SPECIAL PROVISIONS

EXISTING PAINT SURVEY

10/04/2019

For

CUY-480-6.47/VAR PAINT

PID 22131

Lawhon & Associates, Inc.
ENVIRONMENTAL CONSULTING AND ENGINEERING SERVICES

Columbus
Cleveland
Dayton

October 4, 2019

Mark Alan Carpenter, P.E.
District Environmental Engineer
ODOT District 12
5500 Transportation Boulevard
Garfield Heights, OH 44125-5396
(216) 584-2274

Subject: **Lead Paint Testing of the CUY 00010 08690 Bridge (SFN #1801325/PID 22131) Lorain Road over the Cuyahoga Valley, Cuyahoga County, Ohio 44111 (L&A 17-0529)**

Dear Mr. Carpenter:

On October 2, 2019, Mr. Josh Rankin and Mr. John Korth of Lawhon & Associates, Inc (L&A) conducted lead based testing of the CUY 00010 08690 Bridge (SFN #1801325/PID 22131) Lorain Road over the Cuyahoga Valley, Cuyahoga County, Ohio 44111. The purpose of the survey was to determine the presence of lead based paint located on the structure.

The survey consisted of the collection of fourteen samples of existing paint on the Lorain Road Bridge. Eight of the sample locations were located on the inside of the towers and arches. The other 6 sampling locations were on the exterior of the towers and arches. A diagram of the bridge, lead based paint sampling locations can be found in **Appendix A**.

Lead Based Paint

Visible paint was tested for lead content. Sample descriptions, locations, and lead content as determined by Atomic Absorption Spectrophotometry are presented in Table 1.

Table 1: Lead Based Paint Sample Descriptions, Locations and Results

Sample #	Sample Description and Location	Lead %
L-1	South Side Central, Tower - Outside	0.035
L-2	South Side Central, Tower - Inside	0.063
L-3	**North Side Central, Arch - Outside**	**0.64**
L-4	**North Side Central, Arch - Inside**	**35**
L-5	South Side Central, Arch Column	0.022
L-6	North Side, West End, Tower - Outside	<0.0086
L-7	North Side, West End, Tower - Inside	<0.0080
L-8	South Side, West End, Arch- Outside	0.043

Table 1 (Continued): Lead Based Paint Sample Descriptions, Locations and Results

Sample #	Sample Description and Location	Lead %
L-9	**South Side, West End, Arch - Inside**	**30**
L-10	North Side, West End, Arch Column	0.013
L-11	**South Side, East End, Arch - Outside**	**0.76**
L-12	**South Side, East End, Arch - Inside**	**34**
L-13	North Side, East End, Tower - Outside	0.043
L-14	North Side, East End Tower - Inside	0.025

Confirmed Lead Based Paint

It is the position of OSHA CFR 1926.62 Lead in Construction Standard that any lead content in paint is a potential issue to be addressed by air monitoring. It is recommended that contractors that impact components with lead base paint exceeding 0.5% lead by weight or 1.0 mg/cm², perform personal air sampling on their employees to ensure they are not being expose to lead above the Action Level (AL) and Permissible Exposure Limit (PEL). Five samples of the paint on the bridge were found to be LBP containing a lead concentration that exceeds 0.5% lead by weight.

It is important to note that almost all paints will contain some lead when analyzed. It is recommended that all contractors that impact painted building materials perform personal air monitoring on their employees to ensure that they are not being exposed to lead above the AL or PEL, or maintain a negative exposure assessment.

Attachments

Appendix A contains the Bulk Sample Diagram.

Appendix B contains the laboratory results and chain-of-custody documentation for the lead bulk samples collected.

Summary

On October 2, 2019 Mr. Josh Rankin and Mr. John Korth of Lawhon & Associates, Inc (L&A) conducted a lead based paint survey of the CUY 00010 08690 Bridge (SFN #1801325/PID 22131) Lorain Road over the Cuyahoga Valley, Cuyahoga County, Ohio 44111. Lead based paints were identified in the course of the survey.

If you have any questions, please contact Matt Geiger or Trevor Berger at (614) 481-8600.

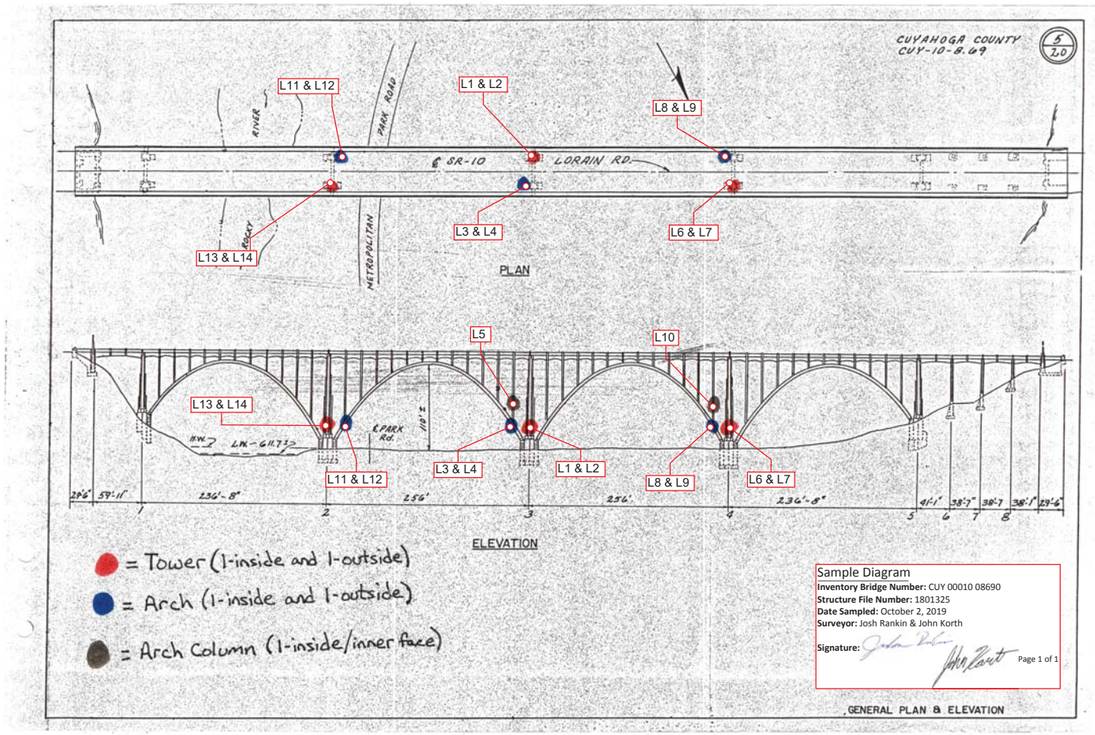
Sincerely,

Matt Geiger
Project Manager

Trevor Berger
Northeast Ohio Regional Manager

APPENDIX A
BULK SAMPLE DIAGRAM

APPENDIX B
LABORATORY RESULTS AND CHAIN OF CUSTODY



iATL INTERNATIONAL
ASBESTOS TESTING LABORATORIES

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc.
1441 King Avenue
Columbus OH 43212

Client: LAW411

Report Date: 10/3/2019
Report No.: 600997 - Lead Paint
Project: CUY 00010 08690
Project No.: 147-0529

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6889616 **Client No.:** L-1 **Description:** **Location:** S. Side Central, Tower-Outside **Result (% by Weight):** 0.035 **Result (ppm):** 350 **Comments:** ***

Lab No.: 6889617 **Client No.:** L-2 **Description:** **Location:** S. Side Central, Tower-Inside **Result (% by Weight):** 0.063 **Result (ppm):** 630 **Comments:** ***

Lab No.: 6889618 **Client No.:** L-3 **Description:** **Location:** N. Side Central, Arch-Outside **Result (% by Weight):** 0.64 **Result (ppm):** 6400 **Comments:** ***

Lab No.: 6889619 **Client No.:** L-4 **Description:** **Location:** N. Side Central, Arch-Inside **Result (% by Weight):** 35 **Result (ppm):** 350000 **Comments:** ***

Lab No.: 6889620 **Client No.:** L-5 **Description:** **Location:** S. Side Central, Arch-Column **Result (% by Weight):** 0.022 **Result (ppm):** 220 **Comments:** ***

Lab No.: 6889621 **Client No.:** L-6 **Description:** **Location:** N. Side W. End, Tower-Outside **Result (% by Weight):** <0.0086 **Result (ppm):** <86 **Comments:** ***

Lab No.: 6889622 **Client No.:** L-7 **Description:** **Location:** N. Side W. End, Tower-Inside **Result (% by Weight):** <0.0080 **Result (ppm):** <80 **Comments:** ***

Lab No.: 6889623 **Client No.:** L-8 **Description:** **Location:** S. Side W. End, Arch-Outside **Result (% by Weight):** 0.043 **Result (ppm):** 430 **Comments:** ***

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/3/2019
Date Analyzed: 10/03/2019
Signature:
Analyst: Chad Shaffer

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

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1441 King Avenue
Columbus OH 43212

Client: LAW411

Report Date: 10/3/2019
Report No.: 600997 - Lead Paint
Project: CUY 00010 08690
Project No.: 147-0529

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 6889624 **Client No.:** L-9 **Description:** **Location:** S. Side W. End, Arch-Inside **Result (% by Weight):** 30 **Result (ppm):** 300000 **Comments:** ***

Lab No.: 6889625 **Client No.:** L-10 **Description:** **Location:** N. Side W. End, Arch-Column **Result (% by Weight):** 0.013 **Result (ppm):** 130 **Comments:** ***

Lab No.: 6889626 **Client No.:** L-11 **Description:** **Location:** S. Side E. End, Arch-Outside **Result (% by Weight):** 0.76 **Result (ppm):** 7600 **Comments:** ***

Lab No.: 6889627 **Client No.:** L-12 **Description:** **Location:** S. Side E. End, Arch-Inside **Result (% by Weight):** 34 **Result (ppm):** 340000 **Comments:** ***

Lab No.: 6889628 **Client No.:** L-13 **Description:** **Location:** N. Side E. End, Tower-Outside **Result (% by Weight):** 0.043 **Result (ppm):** 430 **Comments:** ***

Lab No.: 6889629 **Client No.:** L-14 **Description:** **Location:** N. Side E. End, Tower-Inside **Result (% by Weight):** 0.025 **Result (ppm):** 250 **Comments:** ***

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/3/2019
Date Analyzed: 10/03/2019
Signature:
Analyst: Chad Shaffer

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

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Report Date: 10/3/2019
Report No.: 600997 - Lead Paint
Project: CUY 00010 08690
Project No.: 147-0529

Appendix to Analytical Report:

Customer Contact:
Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager: wchampion@iatl.com
iATL Account Representative: Shirley Clark
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Paint
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by ASTM D3335-85a by AAS

Certification:
- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188
- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.
All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.
Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Apendix B.
Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.
LSD=0.2 ppm MDL=0.005% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com.**

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1441 King Avenue
Columbus OH 43212

Client: LAW411

Report Date: 10/3/2019
Report No.: 600997 - Lead Paint
Project: CUY 00010 08690
Project No.: 147-0529

* Insufficient sample provided to perform QC reanalysis (<200 mg)
** Not enough sample provided to analyze (<50 mg)
*** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

IATL International Asbestos Testing Laboratories

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INFO@IATL.COM

DAILY QUALITY CONTROL DATA

LEAD SAMPLE ANALYSIS

(DATE: 10 / 03 / 19)

Standard	Total Lead (mg)	Percent Recovery **
Reagent Blank	0.000	< LOQ
Blank Spike	0.500	101
Lab Control Std	1.490	93
Matrix Spike - LBP *	0.34	95
Matrix Spike - Wipe *	0.35	99
Matrix Spike - Soil *		
Matrix spike - Air *	0.050	94
2.5 ppm Standard	0.25	103
10.0 ppm Standard	1.0	105
40.0 ppm Standard	4.0	98

AIHA-LAP, LLC No. 100188 **NYSDOH-ELAP No. 11021**

Analysis Method: ASTM D3335-85A
NIOSH 7082
EPA SW846 3050B 7000B

Comments: IATL assumes that all sampling complies with accepted methods.
All client supplied sampling data is assumed to be correct when calculating results.
Detection limit based upon 0.2 mg/L reporting limit and sample size.
* NIST Traceable.
** 80-120% acceptable limits.

Analyzed By: C. Shafer
Date: 10/3/19

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

AAS.DailyQC.005

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Chain of Custody

– Environmental Lead –

Contact Information

Client Company:	Lawhon & Associates, Inc.	**Project Number:**	17-0529
Office Address:	1441 King Avenue	**Project Name:**	CUY 00010 08690
City, State, Zip:	Columbus, Ohio	**Primary Contact:**	Matt Geiger
Fax Number:	(614) 481-8610	**Office Phone:**	(614) 481-8600
Email Address:	mgeiger@lawhon-assoc.com	**Cell Phone:**	(614) 296-6106

iATL is accredited by the National Lead Laboratory Accreditation Program (NLLAP) to perform analytical testing of environmental samples for lead (Pb). The accreditation is through AIHA-LAP, LLC and several other nationally recognized state programs.

Matrix/Method:

- ☑ Paint by AAS: ASTM D3335-85a, 2009
- ☐ Wipe/Dust by AAS: SW 846: 3050B: 700B, 2010
- ☐ Air by AAS: NIOSH 7082, 1994
- ☐ Soil by AAS: EPA SW 846 (Soil)
- ☐ Water by AAS-GF: ASTM D3559-03D, USEPA 40CFR 141.11B, 2010
- ☐ Other Metals (Cd, Zn, Cr) by AAS
- ☐ Toxicity Characteristic Leaching Procedure (TCLP) by AAS: USEPA 1311
- ☐ Other _____

Special Instructions:
Please Report as % by Weight!

Turnaround Time

Preliminary Results Requested Date: Before EOD 10/3/2019 (Specific date / time) ☐Verbal ■ Email ☐ Fax

☐ 10 Day ☐ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ■ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Chain of Custody

Relinquished (Name/Organization):	Matt Geiger	Date: 10/2/2019	Time: 4:00pm
Received (Name / iATL):		Date:	Time:
Sample Login (Name / iATL):		Date:	Time:
Analysis(Name(s) / iATL):	[illegible] 10/3/19	Date:	Time:
QA/QC Review (Name / iATL):	[illegible]	Date:	Time:
Archived / Released:	QA/QC InterLAB Use:	Date:	Time: OCT - 3 2019

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Sample Log

–Environmental Lead –

Client: Lawhon & Associates, Inc. Project: 17-0529 CUY 00010 08690

Sampling Date/Time: 10/2/2019 @ 10:00am-1:00pm

Client Sample #	iATL #	Location/ Description	Flow Rate	Start / End	Sampling time (min)	Area (ft2) Volume (L)	Results ( )
L-1	6889616	S. Side Central, Tower- Outside	--	--	--		
L-2	6889617	S. Side Central, Tower- Inside	--	--	--		
L-3	6889618	N. Side Central, Arch- Outside	--	--	--		
L-4	6889619	N. Side Central, Arch- Inside	--	--	--		
L-5	6889620	S. Side Central, Arch Column	--	--	--		
L-6	6889621	N. Side, W. End, Tower- Outside	--	--	--		
L-7	6889622	N. Side, W. End, Tower- Inside	--	--	--		
L-8	6889623	S. Side, W. End, Arch- Outside	--	--	--		
L-9	6889624	S. Side, W. End, Arch- Inside	--	--	--		
L-10	6889625	N. Side, W. End, Arch Column	--	--	--		
L-11	6889626	S. Side, E. End, Arch- Outside	--	--	--		
L-12	6889627	S. Side, E. End, Arch- Inside	--	--	--		
L-13	6889628	N. Side, E. End, Tower- Outside	--	--	--		
L-14	6889629	N. Side, E. End Tower- Inside	--	--	--		

*= *Insufficient Sample Provided to Perform QC Reanalysis (<200mg)*
** = *Insufficient Sample Provided to Analyze (<50mg)* ***= *Matrix / Substrate Interference Possible*
FB = Method Requires the submittal of blank(s). ML = Multi Layered Sample. May result in inconsistent results.
These **preliminary results** are issued by iATL to expedite procedures by clients based upon the above data. iATL assumes that all of the sampling methods and data upon which these results are based, has been accurately supplied by the client. These results may not have been reviewed by the Laboratory Director. Final Certificate of Analysis will follow these preliminary results. The signed COA is to be considered the official results. All EPA, HUD, and NJDEP conditions apply.