

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-51104-1

Client Project/Site: Abandoned Mining Wastes-Torch Lake

For:

Michigan Dept of Environmental Quality
Constitution Hall
525 W. Allegan Street
3rd Floor
Lansing, Michigan 48909

Attn: Amy Keranen



Authorized for release by:
6/4/2015 9:08:46 PM

Kris Brooks, Project Manager II
(330)966-9790
kris.brooks@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.

1

2

3

4

5

6

7

8

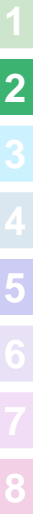


Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Certification Summary	6
Subcontract Data	7
Chain of Custody	13

Definitions/Glossary

Client: Michigan Dept of Environmental Quality
Project/Site: Abandoned Mining Wastes-Torch Lake

TestAmerica Job ID: 240-51104-1

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: Michigan Dept of Environmental Quality
Project/Site: Abandoned Mining Wastes-Torch Lake

TestAmerica Job ID: 240-51104-1

Job ID: 240-51104-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative
240-51104-1

Comments

The Asbestos analysis was performed at EMLab P&K - Irvine.

Receipt

The samples were received on 5/22/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

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

Method Summary

Client: Michigan Dept of Environmental Quality
Project/Site: Abandoned Mining Wastes-Torch Lake

TestAmerica Job ID: 240-51104-1

Method	Method Description	Protocol	Laboratory
Asbestos - Carb 435	General Sub Contract Method	NONE	EMLab

Protocol References:

NONE = NONE

Laboratory References:

EMLab = EMLab - Irvine, Bascom Airport Executive Suites, 17461 Derian Ave, Suite 100, Irvine, CA 92614



Certification Summary

Client: Michigan Dept of Environmental Quality
 Project/Site: Abandoned Mining Wastes-Torch Lake

TestAmerica Job ID: 240-51104-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Florida	NELAP	4	E87225	06-30-15 *
Georgia	State Program	4	N/A	06-30-15 *
Illinois	NELAP	5	200004	07-31-15
Kansas	NELAP	7	E-10336	05-31-15 *
Kentucky (UST)	State Program	4	58	06-30-15 *
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-15
New Jersey	NELAP	2	OH001	06-30-15 *
New York	NELAP	2	10975	03-31-16 *
Ohio VAP	State Program	5	CL0024	10-31-15
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-15
Texas	NELAP	6		08-31-15
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-15
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-15

* Certification renewal pending - certification considered valid.





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

Report for:

Ms. Kris Brooks
TestAmerica-Canton
4101 Shuffel Dr. NW
North Canton, OH 44720

Regarding: Project: 240-51104-1
 EML ID: 1370240

Approved by:

Dates of Analysis:
Asbestos-CARB 435: 06-03-2015

Approved Signatory
Noah Lazarte

Service SOPs: Asbestos-CARB 435 (EM-AS-S-1265)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: TestAmerica-Canton
 C/O: Ms. Kris Brooks
 Re: 240-51104-1

Date of Submittal: 05-23-2015
 Date of Receipt: 05-26-2015
 Date of Report: 06-04-2015

ASBESTOS POINT COUNT REPORT: CARB METHOD 435

Location:	(240-51104-1)		
Total Points Counted:	400		
Lab ID-Version‡:	6289469-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-2)		
Total Points Counted:	400		
Lab ID-Version‡:	6289470-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-3)		
Total Points Counted:	400		
Lab ID-Version‡:	6289471-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-4)		
Total Points Counted:	400		
Lab ID-Version‡:	6289472-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.
 The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of asbestos points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The 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.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.
 ‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: TestAmerica-Canton
 C/O: Ms. Kris Brooks
 Re: 240-51104-1

Date of Submittal: 05-23-2015
 Date of Receipt: 05-26-2015
 Date of Report: 06-04-2015

ASBESTOS POINT COUNT REPORT: CARB METHOD 435

Location:	(240-51104-5)		
Total Points Counted:	400		
Lab ID-Version‡:	6289473-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-6)		
Total Points Counted:	400		
Lab ID-Version‡:	6289474-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-7)		
Total Points Counted:	400		
Lab ID-Version‡:	6289475-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-8)		
Total Points Counted:	400		
Lab ID-Version‡:	6289476-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of asbestos points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The 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.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: TestAmerica-Canton
 C/O: Ms. Kris Brooks
 Re: 240-51104-1

Date of Submittal: 05-23-2015
 Date of Receipt: 05-26-2015
 Date of Report: 06-04-2015

ASBESTOS POINT COUNT REPORT: CARB METHOD 435

Location:	(240-51104-9)		
Total Points Counted:	400		
Lab ID-Version‡:	6289477-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	Chrysotile	1	0.25
Layer Totals:		1	0.25

Comments:

Location:	(240-51104-10)		
Total Points Counted:	400		
Lab ID-Version‡:	6289478-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-11)		
Total Points Counted:	400		
Lab ID-Version‡:	6289479-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-12)		
Total Points Counted:	400		
Lab ID-Version‡:	6289480-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Red Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of asbestos points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The 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.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: TestAmerica-Canton
 C/O: Ms. Kris Brooks
 Re: 240-51104-1

Date of Submittal: 05-23-2015
 Date of Receipt: 05-26-2015
 Date of Report: 06-04-2015

ASBESTOS POINT COUNT REPORT: CARB METHOD 435

Location:	(240-51104-13)		
Total Points Counted:	400		
Lab ID-Version‡:	6289481-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-14)		
Total Points Counted:	400		
Lab ID-Version‡:	6289482-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Red Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-15)		
Total Points Counted:	400		
Lab ID-Version‡:	6289483-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-16)		
Total Points Counted:	400		
Lab ID-Version‡:	6289484-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:		-	-

Comments:No asbestos was detected and no points were counted.
 The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of asbestos points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The 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.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.
 ‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



EMLab P&K

4955 Yarrow Street , Arvada, CO 80002
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: TestAmerica-Canton
C/O: Ms. Kris Brooks
Re: 240-51104-1

Date of Submittal: 05-23-2015
Date of Receipt: 05-26-2015
Date of Report: 06-04-2015

ASBESTOS POINT COUNT REPORT: CARB METHOD 435

Location:	(240-51104-17)		
Total Points Counted:	400		
Lab ID-Version‡:	6289485-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.

Location:	(240-51104-18)		
Total Points Counted:	400		
Lab ID-Version‡:	6289486-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Brown Soil	-	-	ND
Layer Totals:	-	-	-

Comments:No asbestos was detected and no points were counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of asbestos points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The 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.

All samples were received in acceptable condition unless otherwise noted. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-51104 Chain of Custody

1
2
3
4
5
6
7
8

116/CO.2

CHAIN OF CUSTODY
www.EMLabPK.com



New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

	Weather	Fog	Rain	Snow	Wind	Clear
Level	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Moderate	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REQUESTED SERVICES (Use checkboxes below)									
Non-Culturable		Culturable							Other Requests
Spore Trap	Tape Swab Bulk	BioCassette™, Andersen, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plates							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT INFORMATION	
Company: WESTON SOLUTIONS / MDEQ	Address: P.O. BOX 577, Houghton, MI 49931
Contact: JEFF BINKLEY	Special Instructions:
Phone: (906) 523-5457	email: J.BINKLEY@WESTONSOLUTIONS.COM

PROJECT INFORMATION		TURN AROUND TIME CODES (TAT)	
Project ID: ABANDONED MINING WASTES - TORCH LAKE	Sampling Date & Time: 5/13/15-5/17/15	STD - Standard (DEFAULT)	Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Project Description:	Sampled By: D. LIEBAU	ND - Next Business Day	
Project Zip Code:		SD - Same Business Day Rush	
PO Number: 14403130740		WH - Weekend / Holiday	

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc.)
CHL-SB142-0-6"		SO	STD	1-802	5/13/15 0840
CHL-SB143-0-6"		SO	STD	1-802	5/13/15 0947
CHL-SB144-0-6"		SO	STD	1-802	5/13/15 1030
CHL-SB145-0-6"		SO	STD	1-802	5/13/15 1122
CHTC-SB17-0-6"		SO	STD	1-802	5/14/15 1155
CHTC-SB19-0-6"		SO	STD	1-802	5/14/15 1527
CHTC-SB21-0-6"		SO	STD	1-802	5/15/15 0845
CHTC-SB23-0-6"		SO	STD	1-802	5/15/15 1005
CHTC-SB24-0-6"		SO	STD	1-802	5/15/15 1305
CHTC-SB03-0-6"		SO	STD	1-802	5/17/15 0835
CHTC-SB11-0-6"		SO	STD	1-802	5/17/15 0920

SAMPLE TYPE CODES		RELINQUISHED BY		DATE & TIME	RECEIVED BY	DATE & TIME
BC - BioCassette™	ST - Spore Trap: Zefon, Allergenco, Burkard ...	T - Tape	D - Dust	5-20-15	Melissa Smith	5/20/15 8:00
A1S - Anderson	P - Potable Water	SW - Swab	SO - Soil	5/21/15	<i>[Signature]</i>	5/21/15 10:40
SAS - Surface Air Sampler	NP - Non-Potable Water	B - Bulk	O - Other:			
CP - Contact Plate						

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/main/service/terms.html>

Copyright © 2002-2013 EMLab P&K

[Signature]
5/21/15 13:30

[Signature]
5-22-15 9:30

Page 14 of 18

6/4/2015

CHAIN OF CUSTODY
www.EMLabPK.com



New Jersey: 3000 Lincoln Drive East, Suite A, Marlton, NJ 08053 * (866) 871-1984
Phoenix, AZ: 1501 West Knudsen drive, Phoenix, AZ 85027 * (800) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 888-6653

Level	Weather	Fog	Rain	Snow	Wind	Clear
	None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Moderate	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Heavy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

REQUESTED SERVICES
(Use checkboxes below)

Non-Culturable		Culturable										Other Requests						
Spore Trap	Tape Swab Bulk	BioCassette™, Andersen, SAS, Swab, Water, Bulk, Dust, Soil, Contact Plates										Other Requests						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTACT INFORMATION

Company:	WESTON SOLUTIONS / MDEQ	Address:	PO BOX 577, HOUGHTON, MI 49931
Contact:	JEFF BINKLEY	Special Instructions:	
Phone:	(906) 523-5457	Email:	j-binkley@weston-solutions.com

PROJECT INFORMATION

TURN AROUND TIME CODES (TAT)

Project ID:	ABANDONED MINE WASTES - TORCH LAKE	STD - Standard (DEFAULT)	Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Project Description:		ND - Next Business Day	
Project Zip Code:		SD - Same Business Day Rush	
PO Number:	144403130740	WH - Weekend / Holiday	
Sampling Date & Time:	5/17/15 - 5/18/15		
Sampled By:	D. LEBEAU / J.P. WYATT		

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc.)
956990-00					
CHTC-SB05-0-6"		SO	STD	1-802	5-17-15 1225
CHTC-SB08-0-6"		SO	STD	1-802	5-18-15 0830
CHTC-SB07-0-6"		SO	STD	1-802	5/18/15 0900
CHTC-SB10-0-6"		SO	STD	1-802	5/18/15 0943
CHTC-SB09-0-6"		SO	STD	1-802	5/18/15 1050
CHTC-SB14-0-6"		SO	STD	1-802	5/18/15 1120
CHTC-SB15-0-6"		SO	STD	1-802	5/18/15 1305

SAMPLE TYPE CODES

RELINQUISHED BY

DATE & TIME

RECEIVED BY

DATE & TIME

BC - BioCassette™	ST - Spore Trap: Zefon, Allergenco, Burkard ...	T - Tape	D - Dust	SW - Swab	SO - Soil				
SAS - Surface Air Sampler	P - Potable Water	B - Bulk							
CP - Contact Plate	NP - Non-Potable Water	O - Other:							

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/main/serviceterms.html>

Copyright © 2002-2013 EMLab P&K

Doc. #1192 Rev 29 Revised 4/25/13 Page 1 of 1, QA

Page 15 of 18

6/4/2015

[Signature]
5/21/15 13:20

[Signature]
5-22-15 9:30



TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login #: 51104

Client Weston solutions Site Name _____
 Cooler Received on 5/22/15 Opened on 5/22/15 Cooler unpacked by: Jessu Bonoi
 FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
 IR GUN# A (CF +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. 1.0 °C Corrected Cooler Temp. 0.4 °C
 See Multiple Cooler Form
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654
12. Were VOAs on the COC? Yes No NA
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: _____

Sample CHTC-SB05-0-6" says CHTC-SB5-3-9" on bottle.
will log per COC.

15. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Canton
 4101 Shuffel Street NW
 North Canton, OH 44720
 Phone (330) 487-9396 Fax (330) 487-0772

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Samples:		Lab P#:		Carrier (Tracking No(s)):		COC No.:	
Client Contact:		Phone:		E-Mail:				240-43676.1	
Shipping/Receiving:				Kris.Brooks@testamericainc.com				Page 1 of 2	
Company:		Due Date Requested:		Analysis Requested		Job #:		Preservation Codes:	
EMLab P&K		0/4/2015				240-51104-1		A - HCL M - P B - NaOH N - P C - Zn Acetate O - P D - Nitric Acid P - N E - NaHSD4 Q - N F - MeOH R - Na2S2O5 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - Di Water V - MCAA K - EDTA W - pi 4-6 L - EDA Z - other (specify)	
Address:		City:		State, Zip:		Phone:		Email:	
Bascom Airport Executive Suites, 17461 Derian Ave, Suite		Irvine		CA, 92614					
Project Name:		Project #:		SSOW#:					
Abandoned Mining Wastes-Torch Lake		24012499							
Site:		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix (W=Water, S=Solid, O=Other, G=Gas, L=Liquid, A=Asst)	
		5/13/15		08:40 Eastern		Solid		Solid	
		5/13/15		09:47 Eastern		Solid		Solid	
		5/13/15		10:30 Eastern		Solid		Solid	
		5/13/15		11:22 Eastern		Solid		Solid	
		5/14/15		11:55 Eastern		Solid		Solid	
		5/14/15		15:27 Eastern		Solid		Solid	
		5/15/15		08:45 Eastern		Solid		Solid	
		5/15/15		10:05 Eastern		Solid		Solid	
		5/15/15		13:05 Eastern		Solid		Solid	
		5/17/15		08:55 Eastern		Solid		Solid	
		5/17/15		09:20 Eastern		Solid		Solid	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client		Disposal By Lab		Archive For Months	
Unconfirmed				<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/IC Requirements:							
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <i>[Signature]</i>		5-22-2015		11:05		TAI			
Relinquished by: <i>[Signature]</i>				12:05					
Relinquished by:									
Custody Seals Intact: A Yes B No		Custody Seal No.:		Order Temp (use 6) °C and Other Remarks:		6419 2908 5385			

001370240



TestAmerica Canton

4101 Shuffel Street NW
 North Canton, OH 44720
 Phone (330) 497-9396 Fax (330) 497-0772

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:		Lab P#:		Carrier Tracking No(s):		DOC No:			
Client Contact: Shipping/Receiving		Phone:		Brooks, Kris M				240-43873.2			
Company: EMLab P&K		Date Date Requested:		E-Mail:				Page: Page 2 of 2			
Address: Bascom Airport Executive Suites, 17481 Derian Ave, Suite		6/4/2015		kris.brooks@testamericainc.com				Job #: 240-51104-1			
City: Irving		TAT Requested (days):		Analysis Requested [Analysis Requested Columns]						Preservation Codes: A - NiCl M - H B - NaOH N - N C - Zn Acetate O - A D - Nitric Acid P - Ni E - Nitric Acid Q - N F - MeOH R - Na G - AmNH S - H2SO4 H - Ascorbic Acid T - TSP Dodecylhydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-S L - EDA Z - other (specify)	
State, Zip: CA, 92614		PC/A:									
Phone:		P/W:									
Email:											
Project Name: Abandoned Mining Wastes-Torch Lake		Project #:		Project #:				Other: _____			
Site:		SSOW:		24012499							
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (Comp, Grab)		Matrix (Water, Solid, Other)			
								Special Instructions/Note:			
CHTC-SB05-0-6" (240-51104-12)		5/17/15		12:25 Eastern		Solid		X			
CHTC-SB06-0-6" (240-51104-13)		5/18/15		06:30 Eastern		Solid		X			
CHTC-SB07-0-6" (240-51104-14)		5/18/15		06:00 Eastern		Solid		X			
CHTC-SB10-0-6" (240-51104-15)		5/18/15		06:43 Eastern		Solid		X			
CHTC-SB08-0-6" (240-51104-16)		5/18/15		10:50 Eastern		Solid		X			
CHTC-SB14-0-6" (240-51104-17)		5/18/15		11:20 Eastern		Solid		X			
CHTC-SB15-0-6" (240-51104-18)		5/18/15		13:05 Eastern		Solid		X			
Possible Hazard Identification		Unconfirmed		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Deliverable Requested: I, II, III, IV, Other (specify)				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months							
Empty Kit Relinquished by: _____		Date: _____		Time: _____		Method of Shipment: _____					
Relinquished by: <i>[Signature]</i>		Date/Time: 5-22-15-1706		Company: _____		Received by: <i>[Signature]</i>		Date/Time: 05/23/15 11:05			
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: <i>[Signature]</i>		Date/Time: 5/26/15 12:05			
Relinquished by: _____		Date/Time: _____		Company: _____		Received by: _____		Date/Time: _____			
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: 20.3/19.1°C 1/1/1		649 2908 5385					

001370240

