SPECIAL PROVISIONS

EXISTING PAINT SURVEY

10/04/2019

For
CUY-480-6.47/VAR PAINT
PID 22131



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

1441 King Avenue | Columbus, Ohio 43212 | P: 614.481.8600 | F: 614.481.8610 | www.lawhon-assoc.com

CUY 00010 08690 (SFN #1801325/PID 22131) Page 2 October 4, 2019

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.

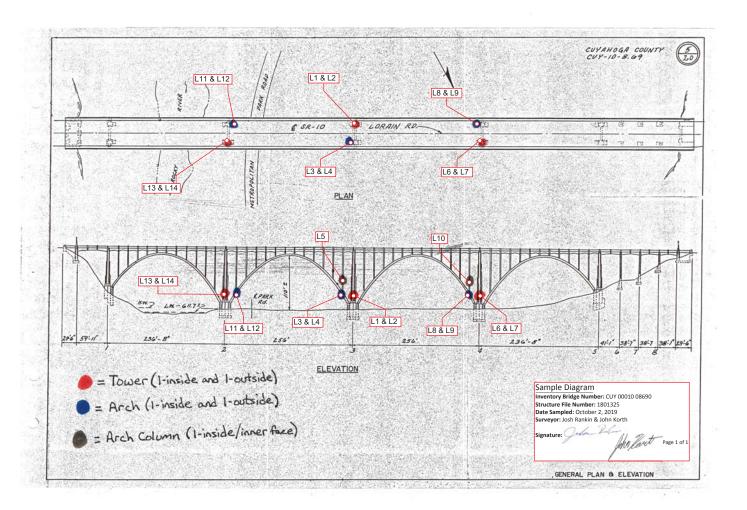
If you have any questions, please contact Matt Geiger or Trevor Berger at (614) 481-8600.

Sincerely,

Matt Geiger Project Manager

Trevor Berger Northeast Ohio Regional Manager

APPENDIX A BULK SAMPLE DIAGRAM



APPENDIX B LABORATORY RESULTS AND CHAIN OF CUSTODY



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. Report Date: 10/3/2019

Report No.: 600997 - Lead Paint 1441 King Avenue Columbus OH 43212 CUY 00010 08690 Project:

Project No.: 147-0529 Client: LAW411

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: Client No.:		Description: Location:	S. Side Central, Tower-Outside	Result (% by Weight) Result (ppm): Comments: ***	: 0.035 350
Lab No.: Client No.:	L-2		S. Side Central, Tower-Inside	Result (% by Weight) Result (ppm): Comments: ***	
Lab No.: Client No.:		Description: Location:	N. Side Central, Arch-Outside	Result (% by Weight) Result (ppm): Comments: ***	
Lab No.: Client No.:		Description: Location:	N. Side Central, Arch-Inside	Result (% by Weight) Result (ppm): Comments: ***	
Lab No.: Client No.:		Description: Location:	S. Side Central, Arch-Column	Result (% by Weight) Result (ppm): Comments: ***	
Lab No.: Client No.:		Description: Location:	N. Side W. End, Tower-Outside	Result (% by Weight) Result (ppm): Comments: ***	: <0.0086 <86
Lab No.: Client No.:		Description: Location:	N. Side W. End, Tower-Inside	Result (% by Weight) Result (ppm): Comments: ***	: <0.0080 <80
Lab No.: Client No.:	6889623 L-8	Description: Location:	S. Side W. End, Arch-Outside	Result (% by Weight) Result (ppm): Comments: ***	: 0.043 430

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

10/3/2019 Date Received:

10/03/2019 Date Analyzed:

Signature:

Analyst:

Chad Shaffer

Approved By:



Laboratory Director

Dated: 10/3/2019 2:51:14 Page 1 of 4



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CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc. Report Date: 10/3/2019

1441 King Avenue Report No.: 600997 - Lead Paint Columbus OH 43212 CUY 00010 08690 Project:

Project No.: 147-0529 Client: LAW411

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

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

Date Received: Date Analyzed: 10/3/2019 10/03/2019

Signature:

Chad Shaffer

Analyst:

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director

Comments: ***

Dated: 10/3/2019 2:51:14 Page 2 of 4



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Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc. Report Date: 10/3/2019

1441 King Avenue Report No.: 600997 - Lead Paint Columbus OH 43212 Project: CUY 00010 08690

Client: LAW411 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 it 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**.

Dated: 10/3/2019 2:51:15 Page 3 of 4



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CERTIFICATE OF ANALYSIS

Client: Lawhon & Associates Inc. Report Date: 10/3/2019

 1441 King Avenue
 Report No.:
 600997 - Lead Paint

 Columbus
 OH
 43212
 Project:
 CUY 00010 08690

Client: LAW411 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.

Dated: 10/3/2019 2:51:15 Page 4 of 4

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



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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	13
Analysis Method:	ASTM D3335-85A		
	NIOSH 7082		
	EPA SW846 3050B 7000B		
Comments:	IATL assumes that all sampling complies with accepted	d methods.	
	All client supplied sampling data is assumed to be corr	ect when calculating results.	
	Detection limit based upon 0.2 mg/L reporting limit an	d sample size.	
	* NIST Traceable.		
	** 80-120% acceptable limits.		nedicino de la companya de la compa
Analyzed By:	Clark Stall	Approved By:	

AAS.DailyQC.005



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Chain of Custody - Environmental Lead -

Contact Informa	ation						
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				
			<u> </u>				
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							
□ 10	quested Date: Before EOD 10/3/2019 Specific date / time Day 5 Day 3 Day 2 Day 1 susiness day unless otherwise specified. ** Matr	Day* 12 Hour** 6	1 ■ Email □ Fax Hour** ■ RUSH** otify the lab before shipping***				
OL 1 00							
Received (Name / i. Sample Login (Nam Analysis(Name(s) / QA/QC Review (Name(s) /	e/Organization): Matt Geiger ATL): ne / iATL): iATL):	Date: 10/2/2019 Date: Da	Time: 4:00pm Time: Time: Time: Time: Time: Time: Time:				

Celebrating 25 years...one sample at a time www.iatl.com

-1-



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Sample Log

-Environmental Lead -

Client: Lawhon & Associate	s, Inc. Project: 17-0529 CUY 00010 08690
Sampling Date/Time:10/2/2	19 @ 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	6889613	N. Side Central, Arch- Outside					
L-4	6889613	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					H4-2)-12-2
L-9	6889624	S. Side, W. End, Arch-Inside					
L-10	800000	N. Side, W. End, Arch Column					
L-11	6889625	S. Side, E. End, Arch- Outside					
L-12	6889626	S. Side, E. End, Arch- Inside					
L-13	6889627	N. Side, E. End, Tower- Outside					
L-14	6889628 6889629	N. Side, E. End Tower- Inside				74	THE STATE OF THE S

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IATL

Submit Form

^{* =} 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.