



**Division of Water and Sewer Utilities
Environmental Laboratory**
4520 Metropolitan Court
Frederick, MD 21704
Phone: (301) 600-1597 Fax: (301) 600-1502
MD Drinking Water Certification No. G-1044

Report of Analysis

Report Date: April 22, 2022

Sample Collector: 1432RS
Date/Time Received: 4/19/22 14:15
Sample Matrix: Drinking_Water
Login Record File: 041922_1417

<u>Location</u>	<u>Test/Parameter</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Units</u>	<u>Analysis Date</u>	<u>Analyst</u>	<u>Method</u>
AT05452 LLWTP Below Dam							
4/19/22 12:20							
Grab							
	Organic Nitrogen	1.6	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	3.7	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	12	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	1.6	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	2.1	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	5	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.5	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	10.0	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	< 10	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

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AT05453	Ben's Branch						
4/19/22	12:50						
Grab							
	Organic Nitrogen	Present < RDL	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	1.9	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	10	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	Present < RDL	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	1.9	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	5	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.8	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	11.7	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	932	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

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AT05454	Nightingale Beach						
4/19/22	13:10						
Grab							
	Organic Nitrogen	0.6	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	2.8	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	12	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	0.6	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	2.2	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	16	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.6	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	10.6	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	51	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

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AT05455	Boyers Mill Bridge						
4/19/22	13:20						
Grab							
	Organic Nitrogen	0.6	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	2.9	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	11	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	0.6	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	2.3	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	16	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.5	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	10.4	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	86	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

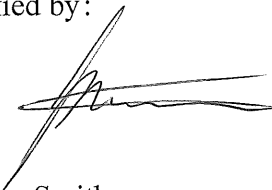
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AT05456	Coldstream Beach						
	4/19/22 13:30						
	Grab						
	Organic Nitrogen	Present < RDL	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	2.2	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	13	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	Present < RDL	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	2.2	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	29	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.6	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	11.0	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	31	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

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AT05457	Linganore Creek						
4/19/22	13:45						
Grab							
	Organic Nitrogen	1.8	0.1	mg/l	4/20/22	RGS	Calculation
	Total Nitrogen	4.3	0.1	mg/l	4/20/22	RGS	Calculation
	Temperature, Field	10	1	C	4/19/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	4/20/22	RGS	EPA 350.1
	TKN	1.8	0.5	mg/l	4/21/22	SPA	EPA 351.2
	Nitrate + Nitrite-N	2.5	0.2	mg/l	4/20/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	4/20/22	RGS	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	4/21/22	SPA	EPA 365.4
	Total Suspended Solids	25	1	mg/l	4/20/22	KMS	SM2540 D
	pH, Lab	7.5	1.0	SU	4/19/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	11.6	0.1	mg/l	4/19/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	1789	1	MPN/100 ml	4/19/22	LKL/RGS	SM9223

Verified by:



Joshua Smith
Laboratory Supervisor


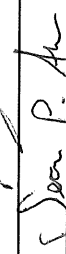
CHAIN OF CUSTODY RECORD

Ortho-P samples filtered at the time of collection.

AGS 4-19-22
 Temp Control 3 °C
 Date/Time/Initial 4-19-22 HIS AGS

S- H₂SO₄ added by AGS on 4-19-22

Analysis on Chain performed:
 Date/Time/Initial

FACILITY LOCATION: LAKE LINGANORE		Analysis Requested										Analysis on Chain performed:							
SAMPLE DATE April 19, 2022		TKN/TP		NO ₃ NO ₂ & NH ₃ N		F coil		Ortho-P		TSS		TEMP		pH		D.O.			
Frederick County Division of Water and Sewer Utilities Laboratory 7303 Marcies Choice Lane Frederick, MD 21704		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P		
* Matrix- WW-Wastewater, DW-Drinking Water, Sl-Sludge ** G=Grab, C=Composite		S	H ₂ SO ₄	Number of Containers per Analysis Requested														Comments	LIMS#
Sample Description/Location	G/C **	Time	Matrix *																
1 LLWTP Below Dam	G	1720	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12 7.5 10.0	AT05452
2 Ben's Branch	G	1250	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10 7.8 11.7	AT05453
3 Nightingale Beach	G	1310	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12 7.6 10.6	AT05454
4 Boyers Mill Bridge	G	1320	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11 7.5 10.4	AT05455
5 Coldstream Beach	G	1330	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13 7.6 11.0	AT05456
6 Linganore Creek	G	1345	DW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10 7.5 11.6	AT05457
7																			
8																			
9																			
10																			
Print Name		Signature														Date	Time	Remarks	
Robert Shaw																04/19/22	1345		
sean Allen																04/19/22	1415		
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