98	2	53-115/15
85-68-7	Butyl benzyl phthalate	25	27.2	109	27.9	112	3	67-128/16
100-51-6	Benzyl Alcohol	25	17.1	68	17.5	70	2	32-110/20
91-58-7	2-Chloronaphthalene	25	20.7	83	21.0	84	1	39-106/19
106-47-8	4-Chloroaniline	25	21.3	85	21.0	84	1	41-107/20
86-74-8	Carbazole	25	27.0	108	27.6	110	2	61-135/11
218-01-9	Chrysene	25	26.3	105	26.7	107	2	68-115/10
111-91-1	bis(2-Chloroethoxy)methane	25	20.8	83	20.9	84	0	37-103/19
111-44-4	bis(2-Chloroethyl)ether	25	18.0	72	18.9	76	5	34-110/22
108-60-1	bis(2-Chloroisopropyl)ether	25	18.6	74	19.2	77	3	22-110/21

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-BS	Y35773.D	1	05/25/16	MT	05/24/16	OP14407	EY1678
OP14407-BSD	Y35774.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

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	23.4	94	23.7	95	1	47-117/16
95-50-1	1,2-Dichlorobenzene	25	17.0	68	17.7	71	4	33-110/20
541-73-1	1,3-Dichlorobenzene	25	16.2	65	17.3	69	7	32-110/22
106-46-7	1,4-Dichlorobenzene	25	16.4	66	17.2	69	5	32-110/22
121-14-2	2,4-Dinitrotoluene	25	27.1	108	27.6	110	2	63-120/10
606-20-2	2,6-Dinitrotoluene	25	25.0	100	25.6	102	2	52-119/16
91-94-1	3,3'-Dichlorobenzidine	50	67.2	134	68.6	137	2	67-151/12
53-70-3	Dibenzo(a,h)anthracene	25	26.8	107	28.7	115	7	60-123/18
132-64-9	Dibenzofuran	25	22.7	91	22.8	91	0	45-114/17
122-39-4	Diphenylamine	25	24.6	98	24.7	99	0	56-118/13
84-74-2	Di-n-butyl phthalate	25	26.4	106	27.1	108	3	75-121/10
117-84-0	Di-n-octyl phthalate	25	27.3	109	27.4	110	0	55-140/25
84-66-2	Diethyl phthalate	25	21.6	86	22.0	88	2	60-121/13
131-11-3	Dimethyl phthalate	25	14.5	58	14.5	58	0	50-112/19
117-81-7	bis(2-Ethylhexyl)phthalate	25	26.8	107	27.3	109	2	65-130/15
206-44-0	Fluoranthene	25	26.4	106	26.9	108	2	70-117/10
86-73-7	Fluorene	25	23.4	94	23.8	95	2	47-116/16
118-74-1	Hexachlorobenzene	25	23.9	96	24.3	97	2	55-114/13
87-68-3	Hexachlorobutadiene	25	17.8	71	17.9	72	1	26-110/22
77-47-4	Hexachlorocyclopentadiene	25	16.1	64	16.4	66	2	12-112/29
67-72-1	Hexachloroethane	25	16.6	66	17.2	69	4	30-110/22
193-39-5	Indeno(1,2,3-cd)pyrene	25	27.2	109	28.8	115	6	62-126/19
78-59-1	Isophorone	25	22.4	90	22.4	90	0	41-110/19
90-12-0	1-Methylnaphthalene	25	20.1	80	20.3	81	1	37-104/19
91-57-6	2-Methylnaphthalene	25	20.1	80	20.4	82	1	40-104/20
88-74-4	2-Nitroaniline	25	25.8	103	26.3	105	2	44-122/15
99-09-2	3-Nitroaniline	25	25.2	101	24.2	97	4	51-119/15
100-01-6	4-Nitroaniline	25	27.5	110	27.3	109	1	61-130/16
91-20-3	Naphthalene	25	18.8	75	19.0	76	1	36-110/19
98-95-3	Nitrobenzene	25	19.2	77	19.9	80	4	35-110/20
62-75-9	N-Nitrosodimethylamine	25	12.0	48	11.9	48	1	21-110/22
621-64-7	N-Nitroso-di-n-propylamine	25	21.1	84	22.0	88	4	38-106/19
85-01-8	Phenanthrene	25	24.7	99	25.2	101	2	61-113/11
129-00-0	Pyrene	25	26.0	104	26.3	105	1	67-117/15
110-86-1	Pyridine	25	8.2	33	8.0	32	2	13-110/33
120-82-1	1,2,4-Trichlorobenzene	25	18.0	72	18.5	74	3	35-110/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-BS	Y35773.D	1	05/25/16	MT	05/24/16	OP14407	EY1678
OP14407-BSD	Y35774.D	1	05/25/16	MT	05/24/16	OP14407	EY1678

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	39%	41%	10-110%
4165-62-2	Phenol-d5	30%	30%	10-110%
118-79-6	2,4,6-Tribromophenol	91%	102%	10-169%
4165-60-0	Nitrobenzene-d5	73%	76%	24-120%
321-60-8	2-Fluorobiphenyl	79%	80%	28-128%
1718-51-0	Terphenyl-d14	101%	102%	54-147%

(a) RPD exceeded laboratory acceptance limit; BS/BSD recoveries met acceptance criteria.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MS	Z14208.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-7	Z14212.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	C45885-7 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
65-85-0	Benzoic Acid	ND		47.2	14.0	30	10-110
95-57-8	2-Chlorophenol	ND		23.6	17.6	75	27-110
59-50-7	4-Chloro-3-methyl phenol	ND		23.6	21.1	89	39-112
120-83-2	2,4-Dichlorophenol	ND		23.6	21.5	91	37-115
105-67-9	2,4-Dimethylphenol	ND		23.6	16.3	69	32-104
51-28-5	2,4-Dinitrophenol	ND		23.6	17.3	73	6-116
534-52-1	4,6-Dinitro-o-cresol	ND		23.6	19.9	84	20-121
95-48-7	2-Methylphenol	ND		23.6	15.3	65	25-110
	3&4-Methylphenol	ND		23.6	14.2	60	22-110
88-75-5	2-Nitrophenol	ND		23.6	21.6	92	32-118
100-02-7	4-Nitrophenol	ND		23.6	8.1	34	10-110
87-86-5	Pentachlorophenol	ND		23.6	21.5	91	18-126
108-95-2	Phenol	ND		23.6	7.3	31	10-110
95-95-4	2,4,5-Trichlorophenol	ND		23.6	23.3	99	43-124
88-06-2	2,4,6-Trichlorophenol	ND		23.6	23.0	98	40-122
83-32-9	Acenaphthene	ND		23.6	20.8	88	41-111
208-96-8	Acenaphthylene	ND		23.6	21.2	90	43-110
62-53-3	Aniline	ND		23.6	13.0	55	28-110
120-12-7	Anthracene	ND		23.6	23.8	101	62-114
103-33-3	Azobenzene	ND		23.6	22.8	97	46-116
92-87-5	Benzidine	ND		47.2	62.1	132	10-190
56-55-3	Benzo(a)anthracene	ND		23.6	23.9	101	71-115
50-32-8	Benzo(a)pyrene	ND		23.6	24.6	104	69-119
205-99-2	Benzo(b)fluoranthene	ND		23.6	23.8	101	66-118
191-24-2	Benzo(g,h,i)perylene	ND		23.6	23.8	101	62-120
207-08-9	Benzo(k)fluoranthene	ND		23.6	25.0	106	67-120
101-55-3	4-Bromophenyl phenyl ether	ND		23.6	22.6	96	53-115
85-68-7	Butyl benzyl phthalate	ND		23.6	24.4	103	67-128
100-51-6	Benzyl Alcohol	ND		23.6	15.2	64	32-110
91-58-7	2-Chloronaphthalene	ND		23.6	20.0	85	39-106
106-47-8	4-Chloroaniline	ND		23.6	19.0	81	41-107
86-74-8	Carbazole	ND		23.6	25.3	107	61-135
218-01-9	Chrysene	ND		23.6	24.3	103	68-115
111-91-1	bis(2-Chloroethoxy)methane	ND		23.6	19.7	84	37-103
111-44-4	bis(2-Chloroethyl)ether	ND		23.6	17.1	73	34-110
108-60-1	bis(2-Chloroisopropyl)ether	ND		23.6	17.5	74	22-110

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MS	Z14208.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-7	Z14212.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	C45885-7 ug/l	Spike Q	MS ug/l	MS %	Limits	
7005-72-3	4-Chlorophenyl phenyl ether	ND		23.6	22.3	95	47-117
95-50-1	1,2-Dichlorobenzene	ND		23.6	16.2	69	33-110
541-73-1	1,3-Dichlorobenzene	ND		23.6	16.0	68	32-110
106-46-7	1,4-Dichlorobenzene	ND		23.6	16.1	68	32-110
121-14-2	2,4-Dinitrotoluene	ND		23.6	24.4	103	63-120
606-20-2	2,6-Dinitrotoluene	ND		23.6	23.2	98	52-119
91-94-1	3,3'-Dichlorobenzidine	ND		47.2	57.7	122	67-151
53-70-3	Dibenzo(a,h)anthracene	ND		23.6	26.6	113	60-123
132-64-9	Dibenzofuran	ND		23.6	21.8	92	45-114
122-39-4	Diphenylamine	ND		23.6	23.1	98	56-118
84-74-2	Di-n-butyl phthalate	ND		23.6	24.9	106	75-121
117-84-0	Di-n-octyl phthalate	ND		23.6	23.1	98	55-140
84-66-2	Diethyl phthalate	ND		23.6	22.4	95	60-121
131-11-3	Dimethyl phthalate	ND		23.6	18.9	80	50-112
117-81-7	bis(2-Ethylhexyl)phthalate	ND		23.6	24.1	102	65-130
206-44-0	Fluoranthene	ND		23.6	24.9	106	70-117
86-73-7	Fluorene	ND		23.6	22.6	96	47-116
118-74-1	Hexachlorobenzene	ND		23.6	21.9	93	55-114
87-68-3	Hexachlorobutadiene	ND		23.6	17.8	75	26-110
77-47-4	Hexachlorocyclopentadiene	ND		23.6	13.9	59	12-112
67-72-1	Hexachloroethane	ND		23.6	15.9	67	30-110
193-39-5	Indeno(1,2,3-cd)pyrene	ND		23.6	25.9	110	62-126
78-59-1	Isophorone	ND		23.6	21.0	89	41-110
90-12-0	1-Methylnaphthalene	ND		23.6	19.8	84	37-104
91-57-6	2-Methylnaphthalene	ND		23.6	19.7	84	40-104
88-74-4	2-Nitroaniline	ND		23.6	23.1	98	44-122
99-09-2	3-Nitroaniline	ND		23.6	22.0	93	51-119
100-01-6	4-Nitroaniline	ND		23.6	25.3	107	61-130
91-20-3	Naphthalene	ND		23.6	18.3	78	36-110
98-95-3	Nitrobenzene	ND		23.6	17.4	74	35-110
62-75-9	N-Nitrosodimethylamine	ND		23.6	10.6	45	21-110
621-64-7	N-Nitroso-di-n-propylamine	ND		23.6	19.4	82	38-106
85-01-8	Phenanthrene	ND		23.6	23.2	98	61-113
129-00-0	Pyrene	ND		23.6	23.2	98	67-117
110-86-1	Pyridine	ND		23.6	6.9	29	13-110
120-82-1	1,2,4-Trichlorobenzene	ND		23.6	17.5	74	35-110

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-MS	Z14208.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-7	Z14212.D	1	05/25/16	MT	05/24/16	OP14407	EZ711

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Surrogate Recoveries	MS	C45885-7	Limits
367-12-4	2-Fluorophenol	40%	28%	10-110%
4165-62-2	Phenol-d5	27%	23%	10-110%
118-79-6	2,4,6-Tribromophenol	93%	94%	10-169%
4165-60-0	Nitrobenzene-d5	69%	77%	24-120%
321-60-8	2-Fluorobiphenyl	79%	82%	28-128%
1718-51-0	Terphenyl-d14	94%	99%	54-147%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MS	Z14182.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-MSD	Z14183.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
C45903-6	Z14190.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	C45903-6 ug/kg	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND	1680	819	49	1680	763	45	7	40-144/22
95-57-8	2-Chlorophenol	ND	842	580	69	842	517	61	11	39-110/19
59-50-7	4-Chloro-3-methyl phenol	ND	842	770	91	842	717	85	7	62-112/15
120-83-2	2,4-Dichlorophenol	ND	842	655	78	842	594	71	10	48-107/17
105-67-9	2,4-Dimethylphenol	ND	842	653	78	842	586	70	11	46-105/18
51-28-5	2,4-Dinitrophenol	ND	842	488	58	842	460	55	6	24-134/26
534-52-1	4,6-Dinitro-o-cresol	ND	842	698	83	842	681	81	2	37-128/19
95-48-7	2-Methylphenol	ND	842	604	72	842	549	65	10	42-101/20
	3&4-Methylphenol	ND	842	640	76	842	580	69	10	46-107/20
88-75-5	2-Nitrophenol	ND	842	584	69	842	527	63	10	40-103/20
100-02-7	4-Nitrophenol	ND	842	869	103	842	861	102	1	50-137/14
87-86-5	Pentachlorophenol	ND	842	789	94	842	761	90	4	36-138/19
108-95-2	Phenol	ND	842	610	72	842	556	66	9	44-104/21
95-95-4	2,4,5-Trichlorophenol	ND	842	788	94	842	743	88	6	63-115/15
88-06-2	2,4,6-Trichlorophenol	ND	842	751	89	842	706	84	6	56-112/16
83-32-9	Acenaphthene	ND	842	699	83	842	661	79	6	51-105/16
208-96-8	Acenaphthylene	106	J 842	715	72	842	674	67	6	52-105/15
62-53-3	Aniline	ND	842	536	64	842	483	57	10	34-110/19
120-12-7	Anthracene	96.9	J 842	839	88	842	823	86	2	73-111/10
103-33-3	Azobenzene	ND	842	799	95	842	768	91	4	61-109/12
92-87-5	Benzidine	ND	1680	967	57	1680	905	54	7	10-151/30
56-55-3	Benzo(a)anthracene	92.3	J 842	867	92	842	866	92	0	77-118/10
50-32-8	Benzo(a)pyrene	112	J 842	898	93	842	893	93	1	77-121/10
205-99-2	Benzo(b)fluoranthene	65.2	J 842	853	94	842	868	95	2	72-121/11
191-24-2	Benzo(g,h,i)perylene	100	J 842	1030	110	842	996	106	3	66-131/19
207-08-9	Benzo(k)fluoranthene	61.1	J 842	882	97	842	868	96	2	77-120/12
101-55-3	4-Bromophenyl phenyl ether	ND	842	788	94	842	758	90	4	67-108/12
85-68-7	Butyl benzyl phthalate	ND	842	891	106	842	867	103	3	70-130/14
100-51-6	Benzyl Alcohol	ND	842	624	74	842	569	68	9	46-105/21
91-58-7	2-Chloronaphthalene	ND	842	642	76	842	592	70	8	45-102/17
106-47-8	4-Chloroaniline	ND	842	593	70	842	539	64	10	31-110/17
86-74-8	Carbazole	ND	842	880	104	842	872	104	1	63-139/10
218-01-9	Chrysene	98.8	J 842	885	93	842	871	92	2	76-117/10
111-91-1	bis(2-Chloroethoxy)methane	ND	842	597	71	842	544	65	9	41-110/18
111-44-4	bis(2-Chloroethyl)ether	ND	842	536	64	842	480	57	11	35-110/19
108-60-1	bis(2-Chloroisopropyl)ether	ND	842	560	66	842	503	60	11	23-103/23

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MS	Z14182.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-MSD	Z14183.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
C45903-6	Z14190.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Compound	C45903-6 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND		842	762	90	842	736	87	3	62-107/14
95-50-1	1,2-Dichlorobenzene	ND		842	487	58	842	447	53	9	32-110/20
541-73-1	1,3-Dichlorobenzene	ND		842	479	57	842	434	52	10	31-110/20
106-46-7	1,4-Dichlorobenzene	ND		842	486	58	842	440	52	10	31-110/20
121-14-2	2,4-Dinitrotoluene	ND		842	884	105	842	858	102	3	73-120/11
606-20-2	2,6-Dinitrotoluene	ND		842	806	96	842	798	95	1	66-113/12
91-94-1	3,3'-Dichlorobenzidine	ND		1680	1860	110	1680	1860	110	0	73-160/11
53-70-3	Dibenzo(a,h)anthracene	ND		842	1030	122	842	971	115	6	65-133/20
132-64-9	Dibenzofuran	ND		842	725	86	842	695	83	4	57-106/14
122-39-4	Diphenylamine	ND		842	833	99	842	814	97	2	71-112/10
84-74-2	Di-n-butyl phthalate	ND		842	907	108	842	903	107	0	79-124/10
117-84-0	Di-n-octyl phthalate	ND		842	832	99	842	822	98	1	53-144/20
84-66-2	Diethyl phthalate	38.7	BJ	842	856	97	842	847	96	1	72-119/15
131-11-3	Dimethyl phthalate	ND		842	824	98	842	794	94	4	67-111/11
117-81-7	bis(2-Ethylhexyl)phthalate	ND		842	899	107	842	887	105	1	65-133/12
206-44-0	Fluoranthene	293		842	907	73* a	842	923	75	2	74-123/12
86-73-7	Fluorene	121	J	842	776	78	842	758	76	2	62-108/13
118-74-1	Hexachlorobenzene	ND		842	785	93	842	752	89	4	65-111/12
87-68-3	Hexachlorobutadiene	ND		842	536	64	842	474	56	12	29-110/20
77-47-4	Hexachlorocyclopentadiene	ND		842	499	59	842	440	52	13	20-103/27
67-72-1	Hexachloroethane	ND		842	478	57	842	440	52	8	30-110/21
193-39-5	Indeno(1,2,3-cd)pyrene	84.9	J	842	981	106	842	956	103	3	67-133/18
78-59-1	Isophorone	ND		842	627	74	842	569	68	10	43-103/20
90-12-0	1-Methylnaphthalene	134	J	842	622	58	842	563	51	10	40-100/17
91-57-6	2-Methylnaphthalene	193		842	613	50	842	563	44	9	42-102/18
88-74-4	2-Nitroaniline	ND		842	835	99	842	798	95	5	61-116/15
99-09-2	3-Nitroaniline	ND		842	791	94	842	773	92	2	59-106/11
100-01-6	4-Nitroaniline	ND		842	909	108	842	897	107	1	64-131/17
91-20-3	Naphthalene	375		842	577	24* a	842	522	17* a	10	37-110/18
98-95-3	Nitrobenzene	ND		842	565	67	842	512	61	10	37-110/20
62-75-9	N-Nitrosodimethylamine	ND		842	508	60	842	470	56	8	34-110/20
621-64-7	N-Nitroso-di-n-propylamine	ND		842	591	70	842	532	63	11	40-100/20
85-01-8	Phenanthrene	588		842	866	33* a	842	861	32* a	1	73-110/10
129-00-0	Pyrene	395		842	858	55* a	842	853	54* a	1	68-124/16
110-86-1	Pyridine	ND		842	328	39	842	300	36	9	17-110/21
120-82-1	1,2,4-Trichlorobenzene	ND		842	544	65	842	490	58	10	37-110/19

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14405-MS	Z14182.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
OP14405-MSD	Z14183.D	1	05/24/16	MT	05/23/16	OP14405	EZ710
C45903-6	Z14190.D	1	05/24/16	MT	05/23/16	OP14405	EZ710

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-2, C45913-3

CAS No.	Surrogate Recoveries	MS	MSD	C45903-6	Limits
367-12-4	2-Fluorophenol	62%	56%	71%	23-116%
4165-62-2	Phenol-d5	66%	60%	74%	28-119%
118-79-6	2,4,6-Tribromophenol	91%	90%	85%	24-160%
4165-60-0	Nitrobenzene-d5	61%	55%	68%	20-115%
321-60-8	2-Fluorobiphenyl	69%	64%	77%	31-123%
1718-51-0	Terphenyl-d14	90%	88%	90%	58-149%

(a) Outside control limits due to matrix interference (Brown extract).

* = Outside of Control Limits.

Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-DUP	Z14209.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-9	Y35792.D	1	05/25/16	MT	05/24/16	OP14407	EY1679

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	C45885-9		Q	RPD	Limits
		ug/l	DUP ug/l			
65-85-0	Benzoic Acid	ND	ND		nc	30
95-57-8	2-Chlorophenol	ND	ND		nc	25
59-50-7	4-Chloro-3-methyl phenol	ND	ND		nc	23
120-83-2	2,4-Dichlorophenol	ND	ND		nc	21
105-67-9	2,4-Dimethylphenol	ND	ND		nc	23
51-28-5	2,4-Dinitrophenol	ND	ND		nc	30
534-52-1	4,6-Dinitro-o-cresol	ND	ND		nc	30
95-48-7	2-Methylphenol	ND	ND		nc	25
	3&4-Methylphenol	ND	ND		nc	26
88-75-5	2-Nitrophenol	ND	ND		nc	18
100-02-7	4-Nitrophenol	ND	ND		nc	31
87-86-5	Pentachlorophenol	ND	ND		nc	25
108-95-2	Phenol	ND	ND		nc	24
95-95-4	2,4,5-Trichlorophenol	ND	ND		nc	18
88-06-2	2,4,6-Trichlorophenol	ND	ND		nc	19
83-32-9	Acenaphthene	ND	ND		nc	18
208-96-8	Acenaphthylene	ND	ND		nc	18
62-53-3	Aniline	ND	ND		nc	26
120-12-7	Anthracene	ND	ND		nc	10
103-33-3	Azobenzene	ND	ND		nc	15
92-87-5	Benzidine	ND	ND		nc	30
56-55-3	Benzo(a)anthracene	ND	ND		nc	10
50-32-8	Benzo(a)pyrene	ND	ND		nc	10
205-99-2	Benzo(b)fluoranthene	ND	ND		nc	13
191-24-2	Benzo(g,h,i)perylene	ND	ND		nc	17
207-08-9	Benzo(k)fluoranthene	ND	ND		nc	13
101-55-3	4-Bromophenyl phenyl ether	ND	ND		nc	15
85-68-7	Butyl benzyl phthalate	ND	ND		nc	16
100-51-6	Benzyl Alcohol	ND	ND		nc	20
91-58-7	2-Chloronaphthalene	ND	ND		nc	19
106-47-8	4-Chloroaniline	ND	ND		nc	20
86-74-8	Carbazole	ND	ND		nc	11
218-01-9	Chrysene	ND	ND		nc	10
111-91-1	bis(2-Chloroethoxy)methane	ND	ND		nc	19
111-44-4	bis(2-Chloroethyl)ether	ND	ND		nc	22
108-60-1	bis(2-Chloroisopropyl)ether	ND	ND		nc	21

* = Outside of Control Limits.

Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A. S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-DUP	Z14209.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-9	Y35792.D	1	05/25/16	MT	05/24/16	OP14407	EY1679

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Compound	C45885-9 ug/l	DUP Q ug/l	Q	RPD	Limits
7005-72-3	4-Chlorophenyl phenyl ether	ND	ND		nc	16
95-50-1	1,2-Dichlorobenzene	ND	ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND	ND		nc	22
106-46-7	1,4-Dichlorobenzene	ND	ND		nc	22
121-14-2	2,4-Dinitrotoluene	ND	ND		nc	10
606-20-2	2,6-Dinitrotoluene	ND	ND		nc	16
91-94-1	3,3'-Dichlorobenzidine	ND	ND		nc	12
53-70-3	Dibenzo(a,h)anthracene	ND	ND		nc	18
132-64-9	Dibenzofuran	ND	ND		nc	17
122-39-4	Diphenylamine	ND	ND		nc	13
84-74-2	Di-n-butyl phthalate	ND	ND		nc	10
117-84-0	Di-n-octyl phthalate	ND	ND		nc	25
84-66-2	Diethyl phthalate	ND	ND		nc	13
131-11-3	Dimethyl phthalate	ND	ND		nc	19
117-81-7	bis(2-Ethylhexyl)phthalate	ND	ND		nc	15
206-44-0	Fluoranthene	ND	ND		nc	10
86-73-7	Fluorene	ND	ND		nc	16
118-74-1	Hexachlorobenzene	ND	ND		nc	13
87-68-3	Hexachlorobutadiene	ND	ND		nc	22
77-47-4	Hexachlorocyclopentadiene	ND	ND		nc	29
67-72-1	Hexachloroethane	ND	ND		nc	22
193-39-5	Indeno(1,2,3-cd)pyrene	ND	ND		nc	19
78-59-1	Isophorone	ND	ND		nc	19
90-12-0	1-Methylnaphthalene	ND	ND		nc	19
91-57-6	2-Methylnaphthalene	ND	ND		nc	20
88-74-4	2-Nitroaniline	ND	ND		nc	15
99-09-2	3-Nitroaniline	ND	ND		nc	15
100-01-6	4-Nitroaniline	ND	ND		nc	16
91-20-3	Naphthalene	ND	ND		nc	19
98-95-3	Nitrobenzene	ND	ND		nc	20
62-75-9	N-Nitrosodimethylamine	ND	ND		nc	22
621-64-7	N-Nitroso-di-n-propylamine	ND	ND		nc	19
85-01-8	Phenanthrene	ND	ND		nc	11
129-00-0	Pyrene	ND	ND		nc	15
110-86-1	Pyridine	ND	ND		nc	33
120-82-1	1,2,4-Trichlorobenzene	ND	ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14407-DUP	Z14209.D	1	05/25/16	MT	05/24/16	OP14407	EZ711
C45885-9	Y35792.D	1	05/25/16	MT	05/24/16	OP14407	EY1679

The QC reported here applies to the following samples:

Method: SW846 8270C

C45913-1

CAS No.	Surrogate Recoveries	DUP	C45885-9	Limits
367-12-4	2-Fluorophenol	3% * b	3% * a	10-110%
4165-62-2	Phenol-d5	1% * b	1% * a	10-110%
118-79-6	2,4,6-Tribromophenol	19%	10%	10-169%
4165-60-0	Nitrobenzene-d5	72%	84%	24-120%
321-60-8	2-Fluorobiphenyl	81%	88%	28-128%
1718-51-0	Terphenyl-d14	103%	112%	54-147%

(a) Outside of control limits due matrix interference (heavy emulsion formed during extraction process).

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

* = Outside of Control Limits.

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14403-MB	OO385552.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647

The QC reported here applies to the following samples:

Method: SW846 8082

C45913-2, C45913-3

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	Limits	
877-09-8	Tetrachloro-m-xylene	88%	10-156%
877-09-8	Tetrachloro-m-xylene	75%	10-156%
2051-24-3	Decachlorobiphenyl	97%	10-188%
2051-24-3	Decachlorobiphenyl	102%	10-188%

7.1.1
7

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14409-MB	OO385686.D	1	05/27/16	SY	05/24/16	OP14409	GOO1652

The QC reported here applies to the following samples:

Method: SW846 8082

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.0058	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.021	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.0056	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.011	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.014	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.0045	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.0043	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	95%	10-134%
877-09-8	Tetrachloro-m-xylene	71%	10-134%
2051-24-3	Decachlorobiphenyl	49%	10-139%
2051-24-3	Decachlorobiphenyl	36%	10-139%

7.1.2

7

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-MB	BB3847.D	1	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	1.5	mg/kg	
	TPH (> C28-C40)	ND	3.3	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	61% 38-146%

Method Blank Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14408-MB	BB3875.D	1	05/24/16	FL	05/24/16	OP14408	GBB141

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.061	mg/l	
	TPH (> C28-C40)	ND	0.10	0.057	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	104% 40-134%

7.1.4

7

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14403-BS	OO385553.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647
OP14403-BSD	OO385554.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647

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

C45913-2, C45913-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	133	102	77	96.8	73	5	54-104/15
11096-82-5	Aroclor 1260	133	125	94	114	86	9	55-116/12

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	87%	79%	10-156%
877-09-8	Tetrachloro-m-xylene	72%	66%	10-156%
2051-24-3	Decachlorobiphenyl	98%	87%	10-188%
2051-24-3	Decachlorobiphenyl	101%	90%	10-188%

* = Outside of Control Limits.

7.2.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14409-BS	OO385687.D	1	05/27/16	SY	05/24/16	OP14409	GOO1652
OP14409-BSD	OO385688.D	1	05/27/16	SY	05/24/16	OP14409	GOO1652

The QC reported here applies to the following samples:

Method: SW846 8082

C45913-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	0.4	0.47	118	0.41	103	14	44-128/24
11096-82-5	Aroclor 1260	0.4	0.28	70	0.34	85	19	34-117/27

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	94%	100%	10-134%
877-09-8	Tetrachloro-m-xylene	66%	72%	10-134%
2051-24-3	Decachlorobiphenyl	53%	56%	10-139%
2051-24-3	Decachlorobiphenyl	39%	42%	10-139%

* = Outside of Control Limits.

7.2.2
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-BS	BB3845.D	1	05/23/16	MT	05/23/16	OP14404	GBB140
OP14404-BSD	BB3846.D	1	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	28.6	86	29.6	89	3	53-107/12
	TPH (> C28-C40)	33.3	32.2	97	32.7	98	2	59-120/14

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	64%	62%	38-146%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14408-BS	BB3876.D	1	05/24/16	FL	05/24/16	OP14408	GBB141
OP14408-BSD	BB3877.D	1	05/24/16	FL	05/24/16	OP14408	GBB141

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.902	90	0.913	91	1	50-108/18
	TPH (> C28-C40)	1	1.07	107	1.09	109	2	56-120/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	101%	100%	40-134%

* = Outside of Control Limits.

7.2.4
 7

Matrix Spike Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14409-MS ^a	OO385685.D	50	05/26/16	SY	05/24/16	OP14409	GOO1652
C45920-1 ^a	OO385684.D	50	05/26/16	SY	05/24/16	OP14409	GOO1652

The QC reported here applies to the following samples:

Method: SW846 8082

C45913-1

CAS No.	Compound	C45920-1 ug/l	Spike Q	MS ug/l	MS %	Limits
12674-11-2	Aroclor 1016	ND	0.383	0.79	206* ^b	44-128
11096-82-5	Aroclor 1260	ND	0.383	ND	0* ^c	34-117

CAS No.	Surrogate Recoveries	MS	C45920-1	Limits
877-09-8	Tetrachloro-m-xylene	136%* ^d	148%* ^d	10-134%
877-09-8	Tetrachloro-m-xylene	138%* ^d	143%* ^d	10-134%
2051-24-3	Decachlorobiphenyl	131%	160%* ^d	10-139%
2051-24-3	Decachlorobiphenyl	115%	142%* ^d	10-139%

- (a) Dilution required due to high concentration of non-target compounds. Analysis at lower dilution caused subsequent CCV failure.
- (b) Outside laboratory control limits.
- (c) Outside control limits due to dilution.
- (d) Outside control limits due to dilution and matrix interference.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14408-MS	BB3878.D	1	05/24/16	FL	05/24/16	OP14408	GBB141
C45911-5	BB3879.D	1	05/24/16	FL	05/24/16	OP14408	GBB141

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-1

CAS No.	Compound	C45911-5 mg/l	Spike Q	mg/l	MS mg/l	MS %	Limits
	TPH (C10-C28)	0.246	0.952	1.17	97	50-108	
	TPH (> C28-C40)	0.106	0.952	1.05	99	56-120	

CAS No.	Surrogate Recoveries	MS	C45911-5	Limits
630-01-3	Hexacosane	91%	54%	40-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14403-MS	OO385567.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647
OP14403-MSD	OO385568.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647
C45903-6	OO385564.D	1	05/23/16	SY	05/23/16	OP14403	GOO1647

The QC reported here applies to the following samples:

Method: SW846 8082

C45913-2, C45913-3

CAS No.	Compound	C45903-6 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	135	113	84	135	109	81	4	54-104/15
11096-82-5	Aroclor 1260	ND	135	129	95	135	123	91	5	55-116/12

CAS No.	Surrogate Recoveries	MS	MSD	C45903-6	Limits
877-09-8	Tetrachloro-m-xylene	81%	83%	83%	10-156%
877-09-8	Tetrachloro-m-xylene	65%	67%	65%	10-156%
2051-24-3	Decachlorobiphenyl	95%	94%	92%	10-188%
2051-24-3	Decachlorobiphenyl	85%	86%	72%	10-188%

* = Outside of Control Limits.

7.4.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14404-MS	BB3842.D	5	05/23/16	MT	05/23/16	OP14404	GBB140
OP14404-MSD	BB3843.D	5	05/23/16	MT	05/23/16	OP14404	GBB140
C45913-3R	BB3848.D	5	05/23/16	MT	05/23/16	OP14404	GBB140

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-2

CAS No.	Compound	C45913-3R mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	15.1	J	33.2	61.0	138* a	33.2	51.7	110* a	17* a	53-107/12
	TPH (> C28-C40)	80.5		33.2	184	312* b	33.2	165	255* b	11	59-120/14

CAS No.	Surrogate Recoveries	MS	MSD	C45913-3R	Limits
630-01-3	Hexacosane	68%	56%	64%	38-146%

(a) Outside laboratory control limits.

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

* = Outside of Control Limits.

Duplicate Summary

Job Number: C45913
Account: ERSCAMP Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP14408-DUP	BB3890.D	1	05/24/16	FL	05/24/16	OP14408	GBB141
C45912-2	BB3885.D	1	05/24/16	FL	05/24/16	OP14408	GBB141

The QC reported here applies to the following samples:

Method: SW846 8015B M

C45913-1

CAS No.	Compound	C45912-2		DUP		RPD	Limits
		mg/l	Q	mg/l	Q		
	TPH (C10-C28)	ND		0.0610	J	200* a	18
	TPH (> C28-C40)	0.0588	J	0.0672	J	13	16

CAS No.	Surrogate Recoveries	DUP	C45912-2	Limits
630-01-3	Hexacosane	90%	76%	40-134%

(a) Outside laboratory control limits.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C45913
Account: ERSCAMP - Environmental Restoration Services
Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 05/24/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.4	1.5		
Antimony	2.0	.12	.18		
Arsenic	2.0	.16	.17		
Barium	20	.02	.09		
Beryllium	1.0	.02	.01		
Boron	10	.18	.15		
Cadmium	1.0	.02	.031	0.010	<1.0
Calcium	500	2.8	4.5		
Chromium	1.0	.04	.054	0.0	<1.0
Cobalt	1.0	.03	.025		
Copper	2.5	.12	.15		
Iron	20	.53	.76		
Lead	2.0	.1	.14	-0.16	<2.0
Magnesium	500	1.6	2.1		
Manganese	1.5	.02	.026		
Molybdenum	2.0	.05	.04		
Nickel	1.0	.04	.047	0.0	<1.0
Potassium	1000	3.5	4.6		
Selenium	2.0	.17	.33		
Silicon	20	.24	.43		
Silver	1.0	.05	.067		
Sodium	1000	1.1	1.2		
Strontium	1.0	.01	.018		
Thallium	2.0	.17	.12		
Tin	50	.08	.28		
Titanium	1.0	.08	.13		
Vanadium	1.0	.06	.074		
Zinc	2.0	.05	.22	0.050	<2.0

Associated samples MP11363: C45913-2

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

8.1.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C45913
 Account: ERSCAMP - Environmental Restoration Services
 Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/24/16

Metal	C45889-5 Original MS		SpikeLot MPIR5	% Rec	QC Limits
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	0.15	40.7	45.6	89.0	75-125
Calcium					
Chromium	13.3	58.1	45.6	98.3	75-125
Cobalt	anr				
Copper	anr				
Iron					
Lead	9.6	54.1	45.6	97.6	75-125
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	13.7	58.4	45.6	98.1	75-125
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	34.1	77.6	45.6	95.4	75-125

Associated samples MP11363: C45913-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.12
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C45913
 Account: ERSCAMP - Environmental Restoration Services
 Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/24/16

Metal	C45889-5 Original	MSD	Spike/lot MPIR5	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.15	41.0	46.4	88.1	0.7	20
Calcium						
Chromium	13.3	57.4	46.4	95.1	1.2	20
Cobalt	anr					
Copper	anr					
Iron						
Lead	9.6	51.3	46.4	89.9	5.3	20
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	13.7	55.8	46.4	90.8	4.6	20
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	34.1	68.5	46.4	74.2N(a)	12.5	20

Associated samples MP11363: C45913-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

8.12
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C45913
 Account: ERSCAMP - Environmental Restoration Services
 Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 05/24/16

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	46.8	50	93.6	80-120
Calcium				
Chromium	51.0	50	102.0	80-120
Cobalt	anr			
Copper	anr			
Iron				
Lead	45.5	50	91.0	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	45.6	50	91.2	80-120
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	48.7	50	97.4	80-120

Associated samples MP11363: C45913-2

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: C45913
 Account: ERSCAMP - Environmental Restoration Services
 Project: A.S. MacDonald Trust - Santa Clara St., Alameda, CA

QC Batch ID: MP11363
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 05/24/16

Metal	C45889-5		%DIF	QC Limits
	Original	SDL 1:5		
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	1.70	1.80	5.9	0-10
Calcium				
Chromium	150	170	13.8*(a)	0-10
Cobalt	anr			
Copper	anr			
Iron				
Lead	108	120	10.3*(a)	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	154	163	5.4	0-10
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	384	432	12.5*(a)	0-10

Associated samples MP11363: C45913-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested
 (a) Serial dilution indicates possible matrix interference.

8.1.4
 8