

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Mr. John Davis
Malvern Water Works
506 Overman
Malvern, Arkansas 72104

Generated 4/6/2023 5:12:32 PM

JOB DESCRIPTION

Wastewater

JOB NUMBER

192-496-1

Eurofins Arkansas

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
4/6/2023 5:12:32 PM

Authorized for release by
Steve Bradford, Lab Director
steve.bradford@et.eurofinsus.com
Designee for
John Overbey, Business Unit Manager
john.overbey@et.eurofinsus.com
(501)224-5060



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
QC Association Summary	7
Lab Chronicle	8
Certification Summary	9
Method Summary	10
Sample Summary	11
Chain of Custody	12
Receipt Checklists	13

Definitions/Glossary

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Job ID: 192-496-1

Laboratory: Eurofins Arkansas

Narrative

Job Narrative
192-496-1

Comments

Analysis for E.Coli was requested on the Chain of Custody. Due to laboratory error, the samples were analyzed for Fecal Coliform.

Receipt

The samples were received on 4/5/2023 3:42 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.1° C.

Biology

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

1

2

3

4

5

6

7

8

9

10

11

12

Client Sample Results

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Client Sample ID: MWW Sample site #1

Lab Sample ID: 192-496-1

Date Collected: 04/05/23 13:35

Matrix: Water

Date Received: 04/05/23 15:42

Method: IDEXX Coliform - Coliforms, Fecal

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	>24000		10	MPN/100mL			04/05/23 16:16	10

Client Sample ID: MWW Sample site #2

Lab Sample ID: 192-496-2

Date Collected: 04/05/23 13:33

Matrix: Water

Date Received: 04/05/23 15:42

Method: IDEXX Coliform - Coliforms, Fecal

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Coliform, Fecal	20000		10	MPN/100mL			04/05/23 16:16	10

QC Association Summary

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Biology

Analysis Batch: 711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
192-496-1	MWW Sample site #1	Total/NA	Water	Coliform	
192-496-2	MWW Sample site #2	Total/NA	Water	Coliform	

1

2

3

4

5

6

7

8

9

10

11

12

Lab Chronicle

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Client Sample ID: MWW Sample site #1

Date Collected: 04/05/23 13:35

Date Received: 04/05/23 15:42

Lab Sample ID: 192-496-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Coliform		10	711	NK6	EET ARK	04/05/23 16:16

Client Sample ID: MWW Sample site #2

Date Collected: 04/05/23 13:33

Date Received: 04/05/23 15:42

Lab Sample ID: 192-496-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Coliform		10	711	NK6	EET ARK	04/05/23 16:16

Laboratory References:

EET ARK = Eurofins Arkansas, 8600 Kanis Rd, Little Rock, AR 72204, TEL (501)224-5060

Accreditation/Certification Summary

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Laboratory: Eurofins Arkansas

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	60-0889	03-01-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Method Summary

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Method	Method Description	Protocol	Laboratory
Coliform	Coliforms, Fecal	IDEXX	EET ARK

Protocol References:

IDEXX = IDEXX Laboratories

Laboratory References:

EET ARK = Eurofins Arkansas, 8600 Kanis Rd, Little Rock, AR 72204, TEL (501)224-5060

1

2

3

4

5

6

7

8

9

10

11

12

Sample Summary

Client: Malvern Water Works
Project/Site: Wastewater

Job ID: 192-496-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
192-496-1	MWW Sample site #1	Water	04/05/23 13:35	04/05/23 15:42
192-496-2	MWW Sample site #2	Water	04/05/23 13:33	04/05/23 15:42

1

2

3

4

5

6

7

8

9

10

11

12



LABORATORIES

8600 Karnis Road
Little Rock, AR 72204-2322
(501) 224-5060
FAX (501) 224-5072



192-496 COC

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE OF

				ANALYSES REQUESTED				AIC CONTROL NO:			
AIC No.	Sample Identification	Date/Time Collected	NO OF BOTTLES	SAMPLE MATRIX		NO OF BOTTLES	ANALYSES REQUESTED		Remarks	Carrier:	Received on ice (4°C)? YES <input checked="" type="radio"/> NO <input type="radio"/>
				WATER	SOIL		H	B			
	MWWS Sample Site #1	4/5/23 1:35 PM	1	<input checked="" type="checkbox"/>							
	MWWS Sample Site #2	4/5/23 1:33 PM	1		<input checked="" type="checkbox"/>						
Client: MALVERN WASTEWATER Project Reference: Project Manager: MASON BECKER Sampled By:											
Container Type		Preservative		G = Glass NO = none		V = VOA vials N = Nitric acid pH2		H = HCl to pH2 B = NaOH to pH12		T = Sodium Thiosulfate Z = Zinc acetate	
Turnaround Time Requested: (Please circle) NORMAL or EXPEDITED IN <u> </u> DAYS				Relinquished By: <u>Mason Becker</u> Date/Time: <u>4/5/23 3:42 PM</u>				Received By: <u> </u> Date/Time: <u> </u>			
Expedited results requested by:				Relinquished By: <u> </u> Date/Time: <u> </u>				Received in Lab By: <u> </u> Date/Time: <u>4-5-23 1543</u>			
Who should AIC contact with questions: Phone: _____ Fax: _____											
Report Attention to: _____											
Report Address to: _____											

FORM 0080



Login Sample Receipt Checklist

Client: Malvern Water Works

Job Number: 192-496-1

Login Number: 496

List Source: Eurofins Arkansas

List Number: 1

Creator: Kinley, Cody

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

