



CERTIFICATE OF ANALYSIS

Chain of Custody: 612166
Client: Howard County Public School System
Address: 10910 Route 108
Ellicott City, MD 21042
Attention: Jeff Klenk

Job Name: Worthington Elementary School
Job Location: 4570 Roundhill Road, Ellicott City, MD
21043
Job Number: 13.010
P.O. Number: Not Provided

Date Submitted: 12/21/2018
Date Analyzed: 12/31/2018
Report Date: 01/02/2019
Date Sampled: 12/18/2018 - 12/19/2018
Person Submitting: Jeff Klenk

Summary of Drinking Water Analysis for Metals

AMA Sample Number	Client Sample Number	Sample Collection Information		Analysis Type	Sample Analyte	Reporting Limit	Final Result	Comments
		Date/Time	Location					
612166-1	WOES 2 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-2	WOES 3 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-3	WOES 6 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-4	WOES 7F 1st Draw	12/18/2018 5:22 am	CC/B	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-5	WOES 8F 1st Draw	12/18/2018 5:22 am	CC/B	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-6	WOES 9F 1st Draw	12/18/2018 5:22 am	CC/B	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-7	WOES 10F 1st Draw	12/18/2018 5:22 am	CC/B	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-8	WOES 11 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-9	WOES 13 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-10	WOES 17 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-11	WOES 20 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-12	WOES 21 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-13	WOES 24 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-14	WOES 25 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-15	WOES 26 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-16	WOES 29 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-17	WOES 30 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-18	WOES 33 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-19	WOES 36 1st Draw	12/18/2018 5:22 am	DF/C	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-20	WOES 38F 1st Draw	12/18/2018 5:22 am	DF/B	ICP	Lead	0.5 ug/L	< 0.5 ug/L	



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		Date/Time	Location					
612166-21	WOES 1 1st Draw	12/19/2018 5:25 am	KS	ICP	Lead	0.5 ug/L	11 ug/L	10.9 ug/L.
612166-22	WOES 4 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.92 ug/L	
612166-23	WOES 5 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-24	WOES 7S 1st Draw	12/19/2018 5:25 am	CC/S	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-25	WOES 8S 1st Draw	12/19/2018 5:25 am	CC/S	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-26	WOES 9S 1st Draw	12/19/2018 5:25 am	CC/S	ICP	Lead	0.5 ug/L	0.8 ug/L	
612166-27	WOES 10S 1st Draw	12/19/2018 5:25 am	CC/S	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-28	WOES 12 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-29	WOES 14 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.81 ug/L	
612166-30	WOES 15 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.58 ug/L	
612166-31	WOES 16 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	1.7 ug/L	
612166-32	WOES 18 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.87 ug/L	
612166-33	WOES 19 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	1.2 ug/L	
612166-34	WOES 22 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.82 ug/L	
612166-35	WOES 23 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.73 ug/L	
612166-36	WOES 27 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.6 ug/L	
612166-37	WOES 28 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.82 ug/L	
612166-38	WOES 31 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.6 ug/L	
612166-39	WOES 32 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.9 ug/L	
612166-40	WOES 34 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	0.53 ug/L	



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		Date/Time	Location					
612166-41	WOES 35 1st Draw	12/19/2018 5:25 am	CR	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-42	WOES 37 1st Draw	12/19/2018 5:25 am	TL	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-43	WOES 38S 1st Draw	12/19/2018 5:25 am	NO	ICP	Lead	0.5 ug/L	< 0.5 ug/L	
612166-44	WOES 39 1st Draw	12/19/2018 5:25 am	OT.7	ICP	Lead	0.5 ug/L	0.68 ug/L	

Analysis Methods: Flame AA: APHA SM3111B (1999, 22nd Ed.), Furnace AA: APHA SM3113B (2010, 22nd Ed.), ICP: EPA 200.8 (Rev. 5.4)

mg/L = Parts Per Million (ppm), N/A = Not Applicable, ug/L = Parts Per Billion, N/P = Not Provided

Analyst(s): Jean-Paul Littleton

Sample Collector: Jeff Klenk

Certification:

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Technical Director G. Edward Carney

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