



Arkansas Department of Health

4815 West Markham Street • Little Rock, Arkansas 72205-3867 • Telephone 501-661-2000

Governor Asa Hutchinson

Nathaniel Smith, MD, MPH, Director and State Health Officer

Engineering Section, Slot 37
www.HealthyArkansas.gov/eng/

Telephone 501-661-2623

Fax 501-661-2032

After Hours Emergency 800-554-5738

November 20, 2018

**System is in compliance
with MCLs and OELs**

BUTCH BERRY
EUREKA SPRINGS WATERWORKS
44 S MAIN
EUREKA SPRINGS AR 72632

RE: Stage 2 Disinfectants and Disinfection Byproducts Rule
Total Trihalomethanes and Haloacetic Acids (TTHM & HAA5) Analyses
PWS ID: 075

Dear Operator:

Attached are the results of the Stage 2 Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) analyses of the water samples collected from your public water system during the fourth quarter, 2018. Also attached is a report summarizing compliance calculations and Operational Evaluation Levels (OELs) based on the results.

The Stage 2 Disinfectants and Disinfection Byproducts Rule establishes the Maximum Contaminant Levels (MCLs) to be 80 ppb for TTHM and 60 ppb for HAA5, as Locational Running Annual Averages (LRAAs) calculated quarterly at each monitoring site.

If an OEL exceeds 80 ppb or 60 ppb for TTHM or HAA5 respectively, the system must conduct an operational evaluation and submit a written report of the evaluation to the state no later than 90 days after the receipt of the analytical result that caused the exceedance. The written report must be made available to the public upon request. If a system is readily able to identify the cause of the OEL exceedance, it may request permission to limit the scope of the evaluation.

All TTHM and HAA5 LRAAs were within the allowable limits of the Primary Drinking Water Standards of the Safe Drinking Water Act, and no OELs were exceeded this monitoring period.

Federal law requires that the water system keep a copy of the analytical reports for a minimum of ten years. If you have any questions or need assistance, feel free to contact your district staff or me at 501-661-2623.

Sincerely,

Jack Wilson
Disinfection Byproducts Environmental Specialist
Engineering Section

CR:CA:RT:AP:JB:jw

enclosures



Report of Sample Analysis

Organic Chemistry Laboratory
Arkansas Public Health Laboratory
201 South Monroe
Little Rock AR 72205

Program

Collection Report Number: 158365

PHE-SDWA

Bottle ID # 10-007

Date: October 16, 2018

Time: 13:05

By: Steven Fitzhugh

Receipt Information

Date: October 18, 2018

Received By: FGULLEY

Time: 10:50

Submitted By: Steven Fitzhugh

Site Information

Water System: Eureka Springs Waterworks

PWS#: 075

Sampling site: Best Western, Eureka Springs Inn, 101 Van Buren @ Main,

District: 1

Location Site Code: 075YD001

County: Carroll

Sample Description

Profile: THMMS

Type: DIS

Category: PUB

Source: Lake

Condition: N/A

Purpose: CMP

Sample Number: 018291012302

Analytical Method

524.2

"Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectroscopy", 1995, U. S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio 45268 (Revision 4.1)

Analytical Results

Regulated Analytes

Bromoform	<1.0	ug/L
Chloroform	48.1	ug/L
Dibromochloromethane	<1.0	ug/L
Dichlorobromomethane	5.9	ug/L
Total Trihalomethanes	54.0	ug/L

Result reported may differ from the summation of the individual analytes due to rounding.

Sample Result Comments

Sample Comments:

Batch Run# 34824

Report Date: 10/30/2018

Extract Date: 10/25/18

Analysis Date: 25 Oct 2018 11:02 pm

BJ Jefferson, Chemist II

Dorothy Ferguson, Supervisor



Report of Sample Analysis

Organic Chemistry Laboratory
Arkansas Public Health Laboratory
201 South Monroe
Little Rock AR 72205

Program

Collection Report Number: 158366

PHE-SDWA

Bottle ID # 10-005

Date: October 16, 2018

Time: 12:40

By: Steven Fitzhugh

Receipt Information

Date: October 18, 2018

Received By: FGULLEY

Time: 10:50

Submitted By: Steven Fitzhugh

Site Information

Water System: Eureka Springs Waterworks

PWS#: 075

Sampling site: WWTP, 100 N. Hwy 23 around gate to office,

District: 1

Location Site Code: 075YD002

County: Carroll

Sample Description

Profile: THMMS

Type: DIS

Category: PUB

Source: Lake

Condition: N/A

Purpose: CMP

Sample Number:

018291012202

Analytical Method

524.2

"Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectroscopy", 1995, U. S. EPA Environmental Monitoring Systems Laboratory, Cincinnati, Ohio 45268 (Revision 4.1)

Analytical Results

Regulated Analytes

Bromoform	<1.0	ug/L
Chloroform	46.2	ug/L
Dibromochloromethane	<1.0	ug/L
Dichlorobromomethane	4.7	ug/L
Total Trihalomethanes	50.9	ug/L

Result reported may differ from the summation of the individual analytes due to rounding.

Sample Result Comments

Sample Comments:

Batch Run# 34767

Report Date: 10/24/2018

Extract Date: 10/20/18

Analysis Date: 20 Oct 2018 1:46 am

BJ Jefferson, Chemist II

Dorothy Ferguson, Supervisor



Report of Sample Analysis

Organic Chemistry Laboratory
Arkansas Public Health Laboratory
201 South Monroe
Little Rock AR 72205

Program

Collection Report Number: 158365

PHE-SDWA

Bottle ID # 8-510

Date: October 16, 2018

Time: 13:05

By: Steven Fitzhugh

Receipt Information

Date: October 18, 2018

Received By: FGULLEY

Time: 10:47

Submitted By: Steven Fitzhugh

Site Information

Water System: Eureka Springs Waterworks

PWS#: 075

Sampling site: Best Western, Eureka Springs Inn, 101 Van Buren @ Main,

District: 1

Location Site Code: 075YD001

County: Carroll

Sample Description

Profile:HAA

Type:DIS

Category: PUB

Source:Lake

Condition:N/A

Purpose:CMP

Sample Number:

018291012301

Analytical Method

552.2

"Determination of Haloacetic Acids and Dalapon by Liquid-Liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection", 1995, U.S. EPA Environmental Monitoring Systems, Cincinnati, Ohio 45268 (Revision 1.0)

Analytical Results

Regulated Analytes

DBAA	<1.0	ug/L
DCAA	12.2	ug/L
MBAA	<1.0	ug/L
MCAA	<2.0	ug/L
TCAA	14.9	ug/L
Total HAA	27.1	ug/L

Received Engineering

NOV 7 - 2018

AR Dept. of Health

Result reported may differ from the summation of the individual analytes due to rounding.

Unregulated Analytes

BCAA 1.4 ug/L

Sample Result Comments

Sample Comments:

Batch Run# 34809

Report Date: 11/01/2018

Extract Date: 10/24/2018

Analysis Date: 10/26/2018

7:21:07 AM

Saluta C. Sanders

Saluta Sanders, Chemist I

Dorothy M. Ferguson

Dorothy Ferguson, Supervisor



Report of Sample Analysis

Organic Chemistry Laboratory
Arkansas Public Health Laboratory
201 South Monroe
Little Rock AR 72205

Program

Collection Report Number: 158366

PHE-SDWA

Bottle ID # 8-507

Date: October 16, 2018

Time: 12:40

By: Steven Fitzhugh

Receipt Information

Date: October 18, 2018

Received By: FGULLEY

Time: 10:47

Submitted By: Steven Fitzhugh

Site Information

Water System: Eureka Springs Waterworks

PWS#: 075

Sampling site: WWTP, 100 N. Hwy 23 around gate to office,

District: 1

Location Site Code: 075YD002

County: Carroll

Sample Description

Profile:HAA

Type:DIS

Category: PUB

Source:Lake

Condition:N/A

Purpose:CMP

Sample Number:

O18291012201

Analytical Method

552.2

"Determination of Haloacetic Acids and Dalapon by Liquid-Liquid Extraction, Derivatization, and Gas Chromatography with Electron Capture Detection", 1995, U.S. EPA Environmental Monitoring Systems, Cincinnati, Ohio 45268 (Revision 1.0)

Analytical Results

Regulated Analytes

DBAA	<1.0	ug/L
DCAA	2.5	ug/L
MBAA	<1.0	ug/L
MCAA	<2.0	ug/L
TCAA	2.9	ug/L
Total HAA	5.3	ug/L

Received Engineering

NOV 7 - 2018

AR Dept. of Health

Result reported may differ from the summation of the individual analytes due to rounding.

Unregulated Analytes

BCAA <1.0 ug/L

Sample Result Comments

Sample Comments:

Batch Run# 34809

Report Date: 11/01/2018

Extract Date: 10/24/2018

Analysis Date: 10/26/2018

8:03:25 AM

Saluta C. Sanders

Saluta Sanders, Chemist I

Dorothy M. Ferguson

Dorothy Ferguson, Supervisor

Stage 2 D/DBPR

4th Quarter, 2018

TTHM/HAA5 LRAA and OEL Calculations Report

Status: Routine

PWS ID: 075

Frequency: Every 90 Days

PWS Name: Eureka Springs Waterworks

Pop: 4125

Number of Sites: 2

Frequency Approved: 10/1/2013

Sample Site	Analyte	Jan, Feb, Mar	Apr, May, Jun	Jul, Aug, Sep	Oct, Nov, Dec	OEL	LRAA
075YD001	TTHM	35.4	48	54.3	54	53	48
075YD002	TTHM	34.1	41.1	53.8	50.9	49	45
075YD001	HAA	29.4	28.3	3.4	27.1	21	22
075YD002	HAA	22.1	33.5	6.6	5.3	13	17