

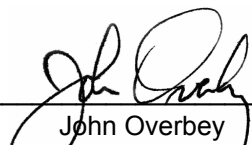


City of Hot Springs
ATTN: Mr. Harold Mauldin
320 Davidson Drive
Hot Springs, AR 71901

This report contains the analytical results and supporting information for samples received on June 9, 2022. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Chief Operating Officer or a qualified designee.



John Overbey
Chief Operating Officer

This document has been distributed to the following:

PDF cc: City of Hot Springs
ATTN: Mr. Dennis Brunson
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City of Hot Springs
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City of Hot Springs
320 Davidson Drive
Hot Springs, AR 71901

SAMPLE INFORMATION

Project Description:

Three (3) water sample(s) received on June 9, 2022
Manhole 1750
P.O. No. 2022-247

Receipt Details:

A Chain of Custody was provided. The samples were delivered in two (2) ice chests.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

Sample Identification:

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
266310-1	Site 1	09-Jun-2022 0827	
266310-2	Site 2	09-Jun-2022 0831	
266310-3	Site 3	09-Jun-2022 0814	

Qualifiers:

D Result is from a secondary dilution factor

References:

"Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
"Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
"Standard Methods for the Examination of Water and Wastewaters", (SM).
"American Society for Testing and Materials" (ASTM).
"Association of Analytical Chemists" (AOAC).

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ANALYTICAL RESULTS

AIC No. 266310-1

Sample Identification: Site 1 09-Jun-2022 0827

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	0.86	0.5	mg/l	D
Prep: 09-Jun-2022 1625 by 330	Analyzed: 10-Jun-2022 1350 by 352		Batch: W79818	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
	Analyzed: 09-Jun-2022 1628 by 45		Batch: W79830	
Total Dissolved Solids SM 2540 C 2015	46	25	mg/l	
Prep: 13-Jun-2022 1340 by 100	Analyzed: 15-Jun-2022 1158 by 100		Batch: W79860	
Chloride EPA 300.0	2.9	0.2	mg/l	
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 1934 by 338		Batch: C25373	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 1832 by 338		Batch: C25373	Dil: 10

AIC No. 266310-2

Sample Identification: Site 2 09-Jun-2022 0831

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	0.68	0.5	mg/l	D
Prep: 09-Jun-2022 1625 by 330	Analyzed: 10-Jun-2022 1351 by 352		Batch: W79818	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
	Analyzed: 09-Jun-2022 1628 by 45		Batch: W79830	
Total Dissolved Solids SM 2540 C 2015	42	25	mg/l	
Prep: 13-Jun-2022 1340 by 100	Analyzed: 15-Jun-2022 1158 by 100		Batch: W79860	
Chloride EPA 300.0	2.2	0.2	mg/l	
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 2016 by 338		Batch: C25373	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 1955 by 338		Batch: C25373	Dil: 10

AIC No. 266310-3

Sample Identification: Site 3 09-Jun-2022 0814

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	0.67	0.5	mg/l	D
Prep: 09-Jun-2022 1625 by 330	Analyzed: 10-Jun-2022 1353 by 352		Batch: W79818	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
	Analyzed: 09-Jun-2022 1628 by 45		Batch: W79830	
Total Dissolved Solids SM 2540 C 2015	46	25	mg/l	
Prep: 13-Jun-2022 1340 by 100	Analyzed: 15-Jun-2022 1158 by 100		Batch: W79860	
Chloride EPA 300.0	2.3	0.2	mg/l	
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 2057 by 338		Batch: C25373	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 10-Jun-2022 1533 by 338	Analyzed: 10-Jun-2022 2037 by 338		Batch: C25373	Dil: 10

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Chlorophyll A	266310-1	< 0.0050 mg/l				09Jun22 1628 by 45		
	Batch: W79830 Duplicate	< 0.0050 mg/l	0.00	10.0		09Jun22 1628 by 45		
Total Dissolved Solids	266227-2	1400 mg/l			13Jun22 1340 by 100	15Jun22 1158 by 100		
	Batch: W79860 Duplicate	1400 mg/l	0.792	10.0	13Jun22 1340 by 100	15Jun22 1158 by 100		

LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Kjeldahl Nitrogen	1 mg/l	112	99.6-146			W79818	09Jun22 0916 by 330	10Jun22 1321 by 352		
Total Dissolved Solids	2000 mg/l	95.9	85.0-115			W79860	13Jun22 1340 by 100	15Jun22 1158 by 100		
Chloride	25 mg/l	102	90.0-110			C25373	10Jun22 1533 by 338	10Jun22 1709 by 338		
Nitrate + Nitrite as N	10 mg/l	102	90.0-110			C25373	10Jun22 1533 by 338	10Jun22 1709 by 338		

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Kjeldahl Nitrogen	266124-2	1 mg/l	79.3	49.4-153	W79818	09Jun22 0916 by 330	10Jun22 1325 by 352		
	266124-2	1 mg/l	72.1	49.4-153	W79818	09Jun22 0916 by 330	10Jun22 1327 by 352		
	Relative Percent Difference:		4.34	11.6	W79818				
Chloride	266321-2	25 mg/l	104	80.0-120	C25373	10Jun22 1533 by 338	10Jun22 1730 by 338		
	266321-2	25 mg/l	104	80.0-120	C25373	10Jun22 1533 by 338	10Jun22 1751 by 338		
	Relative Percent Difference:		0.00985	10.0	C25373				
Nitrate + Nitrite as N	266321-2	10 mg/l	103	80.0-120	C25373	10Jun22 1533 by 338	10Jun22 1730 by 338		
	266321-2	10 mg/l	103	80.0-120	C25373	10Jun22 1533 by 338	10Jun22 1751 by 338		
	Relative Percent Difference:		0.0356	10.0	C25373				

LABORATORY BLANK RESULTS

Analyte	Result	RL	LOQ	QC Sample	Preparation Date	Analysis Date	Qual
Total Kjeldahl Nitrogen	< 0.5 mg/l	0.5	0.5	W79818-1	09Jun22 0916 by 330	10Jun22 1319 by 352	D
Chlorophyll A	< 0.0050 mg/l	0.0050	0.005	W79830-1		09Jun22 1628 by 352	
Total Dissolved Solids	< 25 mg/l	25	25	W79860-1	13Jun22 1340 by 100	15Jun22 1158 by 100	
Chloride	< 0.2 mg/l	0.2	0.2	C25373-1	10Jun22 1533 by 338	10Jun22 1648 by 338	
Nitrate + Nitrite as N	< 0.03 mg/l	0.03	0.05	C25373-1	10Jun22 1533 by 338	10Jun22 1648 by 338	



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: City of Hot Springs		PO No.: 2022-247		ANALYSES REQUESTED										AIC CONTROL NO: 216313	
Project Reference: Manhole 1750		MATRIX:												AIC PROPOSAL NO:	
Project Manager: Harold Mauldin		WATER												Carrier:	
Sampled By: R. S. HAM		SOIL												Received Temperature C: 0.1/0.1	
AIC No.		COMPOUND												Remarks:	
Site 1		GRA B												Field pH calibration on @ Buffer:	
Date/Time Collected: 6-9-22 @ 0827		V = VOA vials												T = Sodium Thiosulfate	
Site 2		N = Nitric acid pH2												Z = Zinc acetate	
Date/Time Collected: 6-9-22 @ 0831		H = HCl to pH2												A = (NH4)2SO4, NH4OH	
Site 3		B = NaOH to pH12												Date/Time: 6-9-22	
Date/Time Collected: 6-9-22 @ 0814		Relinquished												Date/Time: 6-9-22	
		By: A. Colton												By: B. Samu	
		Relinquished												Date/Time: 6-9-22	
		By: B. Samu												By: D. Brown	
		Comments:													

