

**ADDITIONAL
SOIL SAMPLING & ANALYSIS
REPORT FOR
SOIL STOCKPILE #3
EXCAVATED FROM**

THE STUDENT SERVICES PROJECT

West Valley College • Saratoga, California


1. BACKGROUND

The undersigned representative of EnviroScience, Inc. (ESI), an independent industrial hygiene (IH) consulting firm representing **West Valley-Mission Community College District** hereby presents the findings of the limited soil sampling conducted at the location referenced below (Site).

The purpose of ESI's limited soil sampling was to facilitate offsite disposal of ADDITIONAL stockpiled soil. The sampling conducted herein was not intended to comply with any specific regulatory or oversight agency requirements.

It should be noted that ESI's soil sampling and analysis was limited to an ADDITIONAL stockpile of approx. 2,000 cu. yds. of dirt removed from the Student Services project on or around July 2017 (as Shown in Figure 1). The findings presented in this report do not apply to any other soil excavation at any other location on the West Valley College campus in Saratoga, California.

2. GENERAL INFORMATION

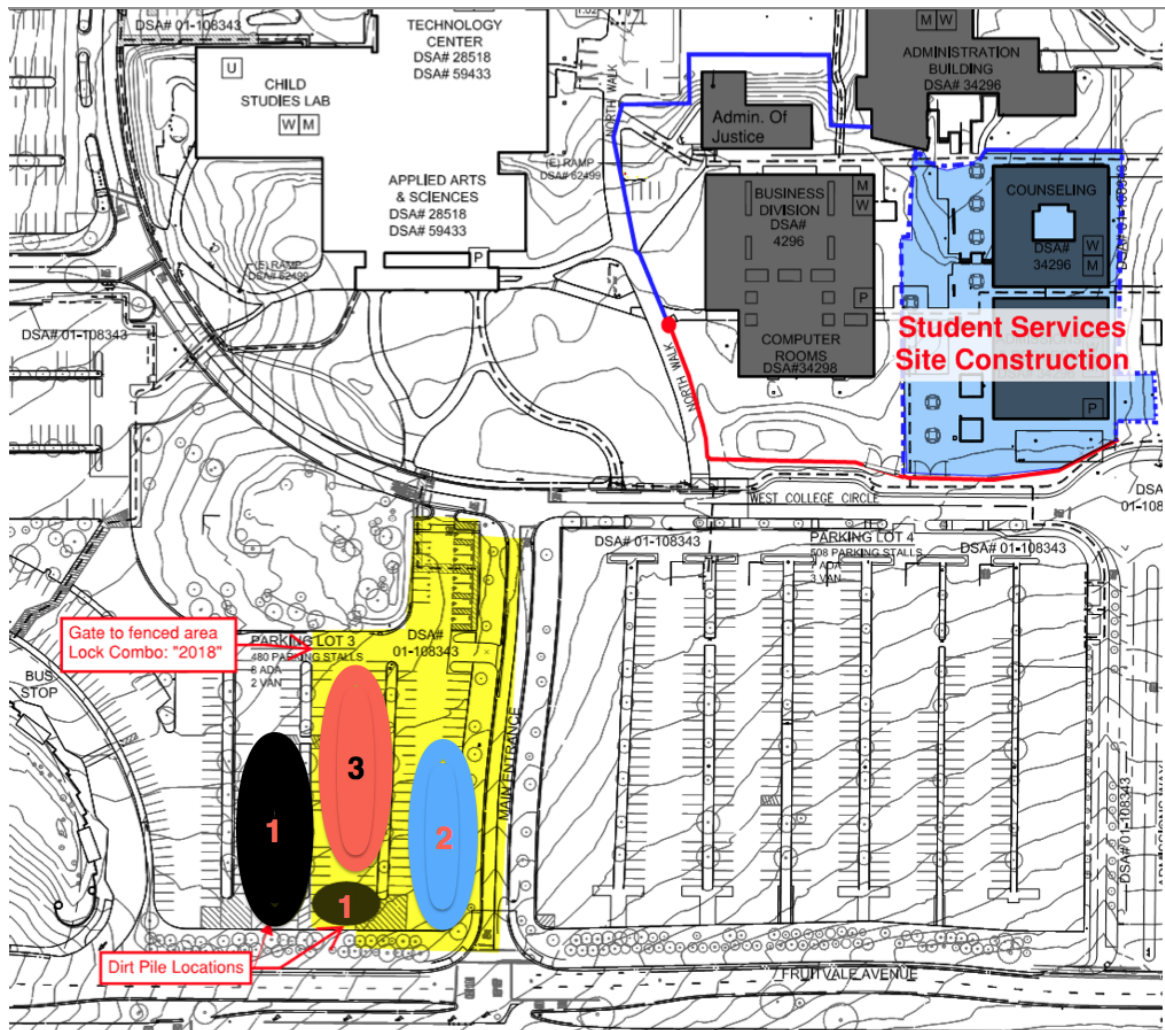
SITE ADDRESS	West Valley College • Saratoga, California 95070
AREA INSPECTED	Soil Stockpile #3 — ADDITIONAL 2000 cu. yds of soil excavated from the Student Services project
ON-SITE SAMPLERS	Benjamin Berman <i>Registered Environmental Property Assessor (REPA) / IRC Env.</i> Alfredo Rocha <i>Cal/OSHA-Certified Site Surveillance Technician</i>
PROJECT MANAGER	Hooman Sotoodeh, Ph.D., PE <i>EPA/AHERA-Certified Contractor Supervisor/Project Monitor</i> <i>Cal/OSHA-Certified Consultant (#93-1097)</i> <i>CDPH-Certified Lead Inspector/Assessor/Project Monitor (#1820)</i>
SOIL SAMPLING DATE	August 24, 2017
REPORT DATE	August 31, 2017
SIGNATURE	

3. PROJECT SUMAMRY

3.1 Summary of Work

This project's scope of work entailed sampling of approximately 2,000 cu yds of ADDITIONAL excavated soil from the Student Services project, and moved to the parking lot across from the project at West Valley College in Saratoga, CA.

The approximate location of soil stockpile 3 (which was sampled this time) is shown in the Site plan below. This soil was treated with lime prior to stockpiling at the subject location.



3.2 Photographic Documentation



Photo #1 — Soil stockpile #3 (in the center) that was sampled as part of this study



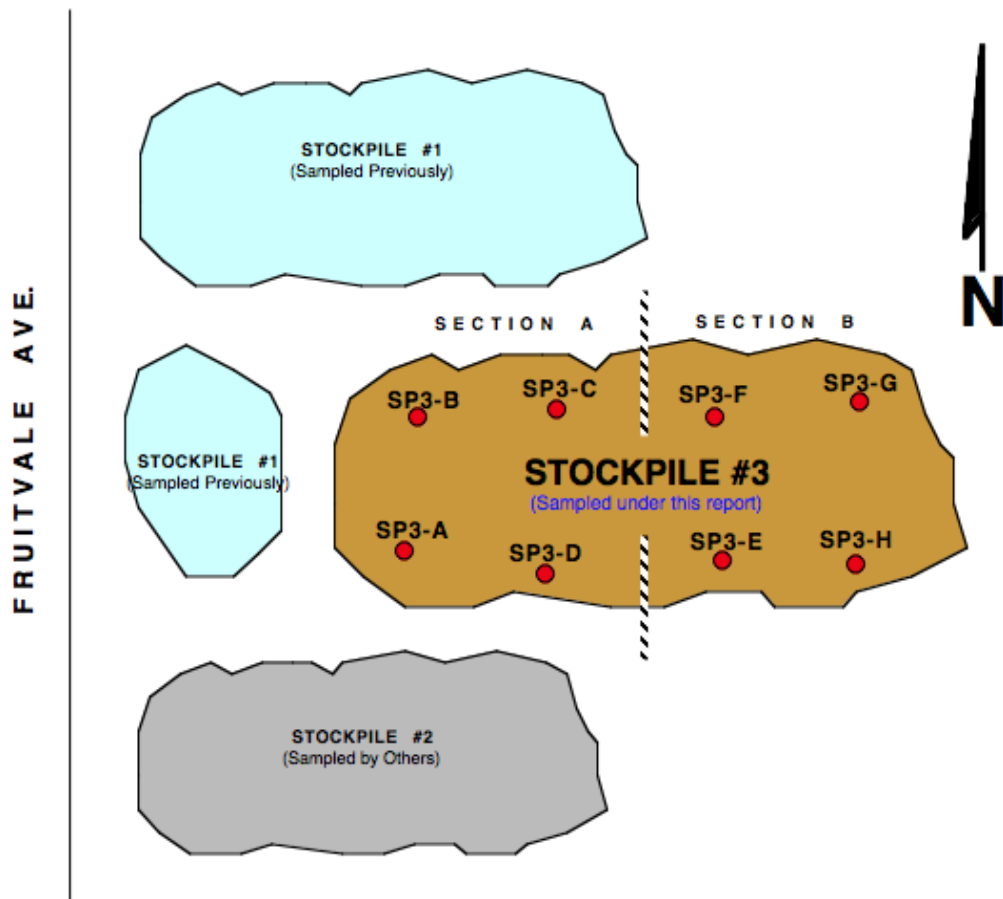
Photo #2 — The lime-treated soil stockpile #3 (in the center) that was sampled as part of this study

4. METHODS

4.1 Sample Collection Procedures

On August 24, 2017, ESI's sub-contractor (IRC Environmental) collected 8 soil samples from an estimated 2,000 cubic yards of stockpiled soil (called stockpile #3) that came from the excavation of the Student Services project across the street on the campus of West Valley College in Saratoga, CA.

The following diagram shows the approximate location of each soil sample collected on Site.



Each soil sample was collected by first pot-holing into the excavation to a depth of approximately two feet using a shovel. Soil samples were then collected in pre-cleaned 16 oz wide-mouthed glass jars with Teflon-lined lids, supplied by the certified laboratory as appropriate for the intended analysis. Each sample was labeled with a unique sample identification number, date, collection time, job number, and the initials of the sampler, and placed into a cooler containing water ice.

Re-usable sampling tools were cleaned before and after each use, by lightly spraying with tap water mixed with Liquenox™ (a cleaning agent) from a spray bottle, wiping with a clean paper towel, and spraying again with purified water and wiping a second time with a paper towel. A new pair of disposable nitrile glove was used in between each sampling episode to avoid cross contamination between samples. Each paper towel and pair of disposable glove was used only once and then discarded.

4.2 Sample Handling Procedures

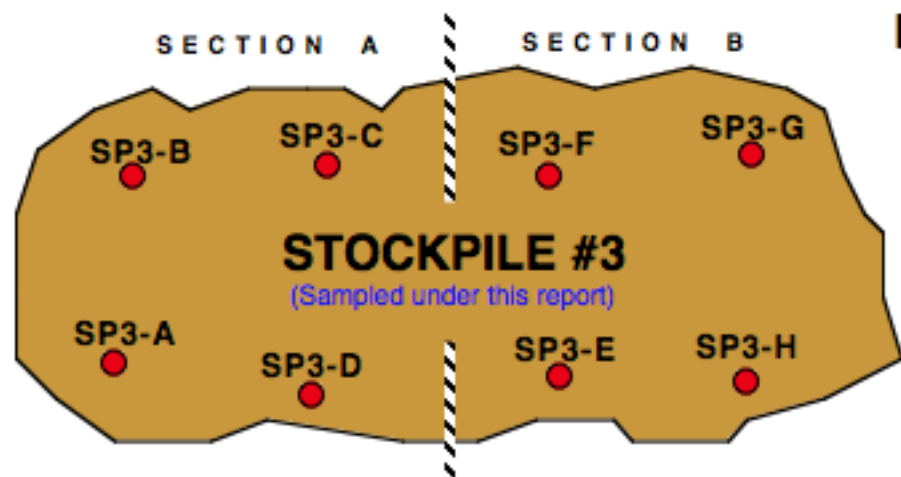
All soil samples were submitted to a State-certified independent laboratory, McCampbell Analytical, Inc, of Pittsburg, California (ELAP No. 1644), under Chain-of-Custody documentation, for proper analysis.

Samples were picked up from the sampling site on the day of collection by the lab courier, and transported to the lab later the same day. All samples were placed on a standard 5 business day turnaround time (TAT).

4.3 Sample Analysis Procedures

ESI's sub-contractor requested the laboratory to do one 4-point composite sample per 1,000 cubic yards of soil, as follows:

- Samples SP3-A through SP3-D from section A were composited into one samples, and
- Samples SP3-E through SP3-H from section B were composited into one samples




Soil samples were then analyzed for the following compounds at the State-certified independent laboratory:

- Total Petroleum Hydrocarbons (TPH), Diesel (D), Motor Oil (MO) with Silica Gel Cleanup (SGCU)
- Volatile Organic Compounds (VOCs) + Total Petroleum Hydrocarbons (TPH) as Gasoline
- Semi-volatile Organic Compounds, (SVOCs)
- Organochlorine Pesticides
- Polychlorinated Biphenyls (PCBs)
- CAM 17 Metals
- Asbestos (Naturally Occurring Asbestos) (NOA) by CARB 435

4.4 COC Form

The laboratory chain-of-custody form is enclosed below.



McC Campbell Analytical, Inc.
 1534 Willow Pass Rd. / Pittsburg, CA 94565-1701
 www.mcccampbell.com / main@mcccampbell.com
 Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 1 DAY 2 DAY 3 DAY 5 DAY

GeoTracker EUP PDF EDD Write On (DW) IQLIS 19 DAY

Effluent Sample Requiring "J" flag UST Clean Up Fund Project Claim # _____

Report To: Benjamin Berman Bill To: Hooman Sotoodeh at FSI

Company: IRC Environmental Consulting (IRC) c/o Benjamin Berman at IRC
 (email invoice to B. Berman at IRC)

Tel: (408) 313-9376 E-Mail: irenvironmental@gmail.com

Project #: 3372 Project Name: West Valley College, Stockpile

Project Location: Fruitvale Ave and Altendale Ave, Saratoga, CA

Sampler Signature: *B. Berman*

Analysis Request

SAMPLE ID	Date	Time	# Containers	MATRIX							METH. PRESERVED	CAM 17 Metals	TPH D-MO (8015) w/ Silica Gel Cleanup	Total List VOCs with TPH-Gasoline (8260)	Total SVOCs (8270)	OC Pesticides (8081)	PCBs (8082)	Asbestos (CARB 435)	Hexavalent Chromium
				Water	Soil	Air	Sludge	Other	HCL	HNO ₃									
SP3-A	08/24/2017	10:25	1		X														
SP3-B		10:36	1									X	X	X	X	X	X	X	X
SP3-C		10:55	1									X	X	X	X	X	X	X	X
SP3-D		11:09	1									X	X	X	X	X	X	X	X
SP3-E		11:15	1									X	X	X	X	X	X	X	X
SP3-F		11:21	1									X	X	X	X	X	X	X	X
SP3-G		11:27	1									X	X	X	X	X	X	X	X
SP3-H		11:32	1									X	X	X	X	X	X	X	X

*MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure keeps an immediate \$200 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

*** If metals are requested for water samples and the water type is not specified on the chain of custody, then MAI will default to metals by E2003.

Relinquished By: <i>B. Berman</i>	Date: 08/24/2017	Time: 11:35	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 8/24/17	Time: 12:29	Received By: <i>[Signature]</i>
Relinquished By: _____	Date: _____	Time: _____	Received By: _____

Please "J" Flag results <RL and >MDL.
 Please report TPH D / MO / G in mg/kg. Need lowest possible RL / MDL for Pesticides and SVOCs. Endrin and Endrin Aldehyde need 0.65 ug/Kg MDL. Please do not dilute. Analyze two

Page 1 of 1 4-point composites; A-B-C-D and E-F-G-H.

5. FINDINGS

Appendix A contains the laboratory analytical findings of the two (2) composite soil samples collected from stockpile #3.

Each landfill may have its own criteria and requirement for soil disposal, depending on where the soil is being transported to. As a result, ESI recommends that the lab data shown in Appendix A of this report to be shared with the landfill in advance of transport by the disposal company.

6. LIMITATIONS

This report was prepared solely for the use of ESI's client, **West Valley-Mission Community College District** and their designated representatives, only. No part of this report shall be copied or used for any purpose by anyone other than the client, without written consent from ESI. Any reliance on this report by a third party is at such party's sole risk. The content and conclusion provided by ESI in this report are based on very limited information collected during its assessment, which include, but are not limited to, visual Site inspection, limited air sampling, air sample analysis by phase contrast microscopy, and our professional judgment.

ESI and its sub-contractor assume that the samples collected and analytical data presented herein, are reasonably representative of the entire soil stockpile stored on Site, which may not be the case at unsampled areas or locations. The results of the sampling and recommendations made here are applicable to a small window of time on the date, time, and location that soil sampling was conducted. Any generalization of these recommendations to others dates, times, or locations will not be applicable or accurate.

This report is issued with the understanding that it is the responsibility of the owner, or its representatives, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous substances on site, in accordance with existing laws and regulations.

This assessment was performed in accordance with generally accepted principles and practices of environmental engineering and assessment in northern California at the time of the work. This report presents our professional opinion based on our findings, technical knowledge, and experience working on similar projects. No warranty, either expressed or implied, is made. The limited conclusions presented are based on the current regulatory climate. We are not responsible for the impact of any changes in environmental standards or regulations in the future.

To the fullest extent permitted by law, Client agrees to limit the liability of ESI, its officers, shareholders and employees, for any acts, errors or omissions or breaches of contract to the greater of \$2,500 or the amount of ESI's fees for services rendered under this Agreement. Client agrees to defend, indemnify and hold ESI harmless from any loss, cost, damage or expense, including attorney's fees, in excess of the foregoing limits. In no event shall ESI be liable for, and Client shall indemnify and hold ESI harmless against, any indirect, special or consequential loss or damage. Failure of Client to give written notice to ESI of any claim of negligent act, error or omission within one (1) year of performance shall constitute a waiver of such claim by Client.

ESI will retain the records related to this project including lab data for a period of **sixty (60) days from the date of this investigation, only**. Thereafter all paper and electronic records will be discarded safely. It will be the responsibility of the client to retain all records related to this project after the 6-month period. ESI assumes no responsibility for document reproduction in legal dispute matters after the 6-month expiration period.

There are no third party beneficiaries of this agreement between Client and ESI and no third party shall be entitled to rely upon any work performed or reports prepared by ESI hereunder for any purpose. Client shall indemnify and hold ESI harmless against any liability to any third party for any loss, expense, or damages arising out of or in connection with reliance by any such third party on any work performed or reports issued by ESI hereunder.

Appendix A

INDEPENDENT LABORATORY ANALYTICAL DATA

“McCampbell Analytical, Inc.”

**The analytical data &
Laboratory chain-of-custody form
is sent as a separate document due to its size**



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1708C19 **Amended:** 09/01/2017

Report Created for: IRC Environmental Consulting

430 South Fourth Street
San Jose, CA 95112

Project Contact: Benjamin Berman

Project P.O.:

Project Name: 3372; West Valley College, Stockpile

Project Received: 08/24/2017

Analytical Report reviewed & approved for release on 08/30/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: IRC Environmental Consulting
Project: 3372; West Valley College, Stockpile
WorkOrder: 1708C19

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: IRC Environmental Consulting
Project: 3372; West Valley College, Stockpile
WorkOrder: 1708C19

Analytical Qualifiers

J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
S Surrogate spike recovery outside accepted recovery limits
c2 Surrogate recovery outside of the control limits due to matrix interference.
k10 CARB 435 Exception 1 - No asbestos detected

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/25/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3060A
Analytical Method: SW7199
Unit: mg/Kg

Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	IC2	144365

<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Hexavalent chromium	2.3	J	1.7	4.0	1	08/26/2017 03:45

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	IC2	144365

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Hexavalent chromium	ND	1.7	4.0	1	08/26/2017 03:59

Analyst(s): AO



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC22	144376

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.00027	0.0010	1	08/26/2017 07:47
a-BHC	ND	0.00010	0.0010	1	08/26/2017 07:47
b-BHC	ND	0.00025	0.0010	1	08/26/2017 07:47
d-BHC	ND	0.00037	0.0010	1	08/26/2017 07:47
g-BHC	ND	0.000097	0.0010	1	08/26/2017 07:47
Chlordane (Technical)	ND	0.016	0.025	1	08/26/2017 07:47
a-Chlordane	ND	0.00047	0.0010	1	08/26/2017 07:47
g-Chlordane	ND	0.00021	0.0010	1	08/26/2017 07:47
p,p-DDD	ND	0.00014	0.0010	1	08/26/2017 07:47
p,p-DDE	0.0042	0.00032	0.0010	1	08/26/2017 07:47
p,p-DDT	ND	0.00043	0.0010	1	08/26/2017 07:47
Dieldrin	ND	0.00033	0.0010	1	08/26/2017 07:47
Endosulfan I	ND	0.00065	0.0010	1	08/26/2017 07:47
Endosulfan II	ND	0.00020	0.0010	1	08/26/2017 07:47
Endosulfan sulfate	ND	0.00063	0.0010	1	08/26/2017 07:47
Endrin	ND	0.00042	0.0010	1	08/26/2017 07:47
Endrin aldehyde	ND	0.00020	0.0010	1	08/26/2017 07:47
Endrin ketone	ND	0.00013	0.0010	1	08/26/2017 07:47
Heptachlor	ND	0.00021	0.0010	1	08/26/2017 07:47
Heptachlor epoxide	ND	0.00020	0.0010	1	08/26/2017 07:47
Hexachlorobenzene	ND	0.00027	0.010	1	08/26/2017 07:47
Hexachlorocyclopentadiene	ND	0.00040	0.020	1	08/26/2017 07:47
Methoxychlor	ND	0.00089	0.0010	1	08/26/2017 07:47
Toxaphene	ND	0.035	0.050	1	08/26/2017 07:47
Aroclor1016	ND	0.0051	0.050	1	08/26/2017 07:47
Aroclor1221	ND	0.011	0.050	1	08/26/2017 07:47
Aroclor1232	ND	0.0063	0.050	1	08/26/2017 07:47
Aroclor1242	ND	0.0067	0.050	1	08/26/2017 07:47
Aroclor1248	ND	0.0040	0.050	1	08/26/2017 07:47
Aroclor1254	ND	0.0068	0.050	1	08/26/2017 07:47
Aroclor1260	ND	0.0061	0.050	1	08/26/2017 07:47
PCBs, total	ND	0.0040	0.050	1	08/26/2017 07:47

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	100	70-130	08/26/2017 07:47

Analyst(s): CK

(Cont.)



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC22	144376

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Aldrin	0.00028	J	0.00027	0.0010	1	08/26/2017 09:30
a-BHC	ND		0.00010	0.0010	1	08/26/2017 09:30
b-BHC	ND		0.00025	0.0010	1	08/26/2017 09:30
d-BHC	ND		0.00037	0.0010	1	08/26/2017 09:30
g-BHC	ND		0.000097	0.0010	1	08/26/2017 09:30
Chlordane (Technical)	ND		0.016	0.025	1	08/26/2017 09:30
a-Chlordane	ND		0.00047	0.0010	1	08/26/2017 09:30
g-Chlordane	ND		0.00021	0.0010	1	08/26/2017 09:30
p,p-DDD	ND		0.00014	0.0010	1	08/26/2017 09:30
p,p-DDE	0.0055		0.00032	0.0010	1	08/26/2017 09:30
p,p-DDT	ND		0.00043	0.0010	1	08/26/2017 09:30
Dieldrin	ND		0.00033	0.0010	1	08/26/2017 09:30
Endosulfan I	ND		0.00065	0.0010	1	08/26/2017 09:30
Endosulfan II	ND		0.00020	0.0010	1	08/26/2017 09:30
Endosulfan sulfate	ND		0.00063	0.0010	1	08/26/2017 09:30
Endrin	ND		0.00042	0.0010	1	08/26/2017 09:30
Endrin aldehyde	ND		0.00020	0.0010	1	08/26/2017 09:30
Endrin ketone	ND		0.00013	0.0010	1	08/26/2017 09:30
Heptachlor	ND		0.00021	0.0010	1	08/26/2017 09:30
Heptachlor epoxide	ND		0.00020	0.0010	1	08/26/2017 09:30
Hexachlorobenzene	ND		0.00027	0.010	1	08/26/2017 09:30
Hexachlorocyclopentadiene	ND		0.00040	0.020	1	08/26/2017 09:30
Methoxychlor	ND		0.00089	0.0010	1	08/26/2017 09:30
Toxaphene	ND		0.035	0.050	1	08/26/2017 09:30
Aroclor1016	ND		0.0051	0.050	1	08/26/2017 09:30
Aroclor1221	ND		0.011	0.050	1	08/26/2017 09:30
Aroclor1232	ND		0.0063	0.050	1	08/26/2017 09:30
Aroclor1242	ND		0.0067	0.050	1	08/26/2017 09:30
Aroclor1248	ND		0.0040	0.050	1	08/26/2017 09:30
Aroclor1254	ND		0.0068	0.050	1	08/26/2017 09:30
Aroclor1260	ND		0.0061	0.050	1	08/26/2017 09:30
PCBs, total	ND		0.0040	0.050	1	08/26/2017 09:30

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	103	70-130	08/26/2017 09:30

Analyst(s): CK



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC10	144360

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acetone	0.092	J	0.039	0.10	1	08/29/2017 17:44
tert-Amyl methyl ether (TAME)	ND		0.0010	0.0050	1	08/29/2017 17:44
Benzene	ND		0.0016	0.0050	1	08/29/2017 17:44
Bromobenzene	ND		0.0017	0.0050	1	08/29/2017 17:44
Bromochloromethane	ND		0.0015	0.0050	1	08/29/2017 17:44
Bromodichloromethane	ND		0.0012	0.0050	1	08/29/2017 17:44
Bromoform	ND		0.00080	0.0050	1	08/29/2017 17:44
Bromomethane	ND		0.0020	0.0050	1	08/29/2017 17:44
2-Butanone (MEK)	0.011	J	0.0054	0.020	1	08/29/2017 17:44
t-Butyl alcohol (TBA)	ND		0.0053	0.050	1	08/29/2017 17:44
n-Butyl benzene	ND		0.0035	0.0050	1	08/29/2017 17:44
sec-Butyl benzene	ND		0.0034	0.0050	1	08/29/2017 17:44
tert-Butyl benzene	ND		0.0030	0.0050	1	08/29/2017 17:44
Carbon Disulfide	ND		0.0017	0.0050	1	08/29/2017 17:44
Carbon Tetrachloride	ND		0.0017	0.0050	1	08/29/2017 17:44
Chlorobenzene	ND		0.0018	0.0050	1	08/29/2017 17:44
Chloroethane	ND		0.0016	0.0050	1	08/29/2017 17:44
Chloroform	ND		0.0016	0.0050	1	08/29/2017 17:44
Chloromethane	ND		0.0017	0.0050	1	08/29/2017 17:44
2-Chlorotoluene	ND		0.0022	0.0050	1	08/29/2017 17:44
4-Chlorotoluene	ND		0.0021	0.0050	1	08/29/2017 17:44
Dibromochloromethane	ND		0.0011	0.0050	1	08/29/2017 17:44
1,2-Dibromo-3-chloropropane	ND		0.0012	0.0040	1	08/29/2017 17:44
1,2-Dibromoethane (EDB)	ND		0.0013	0.0040	1	08/29/2017 17:44
Dibromomethane	ND		0.0014	0.0050	1	08/29/2017 17:44
1,2-Dichlorobenzene	ND		0.0014	0.0050	1	08/29/2017 17:44
1,3-Dichlorobenzene	ND		0.0018	0.0050	1	08/29/2017 17:44
1,4-Dichlorobenzene	ND		0.0018	0.0050	1	08/29/2017 17:44
Dichlorodifluoromethane	ND		0.0011	0.0050	1	08/29/2017 17:44
1,1-Dichloroethane	ND		0.0017	0.0050	1	08/29/2017 17:44
1,2-Dichloroethane (1,2-DCA)	ND		0.0014	0.0040	1	08/29/2017 17:44
1,1-Dichloroethene	ND		0.0017	0.0050	1	08/29/2017 17:44
cis-1,2-Dichloroethene	ND		0.0015	0.0050	1	08/29/2017 17:44
trans-1,2-Dichloroethene	ND		0.0016	0.0050	1	08/29/2017 17:44
1,2-Dichloropropane	ND		0.0014	0.0050	1	08/29/2017 17:44
1,3-Dichloropropane	ND		0.0016	0.0050	1	08/29/2017 17:44
2,2-Dichloropropane	ND		0.0013	0.0050	1	08/29/2017 17:44

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC10	144360

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0018	0.0050	1	08/29/2017 17:44
cis-1,3-Dichloropropene	ND		0.0015	0.0050	1	08/29/2017 17:44
trans-1,3-Dichloropropene	ND		0.0014	0.0050	1	08/29/2017 17:44
Diisopropyl ether (DIPE)	ND		0.0014	0.0050	1	08/29/2017 17:44
Ethanol	ND		0.12	0.50	1	08/29/2017 17:44
Ethylbenzene	ND		0.0020	0.0050	1	08/29/2017 17:44
Ethyl tert-butyl ether (ETBE)	ND		0.0013	0.0050	1	08/29/2017 17:44
Freon 113	ND		0.0016	0.0050	1	08/29/2017 17:44
Hexachlorobutadiene	ND		0.0050	0.0050	1	08/29/2017 17:44
Hexachloroethane	ND		0.0025	0.0050	1	08/29/2017 17:44
2-Hexanone	ND		0.0025	0.0050	1	08/29/2017 17:44
Isopropylbenzene	ND		0.0022	0.0050	1	08/29/2017 17:44
4-Isopropyl toluene	0.0046	J	0.0031	0.0050	1	08/29/2017 17:44
Methyl-t-butyl ether (MTBE)	ND		0.0013	0.0050	1	08/29/2017 17:44
Methylene chloride	ND		0.0036	0.0050	1	08/29/2017 17:44
4-Methyl-2-pentanone (MIBK)	ND		0.00080	0.0050	1	08/29/2017 17:44
Naphthalene	ND		0.00060	0.0050	1	08/29/2017 17:44
n-Propyl benzene	ND		0.0029	0.0050	1	08/29/2017 17:44
Styrene	ND		0.0014	0.0050	1	08/29/2017 17:44
1,1,1,2-Tetrachloroethane	ND		0.0016	0.0050	1	08/29/2017 17:44
1,1,2,2-Tetrachloroethane	ND		0.0013	0.0050	1	08/29/2017 17:44
Tetrachloroethene	ND		0.0023	0.0050	1	08/29/2017 17:44
Toluene	ND		0.0022	0.0050	1	08/29/2017 17:44
1,2,3-Trichlorobenzene	ND		0.00070	0.0050	1	08/29/2017 17:44
1,2,4-Trichlorobenzene	ND		0.0011	0.0050	1	08/29/2017 17:44
1,1,1-Trichloroethane	ND		0.0018	0.0050	1	08/29/2017 17:44
1,1,2-Trichloroethane	ND		0.0016	0.0050	1	08/29/2017 17:44
Trichloroethene	ND		0.0017	0.0050	1	08/29/2017 17:44
Trichlorofluoromethane	ND		0.0016	0.0050	1	08/29/2017 17:44
1,2,3-Trichloropropane	ND		0.0019	0.0050	1	08/29/2017 17:44
1,2,4-Trimethylbenzene	ND		0.0024	0.0050	1	08/29/2017 17:44
1,3,5-Trimethylbenzene	ND		0.0027	0.0050	1	08/29/2017 17:44
Vinyl Chloride	ND		0.0015	0.0050	1	08/29/2017 17:44
Xylenes, Total	ND		0.0025	0.0050	1	08/29/2017 17:44

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC10	144360

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
Dibromofluoromethane	99			70-130		08/29/2017 17:44
Toluene-d8	109			70-130		08/29/2017 17:44
4-BFB	105			70-130		08/29/2017 17:44
Benzene-d6	87			60-140		08/29/2017 17:44
Ethylbenzene-d10	101			60-140		08/29/2017 17:44
1,2-DCB-d4	77			60-140		08/29/2017 17:44

Analyst(s): KF



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC10	144647

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Acetone	0.068	J	0.039	0.10	1	08/31/2017 01:05
tert-Amyl methyl ether (TAME)	ND		0.0010	0.0050	1	08/31/2017 01:05
Benzene	ND		0.0016	0.0050	1	08/31/2017 01:05
Bromobenzene	ND		0.0017	0.0050	1	08/31/2017 01:05
Bromochloromethane	ND		0.0015	0.0050	1	08/31/2017 01:05
Bromodichloromethane	ND		0.0012	0.0050	1	08/31/2017 01:05
Bromoform	ND		0.00080	0.0050	1	08/31/2017 01:05
Bromomethane	ND		0.0020	0.0050	1	08/31/2017 01:05
2-Butanone (MEK)	0.0067	J	0.0054	0.020	1	08/31/2017 01:05
t-Butyl alcohol (TBA)	ND		0.0053	0.050	1	08/31/2017 01:05
n-Butyl benzene	ND		0.0035	0.0050	1	08/31/2017 01:05
sec-Butyl benzene	ND		0.0034	0.0050	1	08/31/2017 01:05
tert-Butyl benzene	ND		0.0030	0.0050	1	08/31/2017 01:05
Carbon Disulfide	ND		0.0017	0.0050	1	08/31/2017 01:05
Carbon Tetrachloride	ND		0.0017	0.0050	1	08/31/2017 01:05
Chlorobenzene	ND		0.0018	0.0050	1	08/31/2017 01:05
Chloroethane	ND		0.0016	0.0050	1	08/31/2017 01:05
Chloroform	ND		0.0016	0.0050	1	08/31/2017 01:05
Chloromethane	ND		0.0017	0.0050	1	08/31/2017 01:05
2-Chlorotoluene	ND		0.0022	0.0050	1	08/31/2017 01:05
4-Chlorotoluene	ND		0.0021	0.0050	1	08/31/2017 01:05
Dibromochloromethane	ND		0.0011	0.0050	1	08/31/2017 01:05
1,2-Dibromo-3-chloropropane	ND		0.0012	0.0040	1	08/31/2017 01:05
1,2-Dibromoethane (EDB)	ND		0.0013	0.0040	1	08/31/2017 01:05
Dibromomethane	ND		0.0014	0.0050	1	08/31/2017 01:05
1,2-Dichlorobenzene	ND		0.0014	0.0050	1	08/31/2017 01:05
1,3-Dichlorobenzene	ND		0.0018	0.0050	1	08/31/2017 01:05
1,4-Dichlorobenzene	ND		0.0018	0.0050	1	08/31/2017 01:05
Dichlorodifluoromethane	ND		0.0011	0.0050	1	08/31/2017 01:05
1,1-Dichloroethane	ND		0.0017	0.0050	1	08/31/2017 01:05
1,2-Dichloroethane (1,2-DCA)	ND		0.0014	0.0040	1	08/31/2017 01:05
1,1-Dichloroethene	ND		0.0017	0.0050	1	08/31/2017 01:05
cis-1,2-Dichloroethene	ND		0.0015	0.0050	1	08/31/2017 01:05
trans-1,2-Dichloroethene	ND		0.0016	0.0050	1	08/31/2017 01:05
1,2-Dichloropropane	ND		0.0014	0.0050	1	08/31/2017 01:05
1,3-Dichloropropane	ND		0.0016	0.0050	1	08/31/2017 01:05
2,2-Dichloropropane	ND		0.0013	0.0050	1	08/31/2017 01:05

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC10	144647

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
1,1-Dichloropropene	ND		0.0018	0.0050	1	08/31/2017 01:05
cis-1,3-Dichloropropene	ND		0.0015	0.0050	1	08/31/2017 01:05
trans-1,3-Dichloropropene	ND		0.0014	0.0050	1	08/31/2017 01:05
Diisopropyl ether (DIPE)	ND		0.0014	0.0050	1	08/31/2017 01:05
Ethanol	ND		0.12	0.50	1	08/31/2017 01:05
Ethylbenzene	ND		0.0020	0.0050	1	08/31/2017 01:05
Ethyl tert-butyl ether (ETBE)	ND		0.0013	0.0050	1	08/31/2017 01:05
Freon 113	ND		0.0016	0.0050	1	08/31/2017 01:05
Hexachlorobutadiene	ND		0.0050	0.0050	1	08/31/2017 01:05
Hexachloroethane	ND		0.0025	0.0050	1	08/31/2017 01:05
2-Hexanone	ND		0.0025	0.0050	1	08/31/2017 01:05
Isopropylbenzene	ND		0.0022	0.0050	1	08/31/2017 01:05
4-Isopropyl toluene	ND		0.0031	0.0050	1	08/31/2017 01:05
Methyl-t-butyl ether (MTBE)	ND		0.0013	0.0050	1	08/31/2017 01:05
Methylene chloride	ND		0.0036	0.0050	1	08/31/2017 01:05
4-Methyl-2-pentanone (MIBK)	ND		0.00080	0.0050	1	08/31/2017 01:05
Naphthalene	ND		0.00060	0.0050	1	08/31/2017 01:05
n-Propyl benzene	ND		0.0029	0.0050	1	08/31/2017 01:05
Styrene	ND		0.0014	0.0050	1	08/31/2017 01:05
1,1,1,2-Tetrachloroethane	ND		0.0016	0.0050	1	08/31/2017 01:05
1,1,2,2-Tetrachloroethane	ND		0.0013	0.0050	1	08/31/2017 01:05
Tetrachloroethene	ND		0.0023	0.0050	1	08/31/2017 01:05
Toluene	ND		0.0022	0.0050	1	08/31/2017 01:05
1,2,3-Trichlorobenzene	ND		0.00070	0.0050	1	08/31/2017 01:05
1,2,4-Trichlorobenzene	ND		0.0011	0.0050	1	08/31/2017 01:05
1,1,1-Trichloroethane	ND		0.0018	0.0050	1	08/31/2017 01:05
1,1,2-Trichloroethane	ND		0.0016	0.0050	1	08/31/2017 01:05
Trichloroethene	ND		0.0017	0.0050	1	08/31/2017 01:05
Trichlorofluoromethane	ND		0.0016	0.0050	1	08/31/2017 01:05
1,2,3-Trichloropropane	ND		0.0019	0.0050	1	08/31/2017 01:05
1,2,4-Trimethylbenzene	ND		0.0024	0.0050	1	08/31/2017 01:05
1,3,5-Trimethylbenzene	ND		0.0027	0.0050	1	08/31/2017 01:05
Vinyl Chloride	ND		0.0015	0.0050	1	08/31/2017 01:05
Xylenes, Total	ND		0.0025	0.0050	1	08/31/2017 01:05

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/30/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC10	144647

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
Dibromofluoromethane	97			82-136		08/31/2017 01:05
Toluene-d8	112			92-139		08/31/2017 01:05
4-BFB	91			82-135		08/31/2017 01:05
Benzene-d6	84			55-122		08/31/2017 01:05
Ethylbenzene-d10	100			58-141		08/31/2017 01:05
1,2-DCB-d4	76			51-107		08/31/2017 01:05

Analyst(s): KF



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.14	0.25	1	08/29/2017 18:38
Acenaphthylene	ND	0.14	0.25	1	08/29/2017 18:38
Acetochlor	ND	0.25	0.25	1	08/29/2017 18:38
Anthracene	ND	0.14	0.25	1	08/29/2017 18:38
Benzidine	ND	0.23	1.3	1	08/29/2017 18:38
Benzo (a) anthracene	ND	0.14	0.25	1	08/29/2017 18:38
Benzo (a) pyrene	ND	0.14	0.25	1	08/29/2017 18:38
Benzo (b) fluoranthene	ND	0.14	0.25	1	08/29/2017 18:38
Benzo (g,h,i) perylene	ND	0.15	0.25	1	08/29/2017 18:38
Benzo (k) fluoranthene	ND	0.16	0.25	1	08/29/2017 18:38
Benzyl Alcohol	ND	0.51	1.3	1	08/29/2017 18:38
1,1-Biphenyl	ND	0.15	0.25	1	08/29/2017 18:38
Bis (2-chloroethoxy) Methane	ND	0.14	0.25	1	08/29/2017 18:38
Bis (2-chloroethyl) Ether	ND	0.13	0.25	1	08/29/2017 18:38
Bis (2-chloroisopropyl) Ether	ND	0.12	0.25	1	08/29/2017 18:38
Bis (2-ethylhexyl) Adipate	ND	0.25	0.25	1	08/29/2017 18:38
Bis (2-ethylhexyl) Phthalate	ND	0.13	0.25	1	08/29/2017 18:38
4-Bromophenyl Phenyl Ether	ND	0.16	0.25	1	08/29/2017 18:38
Butylbenzyl Phthalate	ND	0.13	0.25	1	08/29/2017 18:38
4-Chloroaniline	ND	0.13	0.50	1	08/29/2017 18:38
4-Chloro-3-methylphenol	ND	0.12	0.25	1	08/29/2017 18:38
2-Chloronaphthalene	ND	0.16	0.25	1	08/29/2017 18:38
2-Chlorophenol	ND	0.14	0.25	1	08/29/2017 18:38
4-Chlorophenyl Phenyl Ether	ND	0.15	0.25	1	08/29/2017 18:38
Chrysene	ND	0.14	0.25	1	08/29/2017 18:38
Dibenzo (a,h) anthracene	ND	0.16	0.25	1	08/29/2017 18:38
Dibenzofuran	ND	0.13	0.25	1	08/29/2017 18:38
Di-n-butyl Phthalate	ND	0.13	0.25	1	08/29/2017 18:38
1,2-Dichlorobenzene	ND	0.12	0.25	1	08/29/2017 18:38
1,3-Dichlorobenzene	ND	0.14	0.25	1	08/29/2017 18:38
1,4-Dichlorobenzene	ND	0.13	0.25	1	08/29/2017 18:38
3,3-Dichlorobenzidine	ND	0.12	0.50	1	08/29/2017 18:38
2,4-Dichlorophenol	ND	0.13	0.25	1	08/29/2017 18:38
Diethyl Phthalate	ND	0.14	0.25	1	08/29/2017 18:38
2,4-Dimethylphenol	ND	0.13	0.25	1	08/29/2017 18:38
Dimethyl Phthalate	ND	0.14	0.25	1	08/29/2017 18:38
4,6-Dinitro-2-methylphenol	ND	0.13	1.3	1	08/29/2017 18:38

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.3	6.3	1	08/29/2017 18:38
2,4-Dinitrotoluene	ND	0.13	0.25	1	08/29/2017 18:38
2,6-Dinitrotoluene	ND	0.14	0.25	1	08/29/2017 18:38
Di-n-octyl Phthalate	ND	0.14	0.50	1	08/29/2017 18:38
1,2-Diphenylhydrazine	ND	0.16	0.25	1	08/29/2017 18:38
Fluoranthene	ND	0.13	0.25	1	08/29/2017 18:38
Fluorene	ND	0.14	0.25	1	08/29/2017 18:38
Hexachlorobenzene	ND	0.17	0.25	1	08/29/2017 18:38
Hexachlorobutadiene	ND	0.15	0.25	1	08/29/2017 18:38
Hexachlorocyclopentadiene	ND	0.73	1.3	1	08/29/2017 18:38
Hexachloroethane	ND	0.14	0.25	1	08/29/2017 18:38
Indeno (1,2,3-cd) pyrene	ND	0.14	0.25	1	08/29/2017 18:38
Isophorone	ND	0.12	0.25	1	08/29/2017 18:38
2-Methylnaphthalene	ND	0.14	0.25	1	08/29/2017 18:38
2-Methylphenol (o-Cresol)	ND	0.14	0.25	1	08/29/2017 18:38
3 & 4-Methylphenol (m,p-Cresol)	ND	0.12	0.25	1	08/29/2017 18:38
Naphthalene	ND	0.13	0.25	1	08/29/2017 18:38
2-Nitroaniline	ND	0.62	1.3	1	08/29/2017 18:38
3-Nitroaniline	ND	0.59	1.3	1	08/29/2017 18:38
4-Nitroaniline	ND	0.55	1.3	1	08/29/2017 18:38
Nitrobenzene	ND	0.14	0.25	1	08/29/2017 18:38
2-Nitrophenol	ND	0.64	1.3	1	08/29/2017 18:38
4-Nitrophenol	ND	0.41	1.3	1	08/29/2017 18:38
N-Nitrosodiphenylamine	ND	0.16	0.25	1	08/29/2017 18:38
N-Nitrosodi-n-propylamine	ND	0.13	0.25	1	08/29/2017 18:38
Pentachlorophenol	ND	0.32	1.3	1	08/29/2017 18:38
Phenanthrene	ND	0.14	0.25	1	08/29/2017 18:38
Phenol	ND	0.12	0.25	1	08/29/2017 18:38
Pyrene	ND	0.13	0.25	1	08/29/2017 18:38
Pyridine	ND	0.25	0.25	1	08/29/2017 18:38
1,2,4-Trichlorobenzene	ND	0.14	0.25	1	08/29/2017 18:38
2,4,5-Trichlorophenol	ND	0.12	0.25	1	08/29/2017 18:38
2,4,6-Trichlorophenol	ND	0.14	0.25	1	08/29/2017 18:38

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
2-Fluorophenol	18	S	30-130		08/29/2017 18:38
Phenol-d5	74		30-130		08/29/2017 18:38
Nitrobenzene-d5	91		30-130		08/29/2017 18:38
2-Fluorobiphenyl	80		30-130		08/29/2017 18:38
2,4,6-Tribromophenol	3	S	16-130		08/29/2017 18:38
4-Terphenyl-d14	94		30-130		08/29/2017 18:38

Analyst(s): REB

Analytical Comments: c2



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.14	0.25	1	08/29/2017 19:06
Acenaphthylene	ND	0.14	0.25	1	08/29/2017 19:06
Acetochlor	ND	0.25	0.25	1	08/29/2017 19:06
Anthracene	ND	0.14	0.25	1	08/29/2017 19:06
Benzidine	ND	0.23	1.3	1	08/29/2017 19:06
Benzo (a) anthracene	ND	0.14	0.25	1	08/29/2017 19:06
Benzo (a) pyrene	ND	0.14	0.25	1	08/29/2017 19:06
Benzo (b) fluoranthene	ND	0.14	0.25	1	08/29/2017 19:06
Benzo (g,h,i) perylene	ND	0.15	0.25	1	08/29/2017 19:06
Benzo (k) fluoranthene	ND	0.16	0.25	1	08/29/2017 19:06
Benzyl Alcohol	ND	0.51	1.3	1	08/29/2017 19:06
1,1-Biphenyl	ND	0.15	0.25	1	08/29/2017 19:06
Bis (2-chloroethoxy) Methane	ND	0.14	0.25	1	08/29/2017 19:06
Bis (2-chloroethyl) Ether	ND	0.13	0.25	1	08/29/2017 19:06
Bis (2-chloroisopropyl) Ether	ND	0.12	0.25	1	08/29/2017 19:06
Bis (2-ethylhexyl) Adipate	ND	0.25	0.25	1	08/29/2017 19:06
Bis (2-ethylhexyl) Phthalate	ND	0.13	0.25	1	08/29/2017 19:06
4-Bromophenyl Phenyl Ether	ND	0.16	0.25	1	08/29/2017 19:06
Butylbenzyl Phthalate	ND	0.13	0.25	1	08/29/2017 19:06
4-Chloroaniline	ND	0.13	0.50	1	08/29/2017 19:06
4-Chloro-3-methylphenol	ND	0.12	0.25	1	08/29/2017 19:06
2-Chloronaphthalene	ND	0.16	0.25	1	08/29/2017 19:06
2-Chlorophenol	ND	0.14	0.25	1	08/29/2017 19:06
4-Chlorophenyl Phenyl Ether	ND	0.15	0.25	1	08/29/2017 19:06
Chrysene	ND	0.14	0.25	1	08/29/2017 19:06
Dibenzo (a,h) anthracene	ND	0.16	0.25	1	08/29/2017 19:06
Dibenzofuran	ND	0.13	0.25	1	08/29/2017 19:06
Di-n-butyl Phthalate	ND	0.13	0.25	1	08/29/2017 19:06
1,2-Dichlorobenzene	ND	0.12	0.25	1	08/29/2017 19:06
1,3-Dichlorobenzene	ND	0.14	0.25	1	08/29/2017 19:06
1,4-Dichlorobenzene	ND	0.13	0.25	1	08/29/2017 19:06
3,3-Dichlorobenzidine	ND	0.12	0.50	1	08/29/2017 19:06
2,4-Dichlorophenol	ND	0.13	0.25	1	08/29/2017 19:06
Diethyl Phthalate	ND	0.14	0.25	1	08/29/2017 19:06
2,4-Dimethylphenol	ND	0.13	0.25	1	08/29/2017 19:06
Dimethyl Phthalate	ND	0.14	0.25	1	08/29/2017 19:06
4,6-Dinitro-2-methylphenol	ND	0.13	1.3	1	08/29/2017 19:06

(Cont.)



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.3	6.3	1	08/29/2017 19:06
2,4-Dinitrotoluene	ND	0.13	0.25	1	08/29/2017 19:06
2,6-Dinitrotoluene	ND	0.14	0.25	1	08/29/2017 19:06
Di-n-octyl Phthalate	ND	0.14	0.50	1	08/29/2017 19:06
1,2-Diphenylhydrazine	ND	0.16	0.25	1	08/29/2017 19:06
Fluoranthene	ND	0.13	0.25	1	08/29/2017 19:06
Fluorene	ND	0.14	0.25	1	08/29/2017 19:06
Hexachlorobenzene	ND	0.17	0.25	1	08/29/2017 19:06
Hexachlorobutadiene	ND	0.15	0.25	1	08/29/2017 19:06
Hexachlorocyclopentadiene	ND	0.73	1.3	1	08/29/2017 19:06
Hexachloroethane	ND	0.14	0.25	1	08/29/2017 19:06
Indeno (1,2,3-cd) pyrene	ND	0.14	0.25	1	08/29/2017 19:06
Isophorone	ND	0.12	0.25	1	08/29/2017 19:06
2-Methylnaphthalene	ND	0.14	0.25	1	08/29/2017 19:06
2-Methylphenol (o-Cresol)	ND	0.14	0.25	1	08/29/2017 19:06
3 & 4-Methylphenol (m,p-Cresol)	ND	0.12	0.25	1	08/29/2017 19:06
Naphthalene	ND	0.13	0.25	1	08/29/2017 19:06
2-Nitroaniline	ND	0.62	1.3	1	08/29/2017 19:06
3-Nitroaniline	ND	0.59	1.3	1	08/29/2017 19:06
4-Nitroaniline	ND	0.55	1.3	1	08/29/2017 19:06
Nitrobenzene	ND	0.14	0.25	1	08/29/2017 19:06
2-Nitrophenol	ND	0.64	1.3	1	08/29/2017 19:06
4-Nitrophenol	ND	0.41	1.3	1	08/29/2017 19:06
N-Nitrosodiphenylamine	ND	0.16	0.25	1	08/29/2017 19:06
N-Nitrosodi-n-propylamine	ND	0.13	0.25	1	08/29/2017 19:06
Pentachlorophenol	ND	0.32	1.3	1	08/29/2017 19:06
Phenanthrene	ND	0.14	0.25	1	08/29/2017 19:06
Phenol	ND	0.12	0.25	1	08/29/2017 19:06
Pyrene	ND	0.13	0.25	1	08/29/2017 19:06
Pyridine	ND	0.25	0.25	1	08/29/2017 19:06
1,2,4-Trichlorobenzene	ND	0.14	0.25	1	08/29/2017 19:06
2,4,5-Trichlorophenol	ND	0.12	0.25	1	08/29/2017 19:06
2,4,6-Trichlorophenol	ND	0.14	0.25	1	08/29/2017 19:06

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Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC17	144556

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
2-Fluorophenol	23	S	30-130		08/29/2017 19:06
Phenol-d5	85		30-130		08/29/2017 19:06
Nitrobenzene-d5	101		30-130		08/29/2017 19:06
2-Fluorobiphenyl	87		30-130		08/29/2017 19:06
2,4,6-Tribromophenol	3	S	16-130		08/29/2017 19:06
4-Terphenyl-d14	108		30-130		08/29/2017 19:06

Analyst(s): REB

Analytical Comments: c2



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	ICP-MS2	144375

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Antimony	0.47	J	0.094	0.50	1	08/25/2017 23:51
Arsenic	5.2		0.14	0.50	1	08/25/2017 23:51
Barium	200		0.97	5.0	1	08/25/2017 23:51
Beryllium	0.63		0.072	0.50	1	08/25/2017 23:51
Cadmium	0.10	J	0.058	0.25	1	08/25/2017 23:51
Chromium	50		0.092	0.50	1	08/25/2017 23:51
Cobalt	12		0.056	0.50	1	08/25/2017 23:51
Copper	23		0.069	0.50	1	08/25/2017 23:51
Lead	8.0		0.094	0.50	1	08/25/2017 23:51
Mercury	0.063		0.0050	0.050	1	08/25/2017 23:51
Molybdenum	0.67		0.23	0.50	1	08/25/2017 23:51
Nickel	84		0.072	0.50	1	08/25/2017 23:51
Selenium	0.24	J	0.13	0.50	1	08/25/2017 23:51
Silver	ND		0.055	0.50	1	08/25/2017 23:51
Thallium	ND		0.10	0.50	1	08/25/2017 23:51
Vanadium	51		0.064	0.50	1	08/25/2017 23:51
Zinc	56		1.4	5.0	1	08/25/2017 23:51

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	98	70-130	08/25/2017 23:51

Analyst(s): JC



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	ICP-MS2	144375

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Antimony	0.56		0.094	0.50	1	08/26/2017 00:16
Arsenic	4.5		0.14	0.50	1	08/26/2017 00:16
Barium	200		0.97	5.0	1	08/26/2017 00:16
Beryllium	0.64		0.072	0.50	1	08/26/2017 00:16
Cadmium	0.11	J	0.058	0.25	1	08/26/2017 00:16
Chromium	67		0.092	0.50	1	08/26/2017 00:16
Cobalt	12		0.056	0.50	1	08/26/2017 00:16
Copper	25		0.069	0.50	1	08/26/2017 00:16
Lead	14		0.094	0.50	1	08/26/2017 00:16
Mercury	0.060		0.0050	0.050	1	08/26/2017 00:16
Molybdenum	0.58		0.23	0.50	1	08/26/2017 00:16
Nickel	90		0.072	0.50	1	08/26/2017 00:16
Selenium	0.30	J	0.13	0.50	1	08/26/2017 00:16
Silver	ND		0.055	0.50	1	08/26/2017 00:16
Thallium	ND		0.10	0.50	1	08/26/2017 00:16
Vanadium	54		0.064	0.50	1	08/26/2017 00:16
Zinc	57		1.4	5.0	1	08/26/2017 00:16

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	98	70-130	08/26/2017 00:16

Analyst(s): JC



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/28/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: CARB 435 Asbestos
Analytical Method: 435 CARB
Unit: %

Asbestos (CARB 435) 400 Point Count

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	WetChem	144602

Analytes	Result	MDL	RL	DF	Date Analyzed
Asbestos	ND	0.25	0.25	1	08/29/2017 10:40

Analyst(s): DA

Analytical Comments: k10

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	WetChem	144602

Analytes	Result	MDL	RL	DF	Date Analyzed
Asbestos	ND	0.25	0.25	1	08/29/2017 11:05

Analyst(s): DA

Analytical Comments: k10

 Angela Rydelius, Lab Manager



Analytical Report

Client: IRC Environmental Consulting
Date Received: 8/24/17 17:20
Date Prepared: 8/24/17-8/29/17
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-A,B,C,D	1708C19-001A	Soil	08/24/2017 11:09	GC9b	144371

Analytes	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	0.86	1.0	1	08/25/2017 20:25
TPH-Motor Oil (C18-C36)	ND	3.5	5.0	1	08/25/2017 20:25

Surrogates	REC (%)	Limits
C9	99	78-109

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SP3-E,F,G,H	1708C19-002A	Soil	08/24/2017 11:32	GC9b	144577

Analytes	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.3	0.86	1.0	1	08/28/2017 20:13
TPH-Motor Oil (C18-C36)	ND	3.5	5.0	1	08/28/2017 20:13

Surrogates	REC (%)	Limits
C9	100	78-109

Analyst(s): TK



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/24/17
Instrument: IC2
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144365
Extraction Method: SW3060A
Analytical Method: SW7199
Unit: mg/Kg
Sample ID: MB/LCS-144365
 1708B11-001AMS/MSD

QC Summary Report for SW7199 (Hexavalent chromium)

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Hexavalent chromium	ND	208	1.7	4.0	200	-	104	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexavalent chromium	192	193	200	ND	96	96	70-130	0	20



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17 - 8/26/17
Instrument: GC40
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144376
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-144376

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.00027	0.0010	-	-	-
a-BHC	ND	0.00010	0.0010	-	-	-
b-BHC	ND	0.00025	0.0010	-	-	-
d-BHC	ND	0.00037	0.0010	-	-	-
g-BHC	ND	0.000097	0.0010	-	-	-
Chlordane (Technical)	ND	0.016	0.025	-	-	-
a-Chlordane	ND	0.00047	0.0010	-	-	-
g-Chlordane	ND	0.00021	0.0010	-	-	-
p,p-DDD	ND	0.00014	0.0010	-	-	-
p,p-DDE	ND	0.00032	0.0010	-	-	-
p,p-DDT	ND	0.00043	0.0010	-	-	-
Dieldrin	ND	0.00033	0.0010	-	-	-
Endosulfan I	ND	0.00065	0.0010	-	-	-
Endosulfan II	ND	0.00020	0.0010	-	-	-
Endosulfan sulfate	ND	0.00063	0.0010	-	-	-
Endrin	ND	0.00042	0.0010	-	-	-
Endrin aldehyde	ND	0.00020	0.0010	-	-	-
Endrin ketone	ND	0.00013	0.0010	-	-	-
Heptachlor	ND	0.00021	0.0010	-	-	-
Heptachlor epoxide	ND	0.00020	0.0010	-	-	-
Hexachlorobenzene	ND	0.00027	0.010	-	-	-
Hexachlorocyclopentadiene	ND	0.00040	0.020	-	-	-
Methoxychlor	ND	0.00089	0.0010	-	-	-
Toxaphene	ND	0.035	0.050	-	-	-
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.011	0.050	-	-	-
Aroclor1232	ND	0.0063	0.050	-	-	-
Aroclor1242	ND	0.0067	0.050	-	-	-
Aroclor1248	ND	0.0040	0.050	-	-	-
Aroclor1254	ND	0.0068	0.050	-	-	-
Aroclor1260	ND	0.0061	0.050	-	-	-
PCBs, total	ND	0.0040	0.050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.03509			0.050	70	70-130



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17 - 8/26/17
Instrument: GC40
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144376
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-144376

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0471	-	0.050	94	-	70-130	-	-
a-BHC	0.0596	-	0.050	119	-	70-130	-	-
b-BHC	0.0472	-	0.050	94	-	70-130	-	-
d-BHC	0.0480	-	0.050	96	-	70-130	-	-
g-BHC	0.0566	-	0.050	113	-	70-130	-	-
a-Chlordane	0.0433	-	0.050	87	-	70-130	-	-
g-Chlordane	0.0480	-	0.050	96	-	70-130	-	-
p,p-DDD	0.0558	-	0.050	112	-	70-130	-	-
p,p-DDE	0.0460	-	0.050	92	-	70-130	-	-
p,p-DDT	0.0563	-	0.050	113	-	70-130	-	-
Dieldrin	0.0586	-	0.050	117	-	70-130	-	-
Endosulfan I	0.0510	-	0.050	102	-	70-130	-	-
Endosulfan II	0.0474	-	0.050	95	-	70-130	-	-
Endosulfan sulfate	0.0419	-	0.050	84	-	70-130	-	-
Endrin	0.0568	-	0.050	114	-	70-130	-	-
Endrin aldehyde	0.0461	-	0.050	92	-	70-130	-	-
Endrin ketone	0.0453	-	0.050	91	-	70-130	-	-
Heptachlor	0.0638	-	0.050	128	-	70-130	-	-
Heptachlor epoxide	0.0471	-	0.050	94	-	70-130	-	-
Hexachlorobenzene	0.0438	-	0.050	88	-	50-150	-	-
Hexachlorocyclopentadiene	0.0234	-	0.050	47, F2	-	50-150	-	-
Methoxychlor	0.0542	-	0.050	108	-	70-130	-	-
Aroclor1016	0.129	0.127	0.15	86	85	70-130	1.49	20
Aroclor1260	0.120	0.111	0.15	80	74	70-130	7.89	20
Surrogate Recovery								
Decachlorobiphenyl	0.0430	0.0389	0.050	86	78	70-130	9.84	20



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.792	0.039	0.10	1	-	79	72-156
tert-Amyl methyl ether (TAME)	ND	0.0390	0.0010	0.0050	0.050	-	78	53-116
Benzene	ND	0.0442	0.0016	0.0050	0.050	-	88	63-137
Bromobenzene	ND	0.0509	0.0017	0.0050	0.050	-	102	68-126
Bromochloromethane	ND	0.0454	0.0015	0.0050	0.050	-	91	72-126
Bromodichloromethane	ND	0.0424	0.0012	0.0050	0.050	-	85	61-127
Bromoform	0.001748,J	0.0323	0.00080	0.0050	0.050	-	65	49-100
Bromomethane	ND	0.0396	0.0020	0.0050	0.050	-	79	40-161
2-Butanone (MEK)	ND	0.145	0.0054	0.020	0.20	-	72	43-157
t-Butyl alcohol (TBA)	ND	0.160	0.0053	0.050	0.20	-	80	41-135
n-Butyl benzene	ND	0.0660	0.0035	0.0050	0.050	-	132	102-160
sec-Butyl benzene	ND	0.0643	0.0034	0.0050	0.050	-	129	74-168
tert-Butyl benzene	ND	0.0671	0.0030	0.0050	0.050	-	134	88-157
Carbon Disulfide	ND	0.0451	0.0017	0.0050	0.050	-	90	42-151
Carbon Tetrachloride	ND	0.0459	0.0017	0.0050	0.050	-	92	49-149
Chlorobenzene	ND	0.0465	0.0018	0.0050	0.050	-	93	77-121
Chloroethane	ND	0.0308	0.0016	0.0050	0.050	-	62	41-134
Chloroform	ND	0.0462	0.0016	0.0050	0.050	-	92	69-133
Chloromethane	ND	0.0253	0.0017	0.0050	0.050	-	51	31-119
2-Chlorotoluene	ND	0.0570	0.0022	0.0050	0.050	-	114	79-139
4-Chlorotoluene	ND	0.0566	0.0021	0.0050	0.050	-	113	77-138
Dibromochloromethane	ND	0.0422	0.0011	0.0050	0.050	-	84	58-121
1,2-Dibromo-3-chloropropane	ND	0.0145	0.0012	0.0040	0.020	-	72	39-115
1,2-Dibromoethane (EDB)	ND	0.0464	0.0013	0.0040	0.050	-	93	67-119
Dibromomethane	ND	0.0416	0.0014	0.0050	0.050	-	83	66-117
1,2-Dichlorobenzene	ND	0.0413	0.0014	0.0050	0.050	-	83	59-109
1,3-Dichlorobenzene	ND	0.0491	0.0018	0.0050	0.050	-	98	75-130
1,4-Dichlorobenzene	ND	0.0476	0.0018	0.0050	0.050	-	95	71-122
Dichlorodifluoromethane	ND	0.00743	0.0011	0.0050	0.050	-	15, F2	43-68
1,1-Dichloroethane	ND	0.0446	0.0017	0.0050	0.050	-	89	62-139
1,2-Dichloroethane (1,2-DCA)	ND	0.0413	0.0014	0.0040	0.050	-	83	58-135
1,1-Dichloroethene	ND	0.0430	0.0017	0.0050	0.050	-	86	42-145
cis-1,2-Dichloroethene	ND	0.0461	0.0015	0.0050	0.050	-	92	67-129
trans-1,2-Dichloroethene	ND	0.0448	0.0016	0.0050	0.050	-	90	54-139
1,2-Dichloropropane	ND	0.0445	0.0014	0.0050	0.050	-	89	68-125
1,3-Dichloropropane	ND	0.0465	0.0016	0.0050	0.050	-	93	65-125
2,2-Dichloropropane	ND	0.0478	0.0013	0.0050	0.050	-	96	45-151

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Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0481	0.0018	0.0050	0.050	-	96	64-138
cis-1,3-Dichloropropene	ND	0.0497	0.0015	0.0050	0.050	-	99	62-134
trans-1,3-Dichloropropene	ND	0.0456	0.0014	0.0050	0.050	-	91	59-128
Diisopropyl ether (DIPE)	ND	0.0429	0.0014	0.0050	0.050	-	86	52-129
Ethanol	ND	1.92	0.12	0.50	2.5	-	77	40-113
Ethylbenzene	ND	0.0527	0.0020	0.0050	0.050	-	105	74-142
Ethyl tert-butyl ether (ETBE)	ND	0.0445	0.0013	0.0050	0.050	-	89	53-125
Freon 113	ND	0.0342	0.0016	0.0050	0.050	-	68	51-126
Hexachlorobutadiene	ND	0.0665	0.0050	0.0050	0.050	-	133	70-158
Hexachloroethane	ND	0.0605	0.0025	0.0050	0.050	-	121	80-160
2-Hexanone	ND	0.0328	0.0025	0.0050	0.050	-	66	41-116
Isopropylbenzene	ND	0.0692	0.0022	0.0050	0.050	-	138	77-146
4-Isopropyl toluene	ND	0.0657	0.0031	0.0050	0.050	-	131	96-159
Methyl-t-butyl ether (MTBE)	ND	0.0425	0.0013	0.0050	0.050	-	85	58-122
Methylene chloride	ND	0.0437	0.0036	0.0050	0.050	-	87	58-135
4-Methyl-2-pentanone (MIBK)	ND	0.0340	0.00080	0.0050	0.050	-	68	40-112
Naphthalene	0.000833,J	0.0242	0.00060	0.0050	0.050	-	49	23-73
n-Propyl benzene	ND	0.0662	0.0029	0.0050	0.050	-	132	82-160
Styrene	ND	0.0446	0.0014	0.0050	0.050	-	89	68-124
1,1,1,2-Tetrachloroethane	ND	0.0520	0.0016	0.0050	0.050	-	104	70-128
1,1,2,2-Tetrachloroethane	ND	0.0394	0.0013	0.0050	0.050	-	79	57-111
Tetrachloroethene	ND	0.0553	0.0023	0.0050	0.050	-	111	73-145
Toluene	ND	0.0521	0.0022	0.0050	0.050	-	104	76-130
1,2,3-Trichlorobenzene	ND	0.0293	0.00070	0.0050	0.050	-	59	43-72
1,2,4-Trichlorobenzene	ND	0.0389	0.0011	0.0050	0.050	-	78	47-95
1,1,1-Trichloroethane	ND	0.0481	0.0018	0.0050	0.050	-	96	60-141
1,1,2-Trichloroethane	ND	0.0450	0.0016	0.0050	0.050	-	90	62-118
Trichloroethene	ND	0.0482	0.0017	0.0050	0.050	-	96	72-132
Trichlorofluoromethane	ND	0.0345	0.0016	0.0050	0.050	-	69	43-135
1,2,3-Trichloropropane	ND	0.0437	0.0019	0.0050	0.050	-	87	57-122
1,2,4-Trimethylbenzene	ND	0.0597	0.0024	0.0050	0.050	-	119	81-152
1,3,5-Trimethylbenzene	ND	0.0637	0.0027	0.0050	0.050	-	127	78-160
Vinyl Chloride	ND	0.0282	0.0015	0.0050	0.050	-	56	42-131
Xylenes, Total	ND	0.152	0.0025	0.0050	0.15	-	102	70-130

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Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery								
Dibromofluoromethane	0.1369	0.143			0.12	110	114	70-130
Toluene-d8	0.1519	0.152			0.12	122	121	70-130
4-BFB	0.01409	0.0151			0.012	113	121	70-130
Benzene-d6	0.09848	0.107			0.10	98	107	60-140
Ethylbenzene-d10	0.1066	0.119			0.10	107	119	60-140
1,2-DCB-d4	0.08673	0.0932			0.10	87	93	60-140



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	0.728	0.716	1	ND	73	72	72-156	1.76	20
tert-Amyl methyl ether (TAME)	0.0372	0.0369	0.050	ND	74	74	53-116	0	20
Benzene	0.0419	0.0408	0.050	ND	84	82	63-137	2.61	20
Bromobenzene	0.0483	0.0468	0.050	ND	97	94	68-126	3.07	20
Bromochloromethane	0.0431	0.0419	0.050	ND	86	84	72-126	2.90	20
Bromodichloromethane	0.0404	0.0397	0.050	ND	81	79	61-127	1.79	20
Bromoform	0.0315	0.0308	0.050	ND	63	62	49-100	2.22	20
Bromomethane	0.0413	0.0404	0.050	ND	83	81	40-161	2.30	20
2-Butanone (MEK)	0.139	0.136	0.20	ND	69	68	43-157	1.68	20
t-Butyl alcohol (TBA)	0.149	0.150	0.20	ND	74	75	41-135	0.873	20
n-Butyl benzene	0.0605	0.0580	0.050	ND	121	116	102-160	4.28	20
sec-Butyl benzene	0.0590	0.0571	0.050	ND	118	114	74-168	3.20	20
tert-Butyl benzene	0.0614	0.0594	0.050	ND	123	119	88-157	3.42	20
Carbon Disulfide	0.0445	0.0429	0.050	ND	89	86	42-151	3.75	20
Carbon Tetrachloride	0.0441	0.0423	0.050	ND	88	85	49-149	4.10	20
Chlorobenzene	0.0439	0.0429	0.050	ND	88	86	77-121	2.30	20
Chloroethane	0.0312	0.0299	0.050	ND	62	60	41-134	4.10	20
Chloroform	0.0438	0.0425	0.050	ND	88	85	69-133	3.01	20
Chloromethane	0.0272	0.0267	0.050	ND	54	53	31-119	1.75	20
2-Chlorotoluene	0.0536	0.0515	0.050	ND	107	103	79-139	3.98	20
4-Chlorotoluene	0.0527	0.0510	0.050	ND	105	102	77-138	3.27	20
Dibromochloromethane	0.0406	0.0394	0.050	ND	81	79	58-121	2.80	20
1,2-Dibromo-3-chloropropane	0.0141	0.0140	0.020	ND	71	70	39-115	1.13	20
1,2-Dibromoethane (EDB)	0.0443	0.0428	0.050	ND	89	86	67-119	3.65	20
Dibromomethane	0.0395	0.0388	0.050	ND	79	78	66-117	1.76	20
1,2-Dichlorobenzene	0.0397	0.0389	0.050	ND	79	78	59-109	2.12	20
1,3-Dichlorobenzene	0.0462	0.0451	0.050	ND	92	90	75-130	2.42	20
1,4-Dichlorobenzene	0.0445	0.0438	0.050	ND	89	88	71-122	1.66	20
Dichlorodifluoromethane	0.00946	0.00905	0.050	ND	19,F1	18,F1	43-68	4.48	20
1,1-Dichloroethane	0.0427	0.0414	0.050	ND	85	83	62-139	2.98	20
1,2-Dichloroethane (1,2-DCA)	0.0392	0.0382	0.050	ND	78	76	58-135	2.39	20
1,1-Dichloroethene	0.0426	0.0413	0.050	ND	85	83	42-145	2.98	20
cis-1,2-Dichloroethene	0.0439	0.0426	0.050	ND	88	85	67-129	3.08	20
trans-1,2-Dichloroethene	0.0432	0.0420	0.050	ND	86	84	54-139	2.69	20
1,2-Dichloropropane	0.0422	0.0412	0.050	ND	84	82	68-125	2.28	20
1,3-Dichloropropane	0.0439	0.0427	0.050	ND	88	85	65-125	2.82	20
2,2-Dichloropropane	0.0452	0.0434	0.050	ND	90	87	45-151	4.20	20

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Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,1-Dichloropropene	0.0461	0.0444	0.050	ND	92	89	64-138	3.94	20
cis-1,3-Dichloropropene	0.0470	0.0451	0.050	ND	94	90	62-134	4.01	20
trans-1,3-Dichloropropene	0.0434	0.0419	0.050	ND	87	84	59-128	3.61	20
Diisopropyl ether (DIPE)	0.0408	0.0400	0.050	ND	82	80	52-129	1.83	20
Ethanol	1.71	1.70	2.5	ND	69	68	40-113	0.590	20
Ethylbenzene	0.0497	0.0479	0.050	ND	99	96	74-142	3.69	20
Ethyl tert-butyl ether (ETBE)	0.0424	0.0418	0.050	ND	85	84	53-125	1.49	20
Freon 113	0.0355	0.0340	0.050	ND	71	68	51-126	4.29	20
Hexachlorobutadiene	0.0606	0.0583	0.050	ND	121	117	70-158	3.78	20
Hexachloroethane	0.0558	0.0535	0.050	ND	112	107	80-160	4.32	20
2-Hexanone	0.0311	0.0286	0.050	ND	62	57	41-116	8.34	20
Isopropylbenzene	0.0638	0.0613	0.050	ND	128	123	77-146	3.99	20
4-Isopropyl toluene	0.0604	0.0591	0.050	ND	121	118	96-159	2.14	20
Methyl-t-butyl ether (MTBE)	0.0403	0.0397	0.050	ND	81	79	58-122	1.53	20
Methylene chloride	0.0418	0.0410	0.050	ND	84	82	58-135	2.09	20
4-Methyl-2-pentanone (MIBK)	0.0325	0.0310	0.050	ND	65	62	40-112	4.63	20
Naphthalene	0.0230	0.0228	0.050	ND	46	46	23-73	0	20
n-Propyl benzene	0.0610	0.0587	0.050	ND	122	117	82-160	3.85	20
Styrene	0.0425	0.0414	0.050	ND	85	83	68-124	2.45	20
1,1,1,2-Tetrachloroethane	0.0492	0.0473	0.050	ND	98	95	70-128	3.80	20
1,1,2,2-Tetrachloroethane	0.0385	0.0377	0.050	ND	77	75	57-111	2.16	20
Tetrachloroethene	0.0517	0.0491	0.050	ND	103	98	73-145	4.98	20
Toluene	0.0489	0.0471	0.050	ND	98	94	76-130	3.65	20
1,2,3-Trichlorobenzene	0.0290	0.0292	0.050	ND	58	58	43-72	0	20
1,2,4-Trichlorobenzene	0.0375	0.0369	0.050	ND	75	74	47-95	1.56	20
1,1,1-Trichloroethane	0.0461	0.0448	0.050	ND	92	90	60-141	2.92	20
1,1,2-Trichloroethane	0.0426	0.0410	0.050	ND	85	82	62-118	3.75	20
Trichloroethene	0.0451	0.0435	0.050	ND	90	87	72-132	3.59	20
Trichlorofluoromethane	0.0356	0.0343	0.050	ND	71	69	43-135	3.84	20
1,2,3-Trichloropropane	0.0427	0.0402	0.050	ND	85	80	57-122	6.17	20
1,2,4-Trimethylbenzene	0.0552	0.0534	0.050	ND	110	107	81-152	3.34	20
1,3,5-Trimethylbenzene	0.0586	0.0566	0.050	ND	117	113	78-160	3.37	20
Vinyl Chloride	0.0306	0.0295	0.050	ND	61	59	42-131	3.74	20
Xylenes, Total	0.143	0.139	0.15	ND	95	93	70-130	2.74	20

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Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC38
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144360
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-144360
 1708915-005AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	0.143	0.144	0.12		115	115	70-130	0	20
Toluene-d8	0.151	0.149	0.12		121	119	70-130	1.14	20
4-BFB	0.0152	0.0151	0.012		121	121	70-130	0	20
Benzene-d6	0.101	0.0989	0.10		101	99	60-140	2.58	20
Ethylbenzene-d10	0.111	0.108	0.10		111	108	60-140	2.84	20
1,2-DCB-d4	0.0885	0.0864	0.10		89	86	60-140	2.44	20



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/29/17
Date Analyzed: 8/29/17
Instrument: GC17
Matrix: Soil
Project: 3372; West Valley College, Stockpile


WorkOrder: 1708C19
BatchID: 144556
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-144556

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	3.17	0.14	0.25	5	-	63	46-118
Acenaphthylene	ND	3.30	0.14	0.25	5	-	66	43-122
Acetochlor	ND	-	0.25	0.25	-	-	-	-
Anthracene	ND	3.14	0.14	0.25	5	-	63	47-125
Benzidine	ND	1.30	0.23	1.3	5	-	26	13-83
Benzo (a) anthracene	ND	3.41	0.14	0.25	5	-	68	53-117
Benzo (a) pyrene	ND	4.44	0.14	0.25	5	-	89	53-138
Benzo (b) fluoranthene	ND	3.88	0.14	0.25	5	-	78	48-125
Benzo (g,h,i) perylene	ND	3.98	0.15	0.25	5	-	80	51-146
Benzo (k) fluoranthene	ND	4.54	0.16	0.25	5	-	91	53-124
Benzyl Alcohol	ND	4.42	0.51	1.3	5	-	88	51-105
1,1-Biphenyl	ND	-	0.15	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	3.99	0.14	0.25	5	-	80	48-115
Bis (2-chloroethyl) Ether	ND	3.78	0.13	0.25	5	-	76	51-105
Bis (2-chloroisopropyl) Ether	ND	4.13	0.12	0.25	5	-	83, F2	85-119
Bis (2-ethylhexyl) Adipate	ND	5.13	0.25	0.25	5	-	103	46-117
Bis (2-ethylhexyl) Phthalate	ND	3.99	0.13	0.25	5	-	80	50-124
4-Bromophenyl Phenyl Ether	ND	3.91	0.16	0.25	5	-	78	70-112
Butylbenzyl Phthalate	ND	4.74	0.13	0.25	5	-	95	55-127
4-Chloroaniline	ND	2.40	0.13	0.50	5	-	48	18-77
4-Chloro-3-methylphenol	ND	4.48	0.12	0.25	5	-	90	49-123
2-Chloronaphthalene	ND	3.07	0.16	0.25	5	-	61	44-109
2-Chlorophenol	ND	3.96	0.14	0.25	5	-	79	55-116
4-Chlorophenyl Phenyl Ether	ND	3.77	0.15	0.25	5	-	75	45-122
Chrysene	ND	3.30	0.14	0.25	5	-	66	54-116
Dibenzo (a,h) anthracene	ND	4.10	0.16	0.25	5	-	82	52-141
Dibenzofuran	ND	3.56	0.13	0.25	5	-	71	46-117
Di-n-butyl Phthalate	ND	3.29	0.13	0.25	5	-	66	45-126
1,2-Dichlorobenzene	ND	3.92	0.12	0.25	5	-	78	55-105
1,3-Dichlorobenzene	ND	3.81	0.14	0.25	5	-	76	51-104
1,4-Dichlorobenzene	ND	3.44	0.13	0.25	5	-	69	50-102
3,3-Dichlorobenzidine	ND	2.50	0.12	0.50	5	-	50	20-84
2,4-Dichlorophenol	ND	4.63	0.13	0.25	5	-	93	54-124
Diethyl Phthalate	ND	3.30	0.14	0.25	5	-	66	42-118
2,4-Dimethylphenol	ND	4.38	0.13	0.25	5	-	88	53-120
Dimethyl Phthalate	ND	3.29	0.14	0.25	5	-	66	45-118
4,6-Dinitro-2-methylphenol	ND	4.13	0.13	1.3	5	-	83	32-126

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NELAP 4033ORELAP

 QA/QC Officer



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/29/17
Date Analyzed: 8/29/17
Instrument: GC17
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144556
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-144556

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrophenol	ND	3.30	1.3	6.3	5	-	66	20-130
2,4-Dinitrotoluene	ND	3.77	0.13	0.25	5	-	75	47-117
2,6-Dinitrotoluene	ND	4.05	0.14	0.25	5	-	81	48-121
Di-n-octyl Phthalate	ND	5.11	0.14	0.50	5	-	102	40-150
1,2-Diphenylhydrazine	ND	3.87	0.16	0.25	5	-	77, F2	88-117
Fluoranthene	ND	3.10	0.13	0.25	5	-	62	45-126
Fluorene	ND	3.24	0.14	0.25	5	-	65	43-118
Hexachlorobenzene	ND	3.50	0.17	0.25	5	-	70	47-130
Hexachlorobutadiene	ND	3.78	0.15	0.25	5	-	76	50-121
Hexachlorocyclopentadiene	ND	2.19	0.73	1.3	5	-	44	30-89
Hexachloroethane	ND	3.76	0.14	0.25	5	-	75	50-106
Indeno (1,2,3-cd) pyrene	ND	3.94	0.14	0.25	5	-	79	51-138
Isophorone	ND	3.38	0.12	0.25	5	-	68	38-92
2-Methylnaphthalene	ND	3.78	0.14	0.25	5	-	76	51-121
2-Methylphenol (o-Cresol)	ND	4.28	0.14	0.25	5	-	86	48-114
3 & 4-Methylphenol (m,p-Cresol)	ND	3.97	0.12	0.25	5	-	79	30-130
Naphthalene	ND	3.39	0.13	0.25	5	-	68	50-113
2-Nitroaniline	ND	3.88	0.62	1.3	5	-	78	45-115
3-Nitroaniline	ND	2.94	0.59	1.3	5	-	59	31-93
4-Nitroaniline	ND	3.79	0.55	1.3	5	-	76	41-108
Nitrobenzene	ND	4.44	0.14	0.25	5	-	89	49-122
2-Nitrophenol	ND	4.38	0.64	1.3	5	-	88	54-121
4-Nitrophenol	ND	2.59	0.41	1.3	5	-	52	40-102
N-Nitrosodiphenylamine	ND	-	0.16	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	3.52	0.13	0.25	5	-	70	47-108
Pentachlorophenol	ND	3.82	0.32	1.3	5	-	76	39-134
Phenanthrene	ND	3.08	0.14	0.25	5	-	62	49-123
Phenol	ND	3.70	0.12	0.25	5	-	74	49-107
Pyrene	ND	3.91	0.13	0.25	5	-	78	55-124
Pyridine	ND	6.06	0.25	0.25	5	-	121	70-130
1,2,4-Trichlorobenzene	ND	4.10	0.14	0.25	5	-	82	51-121
2,4,5-Trichlorophenol	ND	3.91	0.12	0.25	5	-	78	45-126
2,4,6-Trichlorophenol	ND	3.84	0.14	0.25	5	-	77	46-128



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/29/17
Date Analyzed: 8/29/17
Instrument: GC17
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144556
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-144556

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery								
2-Fluorophenol	5.218	4.80			5	104	96	47-125
Phenol-d5	5.357	4.78			5	107	96	45-117
Nitrobenzene-d5	5.245	5.15			5	105	103	39-121
2-Fluorobiphenyl	4.344	4.18			5	87	84	35-120
2,4,6-Tribromophenol	2.906	3.35			5	58	67	32-111
4-Terphenyl-d14	5.448	5.11			5	109	102	32-128



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17 - 8/28/17
Instrument: ICP-MS1, ICP-MS3
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144375
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-144375
 1708C14-029AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.9	0.094	0.50	50	-	102	75-125
Arsenic	ND	50.5	0.14	0.50	50	-	101	75-125
Barium	ND	502	0.97	5.0	500	-	100	75-125
Beryllium	ND	50.3	0.072	0.50	50	-	101	75-125
Cadmium	ND	49.9	0.058	0.25	50	-	100	75-125
Chromium	ND	48.5	0.092	0.50	50	-	97	75-125
Cobalt	ND	48.1	0.056	0.50	50	-	96	75-125
Copper	ND	48.6	0.069	0.50	50	-	97	75-125
Lead	ND	48.8	0.094	0.50	50	-	98	75-125
Mercury	0.009,J	1.28	0.0050	0.050	1.25	-	103	75-125
Molybdenum	ND	50.0	0.23	0.50	50	-	100	75-125
Nickel	ND	50.7	0.072	0.50	50	-	101	75-125
Selenium	ND	51.4	0.13	0.50	50	-	103	75-125
Silver	ND	49.6	0.055	0.50	50	-	99	75-125
Thallium	ND	47.1	0.10	0.50	50	-	94	75-125
Vanadium	ND	49.3	0.064	0.50	50	-	99	75-125
Zinc	ND	498	1.4	5.0	500	-	100	75-125
Surrogate Recovery								
Terbium	521.2	511			500	104	102	70-130



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17 - 8/28/17
Instrument: ICP-MS1, ICP-MS3
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144375
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-144375
 1708C14-029AMS/MSD

QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	46.8	46.8	50	ND	93	93	75-125	0	20
Arsenic	51.5	51.4	50	3.120	97	96	75-125	0.272	20
Barium	764	689	500	252.1	102	87	75-125	10.3	20
Beryllium	44.8	44.0	50	ND	89	87	75-125	1.69	20
Cadmium	46.3	46.5	50	ND	92	93	75-125	0.259	20
Chromium	89.4	98.6	50	38.61	102	120	75-125	9.76	20
Cobalt	50.2	50.4	50	7.472	85	86	75-125	0.497	20
Copper	70.1	82.0	50	28.75	83	106	75-125	15.7	20
Lead	57.4	62.6	50	14.64	85	96	75-125	8.72	20
Mercury	1.30	1.31	1.25	0.08200	98	98	75-125	0	20
Molybdenum	47.8	49.2	50	1.357	93	96	75-125	2.76	20
Nickel	85.0	90.8	50	32.84	104	116	75-125	6.58	20
Selenium	46.2	44.8	50	ND	92	89	75-125	3.01	20
Silver	46.0	45.0	50	ND	92	90	75-125	2.09	20
Thallium	45.2	44.8	50	ND	90	90	75-125	0	20
Vanadium	97.6	92.1	50	49.57	96	85	75-125	5.79	20
Zinc	522	502	500	58.73	93	89	75-125	3.81	20

Surrogate Recovery

Terbium	479	469	500		96	94	70-130	2.22	20
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Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.5	ND	-	-
Arsenic	2.80	3.120	10.3	-
Barium	267	252.1	5.91	20
Beryllium	ND<2.5	ND	-	-
Cadmium	ND<1.2	ND	-	-
Chromium	41.4	38.61	7.23	20
Cobalt	8.49	7.472	13.6	-
Copper	30.7	28.75	6.78	20
Lead	15.9	14.64	8.61	20
Mercury	ND<0.25	0.08200	-	-
Molybdenum	ND<2.5	1.357	-	-
Nickel	36.3	32.84	10.5	20
Selenium	ND<2.5	ND	-	-

(Cont.)



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17 - 8/28/17
Instrument: ICP-MS1, ICP-MS3
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144375
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-144375
 1708C14-029AMS/MSD

QC Summary Report for Metals

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	53.0	49.57	6.92	20
Zinc	65.3	58.73	11.2	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/24/17
Date Analyzed: 8/25/17
Instrument: GC9b
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144371
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-144371
 1708C15-001AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	36.7	0.86	1.0	40	-	92	79-133
TPH-Motor Oil (C18-C36)	ND	-	3.5	5.0	-	-	-	-
Surrogate Recovery								
C9	23.94	23.5			25	96	94	77-109
C26		23.3			25		93	81-103

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	40.0	43.1	40	ND	100	108	59-150	7.60	30
Surrogate Recovery									
C9	24.0	24.0	25		96	96	78-109	0	30
C26	23.6	23.7	25		94	95	70-130	0.380	30



Quality Control Report

Client: IRC Environmental Consulting
Date Prepared: 8/29/17
Date Analyzed: 8/29/17
Instrument: GC9b
Matrix: Soil
Project: 3372; West Valley College, Stockpile

WorkOrder: 1708C19
BatchID: 144577
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-144577

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	35.1	0.86	1.0	40	-	88	75-128
TPH-Motor Oil (C18-C36)	ND	-	3.5	5.0	-	-	-	-
Surrogate Recovery								
C9	25.14	24.8			25	101	99	72-122
C26	23.5	23.7			25	94	95	81-112



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1708C19

ClientCode: IRCE

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Benjamin Berman
IRC Environmental Consulting
430 South Fourth Street
San Jose, CA 95112
FAX:

Email: ircenvironmental@gmail.com
cc/3rd Party:
PO:
ProjectNo: 3372; West Valley College, Stockpile

Bill to:

Benjamin Berman
IRC Environmental Consulting
430 South Fourth Street
San Jose, CA 95112
ircenvironmental@gmail.com

Requested TAT: 5 days;

Date Received: 08/24/2017

Date Logged: 08/24/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1708C19-001	SP3-A,B,C,D	Soil	8/24/2017 11:09	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1708C19-002	SP3-E,F,G,H	Soil	8/24/2017 11:32	<input type="checkbox"/>	A	A	A	A	A	A	A	A					

Test Legend:

1	7199_TTLC_S	2	8081PCB_S	3	8260B_S	4	8270_S
5	CAM17MS_TTLC_S	6	CARB435_400	7	TPH(DMO)WSG_S	8	
9		10		11		12	

Prepared by: Alexandra Iniguez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: IRC ENVIRONMENTAL CONSULTING

Project: 3372; West Valley College, Stockpile

Work Order: 1708C19

Client Contact: Benjamin Berman

QC Level: LEVEL 2

Contact's Email: ircenvironmental@gmail.com

Comments:

Date Logged: 8/24/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1708C19-001A	SP3-A,B,C,D	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	4 / (4:1)	16OZ GJ	<input type="checkbox"/>	8/24/2017 11:09	5 days		<input type="checkbox"/>	
			Asbestos, CARB 435, 400 Point			<input type="checkbox"/>		5 days			
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days			
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days			
			SW7199 (Hexavalent chromium)			<input type="checkbox"/>		5 days			
1708C19-002A	SP3-E,F,G,H	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	4 / (4:1)	16OZ GJ	<input type="checkbox"/>	8/24/2017 11:32	5 days		<input type="checkbox"/>	
			Asbestos, CARB 435, 400 Point			<input type="checkbox"/>		5 days			
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days			
			SW8260B (VOCs)			<input type="checkbox"/>		5 days			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		5 days			
			SW7199 (Hexavalent chromium)			<input type="checkbox"/>		5 days			

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



McC Campbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, CA 94565-1701
www.mcccampbell.com / main@mcccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

1708C19

TURN AROUND TIME: RUSH 1 DAY 2 DAY 3 DAY 5 DAY

GeoTracker EDF PDF EDD Write On (DW) EQUIS 10 DAY

Effluent Sample Requiring "J" flag UST Clean Up Fund Project ; Claim # _____

Report To: Benjamin Berman Bill To: Hooman Sotoodeh at ESI

Company: IRC Environmental Consulting (IRC) c/o Benjamin Berman at IRC
(email invoice to B. Berman at IRC)

Tele: (408) 313 - 9376 E-Mail: ircenvironmental@gmail.com

Project #: 3372 Project Name: West Valley College, Stockpile

Project Location: Fruitvale Ave and Allendale Ave, Saratoga, CA

Sampler Signature: *B.B. and [Signature]*

Analysis Request

SAMPLE ID	Date	Time	# Containers	MATRIX					METHOD PRESERVED			CAM 17 Metals	TPH D-MO (8015) w Silica Gel Cleanup	Total List VOCs with TPH -Gasoline (8260)	Total SVOCs (8270)	OC Pesticides (8081)	PCBs (8082)	Asbestos (CARB 435)	Hexavalent Chromium					
				Water	Soil	Air	Sludge	Other	HCL	HNO ₃	ICE													
SP3-A	08-24-2017	10:25	1		X																			
SP3-B		10:36	1																					A 4-point composite, A, B, C, D
SP3-C		10:55	1																					
SP3-D		11:09	1																					
SP3-E		11:15	1																					
SP3-F		11:21	1																					4-point composite, E, F, G, H
SP3-G		11:27	1																					
SP3-H		11:32	1																					

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.
*** If metals are requested for water samples and the water type is not specified on the chain of custody, then MAI will default to metals by E200.8.

Relinquished By: <i>B.B.</i>	Date: 08/24/2017	Time: 11:35	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 8/24/17	Time: 12:29	Received By: <i>[Signature]</i>
Relinquished By: <i>[Signature]</i>	Date: 8/24	Time: 17:20	Received By: <i>[Signature]</i>

Please "J" Flag results <RL and >MDL.
Please report TPH D / MO / G in mg/kg. Need lowest possible RL / MDL for Pesticides and SVOCs. Endrin and Endrin Aldehyde need 0.65 ug/Kg MDL. Please do not dilute. Analyze two 4-point composites; A-B-C-D and E-F-G-H.

Page 1 of 1



Sample Receipt Checklist

Client Name: **IRC Environmental Consulting**
 Project Name: **3372; West Valley College, Stockpile**
 WorkOrder No: **1708C19** Matrix: Soil
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **8/24/2017 17:20**
 Date Logged: **8/24/2017**
 Received by: Alexandra Iniguez
 Logged by: Alexandra Iniguez

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample/Temp Blank temperature	Temp: 4.6°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments: