



EnviroQuest

Mr. Randall Urasaki  
WSP USA  
1001 Bishop Street, Suite 2400  
American Savings Bank Tower  
Honolulu, Hawaii 96813

August 21, 2024

Subject: Limited Lead Paint Sampling  
Nanue Bridge  
Hawaii County, Hawaii

Dear Mr. Urasaki

On August 4, 2024, under the guidance of WSP USA, Inc., EnviroQuest, Inc. (EQI) collected ten paint chips samples for lead analysis at Nanue Bridge in Hawaii County, Hawaii. Samples were collected from the steel beam and girders which may be repaired or replaced during repair work by Hawaii Department of Transportation. All samples were gray paint, and no other colors were present/visible during sample collection. Samples were collected to bare metal substrate. All samples were collected from ground level to 6 ft above ground elevation. Access and slope conditions limited the sample collection area.

Figure 1 identifies the general site area of Nanue Bridge, and Figure 2 identifies the sample locations. The sample IDs (DU2, DU3, etc.) correspond to decision units from the Spring 2024 EQI soil sample site investigation at Nanue Bridge.

Samples were submitted to Hawaii Analytical Laboratory (HAL) in Honolulu, Hawaii, an American Industrial Hygiene Association (AIHA) accredited laboratory with a specific accreditation for lead analysis under AIHA Environmental Lead Laboratory Accreditation Program. The paint film samples were analyzed by NIOSH Method 7082m *Lead by Flame Atomic Absorption Spectrophotometry*.

Based on the laboratory analytical results, none of the 10 samples exceeded the EPA guidelines for lead based paint. The EPA defines lead-based paint as paint or other coatings containing lead equal to, or in excess of, 0.5% lead by weight.

For the purpose of this report, lead containing paint (LCP) is classified as paint where the lead detected is greater than the laboratory analytical detection limit but less than 0.5% lead by weight. All of the samples were classified as LCP under this scenario. A summary of the data is presented in Table 1.

Prior to the disturbance of any LCP, the contractor's employees disturbing the painted materials must be informed that it contains lead and must conduct all lead paint disturbance work in accordance with Occupational Safety and Health Administration (OSHA) 29 CFR 1926.62 *Lead*.

If lead paint chip or waste is generated during the renovation and/or demolition work, composite samples of the generated waste must be collected for *Toxicity Characteristic Leaching Procedure (TCLP)* analysis to determine the waste disposal characterization. *Hawaii Administrative Rules, Title 11, Department of Health, Chapter 261, Hazardous Waste*



Management allows a maximum concentration of lead contaminant by TCLP at 5.0 mg/L. TCLP results exceeding the 5.0 mg/L threshold requires the material to be disposed of as hazardous waste. Results below this threshold allow for the lead waste to be disposed of as construction debris.

**TABLE 1**  
Paint Chip Sample Summary  
Nanue Bridge, HI

Sample No.	Sample Location/Description	Result (wt. %)	LBP <sub>1</sub> (Y/N)	LCP <sub>2</sub> (Y/N)
NAN_Pb_DU2a	N. Embankment, DU2, eastern support girder	0.14	N	Y
NAN_Pb_DU2b	N. Embankment, DU2, middle	0.041	N	Y
NAN_Pb_DU2c	N. Embankment, DU2, western support	0.021	N	Y
NAN_Pb_DU3a	N. Embankment, DU3, middle	0.0087	N	Y
NAN_Pb_DU3b	N. Embankment, DU3, western beam	0.066	N	Y
NAN_Pb_DU9	S. Embankment, DU9, southeastern footing	0.019	N	Y
NAN_Pb_DU10a	S. Embankment, DU10, southeastern footing	0.094	N	Y
NAN_Pb_DU10a2	S. Embankment, DU10, southwestern footing	0.047	N	Y
NAN_Pb_DU10b	S. Embankment, DU10, northeastern footing	0.055	N	Y
NAN_Pb_DU10b2	S. Embankment, DU10, northwestern footing	0.031	N	Y

1. LBP = >0.5% lead by weight
2. LCP = >laboratory detection limit but <0.5%
3. BDL= Below the laboratory detection limit

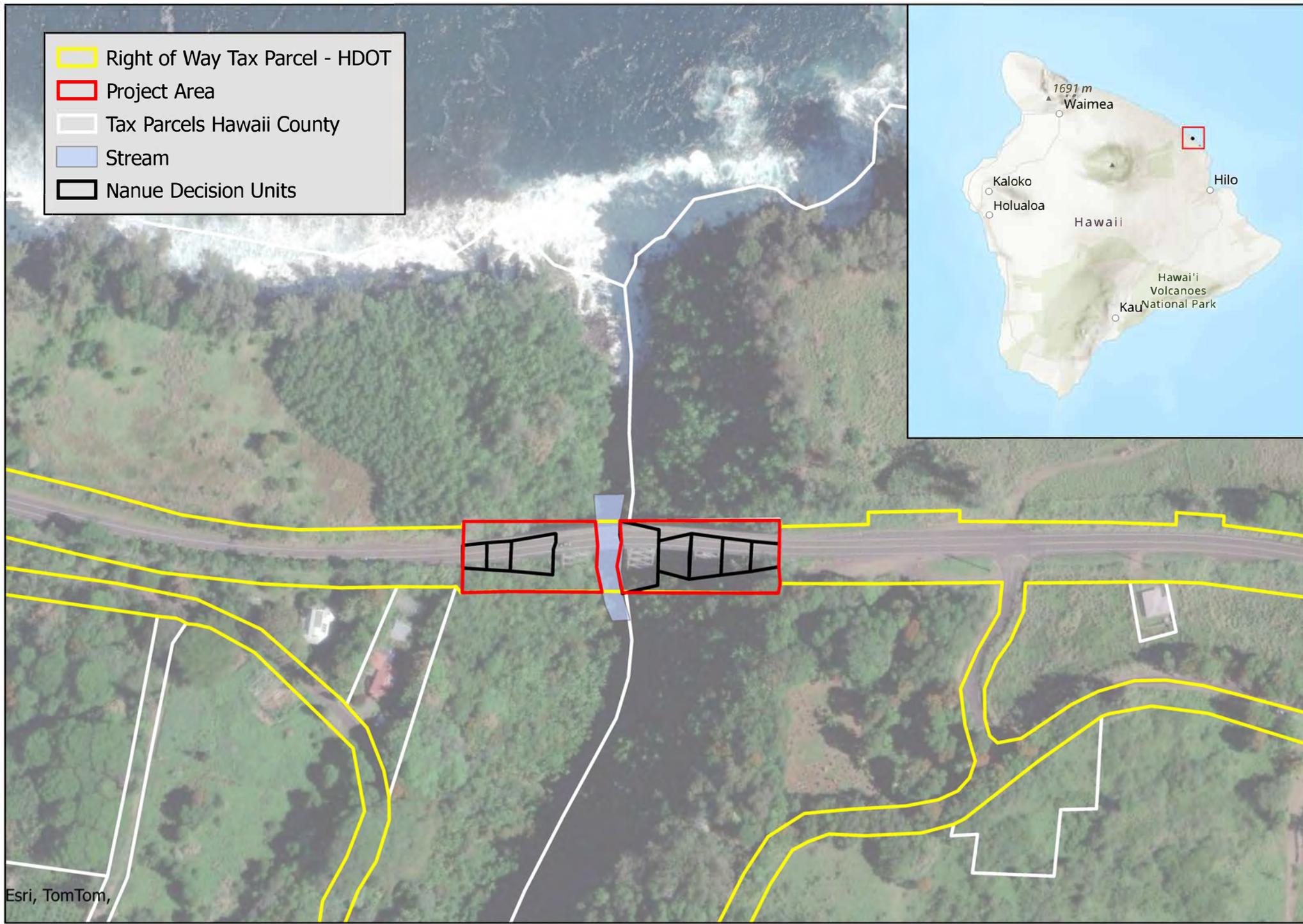
EQI appreciates this opportunity to assist with your lead sampling needs. Any question regarding our work and this report, the presentation of the information, and the interpretation of the data are welcome and should be referred to the undersigned. We look forward to working with you again in the future.

Sincerely,

Scott Moncrief, LG

Attachments

- Laboratory Analytical Report
- Figure 1: Nanue Bridge Sample Area
- Figure 2: Lead Paint Sample Locations and ID



- Right of Way Tax Parcel - HDOT
- Project Area
- Tax Parcels Hawaii County
- Stream
- Nanue Decision Units



Esri, TomTom,

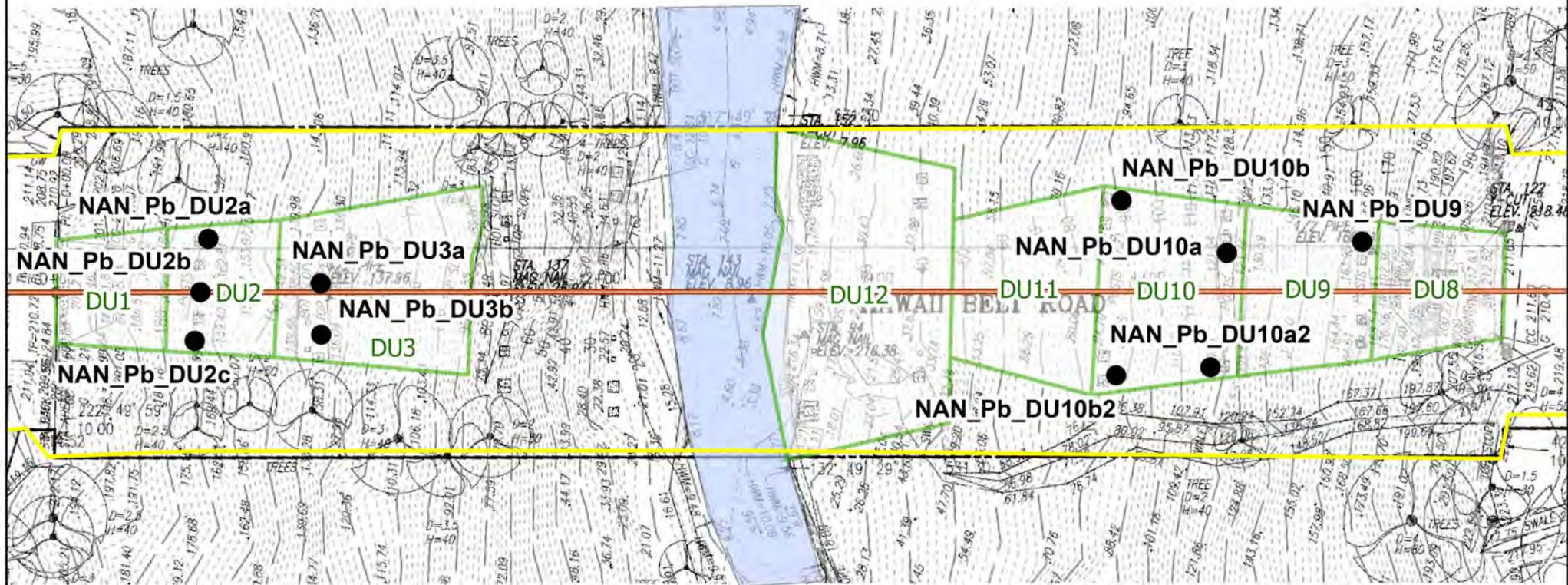


0 95 190 380 Feet

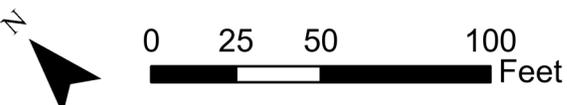
Map not to scale  
Locations are approximate

Figure 1  
Nanue Bridge Sample Area  
Nanue Stream Bridge, Hawaii County, HI

- Lead Paint Sample ID
- ▭ Nanue - Revised and Sampled
- ▭ Right of Way Tax Parcel - HDOT
- Centerline
- ▭ Stream

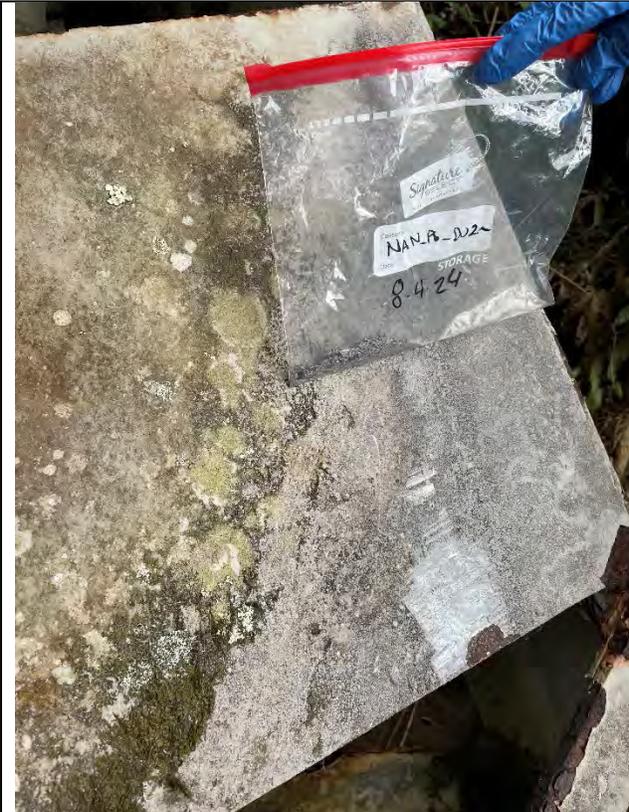


DU: Decision Unit  
 HDOT: Hawaii Dept. of Transportation  
 NAN: Nanue  
 Pb: Lead



Map not to scale  
 Locations are approximate

Figure 2  
 Lead Paint Sample Locations and ID  
 Nanue Stream Bridge, Hawaii County, HI



Sample NAN\_PB\_DU2a



Sample NAN\_PB\_DU2b



Sample NAN\_PB\_DU2c



Sample NAN\_PB\_DU3a



Sample NAN\_PB\_DU3b



Sample NAN\_PB\_DU9a



Sample NAN\_PB\_DU10a



Sample NAN\_PB\_DU10a2



Sample NAN\_PB\_DU10b



Sample NAN\_PB\_DU10b2



# Hawaii Analytical Laboratory ANALYTICAL REPORT

Monday, August 12, 2024

EnviroQuest, Inc.  
98-029 Hekaha Street, Suite 21  
Aiea HI 96701

**Phone Number:** (808)486-5881  
**Facsimile:** (808) 486-5889  
**Email:** eqi@enviroquestinc.com

**Lab Job No:** 202407893  
**Date Submitted:** 8/5/2024  
**Project Name:** Nanue Bridge Lead Assessment, 8/4/24

## Total Lead (paint chips)

NIOSH Method: 7082m LEAD by FAAS

Sample No.	Your Sample ID / Description	Results	Units	Date Analyzed
202454276	NAN_Pb_DU9	0.019	wt %	8/7/2024
Comments				
202454277	NAN_Pb_DU10a	0.094	wt %	8/7/2024
Comments				
202454278	NAN_Pb_DU10a2	0.047	wt %	8/7/2024
Comments				
202454279	NAN_Pb_DU10b	0.055	wt %	8/7/2024
Comments				
202454280	NAN_Pb_DU10b2	0.031	wt %	8/7/2024
Comments				
202454281	NAN_Pb_DU2a	0.14	wt %	8/7/2024
Comments				
202454282	NAN_Pb_DU2b	0.041	wt %	8/7/2024
Comments				
202454283	NAN_Pb_DU2c	0.021	wt %	8/7/2024
Comments				
202454284	NAN_Pb_DU3a	0.0087	wt %	8/7/2024
Comments				

Hawaii Analytical Laboratory (101812) is accredited by the AIHA LAP, LLC in the EMLAP, IHLAP, and ELLAP programs for the scope of work listed on [www.aihaaccreditedlabs.org](http://www.aihaaccreditedlabs.org), in accordance with the recognized ISO/IEC 17025:2017. AIHA LAP, LLC is a NLLAP recognized accrediting body. Controlled doc.: Lead Report, rev. 3 - 20181015



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**Project Name:** Nanue Bridge Lead Assessment, 8/4/24

## Total Lead (paint chips)

NIOSH Method: 7082m LEAD by FAAS

Sample No.	Your Sample ID / Description	Results	Units	Date Analyzed
202454285	NAN_Pb_DU3b	0.066	wt %	8/7/2024
Comments				

All Quality Control data are acceptable unless otherwise noted.  
MRL for lead air is 5ug.  
MRL for lead wipe is 10ug.  
MRL for lead paint or soil is 40 mg/kg for a 0.25g sample.

### General Comments

The sample[s] analysis subject of this analytical report were conducted in general accordance with the procedures associated with the "analytical method" referenced above. Modifications to this methodology may have been made based upon the analyst's professional judgment and / or sample matrix effects encountered. The analysis of sample relates only to the sample analyzed, and may or may not be representative of the original source of the material submitted for our analysis. All analysts participate in interlaboratory quality control testing to continuously document proficiency. This report is not to be duplicated except in full without the expressed written permission of Hawaii Analytical Laboratory. This report should not be construed as an endorsement for a product or a service by the AIHA LAP, LLC or any affiliated organizations. Sample and associated sampling / collection data is reported as provided by client. TWA values have been calculated based on information supplied by the client that the laboratory has not independently verified. Results have not been corrected for blank determinations unless noted in remarks. Unless otherwise indicated the sample condition at the time of receipt was acceptable.

### Results and Symbols Definitions

> This testing result is greater than the numerical value listed.  
< This testing result is less than the numerical value listed.  
# = Analytical methods marked with an "#" are not within our AIHA LAP, LLC Scope of Accreditation.  
MRL = Method Reporting Limit.



**Anne Antin**  
**Quality Control Manager**

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