



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 April 18, 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.

A handwritten signature in black ink that reads 'Steve Bradford'.

Steve Bradford
Deputy Laboratory Director

This document has been distributed to the following:

PDF cc: City of Hot Springs
ATTN: Mr. Dennis Brunson
dbrunson@cityhs.net

City of Hot Springs
ATTN: Mr. Harold Mauldin
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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 April 18, 2022
Manhole 1750
P.O. No. 20222-247

Receipt Details:

A Chain of Custody was provided. The samples were delivered in one (1) ice chest.

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>
264798-1	Site 1	17-Apr-2022 1735	
264798-2	Site 2	17-Apr-2022 1744	
264798-3	Site 3	17-Apr-2022 1721	

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. 264798-1

Sample Identification: Site 1 17-Apr-2022 1735

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	1.3	0.5	mg/l	D
Prep: 18-Apr-2022 1319 by 347	Analyzed: 19-Apr-2022 1643 by 352		Batch: W79291	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
Prep: 18-Apr-2022 1646 by 347	Analyzed: 22-Apr-2022 1630 by 330		Batch: W79297	
Total Dissolved Solids SM 2540 C 2011	40	25	mg/l	
Prep: 21-Apr-2022 1401 by 100	Analyzed: 26-Apr-2022 0731 by 100		Batch: W79326	
Chloride EPA 300.0	2.5	0.2	mg/l	
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1222 by 330		Batch: C25260	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1202 by 330		Batch: C25260	Dil: 10

AIC No. 264798-2

Sample Identification: Site 2 17-Apr-2022 1744

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	0.59	0.5	mg/l	D
Prep: 18-Apr-2022 1319 by 347	Analyzed: 19-Apr-2022 1644 by 352		Batch: W79291	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
Prep: 18-Apr-2022 1646 by 347	Analyzed: 22-Apr-2022 1630 by 330		Batch: W79297	
Total Dissolved Solids SM 2540 C 2011	45	25	mg/l	
Prep: 21-Apr-2022 1401 by 100	Analyzed: 26-Apr-2022 0731 by 100		Batch: W79326	
Chloride EPA 300.0	2.4	0.2	mg/l	
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1304 by 330		Batch: C25260	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1243 by 330		Batch: C25260	Dil: 10

AIC No. 264798-3

Sample Identification: Site 3 17-Apr-2022 1721

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Kjeldahl Nitrogen EPA 351.2	0.52	0.5	mg/l	D
Prep: 18-Apr-2022 1319 by 347	Analyzed: 19-Apr-2022 1649 by 352		Batch: W79291	Dil: 2
Chlorophyll A SM 10200 H 2011	< 0.0050	0.0050	mg/l	
Prep: 18-Apr-2022 1646 by 347	Analyzed: 22-Apr-2022 1630 by 330		Batch: W79297	
Total Dissolved Solids SM 2540 C 2011	47	25	mg/l	
Prep: 21-Apr-2022 1401 by 100	Analyzed: 26-Apr-2022 0731 by 100		Batch: W79326	
Chloride EPA 300.0	2.4	0.2	mg/l	
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1427 by 330		Batch: C25260	
Nitrate + Nitrite as N EPA 300.0	< 0.5	0.5	mg/l	D
Prep: 19-Apr-2022 0831 by 330	Analyzed: 19-Apr-2022 1325 by 330		Batch: C25260	Dil: 10

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Chlorophyll A	264798-1	< 0.0050 mg/l			18Apr22 1646 by 347	22Apr22 1630 by 330		
	Batch: W79297 Duplicate	< 0.0050 mg/l	0.00	10.0	18Apr22 1646 by 347	22Apr22 1630 by 330		
Total Dissolved Solids	264843-2	1500 mg/l			21Apr22 1401 by 100	26Apr22 0731 by 100		
	Batch: W79326 Duplicate	1500 mg/l	0.543	10.0	21Apr22 1401 by 100	26Apr22 0731 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	116	99.6-146			W79291	18Apr22 1320 by 347	19Apr22 1631 by 352		
Total Dissolved Solids	2000 mg/l	94.4	85.0-115			W79326	21Apr22 1401 by 100	26Apr22 0731 by 100		
Chloride	25 mg/l	105	90.0-110			C25260	19Apr22 0832 by 330	19Apr22 1039 by 330		
Nitrate + Nitrite as N	10 mg/l	102	90.0-110			C25260	19Apr22 0832 by 330	19Apr22 1039 by 330		

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Kjeldahl Nitrogen	264751-2	1 mg/l	74.4	49.4-153	W79291	18Apr22 1320 by 347	19Apr22 1634 by 352		
	264751-2	1 mg/l	80.8	49.4-153	W79291	18Apr22 1320 by 347	19Apr22 1636 by 352		
	Relative Percent Difference:		3.36	11.6	W79291				
Chloride	264800-1	25 mg/l	107	80.0-120	C25260	19Apr22 0832 by 330	20Apr22 1229 by 330		
	264800-1	25 mg/l	106	80.0-120	C25260	19Apr22 0832 by 330	20Apr22 1249 by 330		
	Relative Percent Difference:		0.848	10.0	C25260				
Nitrate + Nitrite as N	264800-1	10 mg/l	103	80.0-120	C25260	19Apr22 0832 by 330	20Apr22 1229 by 330		
	264800-1	10 mg/l	102	80.0-120	C25260	19Apr22 0832 by 330	20Apr22 1249 by 330		
	Relative Percent Difference:		0.886	10.0	C25260				

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	W79291-1	18Apr22 1320 by 347	19Apr22 1629 by 352	D
Chlorophyll A	< 0.0050 mg/l	0.0050	0.005	W79297-1	18Apr22 1646 by 347	22Apr22 1630 by 330	
Total Dissolved Solids	< 25 mg/l	25	25	W79326-1	21Apr22 1401 by 100	26Apr22 0731 by 100	
Chloride	< 0.1 mg/l	0.1	0.2	C25260-1	19Apr22 0832 by 330	19Apr22 1018 by 330	
Nitrate + Nitrite as N	< 0.03 mg/l	0.03	0.05	C25260-1	19Apr22 0832 by 330	19Apr22 1018 by 330	



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE OF

Client: <u>City of Hot Springs</u>		PO No. <u>8022-247</u>	NO OF BOTTLES		ANALYSES REQUESTED		AIC CONTROL NO. <u>204798</u>
Project Reference: <u>Manhole 1750</u>		SAMPLE MATRIX		Total Dissolved Solids		AIC PROPOSAL NO.	
Project Manager: <u>Harold Mauldin</u>		W	A	T	E	R	Carrier:
Sampled By: <u>AC</u>		C	O	M	P		Received Temperature C <u>1.3</u>
AIC No.	Sample Identification	Date/Time Collected	G	R	A	B	Remarks
	<u>Site 1</u>	<u>4-17-22 @ 1735</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<u>Site 2</u>	<u>4-17-22 @ 1744</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	<u>Site 3</u>	<u>4-17-22 @ 1721</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Container Type		G = Glass		P = Plastic		Field pH calibration on @ Buffer:	
Preservative		NO = none		S = Sulfuric acid pH2		T = Sodium Thiosulfate	
		V = VOA vials		N = Nitric acid pH2		Z = Zinc acetate	
Turnaround Time Requested: (Please circle) <u>8</u> DAYS		Relinquished By: <u>S. Ryder</u>		Date/Time <u>4-18-22 @ 0859</u>		Received By: <u>B. Damm</u>	
Expedited results requested by: <u>04-25-22</u>		Relinquished By: <u>B. Damm</u>		Date/Time <u>4-8-22 @ 1008</u>		Received in Lab By: <u>Cathy [Signature]</u>	
Who should AIC contact with questions: <u>Amanda Cates</u>		Comments:					
Phone: <u>501-262-1125</u> Fax:							
Report Attention to:							
Report Address to:							