



**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: June 28, 2022

Sample Collector: 1432RS
Date/Time Received: 6/20/22 14:25
Sample Matrix: Drinking_Water
Login Record File: 062022_1428

<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>
AT08616	LLWTP Below Dam						
	6/20/22 12:35 Grab						
	Organic Nitrogen	Present < RDL	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	1.9	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	24	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	Present < RDL	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	1.9	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	8	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	7.6	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	8.8	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	10	1	MPN/100 ml	6/20/22	LKL	SM9223

Sample Collector: 1432RS
 Date/Time Received: 6/20/22 14:25
 Sample Matrix: Drinking_Water
 Login Record File: 062022_1428

<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>
AT08617 Ben's Branch							
6/20/22 13:00 Grab							
	Organic Nitrogen	0.8	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	3.4	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	19	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	0.8	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	2.6	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	1	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	7.4	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	9.2	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	160	1	MPN/100 ml	6/20/22	LKL	SM9223

Sample Collector: 1432RS
 Date/Time Received: 6/20/22 14:25
 Sample Matrix: Drinking_Water
 Login Record File: 062022_1428

<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>
AT08618	Nightingale Beach						
6/20/22	13:15						
Grab							
	Organic Nitrogen	0.6	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	2.4	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	26	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	0.6	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	1.8	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	11	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	8.4	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	11.0	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	< 10	1	MPN/100 ml	6/20/22	LKL	SM9223

Sample Collector: 1432RS
 Date/Time Received: 6/20/22 14:25
 Sample Matrix: Drinking_Water
 Login Record File: 062022_1428

<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>
AT08619	Boyers Mill Bridge						
6/20/22	13:25						
Grab							
	Organic Nitrogen	Present < RDL	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	1.8	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	26	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	Present < RDL	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	1.8	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	11	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	8.4	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	11.2	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	< 10	1	MPN/100 ml	6/20/22	LKL	SM9223

Sample Collector: 1432RS
 Date/Time Received: 6/20/22 14:25
 Sample Matrix: Drinking_Water
 Login Record File: 062022_1428

<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>
AT08620	Coldstream Beach						
	6/20/22 13:40						
	Grab						
	Organic Nitrogen	0.6	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	2.4	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	27	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	0.6	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	1.8	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	11	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	8.4	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	10.0	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	< 10	1	MPN/100 ml	6/20/22	LKL	SM9223

Sample Collector: 1432RS
Date/Time Received: 6/20/22 14:25
Sample Matrix: Drinking_Water
Login Record File: 062022_1428

<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>
AT08621	Linganore Creek						
	6/20/22 14:00 Grab						
	Organic Nitrogen	Present < RDL	0.1	mg/l	6/23/22	RGS	Calculation
	Total Nitrogen	3.1	0.1	mg/l	6/23/22	RGS	Calculation
	Temperature, Field	21	1	C	6/20/22	RGS/KMS	EPA 170.1
	Ammonia-N	Present < RDL	0.2	mg/l	6/23/22	RGS	EPA 350.1
	TKN	Present < RDL	0.5	mg/l	6/23/22	KMS	EPA 351.2
	Nitrate + Nitrite-N	3.1	0.2	mg/l	6/23/22	RGS	EPA 353.2
	Ortho Phosphate	Present < RDL	0.05	mg/l	6/21/22	SPA	EPA 365.1
	Total Phosphorus	Present < RDL	0.20	mg/l	6/23/22	KMS	EPA 365.4
	Total Suspended Solids	4	1	mg/l	6/21/22	RGS	SM2540 D
	pH, Lab	7.3	1.0	SU	6/20/22	RGS/KMS	SM4500-H + B
	Dissolved Oxygen, Field	9.4	0.1	mg/l	6/20/22	RGS/KMS	SM4500-O G
	E. coli, Quantitray	305	1	MPN/100 ml	6/20/22	LKL	SM9223

Verified by:



Christopher Baggett
Laboratory Supervisor

CHAIN OF CUSTODY RECORD

Ortho-P samples filtered at the time of collection.

Temp Control 6-20-22 JKL

Temp Control 6 °C

Date/Time/Initial 6/20/22 1425

S- H₂SO₄ added by RS on 6/20/22

Analysis on Chain performed:

Date/Time/Initial 6/20/22 1425

FACILITY LOCATION: LAKE LINGANORE		Analysis Requested										Analysis Requested		Temp Control		Date/Time/Initial		S- H ₂ SO ₄ added by		Analysis on Chain performed:				
SAMPLE DATE		TKN/TP		NO3NO2 & NH3N		F coli		Ortho-P		TSS		TEMP		P		O		P		Date/Time/Initial		S		
June 20, 2022		P		P		P		P		P		P		P		P		P		Date/Time/Initial		S		
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		Date/Time/Initial		S		
* Matrix- WW-Wastewater, DW-Drinking Water, SI-Sludge		P		P		P		P		P		P		P		P		P		Date/Time/Initial		S		
** G=Grab, C=Composite		S		H ₂ SO ₄																Date/Time/Initial		S		
Sample Description/Location		G/C		Time		Matrix		Number of Containers per Analysis Requested										Comments		LIMS#				
		**		0:00		*																		
1	LLWTP Below Dam	G	1235	DW	24	7.6	8.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 6110
2	Ben's Branch	G	1300	DW	49	7.0	9.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 617
3	Nightingale Beach	G	1315	DW	26	8.4	11.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 618
4	Boyers Mill Bridge	G	1329	DW	26	8.4	11.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 619
5	Coldstream Beach	G	1340	DW	27	8.4	10.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 620
6	Linganore Creek	G	1400	DW	21	7.3	9.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	AT08 621
7																								
8																								
9																								
10																								
Sampled by:		Robert Shaw		06/20/22		1400												1400						
Received by:		Sean Allen		06/20/22		1425												1425						
Relinquished by:																				062022-1425				
Received by:																								
Relinquished by:																								
Received by:																								

(Handwritten signature)