

NORTHERN LAKE SERVICE, INC.  
 Analytical Laboratory and Environmental Services  
 400 North Lake Avenue - Crandon, WI 54520  
 Ph: (715)478-2777 Fax: (715)478-3060

**ANALYTICAL REPORT**  
 RECEIVED

WDNR Laboratory ID No. 1026460  
 WDATCP Laboratory Certification No. 105-330  
 EPA Laboratory ID No. WI00034

Printed: 10/02/17 Page 1 of 2  
 NLS Project: 287620  
 NLS Customer: 97299  
 Phone: 715 223 8189

OC1 - 5 2017

ABBOTSFORD

Client: Abbotsford Waterworks  
 Attn: Todd Medenwaldt  
 203 N 1st Street  
 Abbotsford, WI 54405

Project: Lead & Copper PWS#73701485

**PbCu 1 NLS ID: 1019787**

COC: 191830:1 Matrix: DW  
 Collected: 09/19/17 07:25 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	420	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	1.2	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 5 NLS ID: 1019788**

COC: 191830:2 Matrix: DW  
 Collected: 09/20/17 09:00 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	440	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	14	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 6 NLS ID: 1019789**

COC: 191830:3 Matrix: DW  
 Collected: 09/20/17 02:39 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	510	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	1.2	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 7 NLS ID: 1019790**

COC: 191830:4 Matrix: DW  
 Collected: 09/19/17 03:30 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	930	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.94	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 9 NLS ID: 1019791**

COC: 191830:5 Matrix: DW  
 Collected: 09/20/17 05:00 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	500	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.98	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 11 NLS ID: 1019792**

COC: 191830:6 Matrix: DW  
 Collected: 09/19/17 07:00 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	290	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.66	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

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 Attn: Todd Medenwaldt  
 203 N 1st Street  
 Abbotsford, WI 54405

Project: Lead & Copper PWS#73701485

**PbCu 14 NLS ID: 1019793**

COC: 191830:7 Matrix: DW  
 Collected: 09/19/17 14:08 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	470	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.87	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 15 NLS ID: 1019794**

COC: 191830:8 Matrix: DW  
 Collected: 09/19/17 05:20 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	72	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.44	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 17 NLS ID: 1019795**

COC: 191830:9 Matrix: DW  
 Collected: 09/19/17 06:30 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	470	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.92	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

**PbCu 19 NLS ID: 1019796**

COC: 191830:10 Matrix: DW  
 Collected: 09/20/17 05:00 Received: 09/21/17

Parameter	Result	Units	Dilution	LOD	LOQ/MCL	Analyzed	Method	Lab
Copper, tot. recoverable as Cu by ICP-MS	56	ug/L	1	1.0*	2.0 / 1300*	09/27/17	EPA 200.8, Rev 5.4	721026460
Lead, tot. recoverable as Pb by ICP-MS	0.42	ug/L	1	0.10*	0.20 / 15*	09/27/17	EPA 200.8, Rev 5.4	721026460
Turbidity, screening - SDWA	ND	NTU	1	1.0*	1.0*	09/22/17	EPA 180.1	721026460

Values in brackets represent results greater than or equal to the LOD but less than the LOQ and are within a region of "Less-Certain Quantitation". Results greater than or equal to the LOQ are considered to be in the region of "Certain Quantitation". LOD and/or LOQ tagged with an asterisk(\*) are considered Reporting Limits. All LOD/LOQs adjusted to reflect dilution and/or solids content.  
 ND = Not Detected (< LOD) LOD = Limit of Detection  
 DWB = Dry Weight Basis %DWB = (mg/kg DWB) / 10000  
 MCL = Maximum Contaminant Levels for Drinking Water Samples. Shaded results indicate >MCL.  
 LOQ = Limit of Quantitation  
 1000 ug/L = 1 mg/L  
 NA = Not Applicable

Reviewed by:   
 Authorized by:  
 R. T. Krueger  
 President