



DRAFT

S202
Task 1 - Site Soil Background Survey and Aggregate Sampling
Stockade
Marina, California



Prepared for:
FORA
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April 10, 2017

Project No. 171091001

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Background Soil and Aggregate Sampling (If Applicable) Summary
Title 22 Metals and PCBs Analytical Reports
Asbestos Analytical Reports

EXECUTIVE SUMMARY

Vista Environmental Consulting (Vista) performed background soil and aggregate sampling for Buildings 4950, 4952, 4953, 4954, 4955, 4956, and 4957 at the Stockade, Marina, California (Project Site). The purpose of the survey was to document background levels of Title 22 Metals, asbestos and polychlorinated biphenyls (PCBs) in the soil around the buildings at the Project Site, to be used as a baseline for post remediation/demolition comparisons. Preliminary waste characterization sampling of the aggregate piles inside the building was also performed and tested for Title 22 Metals, asbestos, and PCBs.

The results of the sampling indicate the following:

Soil

Location	Depth	Exceeds Residential ESLs for Title 22 Metals?	Exceeds Worker Exposure ESLs for Title 22 Metals?	Exceeds Disposal Levels or Needs Additional Analysis for Title 22 Metals?	Asbestos Detected?	PCBs Detected?
4950 (4950 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4952 (4952 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4953 (4953 – S01 to S06)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Pending	Pending	Pending
4954 (4954 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4955 (4955 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4956 (4956 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4957 (4957 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No

Aggregate

Location	Exceeds Disposal Levels or Needs Additional Analysis for Title 22 Metals?	Asbestos Detected?	PCBs Detected?
4953 - West Wing, Dining Room, North Side (4953 – AGG01)	Pending	No	No
4953 - North Wing, East Side, South Pile (4953 – AGG02)	No	No	No
4953 - North Wing, East Side, South Pile (4953 – AGG03)	No	No	No

Location	Exceeds Disposal Levels or Needs Additional Analysis for Title 22 Metals?	Asbestos Detected?	PCBs Detected?
4953 - North Wing, East Side, North Pile (4953 – AGG04)	Pending	No	No

The Background Soil and Aggregate Sampling (If Applicable) Summary, Title 22 Metals and PCBs Analytical Reports, and Asbestos Analytical Reports for each building can be found in *Appendix A – Building Data*. The buildings are listed in numerical order.

After completion of the Stockade hazardous materials remediation a series of soil samples should be collected and analyzed for Title 22 Metals, asbestos and PCBs. A summary report should compare those test results to these soil background survey results. Results higher to the ones found here would require additional soil cleaning by the contractor. The contractor should also contact the waste disposal site(s) for specific waste characterization testing requirements of the aggregate and any soil spoils.

Report prepared for the Company by:

Christopher R. Burns
Senior Project Manager
CAC #92-0224
LRCIA #663

1.0 INTRODUCTION

Vista Environmental Consulting (Vista) performed background soil and aggregate sampling for Buildings 4950, 4952, 4953, 4954, 4955, 4956, and 4957 at the Stockade, Marina, California (Project Site). The purpose of the survey was to document background levels of Title 22 Metals, asbestos and polychlorinated biphenyls (PCBs) in the soil around the buildings at the Project Site, to be used as a baseline for post remediation/demolition comparisons. Preliminary waste characterization sampling of the aggregate piles inside the building was also performed and tested for Title 22 Metals, asbestos, and PCBs.

2.0 METHODOLOGY

Vista performed the sampling on March 22, 28 and April 5, 2017. The asbestos sampling was performed by Christopher Burns, a State of California Division of Occupational Safety and Health (Cal/OSHA) Certified Asbestos Consultant (CAC) #92-0224. Soils were sampled for Title 22 Metals and PCBs by Javier Rocha who is Hazardous Waste Operations and Emergency Response (HAZWOPER) trained.

Vista collected 12, “4-point composite” soil samples throughout the site taken from the top 6” of soil within 10’ of the building footprint. The footprint of Building 4951 was covered with debris from the concrete company leasing the site. Building 4953 has no soil on the east side and Building 4954 has no soil on the south side where there were hardscape and debris piles. Vista also collected 4, “4-point composite” aggregate samples from the interior of Building 4953.

Soil and aggregate samples were collected using a hand auger or scoop. Overlying vegetation was removed prior to soil boring and soil sample collection activities. Sampling staff used new nitrile gloves before commencing activities at each sampling location and a second set of new nitrile gloves was used prior to actual sample collection. Samples were then placed into sealed plastic bags or stainless steel tubes with Teflon® film and plastic end caps to provide a seal. Each container was labeled with a unique name and the date of collection and placed into an ice-cooled chest. All sampling equipment was washed in a solution of phosphate-free laboratory detergent and water and then double-rinsed with water to prevent cross contamination between each sample. Chain-of-Custody forms were completed at the time of sampling and accompanied the samples to the laboratory.

Soil samples were collected and analyzed for the following:

- CAM 17 metals (Title 22) by USEPA Method 6010B and 7471A; and
- Asbestos by USEPA Method EPA/600/R-93/116; and
- Polychlorinated Biphenyls by USEPA Method 8082.

Aggregate samples were collected and analyzed for the following:

- CAM 17 metals (Title 22) by USEPA Method 6010B and 7471A; and
- Soluble Threshold Limit Concentration (STLC) or “Wet Test” SW846 and Toxicity Characteristic Leaching Procedure (TCLP); and
- Asbestos by Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate and USEPA Method EPA/600/R-93/116; and
- Polychlorinated Biphenyls by USEPA Method 8082.

All soil and aggregate samples were analyzed for Title 22 Metals and PCBs by Test America Laboratories, Inc. located at 1220 Quarry Lane, Pleasanton, California

All soil and aggregate samples were analyzed for asbestos by EMSL Analytical, Inc. (EMSL) located at 464 McCormick St., San Leandro, California.

3.0 RESULTS

Soil

Location	Depth	Exceeds Residential ESLs for Title 22 Metals?	Exceeds Worker Exposure ESLs for Title 22 Metals?	Exceeds Disposal Levels or Needs Additional Analysis for Title 22 Metals?	Asbestos Detected?	PCBs Detected?
4950 (4950 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4952 (4952 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4953 (4953 – S01 to S06)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Pending	Pending	Pending
4954 (4954 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4955 (4955 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4956 (4956 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No
4957 (4957 – S01)	0-6”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No	No	No

Aggregate

Location	Exceeds Disposal Levels or Needs Additional Analysis for Title 22 Metals?	Asbestos Detected?	PCBs Detected?
4953 - West Wing, Dining Room, North Side (4953 – AGG01)	Pending	No	No
4953 - North Wing, East Side, South Pile (4953 – AGG02)	No	No	No
4953 - North Wing, East Side, South Pile (4953 – AGG03)	No	No	No
4953 - North Wing, East Side, North Pile (4953 – AGG04)	Pending	No	No

The Background Soil and Aggregate Sampling (If Applicable) Summary, Title 22 Metals and PCBs Analytical Reports, and Asbestos Analytical Reports for each building can be found in *Appendix A – Building Data*. The buildings are listed in numerical order.

4.0 RECOMMENDATIONS

After completion of the Stockade hazardous materials remediation a series of soil samples should be collected and analyzed for Title 22 Metals, asbestos and PCBs. A summary report should compare those test results to these soil background survey results. Results higher to the ones found here would require additional soil cleaning by the contractor. The contractor should also contact the waste disposal site(s) for specific waste characterization testing requirements of the aggregate and any soil spoils.

Respectfully Submitted,
Vista Environmental Consulting

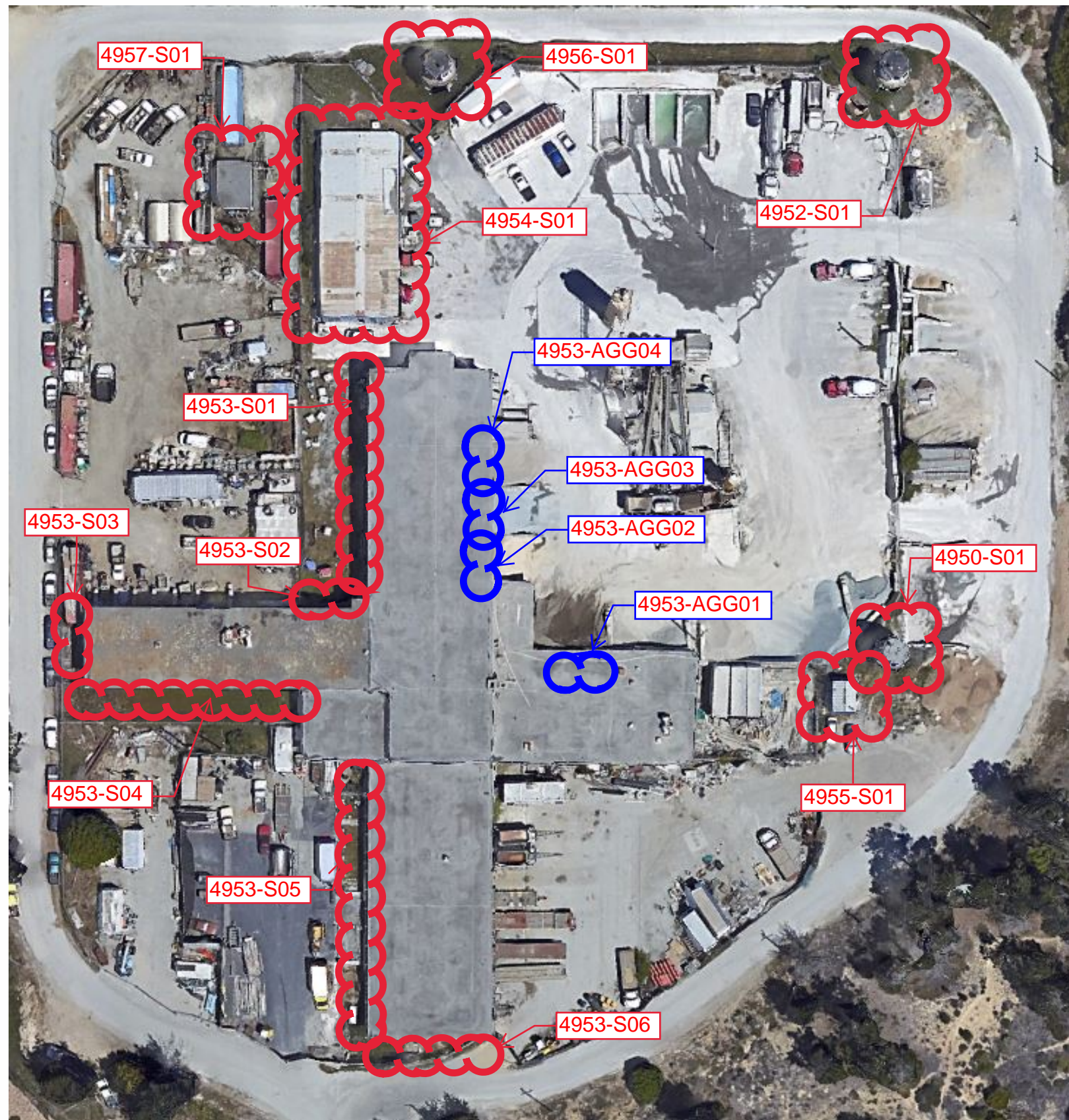
Reviewed and Approved

Christopher R. Burns
Senior Project Manager
CAC #92-0224
LRCIA #663



Charles R. Bove
Principal
CAC #92-0160



FIGURE 1
SAMPLE LOCATION DRAWING



Legend:

-  Soil
-  Aggregate



PROJECT TITLE

**STOCKADE
 BACKGROUND SOIL AND AGGREGATE
 SAMPLING**

SHEET TITLE

SAMPLE LOCATION DRAWING

SCALE:
 DRAWN BY:
 CHECKED BY:
 PROJECT No.
 DATE:
 DRAWING No.

FIGURE

1

APPENDIX A
BUILDING DATA

BUILDING 4950



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4950
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4950 - S01, Depth: 0-6", Location: 4-Point Composite, All Sides*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	45	mg/kg	45	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	11	mg/kg	11	0.3	YES	6.2	YES	2.8	YES
Cobalt	2.5	mg/kg	2.5	23	No	350	No	28	No
Copper	8.9	mg/kg	8.9	3,100	No	47,000	No	14,000	No
Lead	11	mg/kg	11	80	No	320	No	160	No
Nickel	9.6	mg/kg	9.6	820	No	11,000	No	86	No
Vanadium	18	mg/kg	18	390	No	5,800	No	470	No
Zinc	40	mg/kg	40	23,000	No	350,000	No	110,000	No
Mercury	0.043	mg/kg	0.043	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	45	mg/kg	45	10,000	No	No
Chromium	11	mg/kg	11	2,500	No	No
Cobalt	2.5	mg/kg	2.5	8,000	No	No
Copper	8.9	mg/kg	8.9	2,500	No	No
Lead	11	mg/kg	11	1,000	No	No
Nickel	9.6	mg/kg	9.6	2,000	No	No
Vanadium	18	mg/kg	18	2,400	No	No
Zinc	40	mg/kg	40	5,000	No	No
Mercury	0.043	mg/kg	0.043	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4950
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4950-AS01	4-Point Composite, All Sides	ND

PCBs

Sample #	Location	Result (mg/kg)
4950-S01	4-Point Composite, All Sides	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

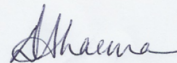
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78415-1
Client Project/Site: FORA STOCKADE, TASK 1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
3/29/2017 3:06:58 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

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Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Job ID: 720-78415-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78415-1

Comments

No additional comments.

Receipt

The sample was received on 3/22/2017 2:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4950-SO1 (720-78415-1), (LCS 720-219993/2-A), (MB 720-219993/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The serial dilution performed for the following sample associated with batch 720-219958 was outside control limits: (720-78415-A-1-D SD ^)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Client Sample ID: 4950-SO1

Lab Sample ID: 720-78415-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	45		1.4		mg/Kg	4		6010B	Total/NA
Chromium	11		1.4		mg/Kg	4		6010B	Total/NA
Cobalt	2.5		0.57		mg/Kg	4		6010B	Total/NA
Copper	8.9		4.3		mg/Kg	4		6010B	Total/NA
Lead	11		1.4		mg/Kg	4		6010B	Total/NA
Nickel	9.6		1.4		mg/Kg	4		6010B	Total/NA
Vanadium	18		1.4		mg/Kg	4		6010B	Total/NA
Zinc	40		4.3		mg/Kg	4		6010B	Total/NA
Mercury	0.043		0.0098		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Client Sample ID: 4950-SO1

Lab Sample ID: 720-78415-1

Date Collected: 03/22/17 10:30

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1221	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1232	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1242	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1248	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1254	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1
PCB-1260	ND		48		ug/Kg		03/27/17 13:02	03/28/17 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		45 - 132	03/27/17 13:02	03/28/17 18:19	1
DCB Decachlorobiphenyl	84		42 - 146	03/27/17 13:02	03/28/17 18:19	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Arsenic	ND		2.9		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Barium	45		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Beryllium	ND		0.29		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Cadmium	ND		0.36		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Chromium	11		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Cobalt	2.5		0.57		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Copper	8.9		4.3		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Lead	11		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Molybdenum	ND		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Nickel	9.6		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Selenium	ND		2.9		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Silver	ND		0.71		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Thallium	ND		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Vanadium	18		1.4		mg/Kg		03/24/17 11:03	03/24/17 21:46	4
Zinc	40		4.3		mg/Kg		03/24/17 11:03	03/24/17 21:46	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043		0.0098		mg/Kg		03/27/17 17:51	03/28/17 12:47	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78415-1	4950-SO1	69	84
LCS 720-219993/2-A	Lab Control Sample	77	62
MB 720-219993/1-A	Method Blank	76	87

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

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

Lab Sample ID: MB 720-219993/1-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1221	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1232	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1242	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1248	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1254	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1260	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		45 - 132	03/27/17 13:02	03/28/17 11:58	1
DCB Decachlorobiphenyl	87		42 - 146	03/27/17 13:02	03/28/17 11:58	1

Lab Sample ID: LCS 720-219993/2-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	109		ug/Kg		81	65 - 121
PCB-1260	133	112		ug/Kg		84	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		45 - 132
DCB Decachlorobiphenyl	62		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-219814/1-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Arsenic	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Barium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Beryllium	ND		0.10		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cadmium	ND		0.13		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Chromium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cobalt	ND		0.20		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Copper	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Lead	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Molybdenum	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Nickel	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Selenium	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Silver	ND		0.25		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Thallium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Vanadium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Zinc	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-219814/2-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	46.4		mg/Kg		93	80 - 120
Beryllium	50.0	46.8		mg/Kg		94	80 - 120
Cadmium	50.0	46.3		mg/Kg		93	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.0		mg/Kg		96	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	48.3		mg/Kg		97	80 - 120
Molybdenum	50.0	48.4		mg/Kg		97	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	46.2		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.3		mg/Kg		99	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	46.4		mg/Kg		93	80 - 120

Lab Sample ID: 720-78415-1 MS

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: 4950-SO1

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND	F1	38.2	17.4	F1	mg/Kg		45	75 - 125
Arsenic	ND		38.2	39.5		mg/Kg		97	75 - 125
Barium	45		38.2	80.6		mg/Kg		92	75 - 125
Beryllium	ND		38.2	37.3		mg/Kg		98	75 - 125
Cadmium	ND		38.2	36.4		mg/Kg		95	75 - 125
Chromium	11		38.2	49.3		mg/Kg		101	75 - 125
Cobalt	2.5		38.2	39.5		mg/Kg		97	75 - 125
Copper	8.9		38.2	46.4		mg/Kg		98	75 - 125
Lead	11		38.2	47.9		mg/Kg		95	75 - 125
Molybdenum	ND		38.2	36.7		mg/Kg		95	75 - 125
Nickel	9.6		38.2	43.6		mg/Kg		89	75 - 125
Selenium	ND		38.2	36.3		mg/Kg		95	75 - 125
Silver	ND		19.1	19.2		mg/Kg		100	75 - 125
Thallium	ND		38.2	37.5		mg/Kg		98	75 - 125
Vanadium	18		38.2	59.8		mg/Kg		110	75 - 125
Zinc	40		38.2	72.8		mg/Kg		87	75 - 125

Lab Sample ID: 720-78415-1 MSD

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: 4950-SO1

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	ND	F1	37.6	16.9	F1	mg/Kg		44	75 - 125	3	20
Arsenic	ND		37.6	38.1		mg/Kg		95	75 - 125	4	20
Barium	45		37.6	77.1		mg/Kg		84	75 - 125	4	20
Beryllium	ND		37.6	35.9		mg/Kg		95	75 - 125	4	20

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 720-78415-1 MSD

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: 4950-SO1

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Cadmium	ND		37.6	35.3		mg/Kg		93	75 - 125	3	20
Chromium	11		37.6	49.0		mg/Kg		102	75 - 125	1	20
Cobalt	2.5		37.6	38.3		mg/Kg		95	75 - 125	3	20
Copper	8.9		37.6	51.0		mg/Kg		112	75 - 125	10	20
Lead	11		37.6	46.9		mg/Kg		94	75 - 125	2	20
Molybdenum	ND		37.6	35.5		mg/Kg		93	75 - 125	3	20
Nickel	9.6		37.6	43.8		mg/Kg		91	75 - 125	1	20
Selenium	ND		37.6	36.0		mg/Kg		96	75 - 125	1	20
Silver	ND		18.8	18.5		mg/Kg		98	75 - 125	4	20
Thallium	ND		37.6	36.4		mg/Kg		97	75 - 125	3	20
Vanadium	18		37.6	56.0		mg/Kg		101	75 - 125	7	20
Zinc	40		37.6	70.8		mg/Kg		83	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-219809/1-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219809

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.010		mg/Kg		03/27/17 17:51	03/28/17 12:28	1

Lab Sample ID: LCS 720-219809/2-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219809

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Mercury	0.833	0.804		mg/Kg		97	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

GC Semi VOA

Prep Batch: 219993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	3546	
MB 720-219993/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 220052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	8082	219993
MB 720-219993/1-A	Method Blank	Total/NA	Solid	8082	219993
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	8082	219993

Metals

Prep Batch: 219809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	7471A	
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 219814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	3050B	
MB 720-219814/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-78415-1 MS	4950-SO1	Total/NA	Solid	3050B	
720-78415-1 MSD	4950-SO1	Total/NA	Solid	3050B	

Analysis Batch: 219958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	6010B	219814
MB 720-219814/1-A	Method Blank	Total/NA	Solid	6010B	219814
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	6010B	219814
720-78415-1 MS	4950-SO1	Total/NA	Solid	6010B	219814
720-78415-1 MSD	4950-SO1	Total/NA	Solid	6010B	219814

Analysis Batch: 220091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78415-1	4950-SO1	Total/NA	Solid	7471A	219809
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	219809
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	219809

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Client Sample ID: 4950-SO1

Lab Sample ID: 720-78415-1

Date Collected: 03/22/17 10:30

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			219993	03/27/17 13:02	RAC	TAL PLS
Total/NA	Analysis	8082		1	220052	03/28/17 18:19	JZT	TAL PLS
Total/NA	Prep	3050B			219814	03/24/17 11:03	JNG	TAL PLS
Total/NA	Analysis	6010B		4	219958	03/24/17 21:46	CAM	TAL PLS
Total/NA	Prep	7471A			219809	03/27/17 17:51	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220091	03/28/17 12:47	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
-----------------	-------------	--------	---------

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78415-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78415-1	4950-SO1	Solid	03/22/17 10:30	03/22/17 14:50

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

TestAmerica Pleasanton
 1220 Quarry Lane
 Pleasanton, CA 94566
 phone 925.484.1919 fax 925.600.3002

720-78415

Chair of Custody Record

179835

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING
 TestAmerica Laboratories, Inc.

3/29/2017

Regulatory Program: DW NPDES RCRA Other: _____
 Date: _____
 Carrier: _____

Client Contact: Vista Environmental Consulting
 2984 Teagarden Street
 San Leandro, CA 94577
 (510) 346-8860
 E-mail: chrisburns@vista-env.com & mollie@vista-env.com
 Project Name: FORA Stockade TASK 1
 Site: 4950
 P O # 171091001

Project Manager: _____
 Tel/Fax: _____
 Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
 TAT if different from Below _____
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Lab Contact:	Date:	Carrier:	COG No.:	Sampler:	For Lab Use Only:
4950-S01	3/21/17	1030	C	Solid	1	X	X	CAM 17 Metals (6010B)					Walk-in Client
						X	X	Mercury (7471A)					Lab Sampling:
						X	X	PCBs (8082)					Job / SDG No.:
Sample Specific Notes:													



Preservation Used: 1-ICE, 2-HCl, 3-ACSON, 4-ANON, 5-NACOH, 6-Other: _____
 Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months
 Special Instructions/QC Requirements & Comments:
 9.6.1
 Custody Seals Intact: Yes No
 Relinquished by: _____ Company: Vista Date/Time: 3/21/17-1450
 Relinquished by: _____ Company: Vista Date/Time: 3/21/17-1450
 Relinquished by: _____ Company: Vista Date/Time: 3/22/17 1950
 Cooler Temp. (C): Obs'd: _____ Therm ID No.: _____
 Received by: _____ Company: Vista Date/Time: _____
 Received by: _____ Company: Vista Date/Time: _____
 Received by: _____ Company: Vista Date/Time: _____

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78415-1

Login Number: 78415

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577
Tel/Fax: (510) 895-3675 / (510) 895-3680
<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091705540
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: Vista Environmental Consulting, Inc.
2984 Teagarden St
San Leandro, CA 94577

Phone: (510) 346-8860
Fax:
Received Date: 03/22/2017 2:15 PM
Analysis Date: 03/25/2017
Collected Date: 03/22/2017

Project: FORA 4950/171091001, Task 1

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4950-AS01	4 pt Composite	Brown Non-Fibrous		40% Quartz 10% Ca Carbonate	None Detected
091705540-0001		Homogeneous		15% Gypsum 35% Non-fibrous (Other)	

Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep

Analyst(s)
Shane Heisser (1)


Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/25/2017 12:34:16



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091705540

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA.
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com; mollr@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4950/171091001 , TASK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If Bill to is Different note instructions in Comments** <i>Third Party Billing requires written authorization from third party</i>			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week
<small>*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide</small>			
PCM - Air <input type="checkbox"/> Check if samples are from NY		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only)	
<input type="checkbox"/> NIOSH 7400		<input type="checkbox"/> AHERA 40 CFR, Part 763	
<input type="checkbox"/> w/ OSHA 8hr TWA		<input type="checkbox"/> NIOSH 7402	
PLM - Bulk (reporting limit)		<input type="checkbox"/> EPA Level II	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)		<input type="checkbox"/> ISO 10312	
<input type="checkbox"/> PLM EPA NOB (<1%)		TEM - Bulk	
Point Count		<input type="checkbox"/> TEM EPA NOB	
<input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> NYS NOB 198 4 (non-friable-NY)	
Point Count w/Gravimetric		<input type="checkbox"/> Chatfield SOP	
<input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)		<input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2 5	
<input type="checkbox"/> NYS 198.1 (friable in NY)		TEM - Water: EPA 100 2	
<input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)		Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
<input type="checkbox"/> NYS 198.8 SOF-V		All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
<input type="checkbox"/> NIOSH 9002 (<1%)			
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: Chris Burns		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4950-AS01	4 pt Composite		
Client Sample # (s): -		Total # of Samples: 1	
Relinquished (Client): <i>Luiz Rocha</i>		Date: 03/22/17	Time: 13:45
Received (Lab): <i>[Signature]</i>		Date: 3/22/17	Time: 2:15 w/
Comments/Special Instructions:			

BUILDING 4952



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4952
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4952 - S01, Depth: 0-6", Location: 4-Point Composite, All Sides*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	62	mg/kg	62	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	17	mg/kg	17	0.3	YES	6.2	YES	2.8	YES
Cobalt	3.9	mg/kg	3.9	23	No	350	No	28	No
Copper	16	mg/kg	16	3,100	No	47,000	No	14,000	No
Lead	24	mg/kg	24	80	No	320	No	160	No
Nickel	10	mg/kg	10	820	No	11,000	No	86	No
Silver	0.98	mg/kg	0.98	390	No	5,800	No	1,800	No
Vanadium	26	mg/kg	26	390	No	5,800	No	470	No
Zinc	76	mg/kg	76	23,000	No	350,000	No	110,000	No
Mercury	0.16	mg/kg	0.16	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	62	mg/kg	62	10,000	No	No
Chromium	17	mg/kg	17	2,500	No	No
Cobalt	3.9	mg/kg	3.9	8,000	No	No
Copper	16	mg/kg	16	2,500	No	No
Lead	24	mg/kg	24	1,000	No	No
Nickel	10	mg/kg	10	2,000	No	No
Silver	0.98	mg/kg	0.98	500	No	No
Vanadium	26	mg/kg	26	2,400	No	No
Zinc	76	mg/kg	76	5,000	No	No
Mercury	0.16	mg/kg	0.16	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4952
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4952-AS01	4-Point Composite, All Sides	ND

PCBs

Sample #	Location	Result (mg/kg)
4952-S01	4-Point Composite, All Sides	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

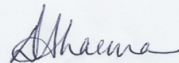
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78418-1
Client Project/Site: FORA STOCKADE, TASK 1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
3/29/2017 3:13:05 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Job ID: 720-78418-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78418-1

Comments

No additional comments.

Receipt

The sample was received on 3/22/2017 2:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

GC Semi VOA

Method 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4952-SO1 (720-78418-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Client Sample ID: 4952-SO1

Lab Sample ID: 720-78418-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	62		1.9		mg/Kg	4		6010B	Total/NA
Chromium	17		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	3.9		0.77		mg/Kg	4		6010B	Total/NA
Copper	16		5.8		mg/Kg	4		6010B	Total/NA
Lead	24		1.9		mg/Kg	4		6010B	Total/NA
Nickel	10		1.9		mg/Kg	4		6010B	Total/NA
Silver	0.98		0.96		mg/Kg	4		6010B	Total/NA
Vanadium	26		1.9		mg/Kg	4		6010B	Total/NA
Zinc	76		5.8		mg/Kg	4		6010B	Total/NA
Mercury	0.16		0.0098		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Client Sample ID: 4952-SO1

Lab Sample ID: 720-78418-1

Date Collected: 03/22/17 09:30

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1221	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1232	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1242	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1248	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1254	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1
PCB-1260	ND		49		ug/Kg		03/27/17 13:02	03/28/17 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		45 - 132	03/27/17 13:02	03/28/17 18:02	1
DCB Decachlorobiphenyl	53		42 - 146	03/27/17 13:02	03/28/17 18:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Arsenic	ND		3.8		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Barium	62		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Beryllium	ND		0.38		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Cadmium	ND		0.48		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Chromium	17		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Cobalt	3.9		0.77		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Copper	16		5.8		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Lead	24		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Molybdenum	ND		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Nickel	10		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Selenium	ND		3.8		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Silver	0.98		0.96		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Thallium	ND		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Vanadium	26		1.9		mg/Kg		03/24/17 11:03	03/24/17 22:01	4
Zinc	76		5.8		mg/Kg		03/24/17 11:03	03/24/17 22:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16		0.0098		mg/Kg		03/27/17 17:51	03/28/17 12:58	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78418-1	4952-SO1	76	53
LCS 720-219993/2-A	Lab Control Sample	77	62
MB 720-219993/1-A	Method Blank	76	87

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

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

Lab Sample ID: MB 720-219993/1-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1221	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1232	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1242	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1248	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1254	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1260	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		45 - 132	03/27/17 13:02	03/28/17 11:58	1
DCB Decachlorobiphenyl	87		42 - 146	03/27/17 13:02	03/28/17 11:58	1

Lab Sample ID: LCS 720-219993/2-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	109		ug/Kg		81	65 - 121
PCB-1260	133	112		ug/Kg		84	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		45 - 132
DCB Decachlorobiphenyl	62		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-219814/1-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Arsenic	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Barium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Beryllium	ND		0.10		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cadmium	ND		0.13		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Chromium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cobalt	ND		0.20		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Copper	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Lead	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Molybdenum	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Nickel	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Selenium	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Silver	ND		0.25		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Thallium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Vanadium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Zinc	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-219814/2-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	46.4		mg/Kg		93	80 - 120
Beryllium	50.0	46.8		mg/Kg		94	80 - 120
Cadmium	50.0	46.3		mg/Kg		93	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.0		mg/Kg		96	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	48.3		mg/Kg		97	80 - 120
Molybdenum	50.0	48.4		mg/Kg		97	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	46.2		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.3		mg/Kg		99	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	46.4		mg/Kg		93	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-219809/1-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		03/27/17 17:51	03/28/17 12:28	1

Lab Sample ID: LCS 720-219809/2-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.804		mg/Kg		97	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

GC Semi VOA

Prep Batch: 219993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	3546	
MB 720-219993/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 220052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219993/1-A	Method Blank	Total/NA	Solid	8082	219993
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	8082	219993

Analysis Batch: 220053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	8082	219993

Metals

Prep Batch: 219809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	7471A	
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 219814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	3050B	
MB 720-219814/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 219958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	6010B	219814
MB 720-219814/1-A	Method Blank	Total/NA	Solid	6010B	219814
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	6010B	219814

Analysis Batch: 220091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78418-1	4952-SO1	Total/NA	Solid	7471A	219809
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	219809
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	219809

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Client Sample ID: 4952-SO1

Lab Sample ID: 720-78418-1

Date Collected: 03/22/17 09:30

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			219993	03/27/17 13:02	RAC	TAL PLS
Total/NA	Analysis	8082		1	220053	03/28/17 18:02	JZT	TAL PLS
Total/NA	Prep	3050B			219814	03/24/17 11:03	JNG	TAL PLS
Total/NA	Analysis	6010B		4	219958	03/24/17 22:01	CAM	TAL PLS
Total/NA	Prep	7471A			219809	03/27/17 17:51	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220091	03/28/17 12:58	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78418-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78418-1	4952-SO1	Solid	03/22/17 09:30	03/22/17 14:50

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720-78418

174838

Regulatory Program: DW NPDES PCCA Other:

Client Contact:
Vista Environmental Consulting
2964 Teagarden Street
San Leandro, CA 94577
(510) 346-8860
E-mail: chrisburns@vista-env.com & mollie@vista-env.com
Project Name: FORA Stockade, **TASK 1**
Site: 4952
P O # 171091001

Project Manager:
Tel/Fax:
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Site Contact:
Lab Contact:
Carrier:
Date:
COC No.:

COC No. of COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.
4952-S01	3/21/17	0930	C	Solid	1

Filtered Sample (Y / N)	Perform MS / MSD (Y / N)
X	X
X	X
X	X

CAM 17 Metals (6010B)
Mercury (7471A)
PCBs (8082)

Sample Specific Notes:



720-78418 Chain of Custody

Preservation Used: HCl HNO₃ H₂SO₄ H₂PO₄ Other: _____
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seal Intact: Yes No
Cooler Temp. (°C): Obs'd: _____ Therm ID No.:

Relinquished by: *Angy Bocha*
Company: Vista
Date/Time: 03/21/17 1450
Received by: _____
Company: Vista
Date/Time: _____

Relinquished by: _____
Company: _____
Date/Time: _____
Received by: _____
Company: TA
Date/Time: 3/22/17 1950

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78418-1

Login Number: 78418

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091705539

Customer ID: 32VEOK25

Customer PO:

Project ID:

Attention: Vista Environmental Consulting, Inc.
2984 Teagarden St
San Leandro, CA 94577

Phone: (510) 346-8860

Fax:

Received Date: 03/22/2017 2:15 PM

Analysis Date: 03/25/2017

Collected Date: 03/22/2017

Project: FORA 4952/171091001, Task 1

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4952-AS01	4 pt Composite	Brown Non-Fibrous		40% Quartz 10% Ca Carbonate	None Detected
091705539-0001		Homogeneous		15% Gypsum 35% Non-fibrous (Other)	

Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep

Analyst(s)

Shane Heisser (1)

Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/25/2017 12:41:34



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody

EMSL Order Number (Lab Use Only)

091705539

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577

PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4952/171091001, T&SK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr TWA	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)
PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2.5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	Soil/Rock/Vermiculite* <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique *Can not accept New York State Loose Fill Vermiculite Samples Other: <input type="checkbox"/>

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Chris Burns Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4952-AS01	4pt Composite		

Client Sample # (s): _____ Total # of Samples: 1

Relinquished (Client): *Luis Roda* Date: 03/22/17 Time: 1345

Received (Lab): *[Signature]* Date: 3/22/17 Time: 2:15 w/

Comments/Special Instructions:

BUILDING 4953



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Background Soil Sampling

Title 22 Metals

Sample: 4953 - S01, Depth: 0-6", Location: 4-Point Composite, North Wing, West Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Arsenic	2.4	mg/kg	2.4	0.067	YES	0.31	YES	0.98	YES
Barium	180	mg/kg	180	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	15	mg/kg	15	0.3	YES	6.2	YES	2.8	YES
Cobalt	2.8	mg/kg	2.8	23	No	350	No	28	No
Copper	17	mg/kg	17	3,100	No	47,000	No	14,000	No
Lead	24	mg/kg	24	80	No	320	No	160	No
Nickel	14	mg/kg	14	820	No	11,000	No	86	No
Vanadium	33	mg/kg	33	390	No	5,800	No	470	No
Zinc	68	mg/kg	68	23,000	No	350,000	No	110,000	No
Mercury	0.086	mg/kg	0.086	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Arsenic	2.4	mg/kg	2.4	500	No	No
Barium	180	mg/kg	180	10,000	No	No
Chromium	15	mg/kg	15	2,500	No	No
Cobalt	2.8	mg/kg	2.8	8,000	No	No
Copper	17	mg/kg	17	2,500	No	No
Lead	24	mg/kg	24	1,000	No	No
Nickel	14	mg/kg	14	2,000	No	No
Vanadium	33	mg/kg	33	2,400	No	No
Zinc	68	mg/kg	68	5,000	No	No
Mercury	0.086	mg/kg	0.086	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Title 22 Metals

Sample: 4953 - S02, Depth: 0-6", Location: 4-Point Composite, West Wing, North Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	18	mg/kg	18	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	10	mg/kg	10	0.3	YES	6.2	YES	2.8	YES
Cobalt	1.6	mg/kg	1.6	23	No	350	No	28	No
Copper	12	mg/kg	12	3,100	No	47,000	No	14,000	No
Lead	16	mg/kg	16	80	No	320	No	160	No
Nickel	7.2	mg/kg	7.2	820	No	11,000	No	86	No
Vanadium	7.8	mg/kg	7.8	390	No	5,800	No	470	No
Zinc	28	mg/kg	28	23,000	No	350,000	No	110,000	No
Mercury	0.022	mg/kg	0.022	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	18	mg/kg	18	10,000	No	No
Chromium	10	mg/kg	10	2,500	No	No
Cobalt	1.6	mg/kg	1.6	8,000	No	No
Copper	12	mg/kg	12	2,500	No	No
Lead	16	mg/kg	16	1,000	No	No
Nickel	7.2	mg/kg	7.2	2,000	No	No
Vanadium	7.8	mg/kg	7.8	2,400	No	No
Zinc	28	mg/kg	28	5,000	No	No
Mercury	0.022	mg/kg	0.022	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Title 22 Metals

Sample: 4953 - S03, Depth: 0-6", Location: 4-Point Composite, West Wing, West Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	39	mg/kg	39	15,000	No	220,000	No	3,000	No
Cadmium	0.61	mg/kg	0.61	39	No	580	No	43	No
Chromium (Based on VI)	11	mg/kg	11	0.3	YES	6.2	YES	2.8	YES
Cobalt	3.4	mg/kg	3.4	23	No	350	No	28	No
Copper	44	mg/kg	44	3,100	No	47,000	No	14,000	No
Lead	18	mg/kg	18	80	No	320	No	160	No
Nickel	13	mg/kg	13	820	No	11,000	No	86	No
Vanadium	18	mg/kg	18	390	No	5,800	No	470	No
Zinc	170	mg/kg	170	23,000	No	350,000	No	110,000	No
Mercury	0.032	mg/kg	0.032	13	No	190	No	44	No

Analyte	TTLCLab Result	Units	Conversion to mg/kg	TTLCCal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	39	mg/kg	39	10,000	No	No
Cadmium	0.61	mg/kg	0.61	100	No	No
Chromium	11	mg/kg	11	2,500	No	No
Cobalt	3.4	mg/kg	3.4	8,000	No	No
Copper	44	mg/kg	44	2,500	No	No
Lead	18	mg/kg	18	1,000	No	No
Nickel	13	mg/kg	13	2,000	No	No
Vanadium	18	mg/kg	18	2,400	No	No
Zinc	170	mg/kg	170	5,000	No	No
Mercury	0.032	mg/kg	0.032	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Title 22 Metals

Sample: 4953 - S04, Depth: 0-6", Location: 4-Point Composite, West Wing, South Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	21	mg/kg	21	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	12	mg/kg	12	0.3	YES	6.2	YES	2.8	YES
Cobalt	2.4	mg/kg	2.4	23	No	350	No	28	No
Copper	14	mg/kg	14	3,100	No	47,000	No	14,000	No
Lead	6.2	mg/kg	6.2	80	No	320	No	160	No
Nickel	8.2	mg/kg	8.2	820	No	11,000	No	86	No
Vanadium	14	mg/kg	14	390	No	5,800	No	470	No
Zinc	42	mg/kg	42	23,000	No	350,000	No	110,000	No
Mercury	0.021	mg/kg	0.021	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	21	mg/kg	21	10,000	No	No
Chromium	12	mg/kg	12	2,500	No	No
Cobalt	2.4	mg/kg	2.4	8,000	No	No
Copper	14	mg/kg	14	2,500	No	No
Lead	6.2	mg/kg	6.2	1,000	No	No
Nickel	8.2	mg/kg	8.2	2,000	No	No
Vanadium	14	mg/kg	14	2,400	No	No
Zinc	42	mg/kg	42	5,000	No	No
Mercury	0.021	mg/kg	0.021	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Title 22 Metals

Sample: 4953 - S05, Depth: 0-6", Location: 4-Point Composite, South Wing, West Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Pending Laboratory Report									

Analyte	TTLCLab Result	Units	Conversion to mg/kg	TTLCCal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Pending Laboratory Report						

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Title 22 Metals

Sample: 4953 - S06, Depth: 0-6", Location: 4-Point Composite, South Wing, South Side*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Pending Laboratory Report									

Analyte	TTLC Lab Result	Units	Conversion to mg/kg	TTLC Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Pending Laboratory Report						

*Metals not listed were None Detected (ND)

**BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY**

Asbestos

Sample #	Location	Result (% Wt)
4953-AS01	4-Point Composite, North Wing, West Side	ND
4953-AS02	4-Point Composite, West Wing, North Side	ND
4953-AS03	4-Point Composite, West Wing, West Side	ND
4953-AS04	4-Point Composite, West Wing, South Side	ND
4953-AS05	4-Point Composite, South Wing, West Side	Pending Results
4953-AS06	4-Point Composite, South Wing, South Side	Pending Results

PCBs

Sample #	Location	Result (mg/kg)
4953-S01	4-Point Composite, North Wing, West Side	ND
4953-S02	4-Point Composite, West Wing, North Side	ND
4953-S03	4-Point Composite, West Wing, West Side	ND
4953-S04	4-Point Composite, West Wing, South Side	ND
4953-S05	4-Point Composite, South Wing, West Side	Pending Results
4953-S06	4-Point Composite, South Wing, South Side	Pending Results

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Aggregate Sampling

Title 22 Metals

Sample: 4953 – AGG01, Location: 4-Point Composite, West Wing, Dining Room, North Side*											
Analyte	TTLIC Lab Result	Units	Conversion to mg/kg	TTLIC Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?	STLC Lab Results (mg/l)	STLC Level (mg/l)	Exceed the Cal/Haz Level?	TCLP Lab Results (mg/l)	Exceed the RCRA Level?
Arsenic	3.9	mg/kg	3.9	500	No	No	NA	5	No	NA	No
Barium	58	mg/kg	58	10,000	No	No	NA	100	No	NA	No
Chromium	81	mg/kg	81	2,500	No	YES	Pending	5	No	Pending	No
Cobalt	5.9	mg/kg	5.9	8,000	No	No	NA	80	No	NA	NA
Copper	10	mg/kg	10	2,500	No	No	NA	25	No	NA	NA
Lead	15	mg/kg	15	1,000	No	No	NA	5	No	NA	No
Molybdenum	0	mg/kg	0	3,500	No	NA	NA	350	No	NA	NA
Nickel	45	mg/kg	45	2,000	No	No	NA	20	No	NA	NA
Vanadium	26	mg/kg	26	2,400	No	No	NA	24	No	NA	NA
Zinc	54	mg/kg	54	5,000	No	No	NA	250	No	NA	NA
Mercury	0.036	mg/kg	0.036	20	No	No	NA	0.2	No	NA	No

Sample: 4953 – AGG02, Location: 4-Point Composite, North Wing, East Side, South Pile*											
Analyte	TTLIC Lab Result	Units	Conversion to mg/kg	TTLIC Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?	STLC Lab Results (mg/l)	STLC Level (mg/l)	Exceed the Cal/Haz Level?	TCLP Lab Results (mg/l)	Exceed the RCRA Level?
Antimony	13	mg/kg	13	500	No	No	NA	15	No	NA	NA
Barium	52	mg/kg	52	10,000	No	No	NA	100	No	NA	No
Chromium	12	mg/kg	12	2,500	No	No	NA	5	No	NA	No
Cobalt	0.95	mg/kg	0.95	8,000	No	No	NA	80	No	NA	NA
Lead	36	mg/kg	36	1,000	No	No	NA	5	No	NA	No
Vanadium	3.9	mg/kg	3.9	2,400	No	No	NA	24	No	NA	NA
Zinc	47	mg/kg	47	5,000	No	No	NA	250	No	NA	NA
Mercury	0.049	mg/kg	0.049	20	No	No	NA	0.2	No	NA	No

*Metals not listed were None Detected (ND)

BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY

Sample: 4953 – AGG03, Location: 4-Point Composite, North Wing, East Side, Central Pile *											
Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?	STLC Lab Results (mg/l)	STLC Level (mg/l)	Exceed the Cal/Haz Level?	TCLP Lab Results (mg/l)	Exceed the RCRA Level?
Barium	48	mg/kg	48	10,000	No	No	NA	100	No	NA	No
Chromium	28	mg/kg	28	2,500	No	No	NA	5	No	NA	No
Cobalt	11	mg/kg	11	8,000	No	No	NA	80	No	NA	NA
Copper	72	mg/kg	72	2,500	No	No	NA	25	No	NA	NA
Nickel	3.9	mg/kg	3.9	2,000	No	No	NA	20	No	NA	NA
Vanadium	92	mg/kg	92	2,400	No	No	NA	24	No	NA	NA
Zinc	33	mg/kg	33	5,000	No	No	NA	250	No	NA	NA
Mercury	0.038	mg/kg	0.038	20	No	No	NA	0.2	No	NA	No

Sample: 4953 – AGG04, Location: 4-Point Composite, North Wing, East Side, North Pile *											
Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?	STLC Lab Results (mg/l)	STLC Level (mg/l)	Exceed the Cal/Haz Level?	TCLP Lab Results (mg/l)	Exceed the RCRA Level?
Antimony	1.2	mg/kg	1.2	500	No	No	NA	15	No	NA	NA
Arsenic	5	mg/kg	5	500	No	No	NA	5	No	NA	No
Barium	200	mg/kg	200	10,000	No	No	NA	100	No	NA	No
Chromium	140	mg/kg	140	2,500	No	YES	Pending	5	No	Pending	No
Cobalt	12	mg/kg	12	8,000	No	No	NA	80	No	NA	NA
Copper	19	mg/kg	19	2,500	No	No	NA	25	No	NA	NA
Lead	94	mg/kg	94	1,000	No	YES	Pending	5	No	Pending	No
Nickel	110	mg/kg	110	2,000	No	No	NA	20	No	NA	NA
Vanadium	33	mg/kg	33	2,400	No	No	NA	24	No	NA	NA
Zinc	110	mg/kg	110	5,000	No	No	NA	250	No	NA	NA
Mercury	0.25	mg/kg	0.25	20	No	No	NA	0.2	No	NA	No

*Metals not listed were None Detected (ND)

**BUILDING 4953
BACKGROUND SOIL AND AGGREGATE SAMPLING SUMMARY**

Asbestos

Sample #	Location	Result (% Wt)
4953-AGG01	4-Point Composite, West Wing, Dining Room, North Side	ND
4953-AGG02	4-Point Composite, North Wing, East Side, South Pile	ND
4953-AGG03	4-Point Composite, North Wing, East Side, Central Pile	ND
4953-AGG04	4-Point Composite, West Wing, South Side	ND

PCBs

Sample #	Location	Result (mg/kg)
4953-AGG01	4-Point Composite, West Wing, Dining Room, North Side	ND
4953-AGG02	4-Point Composite, North Wing, East Side, South Pile	ND
4953-AGG03	4-Point Composite, North Wing, East Side, Central Pile	ND
4953-AGG04	4-Point Composite, North Wing, East Side, North Pile	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

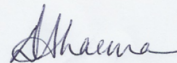
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78419-1
Client Project/Site: FORA Stockade, Task 1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
3/29/2017 3:16:11 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

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results through
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Have a Question?



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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Job ID: 720-78419-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78419-1

Comments

No additional comments.

Receipt

The samples were received on 3/22/2017 2:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4953-AGG01 (720-78419-1), 4953-AGG02 (720-78419-2), 4953-AGG03 (720-78419-3), 4953-AGG04 (720-78419-4), (LCS 720-220069/2-A) and (MB 720-220069/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The following samples was diluted due to the abundance of non-target analytes: 4953-AGG02 (720-78419-2), 4953-AGG03 (720-78419-3) and 4953-AGG04 (720-78419-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG01

Lab Sample ID: 720-78419-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.9		2.5		mg/Kg	4		6010B	Total/NA
Barium	58		1.3		mg/Kg	4		6010B	Total/NA
Chromium	81		1.3		mg/Kg	4		6010B	Total/NA
Cobalt	5.9		0.51		mg/Kg	4		6010B	Total/NA
Copper	10		3.8		mg/Kg	4		6010B	Total/NA
Lead	15		1.3		mg/Kg	4		6010B	Total/NA
Nickel	45		1.3		mg/Kg	4		6010B	Total/NA
Vanadium	26		1.3		mg/Kg	4		6010B	Total/NA
Zinc	54		3.8		mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.0083		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-AGG02

Lab Sample ID: 720-78419-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	13		1.4		mg/Kg	4		6010B	Total/NA
Barium	52		1.4		mg/Kg	4		6010B	Total/NA
Chromium	12		1.4		mg/Kg	4		6010B	Total/NA
Cobalt	0.95		0.54		mg/Kg	4		6010B	Total/NA
Lead	36		1.4		mg/Kg	4		6010B	Total/NA
Vanadium	3.9		1.4		mg/Kg	4		6010B	Total/NA
Zinc	47		4.1		mg/Kg	4		6010B	Total/NA
Mercury	0.049		0.010		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-AGG03

Lab Sample ID: 720-78419-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	48		1.1		mg/Kg	4		6010B	Total/NA
Chromium	28		1.1		mg/Kg	4		6010B	Total/NA
Cobalt	11		0.45		mg/Kg	4		6010B	Total/NA
Copper	72		3.4		mg/Kg	4		6010B	Total/NA
Nickel	3.9		1.1		mg/Kg	4		6010B	Total/NA
Vanadium	92		1.1		mg/Kg	4		6010B	Total/NA
Zinc	33		3.4		mg/Kg	4		6010B	Total/NA
Mercury	0.038		0.0094		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-AGG04

Lab Sample ID: 720-78419-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	1.2		1.2		mg/Kg	4		6010B	Total/NA
Arsenic	5.0		2.5		mg/Kg	4		6010B	Total/NA
Barium	200		1.2		mg/Kg	4		6010B	Total/NA
Chromium	140		1.2		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.50		mg/Kg	4		6010B	Total/NA
Copper	19		3.7		mg/Kg	4		6010B	Total/NA
Lead	94		1.2		mg/Kg	4		6010B	Total/NA
Nickel	110		1.2		mg/Kg	4		6010B	Total/NA
Vanadium	33		1.2		mg/Kg	4		6010B	Total/NA
Zinc	110		3.7		mg/Kg	4		6010B	Total/NA
Mercury	0.25		0.0090		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG01

Lab Sample ID: 720-78419-1

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1221	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1232	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1242	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1248	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1254	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1
PCB-1260	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		45 - 132	03/28/17 11:45	03/28/17 19:25	1
DCB Decachlorobiphenyl	79		42 - 146	03/28/17 11:45	03/28/17 19:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Arsenic	3.9		2.5		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Barium	58		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Beryllium	ND		0.25		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Cadmium	ND		0.32		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Chromium	81		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Cobalt	5.9		0.51		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Copper	10		3.8		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Lead	15		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Molybdenum	ND		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Nickel	45		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Selenium	ND		2.5		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Silver	ND		0.64		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Thallium	ND		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Vanadium	26		1.3		mg/Kg		03/27/17 11:45	03/27/17 21:55	4
Zinc	54		3.8		mg/Kg		03/27/17 11:45	03/27/17 21:55	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.0083		mg/Kg		03/27/17 13:30	03/29/17 10:09	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG02

Lab Sample ID: 720-78419-2

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1221	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1232	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1242	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1248	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1254	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1
PCB-1260	ND		50		ug/Kg		03/28/17 11:45	03/28/17 19:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		45 - 132	03/28/17 11:45	03/28/17 19:42	1
DCB Decachlorobiphenyl	90		42 - 146	03/28/17 11:45	03/28/17 19:42	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	13		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Arsenic	ND		2.7		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Barium	52		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Beryllium	ND		0.27		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Cadmium	ND		0.34		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Chromium	12		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Cobalt	0.95		0.54		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Copper	ND		4.1		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Lead	36		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Molybdenum	ND		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Nickel	ND		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Selenium	ND		2.7		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Silver	ND		0.68		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Thallium	ND		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Vanadium	3.9		1.4		mg/Kg		03/27/17 11:45	03/27/17 22:00	4
Zinc	47		4.1		mg/Kg		03/27/17 11:45	03/27/17 22:00	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.010		mg/Kg		03/27/17 13:30	03/29/17 10:11	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG03

Lab Sample ID: 720-78419-3

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1221	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1232	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1242	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1248	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1254	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1260	ND		49		ug/Kg		03/28/17 11:45	03/28/17 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		45 - 132	03/28/17 11:45	03/28/17 19:59	1
DCB Decachlorobiphenyl	86		42 - 146	03/28/17 11:45	03/28/17 19:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Arsenic	ND		2.3		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Barium	48		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Beryllium	ND		0.23		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Cadmium	ND		0.28		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Chromium	28		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Cobalt	11		0.45		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Copper	72		3.4		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Lead	ND		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Molybdenum	ND		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Nickel	3.9		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Selenium	ND		2.3		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Silver	ND		0.56		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Thallium	ND		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Vanadium	92		1.1		mg/Kg		03/27/17 11:45	03/27/17 22:05	4
Zinc	33		3.4		mg/Kg		03/27/17 11:45	03/27/17 22:05	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.0094		mg/Kg		03/27/17 13:30	03/29/17 10:17	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG04

Lab Sample ID: 720-78419-4

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1221	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1232	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1242	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1248	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1254	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1
PCB-1260	ND		48		ug/Kg		03/28/17 11:45	03/28/17 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		45 - 132	03/28/17 11:45	03/28/17 19:59	1
DCB Decachlorobiphenyl	84		42 - 146	03/28/17 11:45	03/28/17 19:59	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2		1.2		mg/Kg		03/27/17 11:45	03/29/17 12:13	4
Arsenic	5.0		2.5		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Barium	200		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Beryllium	ND		0.25		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Cadmium	ND		0.31		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Chromium	140		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Cobalt	12		0.50		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Copper	19		3.7		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Lead	94		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Molybdenum	ND		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Nickel	110		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Selenium	ND		2.5		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Silver	ND		0.62		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Thallium	ND		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Vanadium	33		1.2		mg/Kg		03/27/17 11:45	03/27/17 22:10	4
Zinc	110		3.7		mg/Kg		03/27/17 11:45	03/27/17 22:10	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.0090		mg/Kg		03/27/17 13:30	03/29/17 10:19	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78419-1	4953-AGG01	65	79
720-78419-2	4953-AGG02	68	90
720-78419-3	4953-AGG03	69	86
720-78419-4	4953-AGG04	67	84
LCS 720-220069/2-A	Lab Control Sample	67	87
MB 720-220069/1-A	Method Blank	74	89

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

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

Lab Sample ID: MB 720-220069/1-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 220069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1221	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1232	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1242	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1248	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1254	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1
PCB-1260	ND		50		ug/Kg		03/28/17 11:45	03/28/17 18:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		45 - 132	03/28/17 11:45	03/28/17 18:52	1
DCB Decachlorobiphenyl	89		42 - 146	03/28/17 11:45	03/28/17 18:52	1

Lab Sample ID: LCS 720-220069/2-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	95.6		ug/Kg		72	65 - 121
PCB-1260	133	102		ug/Kg		77	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	67		45 - 132
DCB Decachlorobiphenyl	87		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-219919/1-A

Matrix: Solid

Analysis Batch: 220050

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Arsenic	ND		1.0		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Beryllium	ND		0.10		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Cadmium	ND		0.13		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Chromium	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Cobalt	ND		0.20		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Copper	ND		1.5		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Lead	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Molybdenum	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Nickel	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Selenium	ND		1.0		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Silver	ND		0.25		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Thallium	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Vanadium	ND		0.50		mg/Kg		03/27/17 11:45	03/27/17 20:05	1
Zinc	ND		1.5		mg/Kg		03/27/17 11:45	03/27/17 20:05	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-219919/1-A
 Matrix: Solid
 Analysis Batch: 220108

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 219919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.50		mg/Kg		03/27/17 11:45	03/28/17 11:52	1

Lab Sample ID: LCS 720-219919/2-A
 Matrix: Solid
 Analysis Batch: 220050

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 219919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	44.1		mg/Kg		88	80 - 120
Arsenic	50.0	44.8		mg/Kg		90	80 - 120
Beryllium	50.0	49.8		mg/Kg		100	80 - 120
Cadmium	50.0	46.7		mg/Kg		93	80 - 120
Chromium	50.0	48.8		mg/Kg		98	80 - 120
Cobalt	50.0	47.1		mg/Kg		94	80 - 120
Copper	50.0	47.6		mg/Kg		95	80 - 120
Lead	50.0	45.9		mg/Kg		92	80 - 120
Molybdenum	50.0	46.0		mg/Kg		92	80 - 120
Nickel	50.0	47.9		mg/Kg		96	80 - 120
Selenium	50.0	43.9		mg/Kg		88	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	46.1		mg/Kg		92	80 - 120
Vanadium	50.0	46.3		mg/Kg		93	80 - 120
Zinc	50.0	45.8		mg/Kg		92	80 - 120

Lab Sample ID: LCS 720-219919/2-A
 Matrix: Solid
 Analysis Batch: 220108

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 219919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	50.0	45.4		mg/Kg		91	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-219929/1-A
 Matrix: Solid
 Analysis Batch: 220155

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 219929

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		03/24/17 17:07	03/29/17 09:52	1

Lab Sample ID: LCS 720-219929/2-A
 Matrix: Solid
 Analysis Batch: 220155

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 219929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.811		mg/Kg		97	80 - 120

TestAmerica Pleasanton

QC Association Summary

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

GC Semi VOA

Analysis Batch: 220052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	8082	220069
720-78419-2	4953-AGG02	Total/NA	Solid	8082	220069
720-78419-3	4953-AGG03	Total/NA	Solid	8082	220069
MB 720-220069/1-A	Method Blank	Total/NA	Solid	8082	220069
LCS 720-220069/2-A	Lab Control Sample	Total/NA	Solid	8082	220069

Analysis Batch: 220053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-4	4953-AGG04	Total/NA	Solid	8082	220069

Prep Batch: 220069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	3546	
720-78419-2	4953-AGG02	Total/NA	Solid	3546	
720-78419-3	4953-AGG03	Total/NA	Solid	3546	
720-78419-4	4953-AGG04	Total/NA	Solid	3546	
MB 720-220069/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-220069/2-A	Lab Control Sample	Total/NA	Solid	3546	

Metals

Prep Batch: 219919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	3050B	
720-78419-2	4953-AGG02	Total/NA	Solid	3050B	
720-78419-3	4953-AGG03	Total/NA	Solid	3050B	
720-78419-4	4953-AGG04	Total/NA	Solid	3050B	
MB 720-219919/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-219919/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 219929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	7471A	
720-78419-2	4953-AGG02	Total/NA	Solid	7471A	
720-78419-3	4953-AGG03	Total/NA	Solid	7471A	
720-78419-4	4953-AGG04	Total/NA	Solid	7471A	
MB 720-219929/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-219929/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 220050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	6010B	219919
720-78419-2	4953-AGG02	Total/NA	Solid	6010B	219919
720-78419-3	4953-AGG03	Total/NA	Solid	6010B	219919
720-78419-4	4953-AGG04	Total/NA	Solid	6010B	219919
MB 720-219919/1-A	Method Blank	Total/NA	Solid	6010B	219919
LCS 720-219919/2-A	Lab Control Sample	Total/NA	Solid	6010B	219919

TestAmerica Pleasanton

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Metals (Continued)

Analysis Batch: 220108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219919/1-A	Method Blank	Total/NA	Solid	6010B	219919
LCS 720-219919/2-A	Lab Control Sample	Total/NA	Solid	6010B	219919

Analysis Batch: 220155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-1	4953-AGG01	Total/NA	Solid	7471A	219929
720-78419-2	4953-AGG02	Total/NA	Solid	7471A	219929
720-78419-3	4953-AGG03	Total/NA	Solid	7471A	219929
720-78419-4	4953-AGG04	Total/NA	Solid	7471A	219929
MB 720-219929/1-A	Method Blank	Total/NA	Solid	7471A	219929
LCS 720-219929/2-A	Lab Control Sample	Total/NA	Solid	7471A	219929

Analysis Batch: 220171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78419-4	4953-AGG04	Total/NA	Solid	6010B	219919

Lab Chronicle

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG01

Lab Sample ID: 720-78419-1

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220069	03/28/17 11:45	RAC	TAL PLS
Total/NA	Analysis	8082		1	220052	03/28/17 19:25	JZT	TAL PLS
Total/NA	Prep	3050B			219919	03/27/17 11:45	BRB	TAL PLS
Total/NA	Analysis	6010B		4	220050	03/27/17 21:55	ASB	TAL PLS
Total/NA	Prep	7471A			219929	03/27/17 13:30	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220155	03/29/17 10:09	OBI	TAL PLS

Client Sample ID: 4953-AGG02

Lab Sample ID: 720-78419-2

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220069	03/28/17 11:45	RAC	TAL PLS
Total/NA	Analysis	8082		1	220052	03/28/17 19:42	JZT	TAL PLS
Total/NA	Prep	3050B			219919	03/27/17 11:45	BRB	TAL PLS
Total/NA	Analysis	6010B		4	220050	03/27/17 22:00	ASB	TAL PLS
Total/NA	Prep	7471A			219929	03/27/17 13:30	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220155	03/29/17 10:11	OBI	TAL PLS

Client Sample ID: 4953-AGG03

Lab Sample ID: 720-78419-3

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220069	03/28/17 11:45	RAC	TAL PLS
Total/NA	Analysis	8082		1	220052	03/28/17 19:59	JZT	TAL PLS
Total/NA	Prep	3050B			219919	03/27/17 11:45	BRB	TAL PLS
Total/NA	Analysis	6010B		4	220050	03/27/17 22:05	ASB	TAL PLS
Total/NA	Prep	7471A			219929	03/27/17 13:30	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220155	03/29/17 10:17	OBI	TAL PLS

Client Sample ID: 4953-AGG04

Lab Sample ID: 720-78419-4

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220069	03/28/17 11:45	RAC	TAL PLS
Total/NA	Analysis	8082		1	220053	03/28/17 19:59	JZT	TAL PLS
Total/NA	Prep	3050B			219919	03/27/17 11:45	BRB	TAL PLS
Total/NA	Analysis	6010B		4	220171	03/29/17 12:13	ASB	TAL PLS
Total/NA	Prep	3050B			219919	03/27/17 11:45	BRB	TAL PLS
Total/NA	Analysis	6010B		4	220050	03/27/17 22:10	ASB	TAL PLS
Total/NA	Prep	7471A			219929	03/27/17 13:30	JNG	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Client Sample ID: 4953-AGG04

Lab Sample ID: 720-78419-4

Date Collected: 03/22/17 09:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	220155	03/29/17 10:19	OBI	TAL PLS

Laboratory References:

EMSL = EMSL Analytical, Inc., 464 McCormick St., San Leandro, CA 94577

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
Crush & Grind	General Sub Contract Method	NONE	EMSL

Protocol References:

NONE = NONE

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EMSL = EMSL Analytical, Inc., 464 McCormick St., San Leandro, CA 94577

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78419-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78419-1	4953-AGG01	Solid	03/22/17 09:00	03/22/17 14:50
720-78419-2	4953-AGG02	Solid	03/22/17 09:00	03/22/17 14:50
720-78419-3	4953-AGG03	Solid	03/22/17 09:00	03/22/17 14:50
720-78419-4	4953-AGG04	Solid	03/22/17 09:00	03/22/17 14:50

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TestAmerica Pleasanton
1220 Quarry Lane

720-78419

Chai of Custody Record

174839

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

Regulatory Program: JW NPDES RCRA Other

TestAmerica Laboratories, Inc

Vista Environmental Consulting
2984 Teagarden Street
San Leandro, CA 94577
(510) 346-8860
E-mail: chrisburns@vista-env.com & mollie@vista-env.com
Project Name: FORA Stockade, TASK 1
Site: 4953
P O # 171091001

Client Contact
Project Manager:
Tel/Fax:
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Site Contact:
Lab Contact:
Date:
Carrier:

COC No. _____
_____ of _____ COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	CAM 17 Metals (6010B)	Mercury (7471A)	PCBs (8082)
4953- AGG01	3/21/11	0900	C	Solid	1			X	X	X
4953- AGG02			C	Solid	1			X	X	X
4953- AGG03			C	Solid	1			X	X	X
4953- AGG04			C	Solid	1			X	X	X



720-78419 Chain of Custody

Preservation Used: 1=Ice 2=HCl 3=H2SO4 4=HN03 5=NaOH 6=Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown
Return to Client Dispose by Lab Archive for _____ months

Special Instructions/QC Requirements & Comments:
AGG03 & AGG04 will need grinding

Custody Seals Intact: Yes No
Cooler Temp. (°C): Obs'd: _____ Therm ID No.: _____

Relinquished by: *Andy Rocha* Company: **VISTA** Date/Time: **03/21/11 1450** Received by: _____ Date/Time: _____
Relinquished by: _____ Company: Vista Date/Time: _____ Received by: _____ Date/Time: _____

Relinquished by: _____ Company: _____ Date/Time: _____ Received in Laboratory by: _____ Date/Time: _____

Relinquished by: _____ Company: _____ Date/Time: **3/22/11 795**

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78419-1

Login Number: 78419

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

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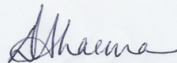
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78547-1
Client Project/Site: FORA Stockade, Task1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
4/4/2017 11:52:05 AM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Job ID: 720-78547-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78547-1

Comments

No additional comments.

Receipt

The samples were received on 3/28/2017 3:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 15.8° C.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4953-S01 (720-78547-1), 4953-S02 (720-78547-2), 4953-S03 (720-78547-3), 4953-S04 (720-78547-4), (LCS 720-220447/2-A), (MB 720-220447/1-A), (720-78537-A-5-I), (720-78537-A-5-G MS) and (720-78537-A-5-H MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The post digestion spike % recovery for Cd, Co, Ni, Sb, Zn associated with batch 720-220362 was outside of control limits.

Method 6010B: The following sample was diluted due to the abundance of non-target analytes: 4953-S01 (720-78547-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S01

Lab Sample ID: 720-78547-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.4		2.3		mg/Kg	4		6010B	Total/NA
Barium	180		1.2		mg/Kg	4		6010B	Total/NA
Chromium	15		1.2		mg/Kg	4		6010B	Total/NA
Cobalt	2.8		0.46		mg/Kg	4		6010B	Total/NA
Copper	17		3.5		mg/Kg	4		6010B	Total/NA
Lead	24		1.2		mg/Kg	4		6010B	Total/NA
Nickel	14		1.2		mg/Kg	4		6010B	Total/NA
Vanadium	33		1.2		mg/Kg	4		6010B	Total/NA
Zinc	68		3.5		mg/Kg	4		6010B	Total/NA
Mercury	0.086		0.0087		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-S02

Lab Sample ID: 720-78547-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	18		1.6		mg/Kg	4		6010B	Total/NA
Chromium	10		1.6		mg/Kg	4		6010B	Total/NA
Cobalt	1.6		0.65		mg/Kg	4		6010B	Total/NA
Copper	12		4.9		mg/Kg	4		6010B	Total/NA
Lead	16		1.6		mg/Kg	4		6010B	Total/NA
Nickel	7.2		1.6		mg/Kg	4		6010B	Total/NA
Vanadium	7.8		1.6		mg/Kg	4		6010B	Total/NA
Zinc	28		4.9		mg/Kg	4		6010B	Total/NA
Mercury	0.022		0.0094		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-S03

Lab Sample ID: 720-78547-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	39		1.9		mg/Kg	4		6010B	Total/NA
Cadmium	0.61		0.47		mg/Kg	4		6010B	Total/NA
Chromium	11		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	3.4		0.75		mg/Kg	4		6010B	Total/NA
Copper	44		5.6		mg/Kg	4		6010B	Total/NA
Lead	18		1.9		mg/Kg	4		6010B	Total/NA
Nickel	13		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	18		1.9		mg/Kg	4		6010B	Total/NA
Zinc	170		5.6		mg/Kg	4		6010B	Total/NA
Mercury	0.032		0.0095		mg/Kg	1		7471A	Total/NA

Client Sample ID: 4953-S04

Lab Sample ID: 720-78547-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	21		1.2		mg/Kg	4		6010B	Total/NA
Chromium	12		1.2		mg/Kg	4		6010B	Total/NA
Cobalt	2.4		0.47		mg/Kg	4		6010B	Total/NA
Copper	14		3.5		mg/Kg	4		6010B	Total/NA
Lead	6.2		1.2		mg/Kg	4		6010B	Total/NA
Nickel	8.2		1.2		mg/Kg	4		6010B	Total/NA
Vanadium	14		1.2		mg/Kg	4		6010B	Total/NA
Zinc	42		3.5		mg/Kg	4		6010B	Total/NA
Mercury	0.021		0.0086		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S01

Lab Sample ID: 720-78547-1

Date Collected: 03/28/17 08:00

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1221	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1232	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1242	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1248	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1254	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1
PCB-1260	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		45 - 132	04/03/17 12:23	04/04/17 03:27	1
DCB Decachlorobiphenyl	89		42 - 146	04/03/17 12:23	04/04/17 03:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Arsenic	2.4		2.3		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Barium	180		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Beryllium	ND		0.23		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Cadmium	ND		0.29		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Chromium	15		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Cobalt	2.8		0.46		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Copper	17		3.5		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Lead	24		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Molybdenum	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Nickel	14		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Selenium	ND		2.3		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Silver	ND		0.58		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Thallium	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Vanadium	33		1.2		mg/Kg		03/30/17 15:47	03/31/17 17:38	4
Zinc	68		3.5		mg/Kg		03/30/17 15:47	03/31/17 17:38	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086		0.0087		mg/Kg		04/03/17 10:44	04/03/17 14:26	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S02

Lab Sample ID: 720-78547-2

Date Collected: 03/28/17 08:00

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1221	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1232	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1242	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1248	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1254	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1
PCB-1260	ND		49		ug/Kg		04/03/17 12:23	04/04/17 03:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		45 - 132	04/03/17 12:23	04/04/17 03:44	1
DCB Decachlorobiphenyl	104		42 - 146	04/03/17 12:23	04/04/17 03:44	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Arsenic	ND		3.3		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Barium	18		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Beryllium	ND		0.33		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Cadmium	ND		0.41		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Chromium	10		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Cobalt	1.6		0.65		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Copper	12		4.9		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Lead	16		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Molybdenum	ND		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Nickel	7.2		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Selenium	ND		3.3		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Silver	ND		0.81		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Thallium	ND		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Vanadium	7.8		1.6		mg/Kg		03/30/17 15:47	03/31/17 17:43	4
Zinc	28		4.9		mg/Kg		03/30/17 15:47	03/31/17 17:43	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.0094		mg/Kg		04/03/17 10:44	04/03/17 14:29	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S03

Lab Sample ID: 720-78547-3

Date Collected: 03/28/17 08:30

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1221	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1232	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1242	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1248	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1254	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1
PCB-1260	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	49		45 - 132	04/03/17 12:23	04/04/17 04:00	1
DCB Decachlorobiphenyl	71		42 - 146	04/03/17 12:23	04/04/17 04:00	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Arsenic	ND		3.7		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Barium	39		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Beryllium	ND		0.37		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Cadmium	0.61		0.47		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Chromium	11		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Cobalt	3.4		0.75		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Copper	44		5.6		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Lead	18		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Molybdenum	ND		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Nickel	13		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Selenium	ND		3.7		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Silver	ND		0.93		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Thallium	ND		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Vanadium	18		1.9		mg/Kg		03/30/17 15:47	03/31/17 17:48	4
Zinc	170		5.6		mg/Kg		03/30/17 15:47	03/31/17 17:48	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.0095		mg/Kg		04/03/17 10:44	04/03/17 14:30	1

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S04

Lab Sample ID: 720-78547-4

Date Collected: 03/28/17 09:30

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1221	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1232	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1242	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1248	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1254	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1
PCB-1260	ND		49		ug/Kg		04/03/17 12:23	04/04/17 04:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		45 - 132	04/03/17 12:23	04/04/17 04:17	1
DCB Decachlorobiphenyl	103		42 - 146	04/03/17 12:23	04/04/17 04:17	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Arsenic	ND		2.4		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Barium	21		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Beryllium	ND		0.24		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Cadmium	ND		0.29		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Chromium	12		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Cobalt	2.4		0.47		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Copper	14		3.5		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Lead	6.2		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Molybdenum	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Nickel	8.2		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Selenium	ND		2.4		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Silver	ND		0.59		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Thallium	ND		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Vanadium	14		1.2		mg/Kg		03/30/17 15:47	03/31/17 18:03	4
Zinc	42		3.5		mg/Kg		03/30/17 15:47	03/31/17 18:03	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.021		0.0086		mg/Kg		04/03/17 10:44	04/03/17 14:33	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78547-1	4953-S01	75	89
720-78547-2	4953-S02	68	104
720-78547-3	4953-S03	49	71
720-78547-4	4953-S04	70	103
LCS 720-220447/2-A	Lab Control Sample	81	92
MB 720-220447/1-A	Method Blank	68	85

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

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

Lab Sample ID: MB 720-220447/1-A
Matrix: Solid
Analysis Batch: 220416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 220447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1221	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1232	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1242	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1248	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1254	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1260	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		45 - 132				04/03/17 12:23	04/04/17 01:47	1
DCB Decachlorobiphenyl	85		42 - 146				04/03/17 12:23	04/04/17 01:47	1

Lab Sample ID: LCS 720-220447/2-A
Matrix: Solid
Analysis Batch: 220416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 220447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	105		ug/Kg		79	65 - 121
PCB-1260	133	107		ug/Kg		80	68 - 127
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	81		45 - 132				
DCB Decachlorobiphenyl	92		42 - 146				

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-220254/1-A
Matrix: Solid
Analysis Batch: 220362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 220254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Arsenic	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Barium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Beryllium	ND		0.10		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cadmium	ND		0.13		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Chromium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cobalt	ND		0.20		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Copper	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Lead	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Molybdenum	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Nickel	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Selenium	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Silver	ND		0.25		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Thallium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Vanadium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Zinc	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-220254/2-A

Matrix: Solid

Analysis Batch: 220362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	48.2		mg/Kg		96	80 - 120
Barium	50.0	47.0		mg/Kg		94	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	47.7		mg/Kg		95	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	49.3		mg/Kg		99	80 - 120
Copper	50.0	49.0		mg/Kg		98	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120
Molybdenum	50.0	49.8		mg/Kg		100	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	50.0		mg/Kg		100	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-220290/1-A

Matrix: Solid

Analysis Batch: 220465

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 220290

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.010		mg/Kg		04/03/17 10:44	04/03/17 13:36	1

Lab Sample ID: LCS 720-220290/2-A

Matrix: Solid

Analysis Batch: 220465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.850		mg/Kg		102	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

GC Semi VOA

Analysis Batch: 220416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	8082	220447
720-78547-2	4953-S02	Total/NA	Solid	8082	220447
720-78547-3	4953-S03	Total/NA	Solid	8082	220447
720-78547-4	4953-S04	Total/NA	Solid	8082	220447
MB 720-220447/1-A	Method Blank	Total/NA	Solid	8082	220447
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	8082	220447

Prep Batch: 220447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	3546	
720-78547-2	4953-S02	Total/NA	Solid	3546	
720-78547-3	4953-S03	Total/NA	Solid	3546	
720-78547-4	4953-S04	Total/NA	Solid	3546	
MB 720-220447/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	3546	

Metals

Prep Batch: 220254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	3050B	
720-78547-2	4953-S02	Total/NA	Solid	3050B	
720-78547-3	4953-S03	Total/NA	Solid	3050B	
720-78547-4	4953-S04	Total/NA	Solid	3050B	
MB 720-220254/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 220290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	7471A	
720-78547-2	4953-S02	Total/NA	Solid	7471A	
720-78547-3	4953-S03	Total/NA	Solid	7471A	
720-78547-4	4953-S04	Total/NA	Solid	7471A	
MB 720-220290/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-220290/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 220362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-220254/1-A	Method Blank	Total/NA	Solid	6010B	220254
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	6010B	220254

Analysis Batch: 220390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	6010B	220254
720-78547-2	4953-S02	Total/NA	Solid	6010B	220254
720-78547-3	4953-S03	Total/NA	Solid	6010B	220254
720-78547-4	4953-S04	Total/NA	Solid	6010B	220254

TestAmerica Pleasanton

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Metals (Continued)

Analysis Batch: 220465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78547-1	4953-S01	Total/NA	Solid	7471A	220290
720-78547-2	4953-S02	Total/NA	Solid	7471A	220290
720-78547-3	4953-S03	Total/NA	Solid	7471A	220290
720-78547-4	4953-S04	Total/NA	Solid	7471A	220290
MB 720-220290/1-A	Method Blank	Total/NA	Solid	7471A	220290
LCS 720-220290/2-A	Lab Control Sample	Total/NA	Solid	7471A	220290

Lab Chronicle

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Client Sample ID: 4953-S01

Lab Sample ID: 720-78547-1

Date Collected: 03/28/17 08:00

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:23	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 03:27	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 17:38	ASB	TAL PLS
Total/NA	Prep	7471A			220290	04/03/17 10:44	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220465	04/03/17 14:26	OBI	TAL PLS

Client Sample ID: 4953-S02

Lab Sample ID: 720-78547-2

Date Collected: 03/28/17 08:00

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:23	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 03:44	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 17:43	ASB	TAL PLS
Total/NA	Prep	7471A			220290	04/03/17 10:44	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220465	04/03/17 14:29	OBI	TAL PLS

Client Sample ID: 4953-S03

Lab Sample ID: 720-78547-3

Date Collected: 03/28/17 08:30

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:23	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 04:00	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 17:48	ASB	TAL PLS
Total/NA	Prep	7471A			220290	04/03/17 10:44	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220465	04/03/17 14:30	OBI	TAL PLS

Client Sample ID: 4953-S04

Lab Sample ID: 720-78547-4

Date Collected: 03/28/17 09:30

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:23	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 04:17	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 18:03	ASB	TAL PLS
Total/NA	Prep	7471A			220290	04/03/17 10:44	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220465	04/03/17 14:33	OBI	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Accreditation/Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task1

TestAmerica Job ID: 720-78547-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78547-1	4953-S01	Solid	03/28/17 08:00	03/28/17 15:40
720-78547-2	4953-S02	Solid	03/28/17 08:00	03/28/17 15:40
720-78547-3	4953-S03	Solid	03/28/17 08:30	03/28/17 15:40
720-78547-4	4953-S04	Solid	03/28/17 09:30	03/28/17 15:40

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TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

720-78547

Chair of Custody Record

174964

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

Client Contact
Vista Environmental Consulting
2984 Teagarden Street
San Leandro, CA 94577
(510) 346-8860
E-mail: chrisburns@vista-env.com & mollie@vista-env.com
Project Name: FORA Stockade, T95K
Site: 4953
P O # 171091001

Regulatory Program: DW NPDES RCRA Other:

TestAmerica Laboratories, Inc.

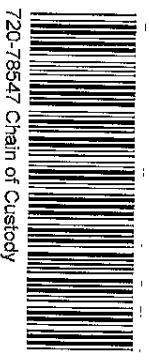
4/4/2017

Project Manager: _____
Tel/Fax: _____
Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below: _____
 2 weeks
 1 week
 2 days
 1 day

Site Contact: _____ Date: _____
Lab Contact: _____ Carrier: _____
COC No: _____ of _____ COCs

Sampler: _____
For Lab Use Only:
Walk-in Client: _____
Lab Sampling: _____
Job / SDG No.: _____

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	CAM 17 Metals (6010B)	Mercury (7471A)	PCBs (8082)	Sample Specific Notes:
4953-S01	3/21/17	0800	C	Solid	1	X	X	X	X		North wing, West
4953-S02	3/21/17	0800	C	Solid	1	X	X	X	X		West wing, North
4953-S03	3/21/17	0830	C	Solid	1	X	X	X	X		West wing, West
4953-S04	3/21/17	0930	C	Solid	1	X	X	X	X		West wing, South
4953-S05			C	Solid	1	X	X	X	X		
4953-S06			C	Solid	1	X	X	X	X		



720-78547 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
All 4 Point Components

15.8

Custody Seals Intact: Yes No
Custody Seal No.: _____
Relinquished by: _____ Company: Vista
Date/Time: 3/21/17
Received by: _____ Company: Vista
Date/Time: 03/21/17
Relinquished by: _____ Company: Vista
Date/Time: 3/28/17
Received by: _____ Company: Vista
Date/Time: 03/29/17
Received in Laboratory by: _____
Corrd: _____ Therm ID No.: _____

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78547-1

Login Number: 78547

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091706013
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: CHRIS BURNS Vista Environmental Consulting, Inc. 2984 Teagarden St San Leandro, CA 94577	Phone: (510) 346-8860 Fax: Received Date: 03/28/2017 3:30 PM Analysis Date: 03/31/2017 Collected Date: 03/28/2017
Project: FORA 4953/171091001, Task 1	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4953-AS01 <small>091706013-0001</small> <i>Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</i>	4 pt Composite, North Wing, West	Brown Non-Fibrous Homogeneous	5% Cellulose	30% Quartz 20% Gypsum 45% Non-fibrous (Other)	None Detected
4953-AS02 <small>091706013-0002</small> <i>Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</i>	4 pt Composite, West Wing, North	Brown Non-Fibrous Homogeneous	5% Cellulose	30% Quartz 20% Gypsum 45% Non-fibrous (Other)	None Detected
4953-AS03 <small>091706013-0003</small> <i>Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</i>	4 pt Composite, West Wing, West	Brown Non-Fibrous Homogeneous	5% Cellulose	30% Quartz 20% Gypsum 45% Non-fibrous (Other)	None Detected
4953-AS04 <small>091706013-0004</small> <i>Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</i>	4 pt Composite, West Wing, South	Brown Non-Fibrous Homogeneous	2% Cellulose	30% Quartz 20% Gypsum 48% Non-fibrous (Other)	None Detected

Analyst(s) _____
Shane Heisser (4)



Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/31/2017 12:31:56



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only).

091706013

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4953/171091001 1 Task		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule *There is a premium charge for 72 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198 1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198.8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198 4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2.5 TEM - Water: EPA 100 2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite* <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual. via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique <small>*Can not accept New York State Loose Fill Vermiculite Samples</small> Other: <input type="checkbox"/>
---	---	---

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: **Chris Burns** **ELLB/CPE** Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4953-AS01	Apt Composite: Northwing West		
4953-AS02	: Westwing North		
4953-AS03	: Westwing West		
4953-AS04	: Westwing South		
4953-AS05			
4953-AS06			

Client Sample # (s): - Total # of Samples: **4**

Relinquished (Client): Date: **3/28/17** Time: **1341**

Received (Lab): Date: **3/28/17** Time: **3:30pm w/**

Comments/Special Instructions:



EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Phone/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091706251

Customer ID: 32VEOK25

Customer PO:

Project ID:

Attention: CHRIS BURNS
Vista Environmental Consulting, Inc.
2984 Teagarden St
San Leandro, CA 94577

Phone: (510) 346-8860
Fax:
Received: 03/22/2017 2:15 PM
Analysis Date: 04/04/2017
Collected:

Project: FORA 4953 71091001 Task 1

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4953-AGG-001 091706251-0001	4 Pt Composite, Dining Room	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4953-AGG-002 091706251-0002	4 Pt Composite, Northwing South	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4953-AGG-003 091706251-0003	4 Pt Composite, Northwing Central	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4953-AGG-004 091706251-0004	4 Pt Composite, Northwing North	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Adam C. Fink (4)

Matthew Batongbacal
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Report amended: 04/05/2017 14:06:46 Replaces initial report from: 04/04/2017 20:49:15 Reason Code: Client-Change to PO



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091706251

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA.
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4953 71091001 TASK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air Check if samples are from NY
 NIOSH 7400
 w/ OSHA 8hr TWA

TEM - Air 4-4.5hr TAT (AHERA only)
 AHERA 40 CFR, Part 763
 NIOSH 7402
 EPA Level II
 ISO 10312

TEM - Dust
 Microvac - ASTM D 5755
 Wipe - ASTM D6480
 Carpet Sonication (EPA 600/J-93/167)

PLM - Bulk (reporting limit)
 PLM EPA 600/R-93/116 (<1%) **CB**
 PLM EPA NOB (<1%)
Point Count
 400 (<0.25%) 1000 (<0.1%)
Point Count w/Gravimetric
 400 (<0.25%) 1000 (<0.1%)
 NYS 198.1 (friable in NY)
 NYS 198.6 NOB (non-friable-NY)
 NYS 198.8 SOF-V
 NIOSH 9002 (<1%)

TEM - Bulk
 TEM EPA NOB
 NYS NOB 198.4 (non-friable-NY)
 Chatfield SOP
 TEM Mass Analysis-EPA 600 sec. 2.5
TEM - Water: EPA 100.2
Fibers >10µm Waste Drinking
All Fiber Sizes Waste Drinking

Soil/Rock/Vermiculite*
 PLM CARB 435 - A (0.25% sensitivity)
 PLM CARB 435 - B (0.1% sensitivity)
 TEM CARB 435 - B (0.1% sensitivity)
 TEM CARB 435 - C (0.01% sensitivity)
 TEM Qual via Filtration Technique
 TEM Qual via Drop-Mount Technique
*Can not accept New York State Loose Fill Vermiculite Samples

Other:

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Chris Burns Samplers Signature:

4953

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4953-AGG01	4pt Composite, Dining Room		
4953-02	North Wing, South		
4953-03	North Wing, Central		
4953-04	North Wing, North		

Client Sample # (s): Total # of Samples: 1

Relinquished (Client): *[Signature]* Date: 03/22/17 Time: 1350

Received (Lab): *[Signature]* Date: 3/22/17 Time: 2:15 w/

Comments/Special Instructions:

BUILDING 4954



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4954
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4954 - S01, Depth: 0-6", Location: 4-Point Composite, North, East and West*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	25	mg/kg	25	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	12	mg/kg	12	0.3	YES	6.2	YES	2.8	YES
Cobalt	2.6	mg/kg	2.6	23	No	350	No	28	No
Copper	16	mg/kg	16	3,100	No	47,000	No	14,000	No
Lead	14	mg/kg	14	80	No	320	No	160	No
Nickel	8.7	mg/kg	8.7	820	No	11,000	No	86	No
Vanadium	15	mg/kg	15	390	No	5,800	No	470	No
Zinc	94	mg/kg	94	23,000	No	350,000	No	110,000	No
Mercury	0.05	mg/kg	0.05	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	25	mg/kg	25	10,000	No	No
Chromium	12	mg/kg	12	2,500	No	No
Cobalt	2.6	mg/kg	2.6	8,000	No	No
Copper	16	mg/kg	16	2,500	No	No
Lead	14	mg/kg	14	1,000	No	No
Nickel	8.7	mg/kg	8.7	2,000	No	No
Vanadium	15	mg/kg	15	2,400	No	No
Zinc	94	mg/kg	94	5,000	No	No
Mercury	0.05	mg/kg	0.05	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4954
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4954-AS01	4-Point Composite, North, East and West	ND

PCBs

Sample #	Location	Result (mg/kg)
4954-S01	4-Point Composite, North, East and West	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

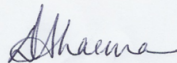
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78549-1
Client Project/Site: FORA Stockade, Task 1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
4/4/2017 11:56:24 AM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

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results through
TotalAccess

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Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Job ID: 720-78549-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78549-1

Comments

No additional comments.

Receipt

The sample was received on 3/28/2017 3:40 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 15.8° C.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4954-S01 (720-78549-1), (LCS 720-220447/2-A) and (MB 720-220447/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The post digestion spike % recovery for Cd, Co, Ni, Sb, Zn associated with batch 720-220362 was outside of control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Client Sample ID: 4954-S01

Lab Sample ID: 720-78549-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	25		1.5		mg/Kg	4		6010B	Total/NA
Chromium	12		1.5		mg/Kg	4		6010B	Total/NA
Cobalt	2.6		0.59		mg/Kg	4		6010B	Total/NA
Copper	16		4.4		mg/Kg	4		6010B	Total/NA
Lead	14		1.5		mg/Kg	4		6010B	Total/NA
Nickel	8.7		1.5		mg/Kg	4		6010B	Total/NA
Vanadium	15		1.5		mg/Kg	4		6010B	Total/NA
Zinc	94		4.4		mg/Kg	4		6010B	Total/NA
Mercury	0.050		0.0083		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Client Sample ID: 4954-S01

Lab Sample ID: 720-78549-1

Date Collected: 03/28/17 09:00

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1221	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1232	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1242	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1248	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1254	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1
PCB-1260	ND		50		ug/Kg		04/03/17 12:26	04/04/17 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	66		45 - 132	04/03/17 12:26	04/04/17 04:50	1
DCB Decachlorobiphenyl	101		42 - 146	04/03/17 12:26	04/04/17 04:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Arsenic	ND		2.9		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Barium	25		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Beryllium	ND		0.29		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Cadmium	ND		0.37		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Chromium	12		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Cobalt	2.6		0.59		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Copper	16		4.4		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Lead	14		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Molybdenum	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Nickel	8.7		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Selenium	ND		2.9		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Silver	ND		0.74		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Thallium	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Vanadium	15		1.5		mg/Kg		03/30/17 15:47	03/31/17 18:13	4
Zinc	94		4.4		mg/Kg		03/30/17 15:47	03/31/17 18:13	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.0083		mg/Kg		04/03/17 10:02	04/03/17 12:21	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78549-1	4954-S01	66	101
LCS 720-220447/2-A	Lab Control Sample	81	92
MB 720-220447/1-A	Method Blank	68	85

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

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

Lab Sample ID: MB 720-220447/1-A

Matrix: Solid

Analysis Batch: 220416

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 220447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1221	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1232	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1242	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1248	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1254	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1260	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		45 - 132	04/03/17 12:23	04/04/17 01:47	1
DCB Decachlorobiphenyl	85		42 - 146	04/03/17 12:23	04/04/17 01:47	1

Lab Sample ID: LCS 720-220447/2-A

Matrix: Solid

Analysis Batch: 220416

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	105		ug/Kg		79	65 - 121
PCB-1260	133	107		ug/Kg		80	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	81		45 - 132
DCB Decachlorobiphenyl	92		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-220254/1-A

Matrix: Solid

Analysis Batch: 220362

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 220254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Arsenic	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Barium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Beryllium	ND		0.10		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cadmium	ND		0.13		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Chromium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cobalt	ND		0.20		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Copper	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Lead	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Molybdenum	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Nickel	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Selenium	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Silver	ND		0.25		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Thallium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Vanadium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Zinc	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-220254/2-A
 Matrix: Solid
 Analysis Batch: 220362

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 220254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	48.2		mg/Kg		96	80 - 120
Barium	50.0	47.0		mg/Kg		94	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	47.7		mg/Kg		95	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	49.3		mg/Kg		99	80 - 120
Copper	50.0	49.0		mg/Kg		98	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120
Molybdenum	50.0	49.8		mg/Kg		100	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	50.0		mg/Kg		100	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-220299/1-A
 Matrix: Solid
 Analysis Batch: 220456

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 220299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		04/03/17 10:02	04/03/17 12:03	1

Lab Sample ID: LCS 720-220299/2-A
 Matrix: Solid
 Analysis Batch: 220456

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 220299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.829		mg/Kg		100	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

GC Semi VOA

Analysis Batch: 220416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	8082	220447
MB 720-220447/1-A	Method Blank	Total/NA	Solid	8082	220447
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	8082	220447

Prep Batch: 220447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	3546	
MB 720-220447/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	3546	

Metals

Prep Batch: 220254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	3050B	
MB 720-220254/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 220299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	7471A	
MB 720-220299/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-220299/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 220362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-220254/1-A	Method Blank	Total/NA	Solid	6010B	220254
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	6010B	220254

Analysis Batch: 220390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	6010B	220254

Analysis Batch: 220456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78549-1	4954-S01	Total/NA	Solid	7471A	220299
MB 720-220299/1-A	Method Blank	Total/NA	Solid	7471A	220299
LCS 720-220299/2-A	Lab Control Sample	Total/NA	Solid	7471A	220299

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Client Sample ID: 4954-S01

Lab Sample ID: 720-78549-1

Date Collected: 03/28/17 09:00

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:26	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 04:50	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 18:13	ASB	TAL PLS
Total/NA	Prep	7471A			220299	04/03/17 10:02	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220456	04/03/17 12:21	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78549-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78549-1	4954-S01	Solid	03/28/17 09:00	03/28/17 15:40

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TestAmerica - Visantion
1220 Quarry Lane

720-78549

Chair of Custody Record

179962

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

Regulatory Program: BW NPDES RCRA Char

TestAmerica Laboratories, Inc.

Client Contact: Vista Environmental Consulting
Project Manager: _____
Date: _____
Carrier: _____

2984 Teagarden Street
San Leandro, CA 94577
Tel/Fax: _____
COC No. _____ of _____ COCs

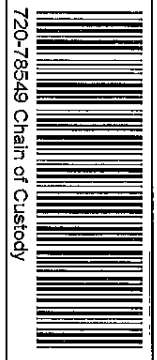
Analysis Turnaround Time
 CALENDAR DAYS
 WORKING DAYS
Sampler: _____
For Lab Use Only: _____
Walk-in Client: _____
Lab Sampling: _____

San Leandro, CA 94577
E-mail: chrisburns@vista-env.com & mollie@vista-env.com
Project Name: FORA Stockade, TASK 1
Lab Sampling: _____

Site: 4954
P O # 171091001
Job / SDG No.: _____

Sample Identification
Sample Date: 4954-S01
Sample Time: _____
Sample Type (C=Comp, S=Grab): C
Matrix: Solid
of Cont: 1
Sample Specific Notes: 4 point composite (N, E, W, X 2)

Filtered Sample (Y / N)
Perform MS / MSD (Y / N)
CAM 17 Metals (6010B) X
Mercury (7471A) X
PCBs (8082) X



720-78549 Chain of Custody

Preservation Used: Ice Dry Ice HCl H2SO4 HNO3 SANITIZER OTHER: _____
Possible Hazard Identification: _____
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments: _____
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Non-Hazard Flammable Skin Irritant Poison B Unknown
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seals Intact: Yes No
Custody Seal No.: _____
Therm ID No.: _____
Therm Temp. (°C): Obs'd: _____
Temp. (°C): Obs'd: _____

Relinquished by: _____
Company: Vista
Date/Time: 3/20/17 1333
Received by: _____
Date/Time: 03/28/17 1333

Relinquished by: _____
Company: Vista
Date/Time: 3/28/17 1590
Received in Laboratory by: _____
Date/Time: 3/28/17 1590

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78549-1

Login Number: 78549

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091706009
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: CHRIS BURNS Vista Environmental Consulting, Inc. 2984 Teagarden St San Leandro, CA 94577	Phone: (510) 346-8860 Fax: Received Date: 03/28/2017 3:30 PM Analysis Date: 03/31/2017 Collected Date: 03/28/2017
Project: FORA 4954-171091001, Task 1	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4954-AS01	4 Point Composite (N, E, Wx2)	Brown Non-Fibrous Homogeneous	5% Cellulose	30% Quartz 20% Gypsum 45% Non-fibrous (Other)	None Detected
<small>091706009-0001 Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</small>					

Analyst(s) _____
Shane Heisser (1)


Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/31/2017 12:48:59



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091706009

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA.
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4954/171091001, RSK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	
EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different - If Bill to is Different note instructions in Comments** <i>Third Party Billing requires written authorization from third party</i>			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/ Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198 1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198 8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)		TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198 4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2 5 TEM - Water: EPA 100 2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		TEM- Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite* <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual via Filtration Technique <input type="checkbox"/> TEM Qual. via Drop-Mount Technique <small>*Can not accept New York State Loose Fill Vermiculite Samples</small> Other: <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group		Filter Pore Size (Air Samples): <input type="checkbox"/> 0.8µm <input type="checkbox"/> 0.45µm	
Samplers Name: Chris Burns		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4954-AS01	4 point Composite (N, E, W, X2)		
Client Sample # (s):	-	Total # of Samples:	1
Relinquished (Client):	Date: 3/22/17	Time: 1342	
Received (Lab):	Date: 3/28	Time: 3:30	
Comments/Special Instructions:			

BUILDING 4955



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4955
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4955 - S01, Depth: 0-6", Location: 4-Point Composite, All Sides*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	31	mg/kg	31	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	15	mg/kg	15	0.3	YES	6.2	YES	2.8	YES
Cobalt	3	mg/kg	3	23	No	350	No	28	No
Copper	17	mg/kg	17	3,100	No	47,000	No	14,000	No
Lead	19	mg/kg	19	80	No	320	No	160	No
Nickel	9.9	mg/kg	9.9	820	No	11,000	No	86	No
Silver	0.68	mg/kg	0.68	390	No	5,800	No	1,800	No
Vanadium	21	mg/kg	21	390	No	5,800	No	470	No
Zinc	140	mg/kg	140	23,000	No	350,000	No	110,000	No
Mercury	0.11	mg/kg	0.11	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	31	mg/kg	31	10,000	No	No
Chromium	15	mg/kg	15	2,500	No	No
Cobalt	3	mg/kg	3	8,000	No	No
Copper	17	mg/kg	17	2,500	No	No
Lead	19	mg/kg	19	1,000	No	No
Nickel	9.9	mg/kg	9.9	2,000	No	No
Silver	0.68	mg/kg	0.68	500	No	No
Vanadium	21	mg/kg	21	2,400	No	No
Zinc	140	mg/kg	140	5,000	No	No
Mercury	0.11	mg/kg	0.11	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4955
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4955-AS01	4-Point Composite, All Sides	ND

PCBs

Sample #	Location	Result (mg/kg)
4955-S01	4-Point Composite, All Sides	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-78417-1

Client Project/Site: FORA STOCKADE, TASK 1

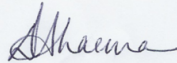
For:

Vista Environmental Consulting, Inc

2984 Teagarden Street

San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:

3/29/2017 3:11:14 PM

Dimple Sharma, Senior Project Manager

(925)484-1919

dimple.sharma@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Job ID: 720-78417-1

Laboratory: TestAmerica Pleasanton

Narrative

**Job Narrative
720-78417-1**

Comments

No additional comments.

Receipt

The sample was received on 3/22/2017 2:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

GC Semi VOA

Method 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4955-SO1 (720-78417-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.



Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Client Sample ID: 4955-SO1

Lab Sample ID: 720-78417-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	31		1.2		mg/Kg	4		6010B	Total/NA
Chromium	15		1.2		mg/Kg	4		6010B	Total/NA
Cobalt	3.0		0.50		mg/Kg	4		6010B	Total/NA
Copper	17		3.7		mg/Kg	4		6010B	Total/NA
Lead	19		1.2		mg/Kg	4		6010B	Total/NA
Nickel	9.9		1.2		mg/Kg	4		6010B	Total/NA
Silver	0.68		0.62		mg/Kg	4		6010B	Total/NA
Vanadium	21		1.2		mg/Kg	4		6010B	Total/NA
Zinc	140		3.7		mg/Kg	4		6010B	Total/NA
Mercury	0.11		0.0091		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Client Sample ID: 4955-SO1

Lab Sample ID: 720-78417-1

Date Collected: 03/22/17 10:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1221	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1232	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1242	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1248	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1254	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1
PCB-1260	ND		49		ug/Kg		03/27/17 13:02	03/28/17 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		45 - 132	03/27/17 13:02	03/28/17 17:46	1
DCB Decachlorobiphenyl	66		42 - 146	03/27/17 13:02	03/28/17 17:46	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Arsenic	ND		2.5		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Barium	31		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Beryllium	ND		0.25		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Cadmium	ND		0.31		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Chromium	15		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Cobalt	3.0		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Copper	17		3.7		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Lead	19		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Molybdenum	ND		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Nickel	9.9		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Selenium	ND		2.5		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Silver	0.68		0.62		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Thallium	ND		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Vanadium	21		1.2		mg/Kg		03/24/17 11:03	03/24/17 21:56	4
Zinc	140		3.7		mg/Kg		03/24/17 11:03	03/24/17 21:56	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.0091		mg/Kg		03/27/17 17:51	03/28/17 12:56	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78417-1	4955-SO1	92	66
LCS 720-219993/2-A	Lab Control Sample	77	62
MB 720-219993/1-A	Method Blank	76	87

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

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

Lab Sample ID: MB 720-219993/1-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1221	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1232	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1242	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1248	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1254	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1260	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		45 - 132	03/27/17 13:02	03/28/17 11:58	1
DCB Decachlorobiphenyl	87		42 - 146	03/27/17 13:02	03/28/17 11:58	1

Lab Sample ID: LCS 720-219993/2-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	109		ug/Kg		81	65 - 121
PCB-1260	133	112		ug/Kg		84	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		45 - 132
DCB Decachlorobiphenyl	62		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-219814/1-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Arsenic	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Barium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Beryllium	ND		0.10		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cadmium	ND		0.13		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Chromium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cobalt	ND		0.20		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Copper	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Lead	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Molybdenum	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Nickel	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Selenium	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Silver	ND		0.25		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Thallium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Vanadium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Zinc	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-219814/2-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	46.4		mg/Kg		93	80 - 120
Beryllium	50.0	46.8		mg/Kg		94	80 - 120
Cadmium	50.0	46.3		mg/Kg		93	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.0		mg/Kg		96	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	48.3		mg/Kg		97	80 - 120
Molybdenum	50.0	48.4		mg/Kg		97	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	46.2		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.3		mg/Kg		99	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	46.4		mg/Kg		93	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-219809/1-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		03/27/17 17:51	03/28/17 12:28	1

Lab Sample ID: LCS 720-219809/2-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.804		mg/Kg		97	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

GC Semi VOA

Prep Batch: 219993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	3546	
MB 720-219993/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 220052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219993/1-A	Method Blank	Total/NA	Solid	8082	219993
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	8082	219993

Analysis Batch: 220053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	8082	219993

Metals

Prep Batch: 219809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	7471A	
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 219814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	3050B	
MB 720-219814/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 219958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	6010B	219814
MB 720-219814/1-A	Method Blank	Total/NA	Solid	6010B	219814
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	6010B	219814

Analysis Batch: 220091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78417-1	4955-SO1	Total/NA	Solid	7471A	219809
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	219809
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	219809

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Client Sample ID: 4955-SO1

Lab Sample ID: 720-78417-1

Date Collected: 03/22/17 10:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			219993	03/27/17 13:02	RAC	TAL PLS
Total/NA	Analysis	8082		1	220053	03/28/17 17:46	JZT	TAL PLS
Total/NA	Prep	3050B			219814	03/24/17 11:03	JNG	TAL PLS
Total/NA	Analysis	6010B		4	219958	03/24/17 21:56	CAM	TAL PLS
Total/NA	Prep	7471A			219809	03/27/17 17:51	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220091	03/28/17 12:56	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78417-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78417-1	4955-SO1	Solid	03/22/17 10:00	03/22/17 14:50

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TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
phone 925-484-1919 fax 925-600-3002

720-78417

Chair of Custody Record

174837

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact
Vista Environmental Consulting
2984 Teagarden Street
San Leandro, CA 94577
(510) 346-8860
E-mail: chrisburns@vista-env.com & molli@vista-env.com
Project Name: FORA Stockade, TASK 1
Site: 4955
P O # 171091001

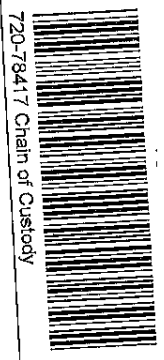
Regulatory Program: DW NPDES RCRA Other

TestAmerica Laboratories, Inc.

Project Manager: Tel/Fax: Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
TAT if different from Below
 2 weeks 1 week 2 days 1 day

Site Contact: Date: Carrier: COC No: of COCs
Lab Contact: Date: Carrier: COC No: of COCs
Sampler: Walk-in Client Lab Sampling. Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Carrier	COC No.	of COCs
4955-S01	3/21/17	1000	C	Solid	1	X	X	X		
Sample Specific Notes: 4PT Composite										



720-78417 Chain of Custody

Preservation Used: Ice HCl H2SO4 HNO3 NaOH Other
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-Hazard Flammable Skin Irritant Poison B Unknown Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments:

9,67

Custody Seals Intact: Yes No
Cooler Temp. (°C): Obs'd: _____ Cor'd: _____ Trip ID No.: _____

Relinquished by: *Henry Rocha* Company: VISTA Date/Time: 3/21/17 Received by: _____ Company: _____ Date/Time: _____

Relinquished by: _____ Company: _____ Date/Time: _____ Received in Laboratory by: _____ Company: _____ Date/Time: 3/22/17 1450

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78417-1

Login Number: 78417

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091705541
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: CHRIS BURNS Vista Environmental Consulting, Inc. 2984 Teagarden St San Leandro, CA 94577	Phone: (510) 346-8860 Fax: Received Date: 03/22/2017 2:15 PM Analysis Date: 03/25/2017 Collected Date: 03/22/2017
Project: FORA 4955/171091001, Task 1	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4955-AS01	4 pt Composite	Brown Non-Fibrous		40% Quartz 15% Ca Carbonate	None Detected
091705541-0001		Homogeneous		10% Gypsum 35% Non-fibrous (Other)	

Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep

Analyst(s)
Shane Heisser (1)



Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/25/2017 12:24:38



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091705540

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA.
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4955/171091001 , TASK 1		EMSL Project ID (Internal Use Only)	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

<p>PCM - Air <input type="checkbox"/> Check if samples are from NY</p> <p><input type="checkbox"/> NIOSH 7400</p> <p><input type="checkbox"/> w/ OSHA 8hr. TWA</p> <p>PLM - Bulk (reporting limit)</p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%)</p> <p>Point Count</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p>Point Count w/Gravimetric</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p><input type="checkbox"/> NYS 198.1 (friable in NY)</p> <p><input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> NYS 198.8 SOF-V</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p>	<p>TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only)</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p><input type="checkbox"/> ISO 10312</p> <p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB</p> <p><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)</p> <p><input type="checkbox"/> Chatfield SOP</p> <p><input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5</p> <p>TEM - Water: EPA 100.2</p> <p>Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p> <p>All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p>	<p>TEM- Dust</p> <p><input type="checkbox"/> Microvac - ASTM D 5755</p> <p><input type="checkbox"/> Wipe - ASTM D6480</p> <p><input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)</p> <p>Soil/Rock/Vermiculite*</p> <p><input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity)</p> <p><input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity)</p> <p><input type="checkbox"/> TEM Qual. via Filtration Technique</p> <p><input type="checkbox"/> TEM Qual. via Drop-Mount Technique</p> <p><small>*Can not accept New York State Loose Fill Vermiculite Samples</small></p> <p>Other:</p> <p><input type="checkbox"/></p>
---	--	---

Check For Positive Stop - Clearly Identify Homogenous Group **Filter Pore Size (Air Samples):** 0.8µm 0.45µm

Samplers Name: Chris Burns **Samplers Signature:**

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4955-AS01	4 pt composite		

Client Sample # (s):	Total # of Samples:		
Relinquished (Client): <i>[Signature]</i>	Date: 03/22/17	Time: 13:50	
Received (Lab): <i>[Signature]</i>	Date: 3/22/17	Time: 2:15 w/	
Comments/Special Instructions:			

BUILDING 4956
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4956 - S01, Depth: 0-6", Location: 4-Point Composite, All Sides*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Arsenic	4.4	mg/kg	4.4	0.067	YES	0.31	YES	0.98	YES
Barium	32	mg/kg	32	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	14	mg/kg	14	0.3	YES	6.2	YES	2.8	YES
Cobalt	2.6	mg/kg	2.6	23	No	350	No	28	No
Copper	7.9	mg/kg	7.9	3,100	No	47,000	No	14,000	No
Lead	82	mg/kg	82	80	YES	320	No	160	No
Nickel	7.6	mg/kg	7.6	820	No	11,000	No	86	No
Vanadium	15	mg/kg	15	390	No	5,800	No	470	No
Zinc	62	mg/kg	62	23,000	No	350,000	No	110,000	No
Mercury	0.1	mg/kg	0.1	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Arsenic	4.4	mg/kg	4.4	500	No	No
Barium	32	mg/kg	32	10,000	No	No
Chromium	14	mg/kg	14	2,500	No	No
Cobalt	2.6	mg/kg	2.6	8,000	No	No
Copper	7.9	mg/kg	7.9	2,500	No	No
Lead	82	mg/kg	82	1,000	No	YES
Nickel	7.6	mg/kg	7.6	2,000	No	No
Vanadium	15	mg/kg	15	2,400	No	No
Zinc	62	mg/kg	62	5,000	No	No
Mercury	0.1	mg/kg	0.1	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4956
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4956-AS01	4-Point Composite, All Sides	ND

PCBs

Sample #	Location	Result (mg/kg)
4956-S01	4-Point Composite, All Sides	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-78416-1

Client Project/Site: FORA STOCKADE, TASK 1

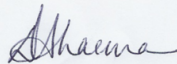
For:

Vista Environmental Consulting, Inc

2984 Teagarden Street

San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:

3/29/2017 3:09:10 PM

Dimple Sharma, Senior Project Manager

(925)484-1919

dimple.sharma@testamericainc.com



LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Job ID: 720-78416-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78416-1

Comments

No additional comments.

Receipt

The sample was received on 3/22/2017 2:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 9.6° C.

GC Semi VOA

Method 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4956-SO1 (720-78416-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Client Sample ID: 4956-SO1

Lab Sample ID: 720-78416-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.4		3.0		mg/Kg	4		6010B	Total/NA
Barium	32		1.5		mg/Kg	4		6010B	Total/NA
Chromium	14		1.5		mg/Kg	4		6010B	Total/NA
Cobalt	2.6		0.60		mg/Kg	4		6010B	Total/NA
Copper	7.9		4.5		mg/Kg	4		6010B	Total/NA
Lead	82		1.5		mg/Kg	4		6010B	Total/NA
Nickel	7.6		1.5		mg/Kg	4		6010B	Total/NA
Vanadium	15		1.5		mg/Kg	4		6010B	Total/NA
Zinc	62		4.5		mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.0088		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Client Sample ID: 4956-SO1

Lab Sample ID: 720-78416-1

Date Collected: 03/22/17 11:00

Matrix: Solid

Date Received: 03/22/17 14:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1221	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1232	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1242	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1248	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1254	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1
PCB-1260	ND		50		ug/Kg		03/27/17 13:02	03/28/17 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		45 - 132	03/27/17 13:02	03/28/17 17:29	1
DCB Decachlorobiphenyl	68		42 - 146	03/27/17 13:02	03/28/17 17:29	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Arsenic	4.4		3.0		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Barium	32		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Beryllium	ND		0.30		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Cadmium	ND		0.38		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Chromium	14		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Cobalt	2.6		0.60		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Copper	7.9		4.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Lead	82		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Molybdenum	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Nickel	7.6		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Selenium	ND		3.0		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Silver	ND		0.75		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Thallium	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Vanadium	15		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4
Zinc	62		4.5		mg/Kg		03/24/17 11:03	03/24/17 21:51	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.0088		mg/Kg		03/27/17 17:51	03/28/17 12:54	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78416-1	4956-SO1	69	68
LCS 720-219993/2-A	Lab Control Sample	77	62
MB 720-219993/1-A	Method Blank	76	87

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

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

Lab Sample ID: MB 720-219993/1-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219993

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1221	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1232	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1242	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1248	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1254	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1
PCB-1260	ND		50		ug/Kg		03/27/17 13:02	03/28/17 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		45 - 132	03/27/17 13:02	03/28/17 11:58	1
DCB Decachlorobiphenyl	87		42 - 146	03/27/17 13:02	03/28/17 11:58	1

Lab Sample ID: LCS 720-219993/2-A

Matrix: Solid

Analysis Batch: 220052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219993

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	109		ug/Kg		81	65 - 121
PCB-1260	133	112		ug/Kg		84	68 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		45 - 132
DCB Decachlorobiphenyl	62		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-219814/1-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Arsenic	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Barium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Beryllium	ND		0.10		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cadmium	ND		0.13		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Chromium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Cobalt	ND		0.20		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Copper	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Lead	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Molybdenum	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Nickel	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Selenium	ND		1.0		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Silver	ND		0.25		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Thallium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Vanadium	ND		0.50		mg/Kg		03/24/17 11:03	03/24/17 21:06	1
Zinc	ND		1.5		mg/Kg		03/24/17 11:03	03/24/17 21:06	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-219814/2-A

Matrix: Solid

Analysis Batch: 219958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.3		mg/Kg		91	80 - 120
Arsenic	50.0	47.2		mg/Kg		94	80 - 120
Barium	50.0	46.4		mg/Kg		93	80 - 120
Beryllium	50.0	46.8		mg/Kg		94	80 - 120
Cadmium	50.0	46.3		mg/Kg		93	80 - 120
Chromium	50.0	47.8		mg/Kg		96	80 - 120
Cobalt	50.0	48.0		mg/Kg		96	80 - 120
Copper	50.0	47.4		mg/Kg		95	80 - 120
Lead	50.0	48.3		mg/Kg		97	80 - 120
Molybdenum	50.0	48.4		mg/Kg		97	80 - 120
Nickel	50.0	47.0		mg/Kg		94	80 - 120
Selenium	50.0	46.2		mg/Kg		92	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	49.3		mg/Kg		99	80 - 120
Vanadium	50.0	48.3		mg/Kg		97	80 - 120
Zinc	50.0	46.4		mg/Kg		93	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-219809/1-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 219809

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		03/27/17 17:51	03/28/17 12:28	1

Lab Sample ID: LCS 720-219809/2-A

Matrix: Solid

Analysis Batch: 220091

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 219809

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.804		mg/Kg		97	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

GC Semi VOA

Prep Batch: 219993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	3546	
MB 720-219993/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 220052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219993/1-A	Method Blank	Total/NA	Solid	8082	219993
LCS 720-219993/2-A	Lab Control Sample	Total/NA	Solid	8082	219993

Analysis Batch: 220053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	8082	219993

Metals

Prep Batch: 219809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	7471A	
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Prep Batch: 219814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	3050B	
MB 720-219814/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 219958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	6010B	219814
MB 720-219814/1-A	Method Blank	Total/NA	Solid	6010B	219814
LCS 720-219814/2-A	Lab Control Sample	Total/NA	Solid	6010B	219814

Analysis Batch: 220091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78416-1	4956-SO1	Total/NA	Solid	7471A	219809
MB 720-219809/1-A	Method Blank	Total/NA	Solid	7471A	219809
LCS 720-219809/2-A	Lab Control Sample	Total/NA	Solid	7471A	219809

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Client Sample ID: 4956-SO1

Lab Sample ID: 720-78416-1

Date Collected: 03/22/17 11:00

Matrix: Solid

Date Received: 03/22/17 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			219993	03/27/17 13:02	RAC	TAL PLS
Total/NA	Analysis	8082		1	220053	03/28/17 17:29	JZT	TAL PLS
Total/NA	Prep	3050B			219814	03/24/17 11:03	JNG	TAL PLS
Total/NA	Analysis	6010B		4	219958	03/24/17 21:51	CAM	TAL PLS
Total/NA	Prep	7471A			219809	03/27/17 17:51	JNG	TAL PLS
Total/NA	Analysis	7471A		1	220091	03/28/17 12:54	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA STOCKADE, TASK 1

TestAmerica Job ID: 720-78416-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78416-1	4956-SO1	Solid	03/22/17 11:00	03/22/17 14:50

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720-78416

Chai of Custody Record

174836

TestAmerica Laboratories, Inc.

Regulatory Program: DW NPDES RCRA Other:

Client Contact: Vista Environmental Consulting
 2984 Teagarden Street
 San Leandro, CA 94577
 (510) 346-8860
 E-mail: chrisburns@vista-env.com & mollie@vista-env.com
 Project Name: FORA Stockade, **77ASK-1**
 Site: 4956
 P O # 171091001

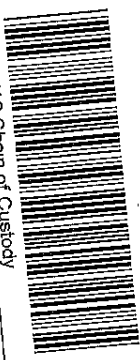
Project Manager: _____
 Tel/Fax: _____
 Analysis Turnaround Time
 CALENDAR DAYS WORKING DAYS
 TAT if different from Below: _____
 2 weeks
 1 week
 2 days
 1 day

Site Contact: _____ Date: _____
 Lab Contact: _____ Carrier: _____

COG No: _____ of _____ COCs

Sampler: _____
 For Lab Use Only:
 Walk-in Client: _____
 Lab Sampling: _____
 Job / SDG No: _____

Sample Specific Notes: **4 PT Composite**

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Carrier	Date
4956-S01	3/21/17	1100	C	Solid	1	X	X X X		
<p>720-78416 Chain of Custody</p> 									
<p>Presented for use as: HCl, H2SO4, H3PO4, HNO3, NaOH, & Other</p> <p>Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.</p> <p><input type="checkbox"/> Non-hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Return to Client <input type="checkbox"/> Deposit by Lab <input type="checkbox"/> Archive for _____ Months</p> <p>Special Instructions/QC Requirements & Comments: 9.6%</p>									
Custody Seal Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C):	Obs'd:	Cor'd:	Therm ID No.:				
Relinquished by: <i>Amal Kober</i>	Company: Vista	Date/Time: 3/21/17 14:50	Received by:	Company: Vista	Date/Time:				
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: <i>TA</i>	Date/Time: 3/22/17 14:50				

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78416-1

Login Number: 78416

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577

Tel/Fax: (510) 895-3675 / (510) 895-3680

<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091705538
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: CHRIS BURNS Vista Environmental Consulting, Inc. 2984 Teagarden St San Leandro, CA 94577	Phone: (510) 346-8860 Fax: Received Date: 03/22/2017 2:15 PM Analysis Date: 03/25/2017 Collected Date: 03/22/2017
Project: FORA 4956/171091001, Task 1	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4956-AS01	4 pt Composite, Soil	Brown Non-Fibrous	4% Cellulose	40% Quartz 10% Gypsum 20% Matrix 26% Non-fibrous (Other)	None Detected
091705538-0001		Homogeneous			

Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep

Analyst(s) _____
Shane Heisser (1)


Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/25/2017 11:11:00



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091705538

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA.
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com; moli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4956/171091001, TASK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

<p>PCM - Air <input type="checkbox"/> Check if samples are from NY</p> <p><input type="checkbox"/> NIOSH 7400</p> <p><input type="checkbox"/> w/ OSHA 8hr. TWA</p> <p>PLM - Bulk (reporting limit)</p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%)</p> <p>Point Count</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p>Point Count w/Gravimetric</p> <p><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p><input type="checkbox"/> NYS 198.1 (friable in NY)</p> <p><input type="checkbox"/> NYS 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> NYS 198.8 SOF-V</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p>	<p>TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only)</p> <p><input type="checkbox"/> AHERA 40 CFR, Part 763</p> <p><input type="checkbox"/> NIOSH 7402</p> <p><input type="checkbox"/> EPA Level II</p> <p><input type="checkbox"/> ISO 10312</p> <p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB</p> <p><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)</p> <p><input type="checkbox"/> Chatfield SOP</p> <p><input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5</p> <p>TEM - Water: EPA 100.2</p> <p>Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p> <p>All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking</p>	<p>TEM - Dust</p> <p><input type="checkbox"/> Microvac - ASTM D 5755</p> <p><input type="checkbox"/> Wipe - ASTM D6480</p> <p><input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)</p> <p>Soil/Rock/Vermiculite*</p> <p><input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity)</p> <p><input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity)</p> <p><input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity)</p> <p><input type="checkbox"/> TEM Qual. via Filtration Technique</p> <p><input type="checkbox"/> TEM Qual. via Drop-Mount Technique</p> <p><small>*Can not accept New York State Loose Fill Vermiculite Samples</small></p> <p>Other:</p> <p><input type="checkbox"/></p>
---	--	--

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Chris Burns Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4956AS01	Apt Composite, Soil		

Client Sample # (s): _____ Total # of Samples: 1

Relinquished (Client): *[Signature]* Date: 03/22/17 Time: 1:50

Received (Lab): *[Signature]* Date: 3/22/17 Time: 2:15 W

Comments/Special Instructions:

BUILDING 4957



The information contained in these appendices are not stand alone documents and should not be separated from this report. For specific regulatory requirements regarding these materials please refer to the information provided in the Main Report.

BUILDING 4957
BACKGROUND SOIL SAMPLING SUMMARY

Title 22 Metals

Sample: 4956 - S01, Depth: 0-6", Location: 4-Point Composite, All Sides*									
Analyte	Lab Result	Units	Conversion to mg/kg	ESL for Shallow Soils Residential (mg/kg)	Exceed the Residential ESL?	ESL for Shallow Soils Commercial/Industrial (mg/kg)	Exceed the Commercial ESL?	ESL for Any Land Use, Construction Worker Shallow and Deep Soil Exposure (mg/kg)	Exceed the Construction ESL?
Barium	57	mg/kg	57	15,000	No	220,000	No	3,000	No
Chromium (Based on VI)	10	mg/kg	10	0.3	YES	6.2	YES	2.8	YES
Cobalt	7.1	mg/kg	7.1	23	No	350	No	28	No
Copper	44	mg/kg	44	3,100	No	47,000	No	14,000	No
Lead	15	mg/kg	15	80	No	320	No	160	No
Nickel	5.3	mg/kg	5.3	820	No	11,000	No	86	No
Vanadium	59	mg/kg	59	390	No	5,800	No	470	No
Zinc	170	mg/kg	170	23,000	No	350,000	No	110,000	No
Mercury	0.078	mg/kg	0.078	13	No	190	No	44	No

Analyte	TTL Lab Result	Units	Conversion to mg/kg	TTL Cal/Haz Level (mg/kg)	Exceed the Cal/Haz Level?	Need STLC?
Barium	57	mg/kg	57	10,000	No	No
Chromium	10	mg/kg	10	2,500	No	No
Cobalt	7.1	mg/kg	7.1	8,000	No	No
Copper	44	mg/kg	44	2,500	No	No
Lead	15	mg/kg	15	1,000	No	No
Nickel	5.3	mg/kg	5.3	2,000	No	No
Vanadium	59	mg/kg	59	2,400	No	No
Zinc	170	mg/kg	170	5,000	No	No
Mercury	0.078	mg/kg	0.078	20	No	No

*Metals not listed were None Detected (ND)

BUILDING 4957
BACKGROUND SOIL SAMPLING SUMMARY

Asbestos

Sample #	Location	Result (% Wt)
4957-AS01	4-Point Composite, All Sides	ND

PCBs

Sample #	Location	Result (mg/kg)
4957-S01	4-Point Composite, All Sides	ND

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

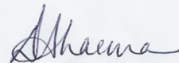
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-78548-1
Client Project/Site: FORA Stockade, Task 1

For:
Vista Environmental Consulting, Inc
2984 Teagarden Street
San Leandro, California 94577

Attn: Chris Burns



Authorized for release by:
4/4/2017 11:54:26 AM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

LINKS

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Job ID: 720-78548-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-78548-1

Comments

No additional comments.

Receipt

The sample was received on 3/28/2017 3:40 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 15.8° C.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 4957-S01 (720-78548-1), (LCS 720-220447/2-A) and (MB 720-220447/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010B: The post digestion spike % recovery for Cd, Co, Ni, Sb, Zn associated with batch 720-220362 was outside of control limits.

Method 6010B: The following sample was diluted due to the abundance of non-target analytes: 4957-S01 (720-78548-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Client Sample ID: 4957-S01

Lab Sample ID: 720-78548-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	57		1.3		mg/Kg	4		6010B	Total/NA
Chromium	10		1.3		mg/Kg	4		6010B	Total/NA
Cobalt	7.1		0.53		mg/Kg	4		6010B	Total/NA
Copper	44		4.0		mg/Kg	4		6010B	Total/NA
Lead	15		1.3		mg/Kg	4		6010B	Total/NA
Nickel	5.3		1.3		mg/Kg	4		6010B	Total/NA
Vanadium	59		1.3		mg/Kg	4		6010B	Total/NA
Zinc	170		4.0		mg/Kg	4		6010B	Total/NA
Mercury	0.078		0.0087		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Client Sample ID: 4957-S01

Lab Sample ID: 720-78548-1

Date Collected: 03/28/17 10:30

Matrix: Solid

Date Received: 03/28/17 15:40

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1221	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1232	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1242	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1248	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1254	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1
PCB-1260	ND		49		ug/Kg		04/03/17 12:26	04/04/17 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		45 - 132	04/03/17 12:26	04/04/17 04:34	1
DCB Decachlorobiphenyl	87		42 - 146	04/03/17 12:26	04/04/17 04:34	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Arsenic	ND		2.7		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Barium	57		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Beryllium	ND		0.27		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Cadmium	ND		0.33		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Chromium	10		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Cobalt	7.1		0.53		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Copper	44		4.0		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Lead	15		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Molybdenum	ND		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Nickel	5.3		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Selenium	ND		2.7		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Silver	ND		0.67		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Thallium	ND		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Vanadium	59		1.3		mg/Kg		03/30/17 15:47	03/31/17 18:08	4
Zinc	170		4.0		mg/Kg		03/30/17 15:47	03/31/17 18:08	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.078		0.0087		mg/Kg		04/03/17 10:02	04/03/17 12:19	1

Surrogate Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78548-1	4957-S01	70	87
LCS 720-220447/2-A	Lab Control Sample	81	92
MB 720-220447/1-A	Method Blank	68	85

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

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

Lab Sample ID: MB 720-220447/1-A
Matrix: Solid
Analysis Batch: 220416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 220447

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1221	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1232	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1242	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1248	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1254	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
PCB-1260	ND		50		ug/Kg		04/03/17 12:23	04/04/17 01:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		45 - 132				04/03/17 12:23	04/04/17 01:47	1
DCB Decachlorobiphenyl	85		42 - 146				04/03/17 12:23	04/04/17 01:47	1

Lab Sample ID: LCS 720-220447/2-A
Matrix: Solid
Analysis Batch: 220416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 220447

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	105		ug/Kg		79	65 - 121
PCB-1260	133	107		ug/Kg		80	68 - 127
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	81		45 - 132				
DCB Decachlorobiphenyl	92		42 - 146				

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-220254/1-A
Matrix: Solid
Analysis Batch: 220362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 220254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Arsenic	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Barium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Beryllium	ND		0.10		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cadmium	ND		0.13		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Chromium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Cobalt	ND		0.20		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Copper	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Lead	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Molybdenum	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Nickel	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Selenium	ND		1.0		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Silver	ND		0.25		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Thallium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Vanadium	ND		0.50		mg/Kg		03/30/17 15:47	03/31/17 15:03	1
Zinc	ND		1.5		mg/Kg		03/30/17 15:47	03/31/17 15:03	1

TestAmerica Pleasanton

QC Sample Results

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-220254/2-A

Matrix: Solid

Analysis Batch: 220362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.1		mg/Kg		94	80 - 120
Arsenic	50.0	48.2		mg/Kg		96	80 - 120
Barium	50.0	47.0		mg/Kg		94	80 - 120
Beryllium	50.0	47.8		mg/Kg		96	80 - 120
Cadmium	50.0	47.7		mg/Kg		95	80 - 120
Chromium	50.0	48.9		mg/Kg		98	80 - 120
Cobalt	50.0	49.3		mg/Kg		99	80 - 120
Copper	50.0	49.0		mg/Kg		98	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120
Molybdenum	50.0	49.8		mg/Kg		100	80 - 120
Nickel	50.0	48.6		mg/Kg		97	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Silver	25.0	24.0		mg/Kg		96	80 - 120
Thallium	50.0	50.0		mg/Kg		100	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-220299/1-A

Matrix: Solid

Analysis Batch: 220456

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 220299

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		04/03/17 10:02	04/03/17 12:03	1

Lab Sample ID: LCS 720-220299/2-A

Matrix: Solid

Analysis Batch: 220456

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 220299

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.829		mg/Kg		100	80 - 120

QC Association Summary

Client: Vista Environmental Consulting, Inc
 Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

GC Semi VOA

Analysis Batch: 220416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	8082	220447
MB 720-220447/1-A	Method Blank	Total/NA	Solid	8082	220447
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	8082	220447

Prep Batch: 220447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	3546	
MB 720-220447/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-220447/2-A	Lab Control Sample	Total/NA	Solid	3546	

Metals

Prep Batch: 220254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	3050B	
MB 720-220254/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 220299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	7471A	
MB 720-220299/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-220299/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Analysis Batch: 220362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-220254/1-A	Method Blank	Total/NA	Solid	6010B	220254
LCS 720-220254/2-A	Lab Control Sample	Total/NA	Solid	6010B	220254

Analysis Batch: 220390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	6010B	220254

Analysis Batch: 220456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78548-1	4957-S01	Total/NA	Solid	7471A	220299
MB 720-220299/1-A	Method Blank	Total/NA	Solid	7471A	220299
LCS 720-220299/2-A	Lab Control Sample	Total/NA	Solid	7471A	220299

Lab Chronicle

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Client Sample ID: 4957-S01

Lab Sample ID: 720-78548-1

Date Collected: 03/28/17 10:30

Matrix: Solid

Date Received: 03/28/17 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			220447	04/03/17 12:26	TTC	TAL PLS
Total/NA	Analysis	8082		1	220416	04/04/17 04:34	DCH	TAL PLS
Total/NA	Prep	3050B			220254	03/30/17 15:47	JNG	TAL PLS
Total/NA	Analysis	6010B		4	220390	03/31/17 18:08	ASB	TAL PLS
Total/NA	Prep	7471A			220299	04/03/17 10:02	BRB	TAL PLS
Total/NA	Analysis	7471A		1	220456	04/03/17 12:19	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Analysis Method	Prep Method	Matrix	Analyte
-----------------	-------------	--------	---------

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Method Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Vista Environmental Consulting, Inc
Project/Site: FORA Stockade, Task 1

TestAmerica Job ID: 720-78548-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78548-1	4957-S01	Solid	03/28/17 10:30	03/28/17 15:40

1

2

3

4

5

6

7

8

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10

11

12

13

14

15

TestAmerica - Pleasanton
 1220 Quarry Lane
 Pleasanton, CA 94566
 phone 925.484.1919 fax 925.600.3002

720-78548

Chair of Custody Record

179910

TestAmerica Laboratories, Inc.
 THE LEADER IN ENVIRONMENTAL TESTING

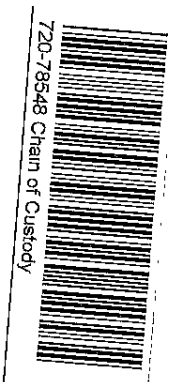
4/4/2017

Client Contact: Vista Environmental Consulting
 Project Manager: [Blank]
 Site Contact: [Blank]
 Date: [Blank]
 Carrier: [Blank]

2984 Teagarden Street
 San Leandro, CA 94577
 (510) 348-8860
 E-mail: christburns@vista-env.com & molli@vista-env.com
 Project Name: FORA Stockade, TASC
 Site: 4857
 P O # 171091001

Analysis Turnaround Time
 CALENDAR DAYS
 WORKING DAYS
 *AT if different from Below
 2 weeks
 1 week
 2 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Lab Contact:	Date:	COC No.:	Sampler:
4857-S01	3/28/17	1030	C	Solid	1		X X X				
Sample Specific Notes: 4PT Composite, All sides											



Preservation Method: [Blank]
 Possible Hazard Identification:
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
 Non-hazard
 Flammable
 Skin Irritant
 Poison B
 Unknown
 Return to Client
 Disposal by Lab
 Archive for _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Special Instructions/QC Requirements & Comments:
 Custody Seal Intact: Yes No
 Custody Seal No.: [Blank]
 Popper Temp. (°C): Obs'd: [Blank]
 Therm ID No.: [Blank]

Relinquished by: [Signature]
 Company: Vista
 Date/Time: 3/28/17 1333
 Received by: [Signature]
 Received in Laboratory by: [Signature]
 Company: Vista
 Date/Time: 03/28/17 1540

Relinquished by: [Signature]
 Company: Vista
 Date/Time: 03/28/17 1540
 Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Login Sample Receipt Checklist

Client: Vista Environmental Consulting, Inc

Job Number: 720-78548-1

Login Number: 78548

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Arauz, Dennis

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





EMSL Analytical, Inc.

464 McCormick Street San Leandro, CA 94577
Tel/Fax: (510) 895-3675 / (510) 895-3680
<http://www.EMSL.com> / sanleandrolab@emsl.com

EMSL Order: 091706012
Customer ID: 32VEOK25
Customer PO:
Project ID:

Attention: CHRIS BURNS
Vista Environmental Consulting, Inc.
2984 Teagarden St
San Leandro, CA 94577

Phone: (510) 346-8860
Fax:
Received Date: 03/28/2017 3:30 PM
Analysis Date: 03/31/2017
Collected Date: 03/28/2017

Project: FORA 4957/171091001, Task 1

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4957-AS01	4 Point Composite - All Sides	Brown Non-Fibrous Homogeneous	4% Cellulose	40% Quartz 20% Gypsum 36% Non-fibrous (Other)	None Detected
<small>091706012-0001 Soil is a problem matrix. Other analytical options are recommended such as EPA 600 PLM/TEM with milling prep</small>					

Analyst(s)
Shane Heisser (1)


Matthew Batongbacal
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, WA C884

Initial report from: 03/31/2017 12:29:41



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Chain of Custody
EMSL Order Number (Lab Use Only)

091706012

EMSL Analytical, Inc.
464 McCormick Street
San Leandro, CA. 94577
PHONE: 510-895-3675
FAX: 510-895-3680

Company Name : Vista Environmental Consulting, Inc.		EMSL Customer ID:	
Street: 2984 Teagarden Street		City: San Leandro	State/Province: CA
Zip/Postal Code: 94577	Country: US	Telephone #: 510-346-8860	Fax #: 888-296-0271
Report To (Name): Chris Burns		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
Email Address: chrisburns@vista-env.com, molli@vista-env.com		Purchase Order:	
Project Name/Number: FORA 4957/171091001, TASK 1		EMSL Project ID (Internal Use Only):	
U.S. State Samples Taken: CA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

EMSL-Bill to: Same Different - If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Turnaround Time (TAT) Options* - Please Check

3 Hour 6 Hour 24 Hour 48 Hour 72 Hour 96 Hour 1 Week 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air <input type="checkbox"/> Check if samples are from NY <input type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA PLM - Bulk (reporting limit) <input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198 6 NOB (non-friable-NY) <input type="checkbox"/> NYS 198 8 SOF-V <input type="checkbox"/> NIOSH 9002 (<1%)	TEM - Air <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 TEM - Bulk <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2 5 TEM - Water: EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	TEM - Dust <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) Soil/Rock/Vermiculite* <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> TEM Qual via Filtration Technique <input type="checkbox"/> TEM Qual via Drop-Mount Technique <small>*Can not accept New York State Loose Fill Vermiculite Samples</small> Other: <input type="checkbox"/>
---	--	---

Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): 0.8µm 0.45µm

Samplers Name: Chris Burns ^{Elliott} Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
4957-AS01	4 point Composite - All Sides		

Client Sample # (s):	-	Total # of Samples:	
Relinquished (Client):	Date: 3/28/17	Time: 1:34	
Received (Lab):	Date: 3/28	Time: 3:30	
Comments/Special Instructions:			