

**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
L.A., CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 6  
Date Received 09/02/2009  
Date Reported 09/11/2009

Job Number	Ordered	Client
42964	09/02/2009	LARWQB

Project ID: BOEING SSFL  
Project Name:  
site: Top Woolsey Cyn Road

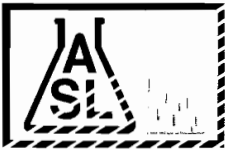
Enclosed are the results of analyses on 2 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# N2 52127 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# 42964

Company: <u>LA 2WQCB</u>				Report To: <u>PETER RAFTERY</u>		ANALYSIS REQUESTED							
Address: <u>320 W. 472 ST.</u>		Project Name: <u>ISRA 008</u>		Address: <u>320 W. 472 ST.</u>		<u>606/6020</u> <u>606/6020</u> <u>LEAD</u> <u>COPY</u>							
<u>LA CA 90013</u>		Site Address: <u>OUT FALL 008</u>		Invoice To: <u>ART LENOX</u>									
Telephone: <u>213 276 6704</u>				Address: <u>BOEING SSFL</u>									
Fax: <u>213 276 6717</u>													
Special Instruction:				Project ID:									
E-mail:				Project Manager: <u>PETER RAFTERY</u>		P.O.#:							
ITEM	LAB USE ONLY	SAMPLE DESCRIPTION			Container(s)		Matrix	Preservation					Remarks
	Lab ID	Sample ID	Date	Time	#	Type							
	<u>241229</u>	<u>HZET0300</u> <u>S001-2WQCB</u>	<u>2 SEPT. 09</u>	<u>11:50</u>		<u>GRAB SLEEVE</u> <u>STAINLESS</u>	<u>SOIL</u>	<u>ICE</u>	<u>X</u>	<u>X</u>			
	<u>241230</u>	<u>HZET0301</u> <u>S001-2WQCB</u>	<u>1 SEPT 09</u>	<u>11:38</u>		<u>GRAB SLEEVE</u> <u>STAINLESS</u>	<u>SOIL</u>	<u>ICE</u>	<u>X</u>	<u>X</u>			
Collected By: <u>[Signature]</u>		Date: <u>9/1/09</u>		Time: <u>12:00</u>		Relinquished By: <u>Peter Raftery</u>		Date: <u>2 Sept. 09</u>		Time: <u>9:20 A</u>		TAT	
Relinquished By: <u>[Signature]</u>		Date: <u>9/1/09</u>		Time: <u>12:00</u>		Received For Laboratory: <u>Janet Chin</u>		Date: <u>9.2.09</u>		Time: <u>9:20</u>		<input checked="" type="checkbox"/> Normal	
Received By: <u>Peter Raftery</u>		Date: <u>1 Sept 09</u>		Time: <u>12:00</u>		Condition of Sample:						<input type="checkbox"/> Rush	

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**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 L.A., CA 90013-

**Site**

Top Woolsey Cyn Road

Telephone: (213)576-6724

Attn: Peter Raftery

Page: **2**

Project ID: BOEING SSFL

ASL Job Number	Submitted	Client
42964	09/02/2009	LARWQB

Method: 6010B, Copper (ICP)

QC Batch No: 090809-1

Our Lab I.D.		241229	241230			
Client Sample I.D.		HZET 0300 S001-RWQC B	HZET 0301 S001-RWQC B			
Date Sampled		09/01/2009	09/01/2009			
Date Prepared		09/08/2009	09/08/2009			
Preparation Method						
Date Analyzed		09/09/2009	09/09/2009			
Matrix		Soil	Soil			
Units		mg/Kg	mg/Kg			
Dilution Factor		1	1			
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>			
<b>ICP Metals</b>						
Copper	0.500	579	3.58			

**QUALITY CONTROL REPORT**

QC Batch No: 090809-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>ICP Metals</b>									
Copper	97	80-120							



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**ANALYTICAL RESULTS**

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 320 W. 4th St.  
 L.A., CA 90013-

**Site**

Top Woolsey Cyn Road

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 3

Project ID: BOEING SSFL

ASL Job Number	Submitted	Client
42964	09/02/2009	LARWQB

Method: 6010B, Lead (ICP)

QC Batch No: 090809-1

Our Lab I.D.		241229	241230			
Client Sample I.D.		HZET 0300 S001-RWQC B	HZET 0301 S001-RWQC B			
Date Sampled		09/01/2009	09/01/2009			
Date Prepared		09/08/2009	09/08/2009			
Preparation Method						
Date Analyzed		09/09/2009	09/09/2009			
Matrix		Soil	Soil			
Units		mg/Kg	mg/Kg			
Dilution Factor		1	1			
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>			
<b>ICP Metals</b>						
Lead	0.250	44.7	3.44			

**QUALITY CONTROL REPORT**

QC Batch No: 090809-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>ICP Metals</b>									
Lead	97	80-120							

# CHAIN OF CUSTODY RECORD

9102042

Page 1 of 1

CLIENT NAME: <i>American Scientific Labs</i>		PROJECT: <i>42964</i>		ANALYSIS REQUESTED				<b>SPECIAL HANDLING</b> <input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input type="checkbox"/> 48 - 72 Hour Rush 75% <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extraction 50% <input checked="" type="checkbox"/> 10 - 15 Business Days <input checked="" type="checkbox"/> QA/QC Package Charges Will Apply For Weekends And Holidays Method of Shipment _____	
ADDRESS: <i>2520 N. San Fernando Road</i> <i>L.A. CA 90065</i>		PHONE #: <i>323 223 9700</i>							
PROJECT MANAGER: <i>Molky Bran</i>		FAX #: <i>323 223 9500</i>							
SAMPLER:		E MAIL: <i>molky@asllab.com</i>		Cu & Pb by GORAP (ICP/ms)				<b>COMMENTS</b>	
		P.O.#:							

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.														
	<i>9-1-09</i>		<i>soil</i>	<i>241229</i>	<i>1 Jon</i>	<i>x</i>	<i>x</i>												
			<i>u</i>	<i>241230</i>	<i>u</i>	<i>x</i>	<i>x</i>												

RELINQUISHED BY:		DATE / TIME		RECEIVED BY:		SAMPLE CONDITION:		SAMPLE TYPE CODE:	
SIGNATURE <i>Alex</i>	PRINT NAME <i>Alex</i>	<i>9/2/09 1350</i>		SIGNATURE <i>Jaime G...er</i>	PRINT NAME	Actual Temperature: <i>6.3C</i>		AQ= Aqueous NA= Non Aqueous SL= Sludge DW= Drinking Water WW= Waste Water RW= Rain Water GW= Ground Water SO= Soil SW= Solid Waste OL= Oil OT= Other Matrix	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Received On Ice <i>(Y)</i>		Y / <i>(N)</i>	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Preserved <i>(Y)</i>		Y / <i>(N)</i>	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Evidence Seals Present <i>(Y)</i>		Y / <i>(N)</i>	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Container Attacked <i>(Y)</i>		Y / <i>(N)</i>	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Preserved at Lab <i>(Y)</i>		Y / <i>(N)</i>	

**PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS. CLIENT AGREES TO TERMS AND CONDITIONS (SEE BACK OF THIS FORM).**

SPECIAL REQUIREMENTS / BILLING INFORMATION



**Certificate of Analysis**

**Report Date:** Wednesday, September 9, 2009  
**Received Date:** Wednesday, September 2, 2009  
**Received Time:** 1:50 pm  
**Turnaround Time:** Normal

**Client:** American Scientific Laboratories  
 2520 N. San Fernando Road  
 Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 42964

**P.O. #:**

<b>Lab Sample ID: 9102042-01</b>		<b>Sample ID: 241229</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 09/01/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	430	0.061	2.0	mg/kg	1x1	EPA 6020	9/3/09	9/9/09 1:31	W9I0295		
Lead, Total	70	0.11	1.0	mg/kg	1x1	EPA 6020B	9/3/09	9/9/09 1:31	W9I0295		

<b>Lab Sample ID: 9102042-02</b>		<b>Sample ID: 241230</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 09/01/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	4.8	0.061	2.0	mg/kg	1x1	EPA 6020	9/3/09	9/9/09 1:36	W9I0295		
Lead, Total	4.5	0.11	1.0	mg/kg	1x1	EPA 6020B	9/3/09	9/9/09 1:36	W9I0295		



### Certificate of Analysis

### Quality Control Section

#### Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

**Batch W9I0295 - EPA 6020**

<b>Blank (W9I0295-BLK1)</b>					<b>Prepared: 09/03/09</b>		<b>Analyzed: 09/09/09 01:04</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit

Copper, Total ..... ND mg/kg

Lead, Total ..... ND mg/kg

**LCS (W9I0295-BS1)**

**Prepared: 09/03/09 Analyzed: 09/09/09 01:09**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Copper, Total		54.3		mg/kg	50.0	109	87-117		
Lead, Total		51.0		mg/kg	50.0	102	80-127		

**LCS Dup (W9I0295-BSD1)**

**Prepared: 09/03/09 Analyzed: 09/09/09 01:13**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Copper, Total		54.3		mg/kg	50.0	109	87-117	0.02	20
Lead, Total		50.9		mg/kg	50.0	102	80-127	0.2	20

**Matrix Spike (W9I0295-MS1)**

**Source: 9H27049-01**

**Prepared: 09/03/09 Analyzed: 09/09/09 01:41**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Copper, Total		77.2		mg/kg	48.5	159	68-127		
Lead, Total		56.7		mg/kg	48.5	117	75-130		

**Matrix Spike Dup (W9I0295-MSD1)**

**Source: 9H27049-01**

**Prepared: 09/03/09 Analyzed: 09/09/09 01:45**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Copper, Total		77.5		mg/kg	47.1	165	68-127	0.5	20
Lead, Total		54.5		mg/kg	47.1	116	75-130	4	20

## Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.  
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.  
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services. The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).  
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002




---

**Authorized Signature**

Contact: Kim G Tu (Project Manager)



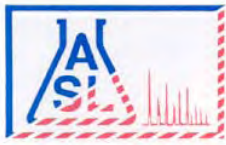
ELAP # 1132  
LACSD # 10143  
NELAC # 04229CA

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- ND            NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub           Subcontracted analysis, original report enclosed.
- Dil           The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b"
- DL           Method Detection Limit
- RL           Method Reporting Limit
- MDA         Minimum Detectable Activity





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*Environmental Testing Services*

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**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213)576-6724  
Attn Peter Raftery

Number of Pages 4  
Date Received 09/16/2009  
Date Reported 09/28/2009

Job Number	Ordered	Client
43106	09/16/2009	LARWQB

Project ID: BOEING SSFL ISRA 008  
Project Name:  
Site: 5800 Woolsey Cyn Dr.

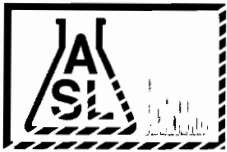
Enclosed are the results of analyses on 2 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

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- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



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Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# N# 52131 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# 43106

Company: <u>Water Quality Control</u>				Report To: <u>PETER RAFFERTY</u>				ANALYSIS REQUESTED														
Address: <u>230 W. 47th St</u>				Project Name: <u>Boeing 5576 152A 008</u>				Address: <u>220 W. 47th St</u>				Copies, Less 6026										
Telephone: <u>213 276 5424</u>				Site Address: <u>5500 Woodley Circle</u>				Invoice To: <u>Boeing</u>														
Special Instruction:				Project ID:				Address: <u>5500 Woodley Circle</u>														
E-mail: <u>PRAFFERTY@ASL-LAB.COM</u>				Project Manager:				P.O.#:														
I T E M	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation													Remarks
	Lab ID	Sample ID	Date	Time	#	Type																
	<u>241856</u>	<u>112:103028004</u>	<u>15 Sep 07</u>	<u>0900</u>	<u>1</u>	<u>Soil</u>	<u>Soil</u>	<u>10E</u>													<u>X</u>	
	<u>241857</u>	<u>112:103028004</u>	<u>15 Sep 07</u>	<u>0915</u>	<u>1</u>	<u>Soil</u>	<u>Soil</u>	<u>10E</u>													<u>X</u>	

Collected By: <u>[Signature]</u> Date <u>9/15/07</u> Time <u>0923</u>	Relinquished By: <u>[Signature]</u> Date <u>16/2/09</u> Time <u>8:50</u>	TAT <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush
Relinquished By: <u>[Signature]</u> Date <u>16/2/09</u> Time <u>0923</u>	Received For Laboratory: <u>[Signature]</u> Date <u>9/16/09</u> Time <u>09:50</u>	
Received By: <u>[Signature]</u> Date <u>15 Sep 09</u> Time <u>9:23</u>	Condition of Sample:	





### Certificate of Analysis

**Report Date:** Friday, September 18, 2009  
**Received Date:** Wednesday, September 16, 2009  
**Received Time:** 1:30 pm  
**Turnaround Time:** Normal

**Client:** American Scientific Laboratories  
2520 N. San Fernando Road  
Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 43106

**P.O. #:**

<b>Lab Sample ID: 9116028-01</b>		<b>Sample ID: 241856</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 09/15/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	48	0.061	2.0	mg/kg	1x1	EPA 6020	9/16/09	9/18/09 15:24	W9I0631		
Lead, Total	24	0.11	1.0	mg/kg	1x1	EPA 6020B	9/16/09	9/18/09 15:24	W9I0631		

<b>Lab Sample ID: 9116028-02</b>		<b>Sample ID: 241857</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 09/15/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	16	0.061	2.0	mg/kg	1x1	EPA 6020	9/16/09	9/18/09 15:29	W9I0631		
Lead, Total	9.9	0.11	1.0	mg/kg	1x1	EPA 6020B	9/16/09	9/18/09 15:29	W9I0631		



### Certificate of Analysis

### Quality Control Section

#### Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

**Batch W9I0631 - EPA 6020**

<b>Blank (W9I0631-BLK1)</b>					<b>Prepared: 09/16/09</b>		<b>Analyzed: 09/18/09 14:07</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit

Copper, Total ..... ND ..... mg/kg

Lead, Total ..... ND ..... mg/kg

**LCS (W9I0631-BS1)**

**Prepared: 09/16/09 Analyzed: 09/18/09 14:12**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
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Copper, Total ..... 55.3 ..... mg/kg 50.0 111 87-117

Lead, Total ..... 51.1 ..... mg/kg 50.0 102 80-127

**LCS Dup (W9I0631-BSD1)**

**Prepared: 09/16/09 Analyzed: 09/18/09 14:16**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
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Copper, Total ..... 54.8 ..... mg/kg 50.0 110 87-117 1 20

Lead, Total ..... 50.4 ..... mg/kg 50.0 101 80-127 1 20

**Matrix Spike (W9I0631-MS1)**

**Source: 9I16026-01**

**Prepared: 09/16/09 Analyzed: 09/18/09 15:33**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
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Copper, Total ..... 5.66 ..... 56.5 ..... mg/kg 49.5 103 68-127

Lead, Total ..... 2.51 ..... 52.1 ..... mg/kg 49.5 100 75-130

**Matrix Spike Dup (W9I0631-MSD1)**

**Source: 9I16026-01**

**Prepared: 09/16/09 Analyzed: 09/18/09 15:38**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
---------	---------------	-----------	-----------	-------	-------------	------	-------------	-----	-----------

Copper, Total ..... 5.66 ..... 56.1 ..... mg/kg 47.6 106 68-127 0.7 20

Lead, Total ..... 2.51 ..... 51.9 ..... mg/kg 47.6 104 75-130 0.4 20

### Certificate of Analysis

**Notes:**

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If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002



*Kim Tu*  
\_\_\_\_\_  
**Authorized Signature**

Contact: Kim G Tu (Project Manager)

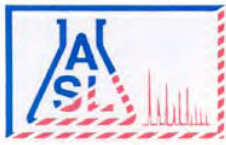


ELAP # 1132  
LACSD # 10143  
NELAC # 04229CA

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub Subcontracted analysis, original report enclosed.
- Dil The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b". (a) and (b) are indicated as whole numbers with rounding up for  $\geq 0.5$  and off for  $< 0.5$
- DL Method Detection Limit
- RL Method Reporting Limit
- MDA Minimum Detectable Activity



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 28  
Date Received 09/21/2009  
Date Reported 10/23/2009

Job Number	Ordered	Client
43153	09/21/2009	LARWQB

Project ID: BOEING SSFL ISRA008  
Project Name: Santa Susana Field Lab  
Site: 5800 Woolsey Cyn Road  
Canoga Park, CA 91304-1148

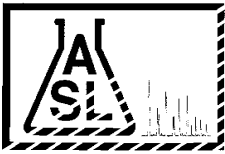
Enclosed are the results of analyses on 4 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# **N<sup>o</sup> 52324** GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# **43153**

Company: <u>L.A. Regional Water Quality Control Board</u>		Report To: <u>PETER RAFFERTY</u>	ANALYSIS REQUESTED			
Address: <u>320 W. 47th St.</u>		Project Name: <u>Boeing SSFL 152A008</u>	Address: <u>320 W. 47th St.</u>			
<u>L.A. 90013</u>		Site Address: <u>Santa Susana Field Lab</u>	<u>L.A. CA. 90013</u>			
Telephone: <u>213 576 6724</u>		<u>5800 Woolsey Cyn Rd.</u>	Invoice To: <u>Art Lenox</u>			
Fax: <u>213 576 6717</u>		<u>CANOGA PARK, CA 91304-1148</u>	<u>818.466.8795</u>			
Special Instruction:		Project ID: <u>Lot 2 / Art Lenox</u>	Address: <u>Santa Susana Field Lab</u>			
E-mail: <u>PRAFFERTY@WATERQUALITYCONTROLBOARD.CA.GOV</u>		Project Manager: <u>[Signature]</u>	<u>5800 Woolsey Cyn Rd</u>			
			<u>CANOGA PARK, CA 91304-1148</u>			
			P.O.#:			

ITEM	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation	Remarks
	Lab ID	Sample ID	Date	Time	#	Type				
	<u>242064</u>	<u>H2ET0600S001</u> <u>- 2WQCB</u>	<u>21 Sept 09</u>	<u>0900</u>	<u>1</u>	<u>STAINLESS STEEL SLEEVE</u>	<u>Soil</u>	<u>ICE</u>	<u>X</u>	
	<u>242065</u>	<u>H2ET0602S001</u> <u>- 2WQCB</u>	<u>21 Sept 09</u>	<u>0905</u>	<u>1</u>	<u>STAINLESS STEEL SLEEVE</u>	<u>Soil</u>	<u>ICE</u>	<u>X</u>	
	<u>242066</u>	<u>H2ET0100S001</u> <u>- CWQCB</u>	<u>21 Sept 09</u>	<u>0925</u>	<u>1</u>	<u>STAINLESS STEEL SLEEVE</u>	<u>Soil</u>	<u>ICE</u>	<u>X</u>	<u>X</u>
	<u>242067</u>	<u>H2ET0101S001</u> <u>- CWQCB</u>	<u>21 Sept 09</u>	<u>0935</u>	<u>1</u>	<u>STAINLESS STEEL SLEEVE</u>	<u>Soil</u>	<u>ICE</u>	<u>X</u>	<u>X</u>

Collected By: <u>[Signature]</u> Date <u>21 Sept 09</u> Time <u>11:11</u>	Relinquished By: <u>[Signature]</u> Date <u>21 Sept 09</u> Time <u>11:05</u>	TAT <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush
Relinquished By: <u>[Signature]</u> Date <u>21 Sept 09</u> Time <u>09:11</u>	Received For Laboratory <u>Janet Chin</u> Date <u>9.21.09</u> Time <u>11:05</u>	
Received By: <u>[Signature]</u> Date <u>21 Sept 09</u> Time _____	Condition of Sample: _____	

CHAIN OF CUSTODY RECORD







### Certificate of Analysis

**Report Date:** Friday, October 2, 2009  
**Received Date:** Monday, September 21, 2009  
**Received Time:** 1:28 pm  
**Turnaround Time:** Normal

**Client:** American Scientific Laboratories  
 2520 N. San Fernando Road  
 Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 43153

**P.O. #:**

**Lab Sample ID:** 9I21026-01      **Sample ID:** 242064      **Matrix:** Solid  
**Sampled by:** Client      **Sampled:** 09/21/09 09:00

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Cadmium, Total	ND	0.063	0.50	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:47	W9I0982	
Zinc, Total	51	1.1	10	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:47	W9I0982	
Lead, Total	6.4	0.11	1.0	mg/kg	1x1	EPA 6020B	9/25/09	9/29/09 21:47	W9I0982	

**Lab Sample ID:** 9I21026-02      **Sample ID:** 242065      **Matrix:** Solid  
**Sampled by:** Client      **Sampled:** 09/21/09 09:05

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Cadmium, Total	ND	0.063	0.50	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:53	W9I0982	
Zinc, Total	44	1.1	10	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:53	W9I0982	
Lead, Total	5.3	0.11	1.0	mg/kg	1x1	EPA 6020B	9/25/09	9/29/09 21:53	W9I0982	

**Lab Sample ID:** 9I21026-03      **Sample ID:** 242066      **Matrix:** Solid  
**Sampled by:** Client      **Sampled:** 09/21/09 09:25

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Cadmium, Total	ND	0.063	0.50	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:59	W9I0982	
Zinc, Total	53	1.1	10	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 21:59	W9I0982	
Lead, Total	7.8	0.11	1.0	mg/kg	1x1	EPA 6020B	9/25/09	9/29/09 21:59	W9I0982	

**Lab Sample ID:** 9I21026-04      **Sample ID:** 242067      **Matrix:** Solid  
**Sampled by:** Client      **Sampled:** 09/21/09 09:35

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Cadmium, Total	ND	0.063	0.50	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 22:05	W9I0982	
Zinc, Total	54	1.1	10	mg/kg	1x1	EPA 6020	9/25/09	9/29/09 22:05	W9I0982	
Lead, Total	6.2	0.11	1.0	mg/kg	1x1	EPA 6020B	9/25/09	9/29/09 22:05	W9I0982	



**Certificate of Analysis**

**Quality Control Section**

**Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control**

**Batch W9I0982 - EPA 6020**

<b>Blank (W9I0982-BLK1)</b>					<b>Prepared: 09/25/09</b>		<b>Analyzed: 09/29/09 21:23</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Zinc, Total .....		ND		mg/kg					
Cadmium, Total .....		ND		mg/kg					
Lead, Total .....		ND		mg/kg					

<b>LCS (W9I0982-BS1)</b>					<b>Prepared: 09/25/09</b>		<b>Analyzed: 09/29/09 21:29</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Zinc, Total .....		49.7		mg/kg	50.0	99	82-122		
Cadmium, Total .....		49.2		mg/kg	50.0	98	85-115		
Lead, Total .....		49.2		mg/kg	50.0	98	80-127		

<b>LCS Dup (W9I0982-BSD1)</b>					<b>Prepared: 09/25/09</b>		<b>Analyzed: 09/29/09 21:35</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Zinc, Total .....		49.2		mg/kg	50.0	98	82-122	0.9	20
Cadmium, Total .....		47.2		mg/kg	50.0	94	85-115	4	20
Lead, Total .....		47.9		mg/kg	50.0	96	80-127	3	20

<b>Matrix Spike (W9I0982-MS1)</b>					<b>Source: 9I21026-01</b>		<b>Prepared: 09/25/09</b>		<b>Analyzed: 09/29/09 22:10</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Zinc, Total .....	50.9 .....	97.1		mg/kg	47.6	97	65-131			
Cadmium, Total .....	ND .....	48.2		mg/kg	47.6	101	85-121			
Lead, Total .....	6.42 .....	54.0		mg/kg	47.6	100	75-130			

<b>Matrix Spike Dup (W9I0982-MSD1)</b>					<b>Source: 9I21026-01</b>		<b>Prepared: 09/25/09</b>		<b>Analyzed: 09/29/09 22:16</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Zinc, Total .....	50.9 .....	97.6		mg/kg	49.0	95	65-131	0.4	20	
Cadmium, Total .....	ND .....	49.5		mg/kg	49.0	101	85-121	3	20	
Lead, Total .....	6.42 .....	55.8		mg/kg	49.0	101	75-130	3	20	

### Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.  
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.  
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services. The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).  
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002



**Authorized Signature**

Contact: Nicole Van Nas For Kim G Tu (Project Manager)



ELAP # 1132  
LACSD # 10143  
NELAC # 04229CA

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub Subcontracted analysis, original report enclosed.
- Dil The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b". (a) and (b) are indicated as whole numbers with rounding up for  $\geq 0.5$  and off for  $< 0.5$
- DL Method Detection Limit
- RL Method Reporting Limit
- MDA Minimum Detectable Activity



AMERICAN SCIENTIFIC LABORATORIES, LLC  
 Environmental Testing Services  
 2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COG# N<sub>0</sub> 52324 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# 43153

Company: L. A. Regional Water Quality Control Board. Report To: PETER BATTERY ANALYSIS REQUESTED

Address: 320 W. 47th St. Project Name: Boeing SSFL 1512A 008 Address: 320 W. 47th St. L.A. CA, 90013

L. A. 90013 Site Address: Santa Susana Field Labs Invoice To: Art Lenoix 818.466.8795

Telephone: 215.576.6724 5800 Woolsey Cyn Rd, Address: Santa Susana Field Labs

Fax: 215.576.6717 Canoga Park, CA 91304-1148

Special Instruction: Project ID: Lorrain / Art Lenoix

E-mail: P.BATTERY@WATERBOARDS.CA.GOV Project Manager: P.O.#:

LAB USE ONLY	SAMPLE DESCRIPTION			Container(s)	Matrix	Preservation	ANALYSIS REQUESTED				Remarks	
	Lab ID	Sample ID	Date				Time	#	Type	LEAD 6020		6020
	242064	HEET06005001 -RU00C8	21 Sept 09	0900	1	SOIL	ICE	X				
	242065	HEET01005001 -RU00C8	21 Sept 09	0905	1	SOIL	ICE	X	X	X		
	242066	HEET01015001 -RU00C8	21 Sept 09	0935	1	SOIL	ICE	X	X	X		

Collected By: [Signature] Date: 21 Sept 09 Time: 0941 Relinquished By: [Signature] Date: 21 Sept 09 Time: 11:05

Received By: [Signature] Date: 21 Sept 09 Time: [Blank] Condition of Sample: [Blank]

TAT  Normal  Rush

October 22, 2009

**TestAmerica Project Number: G9I220221**

PO/Contract:

Molky Brar  
American Scientific Lab  
2520 N. San Fernando Rd  
Los Angeles, CA 90065

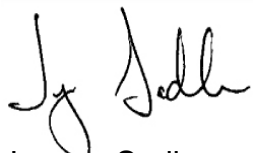
Dear Mr. Brar,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on September 22, 2009. These samples are associated with your 43153 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4381.

Sincerely,



Jeremy Sadler  
Project Manager

## Table of Contents

# TestAmerica West Sacramento Project Number G9I220221

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

SOLID, 1613B, Dioxins/Furans, HRGC/HRMS

Samples: 1, 2

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

SOLID, D 2216-90, Percent Moisture

Samples: 1, 2

Sample Data Sheets

Laboratory QC Report

## Case Narrative

### TestAmerica West Sacramento Project Number G9I220221

#### **SOLID, 1613B, Dioxins/Furans, HRGC/HRMS**

Samples: 1, 2

Analytes in each sample have been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analytes have been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for these analytes.

There were no other anomalies associated with this project.



### TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas	T104704399-08-TX
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C1281
Hawaii	NA	West Virginia	9930C, 334
Illinois	200060	Wisconsin	998204680
Kansas*	E-10375	NFESC	NA
Louisiana*	30612	USACE	NA
Michigan	9947	USDA Foreign Plant	37-82605
Nevada	CA44	USDA Foreign Soil	P330-09-00055
New Jersey*	CA005	US Fish & Wildlife	LE148388-0
New Mexico	NA	Guam	09-014r

\*NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

### QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

# Sample Summary

## TestAmerica West Sacramento Project Number G9I220221

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
LK86V	1	242066	9/21/2009	9/22/2009 09:15 AM
LK86X	2	242067	9/21/2009	9/22/2009 09:15 AM

### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.



CLIENT American Scientific PM 55 LOG# 60841

LOT# (QUANTIMS ID) G91220221 QUOTE# 35699 LOCATION WID

DATE RECEIVED 9-22-09 TIME RECEIVED 915 Initials W Date 9-22-09

- DELIVERED BY
- FEDEX
  - AIRBORNE
  - UPS
  - TAL COURIER
  - OTHER
  - CA OVERNIGHT
  - GOLDENSTATE
  - BAX GLOBAL
  - VALLEY LOGISTICS
  - CLIENT
  - DHL
  - GO-GETTERS
  - MORGAN HILL COURIER

CUSTODY SEAL STATUS  INTACT  BROKEN  N/A

CUSTODY SEAL #(S) \_\_\_\_\_

SHIPPING CONTAINER(S)  TAL  CLIENT  N/A

TEMPERATURE RECORD (IN °C) IR 4  5  OTHER \_\_\_\_\_

COC #(S) \_\_\_\_\_

TEMPERATURE BLANK Observed: N/A Corrected: \_\_\_\_\_

SAMPLE TEMPERATURE  
Observed: 6 6 Average: 6 Corrected Average: 6

COLLECTOR'S NAME:  Verified from COC  Not on COC

pH MEASURED  YES  ANOMALY  N/A

LABELED BY.....

LABELS CHECKED BY.....

PEER REVIEW  NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING  
WETCHEM  N/A  
VOA-ENCORES  N/A

METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL  N/A

COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES  N/A

CLOUSEAU  TEMPERATURE EXCEEDED (2 °C - 6 °C)\*  N/A

WET ICE  BLUE ICE  GEL PACK  NO COOLING AGENTS USED  PM NOTIFIED

Notes: \_\_\_\_\_

Lot ID: G9I220221

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
VOAh*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
___AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
___CGJ																				
500CGJ																				
250CGJ																				
125CGJ	1	1																		
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
___"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

h = hydrochloric acid    s = sulfuric acid    na = sodium hydroxide    n = nitric acid    zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 4/09 RKE

LEAVE NO SPACES BLANK. USE "NA" IF NOT APPLICABLE.

**SOLID, 1613B,  
Dioxins/Furans,  
HRGC/HRMS**

American Scientific Laboratories LLC

Client Sample ID: 242066

Trace Level Organic Compounds

Lot-Sample #...: G9I220221-001    Work Order #...: LK86V3AC    Matrix.....: SOLID  
 Date Sampled...: 09/21/09    Date Received...: 09/22/09  
 Prep Date.....: 10/14/09    Analysis Date...: 10/19/09  
 Prep Batch #...: 9287351  
 Dilution Factor: 0.99  
 % Moisture.....: 1.8

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	0.061 J	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	0.37 J	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	1.2 J	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	0.70 J	5.1	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	40	5.1	pg/g	EPA-5 1613B
OCDD	640	10	pg/g	EPA-5 1613B
2,3,7,8-TCDF	0.28 J,Q,B	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	0.47 J	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	0.18 J,Q	5.1	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	0.18 J	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	4.1 J	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	0.34 J	5.1	pg/g	EPA-5 1613B
OCDF	9.9 J	10	pg/g	EPA-5 1613B

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	(25 - 164)
13C-1,2,3,7,8-PeCDD	97	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	79	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	99	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	85	(23 - 140)
13C-OCDD	82	(17 - 157)
13C-2,3,7,8-TCDF	74	(24 - 169)
13C-1,2,3,7,8-PeCDF	91	(24 - 185)
13C-2,3,4,7,8-PeCDF	89	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	91	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	82	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	78	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	76	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	74	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	81	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	92	(35 - 197)

(Continued on next page)

**American Scientific Laboratories LLC**

**Client Sample ID: 242066**

**Trace Level Organic Compounds**

**Lot-Sample #...: G9I220221-001    Work Order #...: LK86V3AC    Matrix.....: SOLID**

**NOTE(S) :**

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Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.



American Scientific Laboratories LLC

Client Sample ID: 242067

Trace Level Organic Compounds

Lot-Sample #...: G9I220221-002    Work Order #...: LK86X3AC    Matrix.....: SOLID  
 Date Sampled...: 09/21/09    Date Received...: 09/22/09  
 Prep Date.....: 10/14/09    Analysis Date...: 10/19/09  
 Prep Batch #...: 9287351  
 Dilution Factor: 0.95  
 % Moisture.....: 6.1

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	0.068 J,Q	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	0.23 J	5.1	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	0.76 J,Q	5.1	pg/g	EPA-5 1613B
OCDD	11	10	pg/g	EPA-5 1613B
2,3,7,8-TCDF	0.090 J,Q,B	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	0.062 J,Q	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.1	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	0.081 J,Q	5.1	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	0.22 J	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.1	pg/g	EPA-5 1613B
OCDF	0.21 J,Q	10	pg/g	EPA-5 1613B

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	79	(25 - 164)
13C-1,2,3,7,8-PeCDD	95	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	78	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	94	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	80	(23 - 140)
13C-OCDD	74	(17 - 157)
13C-2,3,7,8-TCDF	74	(24 - 169)
13C-1,2,3,7,8-PeCDF	87	(24 - 185)
13C-2,3,4,7,8-PeCDF	87	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	87	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	81	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	77	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	73	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	75	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	75	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	202 *	(35 - 197)

(Continued on next page)

American Scientific Laboratories LLC

Client Sample ID: 242067

Trace Level Organic Compounds

Lot-Sample #...: G9I220221-002 Work Order #...: LK86X3AC Matrix.....: SOLID

**NOTE (S) :**

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\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

# QC DATA ASSOCIATION SUMMARY

G9I220221

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	EPA-5 1613B		9287351	
	SOLID	ASTM D 2216-90		9274252	9274138
002	SOLID	EPA-5 1613B		9287351	
	SOLID	ASTM D 2216-90		9274252	9274138

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G9I220221  
 MB Lot-Sample #: G9J140000-351

Work Order #...: LMJ9V1AA

Matrix.....: SOLID

Prep Date.....: 10/14/09

Analysis Date...: 10/19/09

Prep Batch #...: 9287351

Dilution Factor: 1

PARAMETER	RESULT	DETECTION		
		LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	5.0	pg/g	EPA-5 1613B
OCDD	ND	10	pg/g	EPA-5 1613B
<b>2,3,7,8-TCDF</b>	<b>0.035 J</b>	<b>1.0</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.0	pg/g	EPA-5 1613B
OCDF	ND	10	pg/g	EPA-5 1613B

INTERNAL STANDARDS	PERCENT	RECOVERY
	RECOVERY	LIMITS
13C-2,3,7,8-TCDD	84	(25 - 164)
13C-1,2,3,7,8-PeCDD	96	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	88	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	89	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	86	(23 - 140)
13C-OCDD	81	(17 - 157)
13C-2,3,7,8-TCDF	73	(24 - 169)
13C-1,2,3,7,8-PeCDF	84	(24 - 185)
13C-2,3,4,7,8-PeCDF	86	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	93	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	84	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	81	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	78	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	79	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	78	(26 - 152)

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
37C14-2,3,7,8-TCDD	90	(35 - 197)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than the reporting limit.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G9I220221      Work Order #...: LMJ9V1AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J140000-351      LMJ9V1AD-LCSD  
 Prep Date.....: 10/14/09      Analysis Date...: 10/19/09  
 Prep Batch #...: 9287351  
 Dilution Factor: 1

PARAMETER	PERCENT	RECOVERY	RPD		METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
2,3,7,8-TCDD	93	(67 - 158)			EPA-5 1613B
	94	(67 - 158)	0.80	(0-50)	EPA-5 1613B
1,2,3,7,8-PeCDD	98	(70 - 142)			EPA-5 1613B
	103	(70 - 142)	5.5	(0-50)	EPA-5 1613B
1,2,3,4,7,8-HxCDD	100	(70 - 164)			EPA-5 1613B
	96	(70 - 164)	4.6	(0-50)	EPA-5 1613B
1,2,3,6,7,8-HxCDD	101	(76 - 134)			EPA-5 1613B
	104	(76 - 134)	3.8	(0-50)	EPA-5 1613B
1,2,3,7,8,9-HxCDD	102	(64 - 162)			EPA-5 1613B
	99	(64 - 162)	3.2	(0-50)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	103	(70 - 140)			EPA-5 1613B
	103	(70 - 140)	0.13	(0-50)	EPA-5 1613B
OCDD	100	(78 - 144)			EPA-5 1613B
	96	(78 - 144)	3.6	(0-50)	EPA-5 1613B
2,3,7,8-TCDF	96	(75 - 158)			EPA-5 1613B
	97	(75 - 158)	1.5	(0-50)	EPA-5 1613B
1,2,3,7,8-PeCDF	96	(80 - 134)			EPA-5 1613B
	99	(80 - 134)	3.0	(0-50)	EPA-5 1613B
2,3,4,7,8-PeCDF	95	(68 - 160)			EPA-5 1613B
	99	(68 - 160)	4.5	(0-50)	EPA-5 1613B
1,2,3,4,7,8-HxCDF	94	(72 - 134)			EPA-5 1613B
	96	(72 - 134)	1.6	(0-50)	EPA-5 1613B
1,2,3,6,7,8-HxCDF	97	(84 - 130)			EPA-5 1613B
	100	(84 - 130)	2.8	(0-50)	EPA-5 1613B
2,3,4,6,7,8-HxCDF	95	(70 - 156)			EPA-5 1613B
	100	(70 - 156)	5.1	(0-50)	EPA-5 1613B
1,2,3,7,8,9-HxCDF	98	(78 - 130)			EPA-5 1613B
	101	(78 - 130)	3.0	(0-50)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	97	(82 - 122)			EPA-5 1613B
	101	(82 - 122)	3.6	(0-50)	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	95	(78 - 138)			EPA-5 1613B
	100	(78 - 138)	4.8	(0-50)	EPA-5 1613B
OCDF	91	(63 - 170)			EPA-5 1613B
	93	(63 - 170)	2.2	(0-50)	EPA-5 1613B

(Continued on next page)



LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G9I220221      Work Order #...: LMJ9V1AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J140000-351      LMJ9V1AD-LCSD  
 Prep Date.....: 10/14/09      Analysis Date...: 10/19/09  
 Prep Batch #...: 9287351  
 Dilution Factor: 1

PARAMETER	SPIKE		MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD		
2,3,7,8-TCDD	20.0	18.6	pg/g	93			EPA-5 1613B
	20.0	18.8	pg/g	94	0.80		EPA-5 1613B
1,2,3,7,8-PeCDD	100	97.5	pg/g	98			EPA-5 1613B
	100	103	pg/g	103	5.5		EPA-5 1613B
1,2,3,4,7,8-HxCDD	100	100	pg/g	100			EPA-5 1613B
	100	95.8	pg/g	96	4.6		EPA-5 1613B
1,2,3,6,7,8-HxCDD	100	101	pg/g	101			EPA-5 1613B
	100	104	pg/g	104	3.8		EPA-5 1613B
1,2,3,7,8,9-HxCDD	100	102	pg/g	102			EPA-5 1613B
	100	98.6	pg/g	99	3.2		EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	100	103	pg/g	103			EPA-5 1613B
	100	103	pg/g	103	0.13		EPA-5 1613B
OCDD	200	199	pg/g	100			EPA-5 1613B
	200	192	pg/g	96	3.6		EPA-5 1613B
2,3,7,8-TCDF	20.0	19.2	pg/g	96			EPA-5 1613B
	20.0	19.5	pg/g	97	1.5		EPA-5 1613B
1,2,3,7,8-PeCDF	100	96.2	pg/g	96			EPA-5 1613B
	100	99.1	pg/g	99	3.0		EPA-5 1613B
2,3,4,7,8-PeCDF	100	95.1	pg/g	95			EPA-5 1613B
	100	99.5	pg/g	99	4.5		EPA-5 1613B
1,2,3,4,7,8-HxCDF	100	94.4	pg/g	94			EPA-5 1613B
	100	95.9	pg/g	96	1.6		EPA-5 1613B
1,2,3,6,7,8-HxCDF	100	97.4	pg/g	97			EPA-5 1613B
	100	100	pg/g	100	2.8		EPA-5 1613B
2,3,4,6,7,8-HxCDF	100	95.0	pg/g	95			EPA-5 1613B
	100	100	pg/g	100	5.1		EPA-5 1613B
1,2,3,7,8,9-HxCDF	100	98.0	pg/g	98			EPA-5 1613B
	100	101	pg/g	101	3.0		EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	100	97.1	pg/g	97			EPA-5 1613B
	100	101	pg/g	101	3.6		EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	100	95.3	pg/g	95			EPA-5 1613B
	100	99.9	pg/g	100	4.8		EPA-5 1613B
OCDF	200	182	pg/g	91			EPA-5 1613B
	200	187	pg/g	93	2.2		EPA-5 1613B

(Continued on next page)





# SOLID, D 2216-90, Percent Moisture

American Scientific Laboratories LLC

Client Sample ID: 242066

General Chemistry

Lot-Sample #...: G9I220221-001    Work Order #...: LK86V    Matrix.....: SOLID  
Date Sampled...: 09/21/09    Date Received...: 09/22/09  
% Moisture.....: 1.8

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	1.8	0.10	%	ASTM D 2216-90	10/01-10/02/09	9274252

Dilution Factor: 1

American Scientific Laboratories LLC

Client Sample ID: 242067

General Chemistry

Lot-Sample #...: G9I220221-002    Work Order #...: LK86X    Matrix.....: SOLID  
Date Sampled...: 09/21/09    Date Received...: 09/22/09  
% Moisture.....: 6.1

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	6.1	0.10	%	ASTM D 2216-90	10/01-10/02/09	9274252

Dilution Factor: 1

# QC DATA ASSOCIATION SUMMARY

G9I220221

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	ASTM D 2216-90		9274252	9274138
002	SOLID	ASTM D 2216-90		9274252	9274138

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: G9I220221

Work Order #...: LKTKF-SMP  
LKTKF-DUP

Matrix.....: SOLID

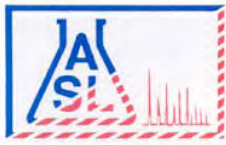
Date Sampled...: 09/10/09

Date Received...: 09/15/09

% Moisture.....: 4.0

<u>PARAM RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	4.0	%	1.7	(0-20)	SD Lot-Sample #: G9I150194-001 ASTM D 2216-90	10/01-10/02/09	9274252

Dilution Factor: 1



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 31  
Date Received 09/23/2009  
Date Reported 10/27/2009

Job Number	Ordered	Client
43179	09/23/2009	LARWQB

**Project ID:** BOEING SSFL ISRA  
**Project Name:** Santa Susana Field Labs.  
**Site:** 5800 Woolsey Canyon Road  
Canoga Park, CA 91304

Enclosed are the results of analyses on 3 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.









### Certificate of Analysis

**Report Date:** Wednesday, October 7, 2009  
**Received Date:** Friday, September 25, 2009  
**Received Time:** 2:32 pm  
**Turnaround Time:** Normal

**Client:** American Scientific Laboratories  
2520 N. San Fernando Road  
Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 43179

**P.O. #:**

---

<b>Lab Sample ID:</b> 9I25045-01	<b>Sample ID:</b> 242217	<b>Matrix:</b> Soil
<b>Sampled by:</b> Molky Barar	<b>Sampled:</b> 09/23/09 00:00	

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Lead, Total .....	4.9	0.11	1.0	mg/kg	1x1	EPA 6020B	10/1/09	10/6/09 13:36	W9J0013	



**Certificate of Analysis**

**Quality Control Section**

**Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control**

**Batch W9J0013 - EPA 6020B**

<b>Blank (W9J0013-BLK1)</b>					<b>Prepared: 10/01/09</b>		<b>Analyzed: 10/06/09 12:38</b>			
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Lead, Total .....		ND		mg/kg						
<b>LCS (W9J0013-BS1)</b>					<b>Prepared: 10/01/09</b>		<b>Analyzed: 10/06/09 12:43</b>			
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Lead, Total .....		51.4		mg/kg	50.0	103	80-127			
<b>LCS Dup (W9J0013-BSD1)</b>					<b>Prepared: 10/01/09</b>		<b>Analyzed: 10/06/09 12:47</b>			
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Lead, Total .....		52.0		mg/kg	50.0	104	80-127	1	20	
<b>Matrix Spike (W9J0013-MS1)</b>					<b>Source: 9I25044-03</b>		<b>Prepared: 10/01/09</b>		<b>Analyzed: 10/06/09 13:41</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Lead, Total .....	6.67 .....	60.2		mg/kg	49.5	108	75-130			
<b>Matrix Spike Dup (W9J0013-MSD1)</b>					<b>Source: 9I25044-03</b>		<b>Prepared: 10/01/09</b>		<b>Analyzed: 10/06/09 13:45</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	
Lead, Total .....	6.67 .....	59.5		mg/kg	47.6	111	75-130	1	20	

### Certificate of Analysis

**Notes:**

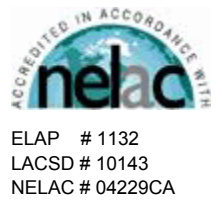
The Chain of Custody document is part of the analytical report.  
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.  
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services. The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).  
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002



*Kim G Tu*  
\_\_\_\_\_  
**Authorized Signature**  
Contact: Kim G Tu (Project Manager)



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub Subcontracted analysis, original report enclosed.
- Dil The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b". (a) and (b) are indicated as whole numbers with rounding up for  $\geq 0.5$  and off for  $< 0.5$
- DL Method Detection Limit
- RL Method Reporting Limit
- MDA Minimum Detectable Activity

October 27, 2009

**TestAmerica Project Number: G9I250311**

PO/Contract:

Molky Brar  
American Scientific Lab  
2520 N. San Fernando Rd  
Los Angeles, CA 90065

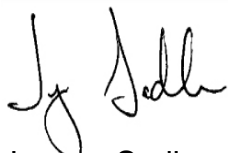
Dear Mr. Brar,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on September 25, 2009. These samples are associated with your 43179 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4381.

Sincerely,



Jeremy Sadler  
Project Manager

## Table of Contents

# TestAmerica West Sacramento Project Number G9I250311

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

SOLID, 1613B, Dioxins/Furans, HRGC/HRMS

Samples: 1, 2

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

SOLID, D 2216-90, Percent Moisture

Samples: 1, 2

Sample Data Sheets

Laboratory QC Report

## Case Narrative

### TestAmerica West Sacramento Project Number G9I250311

#### **SOLID, 1613B, Dioxins/Furans, HRGC/HRMS**

Samples: 1, 2

Several analytes in the MB and in each sample have been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analytes have been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for these analytes.

There were no other anomalies associated with this project.

**TestAmerica Laboratories West Sacramento Certifications/Accreditations**

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas	T104704399-08-TX
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C1281
Hawaii	NA	West Virginia	9930C, 334
Illinois	200060	Wisconsin	998204680
Kansas*	E-10375	NFESC	NA
Louisiana*	30612	USACE	NA
Michigan	9947	USDA Foreign Plant	37-82605
Nevada	CA44	USDA Foreign Soil	P330-09-00055
New Jersey*	CA005	US Fish & Wildlife	LE148388-0
New Mexico	NA	Guam	09-014r

\*NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

**QC Parameter Definitions**

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

# Sample Summary

## TestAmerica West Sacramento Project Number G9I250311

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
LLJCH	1	242215	9/23/2009	9/29/2009 09:00 AM
LLJCK	2	242216	9/23/2009	9/29/2009 09:00 AM

### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.







CLIENT American Scientific Lab PM JS LOG # 60977  
60935

LOT# (QUANTIMS ID) 695250277-119/2969 QUOTE# 35699 LOCATION 6116C  
695250311

DATE RECEIVED 9/25/09 TIME RECEIVED 0825 Initials OV Date 9/25/09

DELIVERED BY  FEDEX  CA OVERNIGHT  CLIENT  
 AIRBORNE  GOLDENSTATE  DHL  
 UPS  BAX GLOBAL  GO-GETTERS  
 TAL COURIER  VALLEY LOGISTICS  MORGAN HILL COURIER  
 OTHER

CUSTODY SEAL STATUS  INTACT  BROKEN  N/A

CUSTODY SEAL #(S) \_\_\_\_\_

SHIPPING CONTAINER(S)  TAL  CLIENT  N/A

TEMPERATURE RECORD (IN °C) IR 4  5  OTHER \_\_\_\_\_

COC #(S) \_\_\_\_\_

TEMPERATURE BLANK Observed: ND Corrected: \_\_\_\_\_

SAMPLE TEMPERATURE

Observed: 15.15 Average: 15 Corrected Average: 15

COLLECTOR'S NAME: 03, 3, 2  Verified from COC  Not on COC JS

pH MEASURED  YES  ANOMALY  N/A

LABELED BY \_\_\_\_\_

LABELS CHECKED BY \_\_\_\_\_

PEER REVIEW  NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING

WETCHEM  N/A

VOA-ENCORES  N/A

METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL  N/A

COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES  N/A

CLOUSEAU  TEMPERATURE EXCEEDED (2 °C - 6 °C)\*\*  N/A

WET ICE  BLUE ICE  GEL PACK  NO COOLING AGENTS USED  PM NOTIFIED

Notes: 1295009 2969 REPLACEMENT SAMPLES 1295009

**Bottle Lot Inventory**

Lot

ID:

69E250277 009/2909  
69E250311

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
VOAh*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
___AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
___CGJ																				
500CGJ																				
250CGJ																				
125CGJ	/	/																		
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
___"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				

h = hydrochloric acid    s = sulfuric acid    na = sodium hydroxide    n = nitric acid    zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

QA-185 4/09 RKE

LEAVE NO SPACES BLANK. USE "NA" IF NOT APPLICABLE.

**SOLID, 1613B,  
Dioxins/Furans,  
HRGC/HRMS**

American Scientific Laboratories LLC

Client Sample ID: 242215

Trace Level Organic Compounds

Lot-Sample #...: G9I250311-001    Work Order #...: LLJCH1AC    Matrix.....: SOLID  
 Date Sampled...: 09/23/09    Date Received...: 09/29/09  
 Prep Date.....: 10/19/09    Analysis Date...: 10/23/09  
 Prep Batch #...: 9292410  
 Dilution Factor: 0.98  
 % Moisture.....: 5.7

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.2	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.2	pg/g	EPA-5 1613B
<b>1,2,3,6,7,8-HxCDD</b>	<b>0.99 J</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>1,2,3,7,8,9-HxCDD</b>	<b>0.85 J</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>1,2,3,4,6,7,8-HpCDD</b>	<b>31</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>OCDD</b>	<b>500 B</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>2,3,7,8-TCDF</b>	<b>0.45 J,Q</b>	<b>1.0</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,7,8-PeCDF	ND	5.2	pg/g	EPA-5 1613B
<b>2,3,4,7,8-PeCDF</b>	<b>0.25 J</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>1,2,3,4,7,8-HxCDF</b>	<b>0.33 J,Q,B</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,6,7,8-HxCDF	ND	5.2	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.2	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.2	pg/g	EPA-5 1613B
<b>1,2,3,4,6,7,8-HpCDF</b>	<b>3.9 J</b>	<b>5.2</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,4,7,8,9-HpCDF	ND	5.2	pg/g	EPA-5 1613B
<b>OCDF</b>	<b>14 B</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	88	(25 - 164)
13C-1,2,3,7,8-PeCDD	80	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	92	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	77	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	114	(23 - 140)
13C-OCDD	105	(17 - 157)
13C-2,3,7,8-TCDF	75	(24 - 169)
13C-1,2,3,7,8-PeCDF	73	(24 - 185)
13C-2,3,4,7,8-PeCDF	75	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	73	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	83	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	90	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	90	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	103	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	82	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37C14-2,3,7,8-TCDD	84	(35 - 197)

(Continued on next page)

American Scientific Laboratories LLC

Client Sample ID: 242215

Trace Level Organic Compounds

Lot-Sample #...: G9I250311-001 Work Order #...: LLJCH1AC Matrix.....: SOLID

**NOTE(S):**

---

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Q Estimated maximum possible concentration (EMPC).

American Scientific Laboratories LLC

Client Sample ID: 242216

Trace Level Organic Compounds

Lot-Sample #...: G9I250311-002    Work Order #...: LLJCK1AC    Matrix.....: SOLID  
 Date Sampled...: 09/23/09    Date Received...: 09/29/09  
 Prep Date.....: 10/19/09    Analysis Date...: 10/23/09  
 Prep Batch #...: 9292410  
 Dilution Factor: 0.99  
 % Moisture.....: 2.3

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	5.1	pg/g	EPA-5 1613B
<b>1,2,3,4,6,7,8-HpCDD</b>	<b>3.0 J</b>	<b>5.1</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>OCDD</b>	<b>49 B</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>2,3,7,8-TCDF</b>	<b>0.25 J,Q</b>	<b>1.0</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.1	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	5.1	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.1	pg/g	EPA-5 1613B
<b>OCDF</b>	<b>1.4 J,B</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	73	(25 - 164)
13C-1,2,3,7,8-PeCDD	65	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	68	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	69	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	97	(23 - 140)
13C-OCDD	82	(17 - 157)
13C-2,3,7,8-TCDF	66	(24 - 169)
13C-1,2,3,7,8-PeCDF	64	(24 - 185)
13C-2,3,4,7,8-PeCDF	58	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	62	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	71	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	78	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	73	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	87	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	61	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37C14-2,3,7,8-TCDD	75	(35 - 197)

(Continued on next page)



American Scientific Laboratories LLC

Client Sample ID: 242216

Trace Level Organic Compounds

Lot-Sample #...: G9I250311-002 Work Order #...: LLJCK1AC Matrix.....: SOLID

**NOTE(S):**

---

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Q Estimated maximum possible concentration (EMPC).

# QC DATA ASSOCIATION SUMMARY

G9I250311

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	EPA-5 1613B		9292410	
	SOLID	ASTM D 2216-90		9287425	9295208
002	SOLID	EPA-5 1613B		9292410	
	SOLID	ASTM D 2216-90		9287425	9295208

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G9I250311  
 MB Lot-Sample #: G9J190000-410

Work Order #...: LMVHX1AA

Matrix.....: SOLID

Prep Date.....: 10/19/09

Analysis Date...: 10/23/09

Prep Batch #...: 9292410

Dilution Factor: 1

PARAMETER	RESULT	DETECTION		
		LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	5.0	pg/g	EPA-5 1613B
<b>OCDD</b>	<b>1.8 J</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
2,3,7,8-TCDF	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
<b>1,2,3,4,7,8-HxCDF</b>	<b>0.28 J</b>	<b>5.0</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.0	pg/g	EPA-5 1613B
<b>OCDF</b>	<b>0.35 J,Q</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>

INTERNAL STANDARDS	PERCENT	RECOVERY
	RECOVERY	LIMITS
13C-2,3,7,8-TCDD	69	(25 - 164)
13C-1,2,3,7,8-PeCDD	74	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	83	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	66	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	77	(23 - 140)
13C-OCDD	73	(17 - 157)
13C-2,3,7,8-TCDF	61	(24 - 169)
13C-1,2,3,7,8-PeCDF	63	(24 - 185)
13C-2,3,4,7,8-PeCDF	66	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	73	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	69	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	70	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	66	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	72	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	77	(26 - 152)

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
37C14-2,3,7,8-TCDD	89	(35 - 197)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

(Continued on next page)

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G9I250311

Work Order #...: LMVHX1AA

Matrix.....: SOLID

**NOTE(S):**

---

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G9I250311      Work Order #...: LMVHX1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J190000-410  
 Prep Date.....: 10/19/09      Analysis Date...: 10/23/09  
 Prep Batch #...: 9292410  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	97	(67 - 158)	EPA-5 1613B
1,2,3,7,8-PeCDD	101	(70 - 142)	EPA-5 1613B
1,2,3,4,7,8-HxCDD	99	(70 - 164)	EPA-5 1613B
1,2,3,6,7,8-HxCDD	102	(76 - 134)	EPA-5 1613B
1,2,3,7,8,9-HxCDD	98	(64 - 162)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	101	(70 - 140)	EPA-5 1613B
OCDD	101	(78 - 144)	EPA-5 1613B
2,3,7,8-TCDF	100	(75 - 158)	EPA-5 1613B
1,2,3,7,8-PeCDF	98	(80 - 134)	EPA-5 1613B
2,3,4,7,8-PeCDF	96	(68 - 160)	EPA-5 1613B
1,2,3,4,7,8-HxCDF	95	(72 - 134)	EPA-5 1613B
1,2,3,6,7,8-HxCDF	96	(84 - 130)	EPA-5 1613B
2,3,4,6,7,8-HxCDF	95	(70 - 156)	EPA-5 1613B
1,2,3,7,8,9-HxCDF	100	(78 - 130)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	96	(82 - 122)	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	96	(78 - 138)	EPA-5 1613B
OCDF	92	(63 - 170)	EPA-5 1613B

(Continued on next page)

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**Trace Level Organic Compounds**

**Client Lot #...**: G9I250311      **Work Order #...**: LMVHX1AC      **Matrix.....**: SOLID  
**LCS Lot-Sample#**: G9J190000-410

<u>INTERNAL STANDARD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	69	(25 - 164)
13C-1,2,3,7,8-PeCDD	70	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	86	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	74	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	77	(23 - 140)
13C-OCDD	73	(17 - 157)
13C-2,3,7,8-TCDF	61	(24 - 169)
13C-1,2,3,7,8-PeCDF	63	(24 - 185)
13C-2,3,4,7,8-PeCDF	65	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	69	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	71	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	71	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	67	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	70	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	74	(26 - 152)
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37C14-2,3,7,8-TCDD	85	(35 - 197)

**NOTE(S) :**

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Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G9I250311      Work Order #...: LMVHX1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J190000-410  
 Prep Date.....: 10/19/09      Analysis Date...: 10/23/09  
 Prep Batch #...: 9292410  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
2,3,7,8-TCDD	20.0	19.4	pg/g	97	EPA-5 1613B
1,2,3,7,8-PeCDD	100	101	pg/g	101	EPA-5 1613B
1,2,3,4,7,8-HxCDD	100	99.4	pg/g	99	EPA-5 1613B
1,2,3,6,7,8-HxCDD	100	102	pg/g	102	EPA-5 1613B
1,2,3,7,8,9-HxCDD	100	97.7	pg/g	98	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	100	101	pg/g	101	EPA-5 1613B
OCDD	200	201	pg/g	101	EPA-5 1613B
2,3,7,8-TCDF	20.0	20.0	pg/g	100	EPA-5 1613B
1,2,3,7,8-PeCDF	100	98.3	pg/g	98	EPA-5 1613B
2,3,4,7,8-PeCDF	100	96.5	pg/g	96	EPA-5 1613B
1,2,3,4,7,8-HxCDF	100	95.3	pg/g	95	EPA-5 1613B
1,2,3,6,7,8-HxCDF	100	95.7	pg/g	96	EPA-5 1613B
2,3,4,6,7,8-HxCDF	100	94.9	pg/g	95	EPA-5 1613B
1,2,3,7,8,9-HxCDF	100	99.9	pg/g	100	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	100	96.1	pg/g	96	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	100	96.4	pg/g	96	EPA-5 1613B
OCDF	200	184	pg/g	92	EPA-5 1613B

(Continued on next page)

**LABORATORY CONTROL SAMPLE DATA REPORT**

**Trace Level Organic Compounds**

**Client Lot #...**: G9I250311      **Work Order #...**: LMVHX1AC      **Matrix.....**: SOLID  
**LCS Lot-Sample#**: G9J190000-410

<u>INTERNAL STANDARD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	69	(25 - 164)
13C-1,2,3,7,8-PeCDD	70	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	86	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	74	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	77	(23 - 140)
13C-OCDD	73	(17 - 157)
13C-2,3,7,8-TCDF	61	(24 - 169)
13C-1,2,3,7,8-PeCDF	63	(24 - 185)
13C-2,3,4,7,8-PeCDF	65	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	69	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	71	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	71	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	67	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	70	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	74	(26 - 152)
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37C14-2,3,7,8-TCDD	85	(35 - 197)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters



# SOLID, D 2216-90, Percent Moisture

American Scientific Laboratories LLC

Client Sample ID: 242215

General Chemistry

Lot-Sample #...: G9I250311-001    Work Order #...: LLJCH    Matrix.....: SOLID  
Date Sampled...: 09/23/09    Date Received..: 09/29/09  
% Moisture.....: 5.7

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	5.7	0.10	%	ASTM D 2216-90	10/14-10/15/09	9287425

Dilution Factor: 1

American Scientific Laboratories LLC

Client Sample ID: 242216

General Chemistry

Lot-Sample #...: G9I250311-002      Work Order #...: LLJCK      Matrix.....: SOLID  
Date Sampled...: 09/23/09      Date Received...: 09/29/09  
% Moisture.....: 2.3

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	2.3	0.10	%	ASTM D 2216-90	10/14-10/15/09	9287425

Dilution Factor: 1

# QC DATA ASSOCIATION SUMMARY

G9I250311

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	EPA-5 1613B		9292410	
	SOLID	ASTM D 2216-90		9287425	9295208
002	SOLID	EPA-5 1613B		9292410	
	SOLID	ASTM D 2216-90		9287425	9295208

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: G9I250311

Work Order #...: LLF35-SMP  
LLF35-DUP

Matrix.....: SOLID

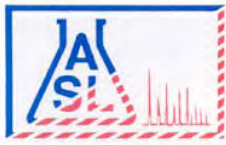
Date Sampled...: 09/21/09

Date Received...: 09/25/09

% Moisture.....: 14

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>		<u>RPD</u>	<u>LIMIT</u>		<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Moisture	13.5	13.5	%	0.42	(0-20)	ASTM D 2216-90	SD Lot-Sample #: G9I240379-001 10/14-10/15/09	9287425

Dilution Factor: 1



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213)576-6724  
Attn Peter Raftery

Number of Pages 24  
Date Received 09/25/2009  
Date Reported 10/30/2009

Job Number	Ordered	Client
43202	09/25/2009	LARWQB

Project ID: BOEING SSFL  
Project Name:  
Site: 5800 Woolsey Canyon Dr.  
Canoga Park, CA 91304

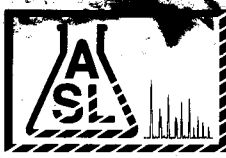
Enclosed are the results of analyses on 2 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# **Nº 52322** GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# **43202**

Company: <b>Los Angeles Regional Water Quality Control Board</b>				Report To: <b>PETER RAFFERY</b>				<b>ANALYSIS REQUESTED</b>									
Address: <b>320 W. 4th St. Suite 200 L.A. CAL. 90013</b>				Project Name: <b>Boeing SSFL</b>								Address: <b>320 W. 4th St. L.A. CA. 90013</b>					
Telephone: <b>213.576.6724</b> Fax: <b>213.576.6717</b>				Site Address: <b>5800 WOOLSEY CYN DR. CANOGA PARK, CA. 91304</b>				Invoice To: <b>Art Lenox THE BOEING CO.</b>									
Special Instruction:				Project ID:				Address: <b>5800 Woolsey Cyn Dr Chatsworth CANOGA PARK, CA 91304</b>									
E-mail: <b>PRAFFERY@WATERBOARDS.CA.GOV</b>				Project Manager: <b>Art Lenox</b>				P.O.#:									
ITEM	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation							Remarks	
	Lab ID	Sample ID	Date	Time	#	Type											
	<b>242270</b>	<b>HZET 07105001 <del>5001-52/5001-5001</del></b>	<b>25 Sept. 09</b>	<b>7:15</b>	<b>1</b>	<b>STAINLESS STEEL SLICER</b>	<b>Soil</b>	<b>ICE</b>									
	<b>242271</b>	<b>HZET 07175001</b>	<b>25 Sept 09</b>	<b>7:25</b>	<b>1</b>	<b>STAINLESS STEEL SLICER</b>	<b>Soil</b>	<b>ICE</b>									
Collected By: <b>[Signature]</b>			Date <b>25 Sept 09</b> Time <b>7:10</b>			Relinquished By: <b>[Signature]</b>			Date <b>25 Sept 09</b> Time <b>8:55</b>			TAT <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush					
Relinquished By: <b>[Signature]</b>			Date <b>25 Sept 09</b> Time			Received For Laboratory <b>Janet Chin</b>			Date <b>9-25-09</b> Time <b>8:55</b>								
Received By: <b>[Signature]</b>			Date <b>25 Sept 09</b> Time			Condition of Sample:											

October 30, 2009

**TestAmerica Project Number: G9I290217**

PO/Contract:

Molky Brar  
American Scientific Lab  
2520 N. San Fernando Rd  
Los Angeles, CA 90065

Dear Mr. Brar,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on September 29, 2009. These samples are associated with your 43202 project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4381.

Sincerely,



Jeremy Sadler  
Project Manager



## Table of Contents

### TestAmerica West Sacramento Project Number G9I290217

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

SOLID, 1613B, Dioxins/Furans, HRGC/HRMS

Samples: 1, 2

Sample Data Sheets

Method Blank Report

Laboratory QC Reports

SOLID, D 2216-90, Percent Moisture

Samples: 1, 2

Sample Data Sheets

Laboratory QC Reports

## Case Narrative

### TestAmerica West Sacramento Project Number G9I290217

#### SOLID, 1613B, Dioxins/Furans, HRGC/HRMS

Sample: 1, 2

Several analytes in each sample have been qualified with a "Q" flag due to the ion abundance ratios being outside of criteria. The analytes have been reported as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio for these analytes.

There were no other anomalies associated with this project.

### TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas	T104704399-08-TX
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C1281
Hawaii	NA	West Virginia	9930C, 334
Illinois	200060	Wisconsin	998204680
Kansas*	E-10375	NFESC	NA
Louisiana*	30612	USACE	NA
Michigan	9947	USDA Foreign Plant	37-82605
Nevada	CA44	USDA Foreign Soil	P330-09-00055
New Jersey*	CA005	US Fish & Wildlife	LE148388-0
New Mexico	NA	Guam	09-014r

\*NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

### QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

## Sample Summary

### TestAmerica West Sacramento Project Number G9I290217

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
LLNNV	1	242270	9/25/2009 07:15 AM	9/29/2009 09:00 AM
LLNNW	2	242271	9/25/2009 09:25 AM	9/29/2009 09:00 AM

#### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.



CLIENT AMERICAN SCIENTIFIC LABS PM 59 LOG # 00992

LOT# (QUANTIMS ID) G91290217 QUOTE# 35699 LOCATION W3C  
Checked (✓)

DATE RECEIVED 29 5/09 TIME RECEIVED 0900

DELIVERED BY  
 FEDEX  ON TRAC  CLIENT  
 GOLDENSTATE  UPS  GO-GETTERS  
 TAL COURIER  VALLEY LOGISTICS  OTHER  
 TAL SF

CUSTODY SEAL STATUS  INTACT  BROKEN  N/A

CUSTODY SEAL #(S) 0/0

SHIPPING CONTAINER(S)  TAL  CLIENT  N/A

TEMPERATURE RECORD (IN °C) IR 4  5  OTHER \_\_\_\_\_

COC #(S) 0/0

TEMPERATURE BLANK Observed: 0/0 Corrected: 0/0

SAMPLE TEMPERATURE

Observed: 3, 3, 2 Average 3 Corrected Average 3

COLLECTOR'S NAME: \_\_\_\_\_  
 Verified from COC  Not on COC Initials gl Date 29 5/09

pH MEASURED  YES  ANOMALY  N/A

LABELLED BY.....

LABELS CHECKED BY.....

PEER REVIEW  NA

SHORT HOLD TEST NOTIFICATION

SAMPLE RECEIVING  
WETCHEM  N/A  
VOA-ENCORES  N/A

METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL  N/A

COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES  N/A

CLOUSEA  TEMPERATURE EXCEEDED (2 °C - 6 °C)\*1  N/A

WET ICE  BLUE ICE  GEL PACK  NO COOLING AGENTS USED  PM NOTIFIED

Initials aw Date 9-29-09

Notes \_\_\_\_\_

\*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

Lot ID: \_\_\_\_\_

G9I290217

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
VOA*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
VOAh*	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
AGB																				
AGBs																				
250AGB																				
250AGBs																				
250AGBn																				
500AGB																				
___AGJ																				
500AGJ																				
250AGJ																				
125AGJ																				
___CGJ																				
500CGJ																				
250CGJ																				
125CGJ	1	1																		
PJ																				
PJn																				
500PJ																				
500PJn																				
500PJna																				
500PJzn/na																				
250PJ																				
250PJn																				
250PJna																				
250PJzn/na																				
Acetate Tube																				
___"CT																				
Encore																				
Folder/filter																				
PUF																				
Petri/Filter																				
XAD Trap																				
Ziploc																				

h = hydrochloric acid    s = sulfuric acid    na = sodium hydroxide    n = nitric acid    zn = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

**SOLID, 1613B,  
Dioxins/Furans,  
HRGC/HRMS**



American Scientific Laboratories LLC

Client Sample ID: 242270

Trace Level Organic Compounds

Lot-Sample #...: G9I290217-001    Work Order #...: LLNNV1AC    Matrix.....: SOLID  
 Date Sampled...: 09/25/09    Date Received...: 09/29/09  
 Prep Date.....: 10/23/09    Analysis Date...: 10/29/09  
 Prep Batch #...: 9295515  
 Dilution Factor: 0.98  
 % Moisture.....: 7.2

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.1	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.3	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.3	pg/g	EPA-5 1613B
<b>1,2,3,6,7,8-HxCDD</b>	<b>1.2 J,Q</b>	<b>5.3</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>1,2,3,7,8,9-HxCDD</b>	<b>1.2 J,Q</b>	<b>5.3</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>1,2,3,4,6,7,8-HpCDD</b>	<b>14</b>	<b>5.3</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
<b>OCDD</b>	<b>160 B</b>	<b>11</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
2,3,7,8-TCDF	ND	1.1	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.3	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.3	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	5.3	pg/g	EPA-5 1613B
<b>1,2,3,6,7,8-HxCDF</b>	<b>0.68 J,Q</b>	<b>5.3</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
2,3,4,6,7,8-HxCDF	ND	5.3	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.3	pg/g	EPA-5 1613B
<b>1,2,3,4,6,7,8-HpCDF</b>	<b>1.8 J</b>	<b>5.3</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
1,2,3,4,7,8,9-HpCDF	ND	5.3	pg/g	EPA-5 1613B
<b>OCDF</b>	<b>11</b>	<b>11</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	68	(25 - 164)
13C-1,2,3,7,8-PeCDD	60	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	60	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	77	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	66	(23 - 140)
13C-OCDD	55	(17 - 157)
13C-2,3,7,8-TCDF	64	(24 - 169)
13C-1,2,3,7,8-PeCDF	62	(24 - 185)
13C-2,3,4,7,8-PeCDF	56	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	73	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	75	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	73	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	68	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	62	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	65	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37C14-2,3,7,8-TCDD	84	(35 - 197)

(Continued on next page)

American Scientific Laboratories LLC

Client Sample ID: 242270

Trace Level Organic Compounds

Lot-Sample #...: G9I290217-001 Work Order #...: LLNNV1AC Matrix.....: SOLID

**NOTE(S):**

---

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

American Scientific Laboratories LLC

Client Sample ID: 242271

Trace Level Organic Compounds

Lot-Sample #...: G9I290217-002    Work Order #...: LLNNW1AC    Matrix.....: SOLID  
 Date Sampled...: 09/25/09    Date Received...: 09/29/09  
 Prep Date.....: 10/23/09    Analysis Date...: 10/29/09  
 Prep Batch #...: 9295515  
 Dilution Factor: 0.99  
 % Moisture.....: 7.5

PARAMETER	RESULT	DETECTION LIMIT	UNITS	METHOD
2,3,7,8-TCDD	ND	1.1	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.4	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	0.64 J	5.4	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	2.8 J	5.4	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	1.5 J,Q	5.4	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	120	5.4	pg/g	EPA-5 1613B
OCDD	1300 B	11	pg/g	EPA-5 1613B
2,3,7,8-TCDF	ND	1.1	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.4	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.4	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	5.4	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.4	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.4	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.4	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	18	5.4	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.4	pg/g	EPA-5 1613B
OCDF	100	11	pg/g	EPA-5 1613B

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	(25 - 164)
13C-1,2,3,7,8-PeCDD	79	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	82	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	98	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	95	(23 - 140)
13C-OCDD	88	(17 - 157)
13C-2,3,7,8-TCDF	84	(24 - 169)
13C-1,2,3,7,8-PeCDF	80	(24 - 185)
13C-2,3,4,7,8-PeCDF	72	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	93	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	102	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	97	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	98	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	94	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	88	(26 - 152)

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37C14-2,3,7,8-TCDD	83	(35 - 197)

(Continued on next page)

American Scientific Laboratories LLC

Client Sample ID: 242271

Trace Level Organic Compounds

Lot-Sample #...: G9I290217-002 Work Order #...: LLNNW1AC Matrix.....: SOLID

**NOTE(S):**

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Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than the reporting limit.

Q Estimated maximum possible concentration (EMPC).

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

# QC DATA ASSOCIATION SUMMARY

G9I290217

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	SOLID	EPA-5 1613B		9295515	
	SOLID	ASTM D 2216-90		9281388	9281223
002	SOLID	EPA-5 1613B		9295515	
	SOLID	ASTM D 2216-90		9281388	9281223

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G9I290217  
 MB Lot-Sample #: G9J220000-515

Work Order #...: LM4MC1AA

Matrix.....: SOLID

Prep Date.....: 10/23/09

Analysis Date...: 10/28/09

Prep Batch #...: 9295515

Dilution Factor: 1

PARAMETER	RESULT	DETECTION		METHOD
		LIMIT	UNITS	
2,3,7,8-TCDD	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDD	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	ND	5.0	pg/g	EPA-5 1613B
<b>OCDD</b>	<b>1.1 J,Q</b>	<b>10</b>	<b>pg/g</b>	<b>EPA-5 1613B</b>
2,3,7,8-TCDF	ND	1.0	pg/g	EPA-5 1613B
1,2,3,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,7,8-PeCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
2,3,4,6,7,8-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,7,8,9-HxCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	ND	5.0	pg/g	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	ND	5.0	pg/g	EPA-5 1613B
OCDF	ND	10	pg/g	EPA-5 1613B

INTERNAL STANDARDS	PERCENT	RECOVERY
	RECOVERY	LIMITS
13C-2,3,7,8-TCDD	86	(25 - 164)
13C-1,2,3,7,8-PeCDD	79	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	84	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	102	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	90	(23 - 140)
13C-OCDD	80	(17 - 157)
13C-2,3,7,8-TCDF	83	(24 - 169)
13C-1,2,3,7,8-PeCDF	82	(24 - 185)
13C-2,3,4,7,8-PeCDF	77	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	105	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	98	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	94	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	97	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	88	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	94	(26 - 152)

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
37C14-2,3,7,8-TCDD	84	(35 - 197)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

(Continued on next page)

METHOD BLANK REPORT

Trace Level Organic Compounds

Client Lot #...: G9I290217

Work Order #...: LM4MC1AA

Matrix.....: SOLID

**NOTE(S):**

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- J Estimated result. Result is less than the reporting limit.
- Q Estimated maximum possible concentration (EMPC).

LABORATORY CONTROL SAMPLE EVALUATION REPORT

Trace Level Organic Compounds

Client Lot #...: G9I290217      Work Order #...: LM4MC1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J220000-515  
 Prep Date.....: 10/23/09      Analysis Date...: 10/28/09  
 Prep Batch #...: 9295515  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	112	(67 - 158)	EPA-5 1613B
1,2,3,7,8-PeCDD	109	(70 - 142)	EPA-5 1613B
1,2,3,4,7,8-HxCDD	110	(70 - 164)	EPA-5 1613B
1,2,3,6,7,8-HxCDD	110	(76 - 134)	EPA-5 1613B
1,2,3,7,8,9-HxCDD	117	(64 - 162)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	107	(70 - 140)	EPA-5 1613B
OCDD	111	(78 - 144)	EPA-5 1613B
2,3,7,8-TCDF	102	(75 - 158)	EPA-5 1613B
1,2,3,7,8-PeCDF	109	(80 - 134)	EPA-5 1613B
2,3,4,7,8-PeCDF	113	(68 - 160)	EPA-5 1613B
1,2,3,4,7,8-HxCDF	109	(72 - 134)	EPA-5 1613B
1,2,3,6,7,8-HxCDF	108	(84 - 130)	EPA-5 1613B
2,3,4,6,7,8-HxCDF	109	(70 - 156)	EPA-5 1613B
1,2,3,7,8,9-HxCDF	111	(78 - 130)	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	105	(82 - 122)	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	109	(78 - 138)	EPA-5 1613B
OCDF	112	(63 - 170)	EPA-5 1613B

(Continued on next page)



**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

**Trace Level Organic Compounds**

**Client Lot #...**: G9I290217      **Work Order #...**: LM4MC1AC      **Matrix.....**: SOLID  
**LCS Lot-Sample#**: G9J220000-515

<u>INTERNAL STANDARD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	87	(25 - 164)
13C-1,2,3,7,8-PeCDD	86	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	81	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	96	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	90	(23 - 140)
13C-OCDD	75	(17 - 157)
13C-2,3,7,8-TCDF	89	(24 - 169)
13C-1,2,3,7,8-PeCDF	87	(24 - 185)
13C-2,3,4,7,8-PeCDF	78	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	93	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	96	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	93	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	90	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	87	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	85	(26 - 152)
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37C14-2,3,7,8-TCDD	84	(35 - 197)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G9I290217      Work Order #...: LM4MC1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J220000-515  
 Prep Date.....: 10/23/09      Analysis Date..: 10/28/09  
 Prep Batch #...: 9295515  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
2,3,7,8-TCDD	20.0	22.3	pg/g	112	EPA-5 1613B
1,2,3,7,8-PeCDD	100	109	pg/g	109	EPA-5 1613B
1,2,3,4,7,8-HxCDD	100	110	pg/g	110	EPA-5 1613B
1,2,3,6,7,8-HxCDD	100	110	pg/g	110	EPA-5 1613B
1,2,3,7,8,9-HxCDD	100	117	pg/g	117	EPA-5 1613B
1,2,3,4,6,7,8-HpCDD	100	107	pg/g	107	EPA-5 1613B
OCDD	200	221	pg/g	111	EPA-5 1613B
2,3,7,8-TCDF	20.0	20.4	pg/g	102	EPA-5 1613B
1,2,3,7,8-PeCDF	100	109	pg/g	109	EPA-5 1613B
2,3,4,7,8-PeCDF	100	113	pg/g	113	EPA-5 1613B
1,2,3,4,7,8-HxCDF	100	109	pg/g	109	EPA-5 1613B
1,2,3,6,7,8-HxCDF	100	108	pg/g	108	EPA-5 1613B
2,3,4,6,7,8-HxCDF	100	109	pg/g	109	EPA-5 1613B
1,2,3,7,8,9-HxCDF	100	111	pg/g	111	EPA-5 1613B
1,2,3,4,6,7,8-HpCDF	100	105	pg/g	105	EPA-5 1613B
1,2,3,4,7,8,9-HpCDF	100	109	pg/g	109	EPA-5 1613B
OCDF	200	225	pg/g	112	EPA-5 1613B

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

Trace Level Organic Compounds

Client Lot #...: G9I290217      Work Order #...: LM4MC1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: G9J220000-515

<u>INTERNAL STANDARD</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
13C-2,3,7,8-TCDD	87	(25 - 164)
13C-1,2,3,7,8-PeCDD	86	(25 - 181)
13C-1,2,3,4,7,8-HxCDD	81	(32 - 141)
13C-1,2,3,6,7,8-HxCDD	96	(28 - 130)
13C-1,2,3,4,6,7,8-HpCDD	90	(23 - 140)
13C-OCDD	75	(17 - 157)
13C-2,3,7,8-TCDF	89	(24 - 169)
13C-1,2,3,7,8-PeCDF	87	(24 - 185)
13C-2,3,4,7,8-PeCDF	78	(21 - 178)
13C-1,2,3,6,7,8-HxCDF	93	(26 - 123)
13C-2,3,4,6,7,8-HxCDF	96	(28 - 136)
13C-1,2,3,7,8,9-HxCDF	93	(29 - 147)
13C-1,2,3,4,6,7,8-HpCDF	90	(28 - 143)
13C-1,2,3,4,7,8,9-HpCDF	87	(26 - 138)
13C-1,2,3,4,7,8-HxCDF	85	(26 - 152)
<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
37C14-2,3,7,8-TCDD	84	(35 - 197)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

# SOLID, D 2216-90, Percent Moisture

American Scientific Laboratories LLC

Client Sample ID: 242270

General Chemistry

Lot-Sample #...: G9I290217-001    Work Order #...: LLNNV    Matrix.....: SOLID  
Date Sampled...: 09/25/09    Date Received...: 09/29/09  
% Moisture.....: 7.2

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	7.2	0.10	%	ASTM D 2216-90	10/08-10/09/09	9281388

Dilution Factor: 1

American Scientific Laboratories LLC

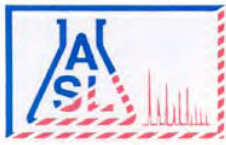
Client Sample ID: 242271

General Chemistry

Lot-Sample #...: G9I290217-002      Work Order #...: LLNNW      Matrix.....: SOLID  
Date Sampled...: 09/25/09      Date Received...: 09/29/09  
% Moisture.....: 7.5

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	7.5	0.10	%	ASTM D 2216-90	10/08-10/09/09	9281388

Dilution Factor: 1



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 2  
Date Received 10/06/2009  
Date Reported 10/13/2009

Job Number	Ordered	Client
43306	10/06/2009	LARWQB

Project ID: BOEING SSFL ISRA 008  
Project Name:  
Site: 5800 Woolsey Canyon Road  
Canoga Park, CA 91304

Enclosed are the results of analyses on 3 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

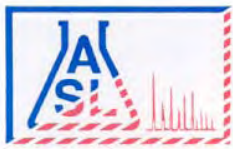
Rojert G. Araghi  
Laboratory Director

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- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.







**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA 91304

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 2

Project ID: BOEING SSFL ISRA 008

ASL Job Number	Submitted	Client
43306	10/06/2009	LARWQB

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 100609-1

Our Lab I.D.		242807	242808	242809		
Client Sample I.D.		HZET 1000-5001R WQCB	HZET 1001-5001R WQCB	HZET 1001-5002R WQCB		
Date Sampled		10/06/2009	10/06/2009	10/06/2009		
Date Prepared		10/06/2009	10/06/2009	10/06/2009		
Preparation Method						
Date Analyzed		10/06/2009	10/06/2009	10/06/2009		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND		
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND		
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND		
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND		
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND		
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND		
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND		

Our Lab I.D.		242807	242808	242809		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	95	107	114		

**QUALITY CONTROL REPORT**

QC Batch No: 100609-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	114	129	12.3	39-150	<30	121	117	3.4	39-150	<30

# SUBMITTAL FORM / Laboratory Services

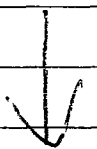
TURNAROUND TIME: STD  48 HR.  24 HR.   
 <8 HR.  WKND  OTHER:

RELINQUISHED BY Alex  
 TIME / DATE 13:00 10/6/09  
 DATE OF SHIPMENT  CARRIER   
 CLIENT P.O. NO.   
 CLIENT JOB/PROJECT ID NO(S). 43306  
 PACKAGE SHIPPED FROM

CLIENT American Scientific Labs  
 ADDRESS 2522 N. San Fernando Road  
L.A. CA 90065  
 TELEPHONE 323 223 9700  
 CONTACT Molky Bran

RESULTS REQUESTED VIA VERBAL  FAX  E-MAIL  E-MAIL molky @ asllab.com  
 (NOTE: Complete written reports will follow all analyses, in addition to any prior transmitted verbal, fax or e-mail results) FAX NO.

DATE/TIME OF SAMPLE COLLECTION 10-6-09  
 SAMPLE PRESERVATIVES  HOLDING TIMES   
 NO. OF SAMPLES SENT 3 SAMPLER'S NAME   
 TYPE:  WATER  WASTE WATER  SOIL  FILTER  SORBENT TUBE  IMPINGER  OTHER

(FOR EMS ONLY)  
 EMS Sample No.   


CLIENT SAMPLE NO.	DESCRIPTION/LOCATION/ANALYSIS	VOLUME TIME-WEIGHT (IF APPLICABLE)
242807	10-6-09 10:30 Asbestos (NIOSH 9002)	1 Jcn
242808	" 10:35 " "	"
242809	" 10:38 " "	"
<del> </del>		

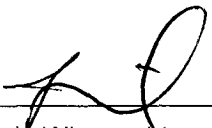
Laboratory No. 132792 Received By [Signature] Time 1:05  
 Date of Package Delivery 10-6-09 Shipping Bill Retained: YES  NONE   
 Condition of Package on Receipt OK Condition of Custody Seal None  
 (NOTE: If the package has sustained substantial damage or the custody seal is broken, stop and contact the project manager and the shipper.)  
 No. of Samples 3 Chain-of-Custody Signature   
 Date of Acceptance into Sample Bank 10-6-09 Misc. Info.   
 Disposition of Samples EMS LABS

FOR EMS ONLY

**Report No:** 132792 **Customer:** American Scientific Labs.  
**Date:** October 13, 2009 2520 N. San Fernando Road  
**Date Received:** October 6, 2009 Los Angeles, CA 90065  
**Date Analyzed:** October 12, 2009 **Attention:** Molky Brar  
**Date/Time Collected:** 6/9/09 **Reference:** 43306  
**Subject:** Polarized Light Microscopy Analysis for Asbestos 3 Samples  
**Methodology:** "Method for Determination of Asbestos in Bulk Building Materials." EPA 600/R-93/116  
**Accredited:** NVLAP Lab Code 101218-0  
**Certified:** California Department of Health Services Environmental Testing Laboratory ELAP 1119  
 County Sanitation Districts of Los Angeles County, Lab ID No. 10120

Quality Control Sample (SRM 1866 Glass Fibers as the blank): None Detected

Sample ID	Location / Description	Visual Description	Asbestiform Minerals	Other Fibrous Materials	Non-fibrous Materials
242807	NON-FRIABLE	BROWN GRANULAR	NONE DETECTED	CELLULOSE <1%, CLEAVAGE FRGMT 3%	GRANULAR MINERALS, OPAQUES
242808	NON-FRIABLE	BROWN GRANULAR	NONE DETECTED	CELLULOSE <1%, CLEAVAGE FRGMT 2%	GRANULAR MINERALS, OPAQUES
242809	NON-FRIABLE	BROWN GRANULAR	NONE DETECTED	CELLULOSE <1%, CLEAVAGE FRGMT 3%	GRANULAR MINERALS, OPAQUES



Optical Microscopist  
BMK/mt

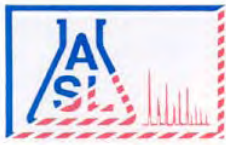
B.M. Kolk, Laboratory Director

The EPA method is a semi-quantitative procedure. The detection limit is between 0.1 - 1% by area and is dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material.

The test results reported are for the sample(s) delivered to us and may not represent the entire material from which the samples was taken. The EPA recommends three samples or more be taken from a "homogenous sampling area" before friable material is considered non-asbestos-containing.

\*\* Negative floor tile samples may contain significant amounts (>1%) of very thin asbestos fibers which cannot be detected by PLM. Confirmation by XRD or TEM is recommended by the EPA (Federal Register Vol. 59, No. 146).

This report, from a NIST-accredited laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government. This report shall not be reproduced, except in full, without the written approval of EMS Laboratories.



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 3  
Date Received 10/07/2009  
Date Reported 10/15/2009

Job Number	Ordered	Client
43320	10/07/2009	LARWQB

Project ID: SSFL  
Project Name:  
site: 5800 Woolsey Canyon Road  
Canoga Park, CA

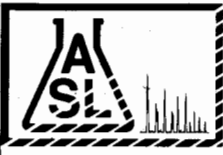
Enclosed are the results of analyses on 2 samples analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# N<sup>o</sup> **52541** GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# **43320**

Company: <b>L.A. REGIONAL WATER QUALITY CONTROL BOARD</b>		Report To: <b>PETER PRAETERY</b>	ANALYSIS REQUESTED			
Address: <b>320 W. 4TH ST. STE 200</b>		Project Name: <b>SSFL</b>	Address: <b>320 W. 4TH ST. L.A. 90013</b>			
L.A. CA. 90013		Site Address: <b>5800 Woolsey Cyn RD. CANOGA PARK, CA.</b>	Invoice To: <b>ART LENOX</b>			
Telephone: <b>213.576.6724</b>		Project ID:	Address: <b>5800 Woolsey Cyn Rd. CANOGA PARK, CA.</b>			
Fax: <b>213.576.6717</b>			P.O.#:			
Special Instruction:		Project Manager: <b>Art Lenox / Lori Blaizo.</b>		LEAD 6010 PCB <sub>s</sub> (8082)		
E-mail: <b>PRAETERY@WATERBOARD.CA.GOV</b>						

ITEM	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation							Remarks
	Lab ID	Sample ID	Date	Time	#	Type										
	<b>242840</b>	HZET0238-SC01-200902	<b>5 Oct 09</b>	<b>1<sup>st</sup> PM</b>	<b>1</b>	<b>Stainless Steel Sample Seals</b>	<b>Soil</b>	<b>ice</b>	<b>X</b>	<b>X</b>						
	<b>242841</b>	HZET0238-SC01-R10902	<b>5 Oct 09</b>	<b>2<sup>nd</sup> PM</b>	<b>1</b>	<b>↓</b>	<b>↓</b>	<b>↓</b>	<b>X</b>	<b>X</b>						

Collected By: <b>Adnan...</b>	Date <b>10-5-09</b> Time <b>1355</b>	Relinquished By: <b>PRP...</b>	Date <b>7 Oct. 09</b> Time <b>1215</b>	TAT <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Rush
Relinquished By: <b>Adnan...</b>	Date <b>10-5-09</b> Time <b>1355</b>	Received For Laboratory: <b>Janet Chin</b>	Date <b>10.7.09</b> Time <b>12:15</b>	
Received By: <b>PRP...</b>	Date <b>5 Oct 09</b> Time <b>1355</b>	Condition of Sample: <b>rr</b>		



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 2

Project ID: SSFL

ASL Job Number	Submitted	Client
43320	10/07/2009	LARWQB

Method: 6010B, Lead (ICP)

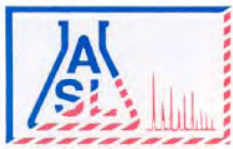
QC Batch No: 100809-1

Our Lab I.D.		242840	242841			
Client Sample I.D.		HZET 0237-5001-R WQC	HZET 0238-5001-R WQCB			
Date Sampled		10/05/2009	10/05/2009			
Date Prepared		10/08/2009	10/08/2009			
Preparation Method						
Date Analyzed		10/08/2009	10/08/2009			
Matrix		Soil	Soil			
Units		mg/Kg	mg/Kg			
Dilution Factor		1	1			
<b>Analytes</b>	<b>PQL</b>	<b>Results</b>	<b>Results</b>			
<b>ICP Metals</b>						
Lead	0.250	3.08	3.62			

**QUALITY CONTROL REPORT**

QC Batch No: 100809-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>ICP Metals</b>									
Lead	90	80-120							



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

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**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 3

Project ID: SSFL

ASL Job Number	Submitted	Client
43320	10/07/2009	LARWQB

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 100909-1

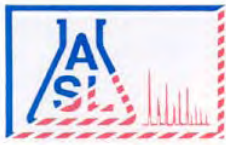
Our Lab I.D.		242840	242841			
Client Sample I.D.		HZET 0237-5001-R WQC	HZET 0238-5001-R WQCB			
Date Sampled		10/05/2009	10/05/2009			
Date Prepared		10/09/2009	10/09/2009			
Preparation Method						
Date Analyzed		10/09/2009	10/09/2009			
Matrix		Soil	Soil			
Units		ug/kg	ug/kg			
Dilution Factor		1	1			
Analytes	PQL	Results	Results			
Aroclor-1016 (PCB-1016)	33.0	ND	ND			
Aroclor-1221 (PCB-1221)	67.0	ND	ND			
Aroclor-1232 (PCB-1232)	33.0	ND	ND			
Aroclor-1242 (PCB-1242)	33.0	ND	ND			
Aroclor-1248 (PCB-1248)	33.0	ND	ND			
Aroclor-1254 (PCB-1254)	33.0	ND	ND			
Aroclor-1260 (PCB-1260)	33.0	ND	ND			

Our Lab I.D.		242840	242841			
<b>Surrogates</b>	<b>% Rec.Limit</b>	<b>% Rec.</b>	<b>% Rec.</b>			
<b>Surrogate Percent Recovery</b>						
Decachlorobiphenyl	43-169	96	98			

**QUALITY CONTROL REPORT**

QC Batch No: 100909-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	107	113	5.5	39-150	<30	106	103	2.9	39-150	<30



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

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**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213)576-6724  
Attn Peter Raftery

Number of Pages 2  
Date Received 10/19/2009  
Date Reported 10/21/2009

Job Number	Ordered	Client
43477	10/19/2009	LARWQB

Project ID: BOEING SSFL  
Project Name:  
Site: 5800 Woolsey Canyon Road  
Canoga Park, CA 91304

Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

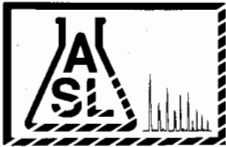
Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

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AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

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COC# N<sup>o</sup> 52592 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# 43477

Company: <b>Los Angeles Regional Water Quality Control Board</b>		Report To: <b>PETER RAFTERY</b>	ANALYSIS REQUESTED				
Address: <b>320 W. 6TH ST. Suite 200 Los Angeles, CA 90013</b>		Address: <b>320 W. 4TH ST. Suite 200 Los Angeles CA, 90013</b>	DIOXIN	Copper 6020	PCB <sub>s</sub>	Asbestos	LEAD 6020
Project Name: <b>Boeing SSFL</b>		Invoice To: <b>ART LENOX Boeing Co.</b>					
Site Address: <b>5800 Woolsey Cyn Rd CANOGA PARK, CA 91304</b>		Address: <b>5800 Woolsey Cyn Rd. CANOGA PARK, CA 91304</b>					
Telephone: <b>213.576.6724</b>		Project ID:					
Fax: <b>213.576.6717</b>							
Special Instruction:							

E-mail: <b>PRAFTERY@WATERBOARDS.CA.GOV</b>	Project Manager: <b>ART LENOX</b>	P.O.#:
--	-----------------------------------	--------

I T E M	LAB USE ONLY	SAMPLE DESCRIPTION			Container(s)		Matrix	Preservation						Remarks
	Lab ID	Sample ID	Date	Time	#	Type								
1	243646	HRET 0726 5001 RWQCB	19 Oct 09	8 <sup>55</sup>	1	STAINLESS STEEL Sleeve	Soil	ICE	X	X				
2	243647	HRET 0727 5001 RWQCB	19 Oct 09	9 <sup>05</sup>	1	STAINLESS STEEL SLEEVE	"	"	X	X				
3	243648	HRET 1002 5001 RWQCB	19 Oct 09	10 <sup>00</sup>	1	STAINLESS STEEL SLEEVE	"	"	<del>X</del>	X	X			
		<del>HRET 5001</del>	<del>19 Oct 09</del>		1	<del>STAINLESS STEEL SLEEVE</del>	<del>"</del>	<del>"</del>				X		
4	243649	HRET 1100 5001 RWQCB	19 Oct 09	12 <sup>05</sup>	1	STAINLESS STEEL SLEEVE			X			X		

Collected By: <b>ADAM GOLDENBERG</b>	Date: <b>10/19/09</b>	Time: <b>10:20</b>	Relinquished By:	Date:	Time:	TAT
Relinquished By: <b>Alan [Signature]</b>	Date: <b>10/19/09</b>	Time: <b>10:20</b>	Received For Laboratory: <b>Jaret Chin</b>	Date: <b>10.19.09</b>	Time: <b>1:15</b>	<input type="checkbox"/> Normal
Received By: <b>PR R. [Signature]</b>	Date: <b>19 Oct 09</b>	Time: <b>10:20</b>	Condition of Sample:			



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA 91304

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 2

Project ID: BOEING SSFL

ASL Job Number	Submitted	Client
43477	10/19/2009	LARWQB

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 102009-1

Our Lab I.D.		243648			
Client Sample I.D.		HZET 1002 5001 RWQCB			
Date Sampled		10/19/2009			
Date Prepared		10/20/2009			
Preparation Method					
Date Analyzed		10/20/2009			
Matrix		Soil			
Units		ug/kg			
Dilution Factor		1			
Analytes	PQL	Results			
Aroclor-1016 (PCB-1016)	33.0	ND			
Aroclor-1221 (PCB-1221)	67.0	ND			
Aroclor-1232 (PCB-1232)	33.0	ND			
Aroclor-1242 (PCB-1242)	33.0	ND			
Aroclor-1248 (PCB-1248)	33.0	ND			
Aroclor-1254 (PCB-1254)	33.0	ND			
Aroclor-1260 (PCB-1260)	33.0	ND			

Our Lab I.D.		243648			
Surrogates	% Rec.Limit	% Rec.			
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169	102			

**QUALITY CONTROL REPORT**

QC Batch No: 102009-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Aroclor-1260 (PCB-1260)	108	108	<1	39-150	<30				

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243646  
**Lab Code:** E0900926-001

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry  
**Percent Solids:** 97.6

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.376g  
**Data File Name:** P204642  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1217  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0395	0.987			1
1,2,3,7,8-PeCDD	ND	U	0.0273	4.94			1
1,2,3,4,7,8-HxCDD	ND	U	0.0840	4.94			1
1,2,3,6,7,8-HxCDD	ND	U	0.106	4.94			1
1,2,3,7,8,9-HxCDD	ND	U	0.0909	4.94			1
1,2,3,4,6,7,8-HpCDD	<b>0.152</b>	BJK	0.0572	4.94	1.26	1.000	1
OCDD	<b>1.76</b>	BJ	0.252	9.87	0.95	1.000	1
2,3,7,8-TCDF	ND	U	0.0164	0.987			1
1,2,3,7,8-PeCDF	ND	U	0.0136	4.94			1
2,3,4,7,8-PeCDF	ND	U	0.0131	4.94			1
1,2,3,4,7,8-HxCDF	ND	U	0.0193	4.94			1
1,2,3,6,7,8-HxCDF	ND	U	0.0211	4.94			1
1,2,3,7,8,9-HxCDF	ND	U	0.0289	4.94			1
2,3,4,6,7,8-HxCDF	ND	U	0.0189	4.94			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.154	4.94			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.146	4.94			1
OCDF	ND	U	0.111	9.87			1
Total Tetra-Dioxins	ND	U	0.0395	0.987			1
Total Penta-Dioxins	ND	U	0.0273	4.94			1
Total Hexa-Dioxins	ND	U	0.0840	4.94			1
Total Hepta-Dioxins	<b>0.208</b>	J	0.0572	4.94	1.08		1
Total Tetra-Furans	ND	U	0.0164	0.987			1
Total Penta-Furans	ND	U	0.0131	4.94			1
Total Hexa-Furans	ND	U	0.0193	4.94			1
Total Hepta-Furans	ND	U	0.154	4.94			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243646  
**Lab Code:** E0900926-001

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** Percent  
**Basis:** Dry  
**Percent Solids:** 97.6

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.376g  
**Data File Name:** P204642  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1217  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1397.025	70		25-164	0.76	1.009
13C-1,2,3,7,8-PeCDD	2000	1523.956	76		25-181	1.55	1.166
13C-1,2,3,4,7,8-HxCDD	2000	1437.761	72		32-141	1.23	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1553.515	78		28-130	1.22	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1266.242	63		23-140	1.05	1.068
13C-OCDD	4000	1482.291	37		17-157	0.91	1.149
13C-2,3,7,8-TCDF	2000	1350.942	68		24-169	0.78	0.981
13C-1,2,3,7,8-PeCDF	2000	1365.960	68		24-185	1.50	1.129
13C-2,3,4,7,8-PeCDF	2000	1245.262	62		21-178	1.50	1.155
13C-1,2,3,4,7,8-HxCDF	2000	1295.849	65		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1511.186	76		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1464.051	73		29-147	0.51	1.007
13C-2,3,4,6,7,8-HxCDF	2000	1478.880	74		28-136	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1035.429	52		28-143	0.42	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1585.496	79		26-138	0.42	1.080
37Cl-2,3,7,8-TCDD	800	604.502	76		35-197	NA	1.010

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243646  
**Lab Code:** E0900926-001

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0395	1	1	
1,2,3,7,8-PeCDD	ND	0.0273	1	1	
1,2,3,4,7,8-HxCDD	ND	0.0840	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.106	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.0909	1	0.1	
1,2,3,4,6,7,8-HpCDD	<b>0.152</b>	0.0572	1	0.01	0.00152
OCDD	<b>1.76</b>	0.252	1	0.0003	0.000528
2,3,7,8-TCDF	ND	0.0164	1	0.1	
1,2,3,7,8-PeCDF	ND	0.0136	1	0.03	
2,3,4,7,8-PeCDF	ND	0.0131	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.0193	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.0211	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.0289	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.0189	1	0.1	
1,2,3,4,6,7,8-HpCDF	ND	0.154	1	0.01	
1,2,3,4,7,8,9-HpCDF	ND	0.146	1	0.01	
OCDF	ND	0.111	1	0.0003	
Total TEQ					0.00205

2005 WHO TEFs, ND = 0

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243647  
**Lab Code:** E0900926-002

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry  
**Percent Solids:** 89.2

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.434g  
**Data File Name:** P204643  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1305  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0281	1.07			1
1,2,3,7,8-PeCDD	ND	U	0.0359	5.37			1
1,2,3,4,7,8-HxCDD	ND	U	0.0404	5.37			1
1,2,3,6,7,8-HxCDD	ND	U	0.0532	5.37			1
1,2,3,7,8,9-HxCDD	ND	U	0.0449	5.37			1
1,2,3,4,6,7,8-HpCDD	0.395	BJ	0.0301	5.37	0.92	1.001	1
OCDD	3.11	BJ	0.144	10.7	0.94	1.000	1
2,3,7,8-TCDF	ND	U	0.0179	1.07			1
1,2,3,7,8-PeCDF	ND	U	0.0309	5.37			1
2,3,4,7,8-PeCDF	ND	U	0.0236	5.37			1
1,2,3,4,7,8-HxCDF	ND	U	0.0235	5.37			1
1,2,3,6,7,8-HxCDF	ND	U	0.0233	5.37			1
1,2,3,7,8,9-HxCDF	ND	U	0.0365	5.37			1
2,3,4,6,7,8-HxCDF	ND	U	0.0236	5.37			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.108	5.37			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.128	5.37			1
OCDF	0.139	JK	0.116	10.7	0.59	1.004	1
Total Tetra-Dioxins	ND	U	0.0281	1.07			1
Total Penta-Dioxins	ND	U	0.0359	5.37			1
Total Hexa-Dioxins	ND	U	0.0404	5.37			1
Total Hepta-Dioxins	0.735	J	0.0301	5.37	1.11		1
Total Tetra-Furans	ND	U	0.0179	1.07			1
Total Penta-Furans	ND	U	0.0236	5.37			1
Total Hexa-Furans	ND	U	0.0235	5.37			1
Total Hepta-Furans	ND	U	0.108	5.37			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243647  
**Lab Code:** E0900926-002

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** Percent  
**Basis:** Dry  
**Percent Solids:** 89.2

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.434g  
**Data File Name:** P204643  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1305  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1283.207	64		25-164	0.75	1.009
13C-1,2,3,7,8-PeCDD	2000	1575.571	79		25-181	1.50	1.165
13C-1,2,3,4,7,8-HxCDD	2000	1493.139	75		32-141	1.21	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1458.829	73		28-130	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1231.005	62		23-140	1.03	1.068
13C-OCDD	4000	1454.642	36		17-157	0.89	1.149
13C-2,3,7,8-TCDF	2000	1124.480	56		24-169	0.75	0.981
13C-1,2,3,7,8-PeCDF	2000	1311.672	66		24-185	1.52	1.129
13C-2,3,4,7,8-PeCDF	2000	1442.395	72		21-178	1.49	1.155
13C-1,2,3,4,7,8-HxCDF	2000	1215.482	61		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1521.293	76		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1357.252	68		29-147	0.49	1.007
13C-2,3,4,6,7,8-HxCDF	2000	1368.349	68		28-136	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1173.160	59		28-143	0.41	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1532.737	77		26-138	0.41	1.080
37Cl-2,3,7,8-TCDD	800	520.832	65		35-197	NA	1.010

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243647  
**Lab Code:** E0900926-002

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0281	1	1	
1,2,3,7,8-PeCDD	ND	0.0359	1	1	
1,2,3,4,7,8-HxCDD	ND	0.0404	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.0532	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.0449	1	0.1	
1,2,3,4,6,7,8-HpCDD	<b>0.395</b>	0.0301	1	0.01	0.00395
OCDD	<b>3.11</b>	0.144	1	0.0003	0.000933
2,3,7,8-TCDF	ND	0.0179	1	0.1	
1,2,3,7,8-PeCDF	ND	0.0309	1	0.03	
2,3,4,7,8-PeCDF	ND	0.0236	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.0235	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.0233	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.0365	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.0236	1	0.1	
1,2,3,4,6,7,8-HpCDF	ND	0.108	1	0.01	
1,2,3,4,7,8,9-HpCDF	ND	0.128	1	0.01	
OCDF	<b>0.139</b>	0.116	1	0.0003	0.0000417
Total TEQ					0.00492

2005 WHO TEFs, ND = 0

**Comments:** \_\_\_\_\_



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243649  
**Lab Code:** E0900926-003

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry  
**Percent Solids:** 93.8

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.510g  
**Data File Name:** P204644  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1352  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0159	1.01			1
1,2,3,7,8-PeCDD	ND	U	0.0325	5.07			1
1,2,3,4,7,8-HxCDD	ND	U	0.0373	5.07			1
1,2,3,6,7,8-HxCDD	1.37	J	0.0506	5.07	1.23	1.000	1
1,2,3,7,8,9-HxCDD	1.43	J	0.0421	5.07	1.38	1.008	1
1,2,3,4,6,7,8-HpCDD	ND	U	0.0403	5.07			1
OCDD	0.588	BJ	0.118	10.1	0.96	1.000	1
2,3,7,8-TCDF	ND	U	0.0199	1.01			1
1,2,3,7,8-PeCDF	ND	U	0.0181	5.07			1
2,3,4,7,8-PeCDF	ND	U	0.0130	5.07			1
1,2,3,4,7,8-HxCDF	ND	U	0.0217	5.07			1
1,2,3,6,7,8-HxCDF	0.890	J	0.0227	5.07	1.36	1.001	1
1,2,3,7,8,9-HxCDF	ND	U	0.0315	5.07			1
2,3,4,6,7,8-HxCDF	ND	U	0.0200	5.07			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.0807	5.07			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0937	5.07			1
OCDF	ND	U	0.0890	10.1			1
Total Tetra-Dioxins	ND	U	0.0159	1.01			1
Total Penta-Dioxins	ND	U	0.0325	5.07			1
Total Hexa-Dioxins	2.80	J	0.0373	5.07	1.23		1
Total Hepta-Dioxins	ND	U	0.0403	5.07			1
Total Tetra-Furans	ND	U	0.0199	1.01			1
Total Penta-Furans	ND	U	0.0130	5.07			1
Total Hexa-Furans	0.890	J	0.0217	5.07	1.36		1
Total Hepta-Furans	ND	U	0.0807	5.07			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243649  
**Lab Code:** E0900926-003

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** Percent  
**Basis:** Dry  
**Percent Solids:** 93.8

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.510g  
**Data File Name:** P204644  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 1352  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P204638

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1137.677	57		25-164	0.79	1.009
13C-1,2,3,7,8-PeCDD	2000	1517.050	76		25-181	1.51	1.166
13C-1,2,3,4,7,8-HxCDD	2000	1384.043	69		32-141	1.22	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1446.369	72		28-130	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1243.168	62		23-140	1.03	1.068
13C-OCDD	4000	1425.970	36		17-157	0.86	1.149
13C-2,3,7,8-TCDF	2000	998.277	50		24-169	0.74	0.981
13C-1,2,3,7,8-PeCDF	2000	1210.281	61		24-185	1.51	1.130
13C-2,3,4,7,8-PeCDF	2000	1338.341	67		21-178	1.51	1.155
13C-1,2,3,4,7,8-HxCDF	2000	1060.287	53		26-152	0.51	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1390.217	70		26-123	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1344.888	67		29-147	0.51	1.007
13C-2,3,4,6,7,8-HxCDF	2000	1335.189	67		28-136	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1190.585	60		28-143	0.42	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	1555.803	78		26-138	0.40	1.080
37Cl-2,3,7,8-TCDD	800	481.145	60		35-197	NA	1.010

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** 243649  
**Lab Code:** E0900926-003

**Service Request:** E0900926  
**Date Collected:** 10/19/09 0000  
**Date Received:** 10/21/09  
**Units:** ng/Kg  
**Basis:** Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0159	1	1	
1,2,3,7,8-PeCDD	ND	0.0325	1	1	
1,2,3,4,7,8-HxCDD	ND	0.0373	1	0.1	
1,2,3,6,7,8-HxCDD	1.37	0.0506	1	0.1	0.137
1,2,3,7,8,9-HxCDD	1.43	0.0421	1	0.1	0.143
1,2,3,4,6,7,8-HpCDD	ND	0.0403	1	0.01	
OCDD	0.588	0.118	1	0.0003	0.000176
2,3,7,8-TCDF	ND	0.0199	1	0.1	
1,2,3,7,8-PeCDF	ND	0.0181	1	0.03	
2,3,4,7,8-PeCDF	ND	0.0130	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.0217	1	0.1	
1,2,3,6,7,8-HxCDF	0.890	0.0227	1	0.1	0.0890
1,2,3,7,8,9-HxCDF	ND	0.0315	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.0200	1	0.1	
1,2,3,4,6,7,8-HpCDF	ND	0.0807	1	0.01	
1,2,3,4,7,8,9-HpCDF	ND	0.0937	1	0.01	
OCDF	ND	0.0890	1	0.0003	
Total TEQ					0.369

2005 WHO TEFs, ND = 0

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** Method Blank  
**Lab Code:** EQ0900434-01

**Service Request:** E0900926  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ng/Kg  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P204639  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 0955  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** EQ434  
**Cal Ver. File Name:** P204638

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0328	1.00			1
1,2,3,7,8-PeCDD	ND	U	0.0400	5.00			1
1,2,3,4,7,8-HxCDD	ND	U	0.0374	5.00			1
1,2,3,6,7,8-HxCDD	ND	U	0.0516	5.00			1
1,2,3,7,8,9-HxCDD	ND	U	0.0424	5.00			1
1,2,3,4,6,7,8-HpCDD	<b>0.160</b>	JK	0.0391	5.00	1.83	1.000	1
OCDD	<b>0.580</b>	JK	0.115	10.0	1.09	1.000	1
2,3,7,8-TCDF	ND	U	0.0191	1.00			1
1,2,3,7,8-PeCDF	ND	U	0.0328	5.00			1
2,3,4,7,8-PeCDF	ND	U	0.0294	5.00			1
1,2,3,4,7,8-HxCDF	ND	U	0.0373	5.00			1
1,2,3,6,7,8-HxCDF	ND	U	0.0379	5.00			1
1,2,3,7,8,9-HxCDF	ND	U	0.0521	5.00			1
2,3,4,6,7,8-HxCDF	ND	U	0.0369	5.00			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.0589	5.00			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0653	5.00			1
OCDF	ND	U	0.0744	10.0			1
Total Tetra-Dioxins	ND	U	0.0328	1.00			1
Total Penta-Dioxins	ND	U	0.0400	5.00			1
Total Hexa-Dioxins	ND	U	0.0374	5.00			1
Total Hepta-Dioxins	ND	U	0.0391	5.00			1
Total Tetra-Furans	ND	U	0.0191	1.00			1
Total Penta-Furans	ND	U	0.0294	5.00			1
Total Hexa-Furans	ND	U	0.0373	5.00			1
Total Hepta-Furans	ND	U	0.0589	5.00			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** Method Blank  
**Lab Code:** EQ0900434-01

**Service Request:** E0900926  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** Percent  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P204639  
**ICAL Date:** 08/20/08

**Date Analyzed:** 10/26/09 0955  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** EQ434  
**Cal Ver. File Name:** P204638

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1428.970	71		25-164	0.77	1.009
13C-1,2,3,7,8-PeCDD	2000	1812.202	91		25-181	1.54	1.165
13C-1,2,3,4,7,8-HxCDD	2000	2030.244	102		32-141	1.22	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1807.747	90		28-130	1.22	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1543.413	77		23-140	1.05	1.068
13C-OCDD	4000	1809.183	45		17-157	0.87	1.149
13C-2,3,7,8-TCDF	2000	1262.143	63		24-169	0.73	0.981
13C-1,2,3,7,8-PeCDF	2000	1526.802	76		24-185	1.51	1.128
13C-2,3,4,7,8-PeCDF	2000	1618.649	81		21-178	1.51	1.154
13C-1,2,3,4,7,8-HxCDF	2000	1497.123	75		26-152	0.50	0.972
13C-1,2,3,6,7,8-HxCDF	2000	1856.737	93		26-123	0.50	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1742.315	87		29-147	0.52	1.007
13C-2,3,4,6,7,8-HxCDF	2000	1843.440	92		28-136	0.50	0.988
13C-1,2,3,4,6,7,8-HpCDF	2000	1487.197	74		28-143	0.42	1.044
13C-1,2,3,4,7,8,9-HpCDF	2000	2021.155	101		26-138	0.42	1.080
37Cl-2,3,7,8-TCDD	800	569.206	71		35-197	NA	1.009

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** Lab Control Sample  
**Lab Code:** EQ0900434-02

**Service Request:** E0900926  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ng/Kg  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P105745  
**ICAL Date:** 07/29/09

**Date Analyzed:** 10/25/09 1909  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-03  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P105732

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	18.5		0.0970	1.00	0.76	1.001	1
1,2,3,7,8-PeCDD	96.2		0.0820	5.00	1.58	1.000	1
1,2,3,4,7,8-HxCDD	86.3		0.104	5.00	1.26	1.000	1
1,2,3,6,7,8-HxCDD	110		0.126	5.00	1.26	1.000	1
1,2,3,7,8,9-HxCDD	86.7		0.109	5.00	1.27	1.008	1
1,2,3,4,6,7,8-HpCDD	96.6		0.164	5.00	1.06	1.000	1
OCDD	218		0.243	10.0	0.90	1.000	1
2,3,7,8-TCDF	17.9		0.101	1.00	0.76	1.001	1
1,2,3,7,8-PeCDF	90.4		0.0562	5.00	1.45	1.000	1
2,3,4,7,8-PeCDF	93.9		0.0553	5.00	1.57	1.000	1
1,2,3,4,7,8-HxCDF	98.9		0.0916	5.00	1.27	1.000	1
1,2,3,6,7,8-HxCDF	93.2		0.0828	5.00	1.26	1.000	1
1,2,3,7,8,9-HxCDF	86.4		0.127	5.00	1.29	1.000	1
2,3,4,6,7,8-HxCDF	93.5		0.0937	5.00	1.22	1.000	1
1,2,3,4,6,7,8-HpCDF	87.3		0.209	5.00	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	89.7		0.247	5.00	0.99	1.000	1
OCDF	237		0.273	10.0	0.92	1.004	1
Total Tetra-Dioxins	18.7		0.0970	1.00	0.76		1
Total Penta-Dioxins	96.2		0.0820	5.00	1.58		1
Total Hexa-Dioxins	283		0.104	5.00	1.26		1
Total Hepta-Dioxins	96.6		0.164	5.00	1.06		1
Total Tetra-Furans	17.9		0.101	1.00	0.76		1
Total Penta-Furans	185		0.0553	5.00	1.45		1
Total Hexa-Furans	372		0.0916	5.00	1.27		1
Total Hepta-Furans	177		0.209	5.00	1.03		1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43477  
**Sample Matrix:** Soil  
**Sample Name:** Lab Control Sample  
**Lab Code:** EQ0900434-02

**Service Request:** E0900926  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** Percent  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P105745  
**ICAL Date:** 07/29/09

**Date Analyzed:** 10/25/09 1909  
**Date Extracted:** 10/21/09  
**Instrument Name:** E-HRMS-03  
**GC Column:** DB-5  
**Blank File Name:** P204639  
**Cal Ver. File Name:** P105732


Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1386.115	69		20-175	0.77	1.009
13C-1,2,3,7,8-PeCDD	2000	1400.281	70		21-227	1.55	1.174
13C-1,2,3,4,7,8-HxCDD	2000	1456.887	73		21-193	1.24	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1538.015	77		25-163	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1105.617	55		26-166	1.09	1.069
13C-OCDD	4000	1441.236	36		13-199	0.89	1.149
13C-2,3,7,8-TCDF	2000	1364.084	68		22-152	0.79	0.979
13C-1,2,3,7,8-PeCDF	2000	1363.988	68		21-192	1.58	1.135
13C-2,3,4,7,8-PeCDF	2000	1419.712	71		13-328	1.59	1.162
13C-1,2,3,4,7,8-HxCDF	2000	1271.491	64		19-202	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1696.274	85		21-159	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1384.372	69		17-205	0.51	1.006
13C-2,3,4,6,7,8-HxCDF	2000	1500.638	75		22-176	0.52	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1138.117	57		21-158	0.43	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1462.290	73		20-186	0.44	1.079
37Cl-2,3,7,8-TCDD	800	531.876	66		31-191	NA	1.010

**Comments:** \_\_\_\_\_

**Report No:** 133046 **Customer:** American Scientific Labs.  
**Date:** October 21, 2009 2520 N. San Fernando Road  
**Date Received:** October 19, 2009 Los Angeles, CA 90065  
**Date Analyzed:** October 20, 2009 **Attention:** Molky Brar  
**Date/Time Collected:** 10/19/09 at 10:00am **Reference:** 43477  
**Subject:** Polarized Light Microscopy Analysis for Asbestos 1 Samples  
**Methodology:** "Method for Determination of Asbestos in Bulk Building Materials." NIOSH 9002  
**Accredited:** NVLAP Lab Code 101218-0  
**Certified:** California Department of Health Services Environmental Testing Laboratory ELAP 1119  
 County Sanitation Districts of Los Angeles County, Lab ID No. 10120

Quality Control Sample (SRM 1866 Glass Fibers as the blank): None Detected

Sample ID	Location / Description	Visual Description	Asbestiform Minerals	Other Fibrous Materials	Non-fibrous Materials
243648	NON-FRIABLE	BROWN GRANULAR	NONE DETECTED	CELLULOSE <1%, CLV. FRGMT 3%	GRANULAR MINERALS, OPAQUES




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Optical Microscopist  
BMK/mt

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B.M. Kolk, Laboratory Director

The EPA method is a semi-quantitative procedure. The detection limit is between 0.1 - 1% by area and is dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material.

The test results reported are for the sample(s) delivered to us and may not represent the entire material from which the samples was taken. The EPA recommends three samples or more be taken from a "homogenous sampling area" before friable material is considered non-asbestos-containing.

\*\* Negative floor tile samples may contain significant amounts (>1%) of very thin asbestos fibers which cannot be detected by PLM. Confirmation by XRD or TEM is recommended by the EPA (Federal Register Vol. 59, No. 146).

This report, from a NIST-accredited laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government. This report shall not be reproduced, except in full, without the written approval of EMS Laboratories.



**SUBMITTAL FORM** / Laboratory Services

133046

TURNAROUND TIME: STD  48 HR.  24 HR.   
 <8 HR.  WKND  OTHER:

RELINQUISHED BY Buk  
 TIME / DATE 3:20 - 10-19-09

CLIENT American Scientific Labs.  
 ADDRESS 2520 N. San Fernando Road  
L.A. CA 90065  
 TELEPHONE 323 223 9700  
 CONTACT Molky Bran

DATE OF SHIPMENT \_\_\_\_\_ CARRIER \_\_\_\_\_  
 CLIENT P.O. NO. \_\_\_\_\_  
 CLIENT JOB/PROJECT ID NO(S). 43477

RESULTS REQUESTED VIA VERBAL  FAX  E-MAIL  E-MAIL \_\_\_\_\_  
 (NOTE: Complete written reports will follow all analyses, in addition to any prior transmitted verbal, fax or e-mail results) FAX NO. \_\_\_\_\_

DATE/TIME OF SAMPLE COLLECTION 10-19-09 10:00 a.m.  
 SAMPLE PRESERVATIVES \_\_\_\_\_ HOLDING TIMES \_\_\_\_\_  
 NO. OF SAMPLES SENT 1 SAMPLER'S NAME \_\_\_\_\_  
 TYPE:  WATER  WASTE WATER  SOIL  FILTER  SORBENT TUBE  IMPINGER  OTHER \_\_\_\_\_

(FOR EMS ONLY)  
 EMS Sample No. 133046-48

CLIENT SAMPLE NO.	DESCRIPTION-LOCATION ANALYSIS	VOLUME TIME WEIGHT (IF APPLICABLE)
<u>243648</u>	<u>Asbestos (NIOSH 9002)</u>	<u>50 gm</u>
	<u>48m Rush</u>	
<del>_____</del>		

133046

Laboratory No. \_\_\_\_\_ Received By Meyerly Time 3:05  
 Date of Package Delivery 10/19/09 Shipping Bill Retained: YES  NONE   
 Condition of Package on Receipt ok Condition of Custody Seal none  
 (NOTE: If the package has sustained substantial damage or the custody seal is broken, stop and contact the project manager and the shipper.)  
 No. of Samples 1 Chain-of-Custody Signature \_\_\_\_\_  
 Date of Acceptance into Sample Bank 10/19/09 Misc. Info. \_\_\_\_\_  
 Disposition of Samples EMS Labs

(SF 6/07)

FOR EMS ONLY



**Weck Laboratories, Inc.**

Analytical Laboratory Services • Since 1964

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# CHAIN OF CUSTODY RECORD

9520039

Page 1 Of 1

CLIENT NAME: <i>American Scientific Labs.</i>		PROJECT: <i>43477</i>		ANALYSIS REQUESTED				SPECIAL HANDLING	
ADDRESS: <i>2520 N. San Fernando Road</i>		PHONE #: <i>323 223 9700</i>		<i>Copper by 60206</i>	<i>Lead by 60206</i>				<input type="checkbox"/> Same Day Rush 150% <input type="checkbox"/> 24 Hour Rush 100% <input checked="" type="checkbox"/> <b>48- 72 Hour Rush 75%</b> <input type="checkbox"/> 4 - 5 Day Rush 30% <input type="checkbox"/> Rush Extraction 50% <input type="checkbox"/> 10 - 15 Business Days <input checked="" type="checkbox"/> QA/QC Package
<i>L.A. CA 90065</i>		FAX #: <i>323 223 9500</i>							
PROJECT MANAGER: <i>Molky Bran</i>		SAMPLER:		E MAIL: <i>molley @ asllab.com</i>		P.O.#:		Method of Shipment _____	

ID# (For lab Use Only)	DATE SAMPLED	TIME SAMPLED	SMPL TYPE	SAMPLE IDENTIFICATION/SITE LOCATION	# OF CONT.	ANALYSIS REQUESTED										COMMENTS		
	<i>10-19-09</i>		<i>Soil</i>	<i>243646</i>	<i>1 Jar</i>	X												<i>48 hr Rush</i>
	<i>"</i>		<i>"</i>	<i>243647</i>	<i>"</i>	X												<i>PDF Results to Molky</i>
	<i>"</i>		<i>"</i>	<i>243649</i>	<i>"</i>	X												<i>by 10-22-09</i>

RELINQUISHED BY:		DATE / TIME		RECEIVED BY:		SAMPLE CONDITION:		SAMPLE TYPE CODE:	
SIGNATURE <i>Alex</i>	PRINT NAME <i>Alex</i>	<i>10/20/09 1305</i>		SIGNATURE <i>Jame Gunnel</i>	PRINT NAME	Actual Temperature: <i>20°C</i>		AQ = Aqueous NA = Non Aqueous SL = Sludge DW = Drinking Water WW = Waste Water RW = Rain Water GW = Ground Water SO = Soil SW = Solid Waste OL = Oil OT = Other Matrix	
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Received On Ice <i>(Y) / N</i>			
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Preserved <i>(Y) / (N)</i>			
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Evidence Seals Present <i>(Y) / (N)</i>			
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Container Attacked <i>(Y) / (N)</i>			
SIGNATURE	PRINT NAME			SIGNATURE	PRINT NAME	Preserved at Lab <i>(Y) / (N)</i>			

**PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS. CLIENT AGREES TO TERMS AND CONDITIONS (SEE BACK OF THIS FORM).**

SPECIAL REQUIREMENTS / BILLING INFORMATION



**Certificate of Analysis**

**Report Date:** Thursday, October 22, 2009  
**Received Date:** Tuesday, October 20, 2009  
**Received Time:** 1:05 pm  
**Turnaround Time:** 2 workdays

**Client:** American Scientific Laboratories  
 2520 N. San Fernando Road  
 Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 43477

**P.O. #:**

<b>Lab Sample ID: 9J20039-01</b>		<b>Sample ID: 243646</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 10/19/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	8.8	0.061	2.0	mg/kg	1x1	EPA 6020	10/20/09	10/21/09 20:58	W9J0716		
Lead, Total	5.9	0.11	1.0	mg/kg	1x1	EPA 6020B	10/20/09	10/21/09 20:58	W9J0716		

<b>Lab Sample ID: 9J20039-02</b>		<b>Sample ID: 243647</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 10/19/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	7.3	0.061	2.0	mg/kg	1x1	EPA 6020	10/20/09	10/21/09 21:02	W9J0716		
Lead, Total	4.2	0.11	1.0	mg/kg	1x1	EPA 6020B	10/20/09	10/21/09 21:02	W9J0716		

<b>Lab Sample ID: 9J20039-03</b>		<b>Sample ID: 243649</b>									<b>Matrix: Solid</b>
Sampled by: Client		Sampled: 10/19/09 00:00									
Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier	
Copper, Total	9.9	0.061	2.0	mg/kg	1x1	EPA 6020	10/20/09	10/21/09 21:25	W9J0716		
Lead, Total	6.1	0.11	1.0	mg/kg	1x1	EPA 6020B	10/20/09	10/21/09 21:25	W9J0716		



### Certificate of Analysis

### Quality Control Section

#### Metals (Non-Aqueous) by EPA 6000/7000 Series Methods - Quality Control

**Batch W9J0716 - EPA 6020**

<b>Blank (W9J0716-BLK1)</b>					<b>Prepared: 10/20/09</b>		<b>Analyzed: 10/21/09 20:31</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit

Copper, Total		ND		mg/kg					
Lead, Total		ND		mg/kg					

<b>LCS (W9J0716-BS1)</b>					<b>Prepared: 10/20/09</b>		<b>Analyzed: 10/21/09 20:35</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit

Copper, Total		45.5		mg/kg	50.0	91	87-117		
Lead, Total		49.2		mg/kg	50.0	98	80-127		

<b>LCS Dup (W9J0716-BSD1)</b>					<b>Prepared: 10/20/09</b>		<b>Analyzed: 10/21/09 20:40</b>		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit

Copper, Total		51.7		mg/kg	50.0	103	87-117	13	20
Lead, Total		52.5		mg/kg	50.0	105	80-127	6	20

<b>Matrix Spike (W9J0716-MS1)</b>					<b>Source: 9J19044-01</b>		<b>Prepared: 10/20/09</b>		<b>Analyzed: 10/21/09 21:29</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	

Copper, Total	20.4	68.7		mg/kg	48.1	100	68-127		
Lead, Total	36.4	89.1		mg/kg	48.1	110	75-130		

<b>Matrix Spike Dup (W9J0716-MSD1)</b>					<b>Source: 9J19044-01</b>		<b>Prepared: 10/20/09</b>		<b>Analyzed: 10/21/09 21:34</b>	
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit	

Copper, Total	20.4	67.7		mg/kg	47.6	99	68-127	2	20
Lead, Total	36.4	85.8		mg/kg	47.6	104	75-130	4	20

### Certificate of Analysis

**Notes:**

The Chain of Custody document is part of the analytical report.  
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.  
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services. The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).  
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

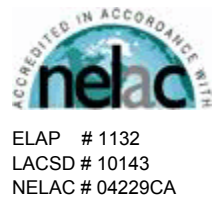
If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002




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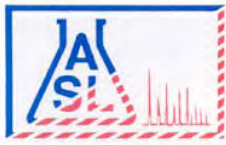
**Authorized Signature**  
 Contact: Kim G Tu (Project Manager)



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub Subcontracted analysis, original report enclosed.
- Dil The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b". (a) and (b) are indicated as whole numbers with rounding up for  $\geq 0.5$  and off for  $< 0.5$
- DL Method Detection Limit
- RL Method Reporting Limit
- MDA Minimum Detectable Activity



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

LARWQCB  
320 W. 4th St.  
Los Angeles, CA 90013-

Telephone (213) 576-6724  
Attn Peter Raftery

Number of Pages 7  
Date Received 10/30/2009  
Date Reported 11/03/2009

Job Number	Ordered	Client
43586	10/30/2009	LARWQB

Project ID: SSFL ISRA OUTFL.008  
Project Name: SSFL ISRA Outfall 008  
Site: 5800 Woolsey Canyon Road  
Canoga Park, CA

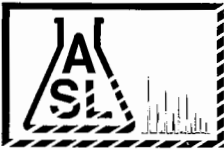
Enclosed are the results of analyses on 1 sample analyzed as specified on attached chain of custody.

Amolk MOLKY Brar  
Laboratory Manager

Rojert G. Araghi  
Laboratory Director

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
- 2) ASL is not responsible for any consequences resulting from any inaccuracies, omissions, or misrepresentations contained in client-provided information regarding samples submitted to the laboratory.



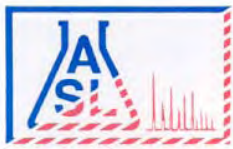
AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

2520 N. San Fernando Road, LA, CA 90065 Tel: (323) 223-9700 • Fax: (323) 223-9500

COC# N<sup>o</sup> 52593 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# 43586

Company: LA REGIONAL WATER QUALITY CONTROL BOARD				Report To: PETER RAFFERTY		ANALYSIS REQUESTED																
Address: 320 W 42nd St. SE200				Project Name: SSEL ISRA OUTFALL 008		Address: 320 W. 42nd St. SE200																
Telephone: 213.576.6724				Site Address: 5800 Woolsey Cyn Rd.		Invoice To: ART LENOX (Boeing)																
Fax: 213.576.6717				CANDIGA PARK, CA.		Address: 5800 Woolsey Cyn Rd.																
Special Instruction:				Project ID:		CANOGA PARK CA.																
E-mail:				Project Manager:		P.O.#:																
I T E M	LAB USE ONLY	SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation											Remarks		
	Lab ID	Sample ID	Date	Time	#	Type																
	244129	HZET 0730-9001	29 Oct 09	19:25	2	STAINLESS STEEL SLEEVE	Soil/Rock	ICE	x	x	x	x	x	x	x	x	x	x	x	x		
Collected By: <i>[Signature]</i> Date 10/29/09 Time 1200 Relinquished By: <i>[Signature]</i> Date 30 Oct 09 Time 10:30 Relinquished By: <i>[Signature]</i> Date 10/29/09 Time 1200 Received For Laboratory Janet Chin Date 10.30.09 Time 10:40 Received By: Peter Rafferty Date 29 Oct 09 Time 12:00 Condition of Sample:																						

TAT  
 Normal  
 Rush  
48hr



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 2

Project ID: SSFL ISRA OUTFL.008  
 Project Name: SSFL ISRA Outfall 008

ASL Job Number	Submitted	Client
43586	10/30/2009	LARWQB

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QC Batch No: 103009-2

Our Lab I.D.		244129			
Client Sample I.D.		HZET 0730-5001			
Date Sampled		10/29/2009			
Date Prepared		10/30/2009			
Preparation Method					
Date Analyzed		10/30/2009			
Matrix		Soil			
Units		mg/Kg			
Dilution Factor		1			
Analytes	PQL	Results			
<b>AA Metals</b>					
Mercury	0.0500	ND			
<b>ICP Metals</b>					
Antimony	0.500	0.865			
Arsenic	0.250	1.59			
Barium	0.500	49.4			
Beryllium	0.500	ND			
Cadmium	0.500	0.797			
Chromium	0.500	11.3			
Cobalt	0.500	3.97			
Copper	0.500	4.52			
Lead	0.250	2.77			
Molybdenum	0.500	ND			
Nickel	0.500	6.41			
Selenium	0.500	ND			
Silver	0.500	ND			
Thallium	0.500	ND			
Vanadium	0.500	21.7			
Zinc	0.500	45.7			

**QUALITY CONTROL REPORT**

QC Batch No: 103009-2

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	118	80-120							
<b>ICP Metals</b>									
Antimony	93	80-120							







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**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
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 Los Angeles, CA 90013-

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Attn: Peter Raftery

Page: 4

Project ID: SSFL ISRA OUTFL.008  
 Project Name: SSFL ISRA Outfall 008

ASL Job Number	Submitted	Client
43586	10/30/2009	LARWQB

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

QC Batch No: 102909-1

Our Lab I.D.		244129			
Client Sample I.D.		HZET 0730-5001			
Date Sampled		10/29/2009			
Date Prepared		10/29/2009			
Preparation Method					
Date Analyzed		10/29/2009			
Matrix		Soil			
Units		ug/kg			
Dilution Factor		1			
Analytes	PQL	Results			
Aroclor-1016 (PCB-1016)	33.0	ND			
Aroclor-1221 (PCB-1221)	67.0	ND			
Aroclor-1232 (PCB-1232)	33.0	ND			
Aroclor-1242 (PCB-1242)	33.0	ND			
Aroclor-1248 (PCB-1248)	33.0	ND			
Aroclor-1254 (PCB-1254)	33.0	ND			
Aroclor-1260 (PCB-1260)	33.0	ND			

Our Lab I.D.		244129			
Surrogates	% Rec.Limit	% Rec.			
Surrogate Percent Recovery					
Decachlorobiphenyl	43-169	103			

**QUALITY CONTROL REPORT**

QC Batch No: 102909-1

Analytes	MS % REC	MS DUP % REC	RPD %	MS/MSD % Limit	MS RPD % Limit	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Aroclor-1260 (PCB-1260)	116	115	<1	39-150	<30	111	102	8.5	39-150	<30



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*Environmental Testing Services*

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**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 5

Project ID: SSFL ISRA OUTFL.008  
 Project Name: SSFL ISRA Outfall 008

ASL Job Number	Submitted	Client
43586	10/30/2009	LARWQB

Method: 8270C, Polynuclear Aromatic Hydrocarbons

QC Batch No: 110209-1

Our Lab I.D.		244129			
Client Sample I.D.		HZET 0730-5001			
Date Sampled		10/29/2009			
Date Prepared		11/02/2009			
Preparation Method					
Date Analyzed		11/02/2009			
Matrix		Soil			
Units		ug/kg			
Dilution Factor		1			
Analytes	PQL	Results			
Acenaphthene	50.0	ND			
Acenaphthylene	50.0	ND			
Anthracene	50.0	ND			
Benz(a)anthracene (Benzo(a)anthracene)	50.0	ND			
Benzo(a)pyrene	50.0	ND			
Benzo(b)fluoranthene	50.0	ND			
Benzo(ghi)perylene	50.0	ND			
Benzo(k)fluoranthene	50.0	ND			
Chrysene	50.0	ND			
Dibenz(a,h)anthracene	50.0	ND			
Fluoranthene	50.0	ND			
Fluorene	50.0	ND			
Indeno(1,2,3-cd)pyrene	50.0	ND			
Naphthalene	50.0	ND			
Phenanthrene	50.0	ND			
Pyrene	50.0	ND			

Our Lab I.D.		244129			
Surrogates	% Rec.Limit	% Rec.			
<b>Surrogate Percent Recovery</b>					
2-Fluorophenol	21-105	25			
Phenol-d6	10-107	28			
2,4,6-Tribromophenol	10-123	57			
Nitrobenzene-d5	35-114	47			
2-Fluorobiphenyl	18-116	22			
Terphenyl-d14	33-141	77			



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**ANALYTICAL RESULTS**

Page: **6**

Project ID: SSFL ISRA OUTFL.008  
Project Name: SSFL ISRA Outfall 008

ASL Job Number	Submitted	Client
43586	10/30/2009	LARWQB

Method: 8270C, Polynuclear Aromatic Hydrocarbons

**QUALITY CONTROL REPORT**

**QC Batch No: 110209-1**

Analytes	LCS	LCS DUP	LCS RPD	LCS/LCSD	LCS RPD					
	% REC	% REC	% REC	% Limit	% Limit					
Acenaphthene	96	111	14.5	43-118	<30					
Pyrene	92	81	12.7	26-127	<30					



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**ANALYTICAL RESULTS**

**Ordered By**

LARWQCB  
 320 W. 4th St.  
 Los Angeles, CA 90013-

**Site**

5800 Woolsey Canyon Road  
 Canoga Park, CA

Telephone: (213)576-6724

Attn: Peter Raftery

Page: 7

Project ID: SSFL ISRA OUTFL.008  
 Project Name: SSFL ISRA Outfall 008

ASL Job Number	Submitted	Client
43586	10/30/2009	LARWQB

Method: 9045C, Soil and Waste pH

QC Batch No: 103009-1

Our Lab I.D.		244129			
Client Sample I.D.		HZET 0730-5001			
Date Sampled		10/29/2009			
Date Prepared		10/30/2009			
Preparation Method					
Date Analyzed		10/30/2009			
Matrix		Soil			
Units		pH Units			
Dilution Factor		1			
Analytes	PQL	Results			
Conventionals					
pH	1.00	7.81			

**QUALITY CONTROL REPORT**

QC Batch No: 103009-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit				
Conventionals									
pH	100	100	<1	80-120					

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43586  
**Sample Matrix:** Soil  
**Sample Name:** 244129  
**Lab Code:** E0900966-001

**Service Request:** E0900966  
**Date Collected:** 10/29/09 0000  
**Date Received:** 10/31/09  
**Units:** ng/Kg  
**Basis:** Dry  
**Percent Solids:** 94.4

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.420g  
**Data File Name:** P204845  
**ICAL Date:** 08/20/08

**Date Analyzed:** 11/5/09 2122  
**Date Extracted:** 11/2/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204842  
**Cal Ver. File Name:** P204840

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0171	1.02			1
1,2,3,7,8-PeCDD	ND	U	0.0309	5.08			1
1,2,3,4,7,8-HxCDD	ND	U	0.0351	5.08			1
1,2,3,6,7,8-HxCDD	ND	U	0.0453	5.08			1
1,2,3,7,8,9-HxCDD	ND	U	0.0390	5.08			1
1,2,3,4,6,7,8-HpCDD	0.414	BJ	0.0356	5.08	1.07	1.000	1
OCDD	5.71	BJ	0.0856	10.2	0.93	1.000	1
2,3,7,8-TCDF	ND	U		1.02			1
1,2,3,7,8-PeCDF	ND	U	0.0277	5.08			1
2,3,4,7,8-PeCDF	ND	U	0.0242	5.08			1
1,2,3,4,7,8-HxCDF	0.0421	JK	0.0155	5.08	0.85	1.000	1
1,2,3,6,7,8-HxCDF	ND	U	0.0143	5.08			1
1,2,3,7,8,9-HxCDF	ND	U	0.0195	5.08			1
2,3,4,6,7,8-HxCDF	0.0268	JK	0.0164	5.08	1.03	1.000	1
1,2,3,4,6,7,8-HpCDF	0.0909	JK	0.0615	5.08	1.47	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0714	5.08			1
OCDF	0.376	J	0.119	10.2	0.94	1.004	1
Total Tetra-Dioxins	ND	U	0.0171	1.02			1
Total Penta-Dioxins	ND	U	0.0309	5.08			1
Total Hexa-Dioxins	ND	U	0.0351	5.08			1
Total Hepta-Dioxins	0.414	J	0.0356	5.08	1.07		1
Total Tetra-Furans	ND	U	0.0282	1.02			1
Total Penta-Furans	ND	U	0.0242	5.08			1
Total Hexa-Furans	0.0647	J	0.0155	5.08	1.32		1
Total Hepta-Furans	ND	U	0.0615	5.08			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43586  
**Sample Matrix:** Soil  
**Sample Name:** 244129  
**Lab Code:** E0900966-001

**Service Request:** E0900966  
**Date Collected:** 10/29/09 0000  
**Date Received:** 10/31/09  
**Units:** Percent  
**Basis:** Dry  
**Percent Solids:** 94.4

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.420g  
**Data File Name:** P204845  
**ICAL Date:** 08/20/08

**Date Analyzed:** 11/5/09 2122  
**Date Extracted:** 11/2/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204842  
**Cal Ver. File Name:** P204840

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1584.858	79		25-164	0.79	1.008
13C-1,2,3,7,8-PeCDD	2000	1611.635	81		25-181	1.54	1.174
13C-1,2,3,4,7,8-HxCDD	2000	1674.257	84		32-141	1.23	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1562.258	78		28-130	1.21	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1371.639	69		23-140	1.02	1.068
13C-OCDD	4000	1599.466	40		17-157	0.87	1.148
13C-2,3,7,8-TCDF	2000	1486.392	74		24-169	0.75	0.978
13C-1,2,3,7,8-PeCDF	2000	1480.890	74		24-185	1.52	1.135
13C-2,3,4,7,8-PeCDF	2000	1539.139	77		21-178	1.51	1.161
13C-1,2,3,4,7,8-HxCDF	2000	1605.848	80		26-152	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1714.449	86		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1490.875	75		29-147	0.51	1.006
13C-2,3,4,6,7,8-HxCDF	2000	1626.461	81		28-136	0.51	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1402.746	70		28-143	0.42	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1693.542	85		26-138	0.42	1.079
37Cl-2,3,7,8-TCDD	800	650.529	81		35-197	NA	1.009

**Comments:** \_\_\_\_\_

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43586  
**Sample Matrix:** Soil  
**Sample Name:** 244129  
**Lab Code:** E0900966-001

**Service Request:** E0900966  
**Date Collected:** 10/29/09 0000  
**Date Received:** 10/31/09  
**Units:** ng/Kg  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0171	1	1	
1,2,3,7,8-PeCDD	ND	0.0309	1	1	
1,2,3,4,7,8-HxCDD	ND	0.0351	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.0453	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.0390	1	0.1	
1,2,3,4,6,7,8-HpCDD	<b>0.414</b>	0.0356	1	0.01	0.00414
OCDD	<b>5.71</b>	0.0856	1	0.0003	0.00171
2,3,7,8-TCDF	ND		1	0.1	
1,2,3,7,8-PeCDF	ND	0.0277	1	0.03	
2,3,4,7,8-PeCDF	ND	0.0242	1	0.3	
1,2,3,4,7,8-HxCDF	<b>0.0421</b>	0.0155	1	0.1	0.00421
1,2,3,6,7,8-HxCDF	ND	0.0143	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.0195	1	0.1	
2,3,4,6,7,8-HxCDF	<b>0.0268</b>	0.0164	1	0.1	0.00268
1,2,3,4,6,7,8-HpCDF	<b>0.0909</b>	0.0615	1	0.01	0.000909
1,2,3,4,7,8,9-HpCDF	ND	0.0714	1	0.01	
OCDF	<b>0.376</b>	0.119	1	0.0003	0.000113
Total TEQ					0.0138

2005 WHO TEFs, ND = 0

**Comments:** \_\_\_\_\_



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43586  
**Sample Matrix:** Soil  
**Sample Name:** Method Blank  
**Lab Code:** EQ0900453-01

**Service Request:** E0900966  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** ng/Kg  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P204842  
**ICAL Date:** 08/20/08

**Date Analyzed:** 11/5/09 1859  
**Date Extracted:** 11/2/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204842  
**Cal Ver. File Name:** P204840

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0325	1.00			1
1,2,3,7,8-PeCDD	ND	U	0.0198	5.00			1
1,2,3,4,7,8-HxCDD	ND	U	0.0289	5.00			1
1,2,3,6,7,8-HxCDD	ND	U	0.0369	5.00			1
1,2,3,7,8,9-HxCDD	ND	U	0.0318	5.00			1
1,2,3,4,6,7,8-HpCDD	<b>0.102</b>	JK	0.0196	5.00	1.70	1.000	1
OCDD	<b>0.302</b>	JK	0.0728	10.0	0.71	1.000	1
2,3,7,8-TCDF	ND	U		1.00			1
1,2,3,7,8-PeCDF	ND	U	0.0360	5.00			1
2,3,4,7,8-PeCDF	ND	U	0.0304	5.00			1
1,2,3,4,7,8-HxCDF	ND	U	0.0138	5.00			1
1,2,3,6,7,8-HxCDF	ND	U	0.0128	5.00			1
1,2,3,7,8,9-HxCDF	ND	U	0.0168	5.00			1
2,3,4,6,7,8-HxCDF	ND	U	0.0139	5.00			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.0415	5.00			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0474	5.00			1
OCDF	ND	U	0.0688	10.0			1
Total Tetra-Dioxins	ND	U	0.0325	1.00			1
Total Penta-Dioxins	ND	U	0.0198	5.00			1
Total Hexa-Dioxins	ND	U	0.0289	5.00			1
Total Hepta-Dioxins	<b>0.189</b>	J	0.0196	5.00	0.96		1
Total Tetra-Furans	ND	U	0.0259	1.00			1
Total Penta-Furans	ND	U	0.0304	5.00			1
Total Hexa-Furans	ND	U	0.0138	5.00			1
Total Hepta-Furans	ND	U	0.0415	5.00			1

**Comments:** \_\_\_\_\_

**COLUMBIA ANALYTICAL SERVICES, INC.**

Analytical Report

**Client:** American Scientific Laboratories  
**Project:** Subcontracted High Res Testing/43586  
**Sample Matrix:** Soil  
**Sample Name:** Method Blank  
**Lab Code:** EQ0900453-01

**Service Request:** E0900966  
**Date Collected:** NA  
**Date Received:** NA  
**Units:** Percent  
**Basis:** Dry

**Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS**

**Analytical Method:** 1613B  
**Prep Method:** Method  
**Sample Amount:** 10.000g  
**Data File Name:** P204842  
**ICAL Date:** 08/20/08

**Date Analyzed:** 11/5/09 1859  
**Date Extracted:** 11/2/09  
**Instrument Name:** E-HRMS-04  
**GC Column:** DB-5  
**Blank File Name:** P204842  
**Cal Ver. File Name:** P204840

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	2000	1472.678	74		25-164	0.79	1.009
13C-1,2,3,7,8-PeCDD	2000	1539.108	77		25-181	1.54	1.174
13C-1,2,3,4,7,8-HxCDD	2000	1779.925	89		32-141	1.21	0.990
13C-1,2,3,6,7,8-HxCDD	2000	1585.011	79		28-130	1.23	0.992
13C-1,2,3,4,6,7,8-HpCDD	2000	1476.161	74		23-140	1.05	1.068
13C-OCDD	4000	1734.192	43		17-157	0.88	1.147
13C-2,3,7,8-TCDF	2000	1370.547	69		24-169	0.75	0.978
13C-1,2,3,7,8-PeCDF	2000	1365.394	68		24-185	1.52	1.135
13C-2,3,4,7,8-PeCDF	2000	1469.458	73		21-178	1.51	1.161
13C-1,2,3,4,7,8-HxCDF	2000	1606.839	80		26-152	0.51	0.971
13C-1,2,3,6,7,8-HxCDF	2000	1793.977	90		26-123	0.51	0.974
13C-1,2,3,7,8,9-HxCDF	2000	1587.817	79		29-147	0.50	1.006
13C-2,3,4,6,7,8-HxCDF	2000	1726.265	86		28-136	0.50	0.987
13C-1,2,3,4,6,7,8-HpCDF	2000	1518.129	76		28-143	0.44	1.045
13C-1,2,3,4,7,8,9-HpCDF	2000	1823.290	91		26-138	0.43	1.079
37Cl-2,3,7,8-TCDD	800	704.292	88		35-197	NA	1.009

**Comments:** \_\_\_\_\_



# EBERLINE SERVICES

EBERLINE ANALYTICAL CORPORATION  
2030 Wright Avenue  
Richmond, California 94804-3849  
Phone (510) 235-2633 Fax (510) 235-0438  
Toll Free (800) 841-5487  
[www.eberlineservices.com](http://www.eberlineservices.com)

November 9, 2009

Mr. Molky Brar  
American Scientific Laboratories, LLC  
2520 N. San Fernando Road  
Los Angeles, CA 90065

**Ref: ASL Chain of Custody No: 53033**  
**Project ID: 43586**  
**Eberline Analytical Report: R911002-8389**

Dear Mr. Brar:

Enclosed is a report from the analysis of one soil sample received at Eberline Analytical on November 2, 2009. The sample was analyzed according to the accompanying chain of custody document; the requested analyses were tritium (H-3), strontium-90, and gamma scan. Results are reported on a dry weight basis. The parenthetical G after a nuclide indicates that the result was obtained by gamma spectroscopy; a "U" in the results column indicates that the nuclide was not detected greater than the indicated minimum detectable activity (MDA). No problems were encountered during the analyses; all QC sample results were within the control limits described in Eberline Analytical Quality Control Procedures Manual.

Please call me if you have any questions concerning the enclosed report.

Regards,

N. Joseph Verville  
Client Services Manager

NJV/ljb  
Enclosures: Report/CoC

# Eberline Analytical

## ANALYSIS RESULTS

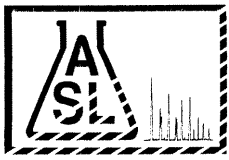
SDG <u>8389</u>	Client <u>ASL LLC ENV</u>
Work Order <u>R911002-01</u>	Contract _____
Received Date <u>11/02/09</u>	Matrix <u>SOIL</u>

Client	Lab								
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>		<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>	
244129	8389-001	10/29/09	11/02/09	Be-7 (G)		U	pCi/g	0.292	
			11/02/09	Na-22 (G)		U	pCi/g	0.0513	
			11/02/09	K-40 (G)		25.60 ± 1.0	pCi/g	0.602	
			11/02/09	Sc-46 (G)		U	pCi/g	0.0456	
			11/02/09	Mn-54 (G)		U	pCi/g	0.0439	
			11/02/09	Co-58 (G)		U	pCi/g	0.0402	
			11/02/09	Co-60 (G)		U	pCi/g	0.0480	
			11/02/09	Zn-65 (G)		U	pCi/g	0.108	
			11/02/09	Kr-85 (G)		U	pCi/g	11.2	
			11/02/09	Nb-94 (G)		U	pCi/g	0.0464	
			11/02/09	Ru-103 (G)		U	pCi/g	0.0371	
			11/02/09	Ru-106 (G)		U	pCi/g	0.368	
			11/02/09	Ag-108m(G)		U	pCi/g	0.0325	
			11/02/09	Sn-113 (G)		U	pCi/g	0.0434	
			11/02/09	Sb-125 (G)		U	pCi/g	0.0955	
			11/02/09	Ba-133 (G)		U	pCi/g	0.0454	
			11/02/09	Cs-134 (G)		U	pCi/g	0.0655	
			11/02/09	Cs-137 (G)		U	pCi/g	0.0443	
			11/02/09	Ce-144 (G)		U	pCi/g	0.181	
			11/02/09	Pr-144 (G)		U	pCi/g	0.181	
			11/02/09	Eu-152 (G)		U	pCi/g	0.101	
			11/02/09	Eu-154 (G)		U	pCi/g	0.152	
			11/02/09	Eu-155 (G)		U	pCi/g	0.148	
			11/02/09	Ra-226 (G)			0.8350 ± 0.10	pCi/g	0.0923
			11/02/09	Th-228 (G)			1.497 ± 0.069	pCi/g	0.0489
			11/02/09	Th-232 (G)			1.689 ± 0.24	pCi/g	0.227
			11/02/09	U-235 (G)			U	pCi/g	0.191
			11/02/09	U-238 (G)			U	pCi/g	5.80
			11/02/09	Am-241 (G)			U	pCi/g	0.0512
			11/05/09	H-3			1.783 ± 2.0	pCi/g	3.28
			11/04/09	Sr-90			-0.1318 ± 0.13	pCi/g	0.286

Certified by
Report Date <u>11/09/09</u>
Page 1







COC# N<sup>o</sup> 53033 GLOBAL ID \_\_\_\_\_ E REPORT:  PDF  EDF  EDD ASL JOB# \_\_\_\_\_

Company: <i>American Scientific Labs.</i>		Report To: <i>molky Brian</i>		ANALYSIS REQUESTED																	
Address: <i>2520 N. San Fernando Road</i>		Project Name:		Address:		<i>Gamma Scan 901.1</i> <i>Tritium 906.0</i> <i>Strontium 905.0</i>															
<i>L.A. CA 90065</i>		Site Address:		Invoice To:																	
Telephone: <i>323 223 9700</i>		Project ID: <i>43586</i>		Address:																	
Fax: <i>323 223 9500</i>		Project Manager:		P.O.#:																	
Special Instruction: <i>5 Days TAT</i>		E-mail: <i>molky@asllab.com</i>																			

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation	ANALYSIS REQUESTED												Remarks	
	Lab ID	Sample ID	Date	Time	#	Type																		
		<i>244129</i>	<i>10-29-09</i>		<i>1</i>	<i>40% Tau Soil</i>					<i>X</i>	<i>X</i>	<i>X</i>											<i>5 Days TAT</i>
																								<i>PDF Results to molky.</i>

Collected By:	Date	Time	Relinquished By:	Date	Time	TAT <input type="checkbox"/> Normal <input type="checkbox"/> Rush
Relinquished By: <i>Janet Chin</i>	Date <i>10.30.09</i>	Time <i>4:00pm</i>	Received For Laboratory	Date	Time	
Received By: <i>[Signature]</i>	Date <i>11/02/09</i>	Time <i>0815</i>	Condition of Sample:			

CHAIN OF CUSTODY RECORD



# RICHMOND, CA LABORATORY

## SAMPLE RECEIPT CHECKLIST

Client: AMERICAN SCIENTIFIC LAB City L.A. State CA  
 Date/Time received 11/02/09 0815 CoC No. 43586  
 Container I.D. No. 160482 Requested TAT (Days) 5 P.O. Received Yes [ ] No [ ]

### INSPECTION

1. Custody seals on shipping container intact? Yes [ ] No [ ] N/A [x]
2. Custody seals on shipping container dated & signed? Yes [ ] No [ ] N/A [x]
3. Custody seals on sample containers intact? Yes [ ] No [ ] N/A [x]
4. Custody seals on sample containers dated & signed? Yes [ ] No [ ] N/A [x]
5. Packing material is: Wet [ ] Dry [x]
6. Number of samples in shipping container: 1 Sample Matrix S
7. Number of containers per sample: 1 (Or see CoC \_\_\_\_\_)
8. Samples are in correct container Yes [x] No [ ]
9. Paperwork agrees with samples? Yes [x] No [ ]
10. Samples have: Tape [ ] Hazard labels [ ] Rad labels [ ] Appropriate sample labels [x]
11. Samples are: In good condition [x] Leaking [ ] Broken Container [ ] Missing [ ]
12. Samples are: Preserved [ ] Not preserved [ ] pH \_\_\_\_\_ Preservative \_\_\_\_\_
13. Describe any anomalies:  
 \_\_\_\_\_  
 \_\_\_\_\_
14. Was P.M. notified of any anomalies? Yes [ ] No [ ] Date \_\_\_\_\_
15. Inspected by [Signature] Date: 11/02/09 Time: 0830

Customer Sample No.	Beta/Gamma cpm	Ion Chamber mR/hr	Wipe	Customer Sample No.	Beta/Gamma cpm	Ion Chamber mR/hr	wipe
<u>244129</u>	<u>260</u>						

Ion Chamber Ser. No. \_\_\_\_\_ Calibration date \_\_\_\_\_  
 Alpha Meter Ser. No. \_\_\_\_\_ Calibration date \_\_\_\_\_  
 Beta/Gamma Meter Ser. No. 100482 Calibration date 05 AUG 09







**Certificate of Analysis**

**Report Date:** Monday, November 9, 2009  
**Received Date:** Friday, October 30, 2009  
**Received Time:** 12:50 pm  
**Turnaround Time:** 5 workdays

**Client:** American Scientific Laboratories  
 2520 N. San Fernando Road  
 Los Angeles, CA 90065-1324

**Phones:** (323) 223-9700  
**Fax:** (323) 223-9500

**Attn:** Molky Brar  
**Project:** 43586

**P.O. #:**

**Lab Sample ID:** 9J30028-01      **Sample ID:** 244129      **Matrix:** Soil  
**Sampled by:** Client      **Sampled:** 10/29/09 00:00

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed	Batch	Qualifier
Perchlorate .....	ND	13	30	mg/Kg (dry wt basis)	1x1	EPA 314M	11/3/09	11/4/09 10:23	W9K0138	
1,3,5-Trinitrobenzene .....	ND	2.05	2.50	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
1,3-Dinitrobenzene .....	ND	0.490	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
2,4,6-Trinitrotoluene .....	ND	0.470	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
2,4-Dinitrotoluene .....	ND	0.310	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
2,6-Dinitrotoluene .....	ND	0.280	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
2-Amino-4,6-Dinitrotoluene .....	ND	0.660	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
2-Nitrotoluene .....	ND	0.310	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
3-Nitrotoluene .....	ND	0.230	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
4-Amino-2,6-Dinitrotoluene .....	ND	0.470	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
4-Nitrotoluene .....	ND	0.380	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
HMX .....	ND	0.620	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
Nitrobenzene .....	ND	0.250	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
RDX .....	ND	0.720	1.00	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	
Tetryl .....	ND	1.68	2.50	mg/kg	1x1	EPA 8330A	11/2/09	11/6/09 20:47	W9K0019	



### Certificate of Analysis

### Quality Control Section

#### Explosives by EPA Method 8330 - Quality Control

Batch W9K0019 - EPA 8330A

Blank (W9K0019-BLK1)					Prepared: 11/02/09	Analyzed: 11/06/09 20:47			
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
HMX		ND		mg/kg					
RDX		ND		mg/kg					
1,3,5-Trinitrobenzene		ND		mg/kg					
1,3-Dinitrobenzene		ND		mg/kg					
Nitrobenzene		ND		mg/kg					
Tetryl		ND		mg/kg					
2,4,6-Trinitrotoluene		ND		mg/kg					
4-Amino-2,6-Dinitrotoluene		ND		mg/kg					
2-Amino-4,6-Dinitrotoluene		ND		mg/kg					
2,6-Dinitrotoluene		ND		mg/kg					
2,4-Dinitrotoluene		ND		mg/kg					
2-Nitrotoluene		ND		mg/kg					
4-Nitrotoluene		ND		mg/kg					
3-Nitrotoluene		ND		mg/kg					

LCS (W9K0019-BS1)					Prepared: 11/02/09	Analyzed: 11/06/09 20:47			
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
HMX		5.20		mg/kg	5.00	104	68-147		
RDX		5.01		mg/kg	5.00	100	43-154		
1,3,5-Trinitrobenzene		5.27		mg/kg	5.00	105	56-135		
1,3-Dinitrobenzene		4.88		mg/kg	5.00	98	44-152		
Nitrobenzene		5.05		mg/kg	5.00	101	47-158		
Tetryl		4.87		mg/kg	5.00	97	46-152		
2,4,6-Trinitrotoluene		4.94		mg/kg	5.00	99	53-142		
4-Amino-2,6-Dinitrotoluene		5.05		mg/kg	5.00	101	70-130		
2-Amino-4,6-Dinitrotoluene		4.80		mg/kg	5.00	96	66-139		
2,6-Dinitrotoluene		4.89		mg/kg	5.00	98	34-164		
2,4-Dinitrotoluene		4.74		mg/kg	5.00	95	37-133		
2-Nitrotoluene		4.91		mg/kg	5.00	98	56-156		
4-Nitrotoluene		4.84		mg/kg	5.00	97	56-174		
3-Nitrotoluene		5.10		mg/kg	5.00	102	73-125		

Matrix Spike (W9K0019-MS1)					Source: 9J30028-01	Prepared: 11/02/09	Analyzed: 11/06/09 20:47		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
HMX	ND	5.56		mg/kg	5.00	111	68-147		
RDX	ND	5.11		mg/kg	5.00	102	43-154		
1,3,5-Trinitrobenzene	ND	5.52		mg/kg	5.00	110	56-135		
1,3-Dinitrobenzene	ND	5.02		mg/kg	5.00	100	53-159		
Nitrobenzene	ND	5.09		mg/kg	5.00	102	47-158		
Tetryl	ND	5.31		mg/kg	5.00	106	46-152		



### Certificate of Analysis

#### Explosives by EPA Method 8330 - Quality Control

**Batch W9K0019 - EPA 8330A**

Matrix Spike (W9K0019-MS1)		Source: 9J30028-01			Prepared: 11/02/09		Analyzed: 11/06/09 20:47		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
2,4,6-Trinitrotoluene	ND	5.04		mg/kg	5.00	101	53-142		
4-Amino-2,6-Dinitrotoluene	ND	5.13		mg/kg	5.00	103	69-140		
2-Amino-4,6-Dinitrotoluene	ND	4.85		mg/kg	5.00	97	80-130		
2,6-Dinitrotoluene	ND	5.03		mg/kg	5.00	101	34-164		
2,4-Dinitrotoluene	ND	4.84		mg/kg	5.00	97	37-133		
2-Nitrotoluene	ND	4.91		mg/kg	5.00	98	56-156		
4-Nitrotoluene	ND	4.96		mg/kg	5.00	99	56-174		
3-Nitrotoluene	ND	5.22		mg/kg	5.00	104	73-125		

Matrix Spike Dup (W9K0019-MSD1)		Source: 9J30028-01			Prepared: 11/02/09		Analyzed: 11/06/09 20:47		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
HMX	ND	5.51		mg/kg	5.00	110	68-147	0.9	20
RDX	ND	5.13		mg/kg	5.00	103	43-154	0.3	20
1,3,5-Trinitrobenzene	ND	5.42		mg/kg	5.00	108	56-135	2	20
1,3-Dinitrobenzene	ND	4.98		mg/kg	5.00	100	53-159	0.9	20
Nitrobenzene	ND	4.98		mg/kg	5.00	100	47-158	2	20
Tetryl	ND	5.31		mg/kg	5.00	106	46-152	0.06	20
2,4,6-Trinitrotoluene	ND	4.96		mg/kg	5.00	99	53-142	2	20
4-Amino-2,6-Dinitrotoluene	ND	5.16		mg/kg	5.00	103	69-140	0.6	20
2-Amino-4,6-Dinitrotoluene	ND	4.96		mg/kg	5.00	99	80-130	2	20
2,6-Dinitrotoluene	ND	4.86		mg/kg	5.00	97	34-164	3	20
2,4-Dinitrotoluene	ND	4.85		mg/kg	5.00	97	37-133	0.2	20
2-Nitrotoluene	ND	5.08		mg/kg	5.00	102	56-156	3	20
4-Nitrotoluene	ND	5.19		mg/kg	5.00	104	56-174	5	20
3-Nitrotoluene	ND	5.19		mg/kg	5.00	104	73-125	0.6	20

#### Perchlorate in solid by EPA 314M - Quality Control

**Batch W9K0138 - EPA 314M**

Blank (W9K0138-BLK1)					Prepared: 11/03/09		Analyzed: 11/04/09 05:35		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Perchlorate		ND		mg/Kg (dry wt basis)					

LCS (W9K0138-BS1)					Prepared: 11/03/09		Analyzed: 11/04/09 09:13		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Perchlorate		103		mg/Kg (dry wt basis)	100	103	85-115		

Matrix Spike (W9K0138-MS1)		Source: 9J30028-01			Prepared: 11/03/09		Analyzed: 11/04/09 06:45		
Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Perchlorate	ND	145	MS-01	mg/Kg (dry wt basis)	100	145	69-137		



**Certificate of Analysis**

**Perchlorate in solid by EPA 314M - Quality Control**

**Batch W9K0138 - EPA 314M**

**Matrix Spike Dup (W9K0138-MSD1)**

**Source: 9J30028-01**

**Prepared: 11/03/09**

**Analyzed: 11/04/09 07:02**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Perchlorate .....	ND .....	133		mg/Kg (dry wt basis)	100	133	69-137	8	20

### Certificate of Analysis

**Notes:**

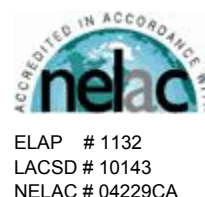
The Chain of Custody document is part of the analytical report.  
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.  
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services. The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).  
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002



*Kim G Tu*  
\_\_\_\_\_  
**Authorized Signature**  
Contact: Kim G Tu (Project Manager)



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

- MS-01** The spike recovery for this QC sample is outside of established control limits possibly due to sample matrix interference.
- ND NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
- Sub Subcontracted analysis, original report enclosed.
- Dil The total dilution factor is expressed as a multiplication between the preparation dilution factor (a) and the analysis dilution factor (b) as "a x b". (a) and (b) are indicated as whole numbers with rounding up for  $\geq 0.5$  and off for  $< 0.5$
- DL Method Detection Limit
- RL Method Reporting Limit
- MDA Minimum Detectable Activity