



8100 National Dr. - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

13 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396

Project: Lagoon Discharge Sample
Project Number: August 2024
SDG Number: 2408126

Enclosed are the results of analyses for samples received by the laboratory on 07-Aug-24 15:00. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Received On Ice	✓
Temperature on Receipt	2.0°C

Sincerely,

A handwritten signature in blue ink that reads "Norma James".

Norma James
Technical Director

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13 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 07-Aug-24 15:00



CASE NARRATIVE

Sample Delivery Group – 2408126

One OR more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

BOD/CBOD QUALIFIERS:

<u>Qualifier</u>	<u>Description</u>
B-01	Method requirements for oxygen depletion failed.
B-02	Method requirements for residual oxygen failed.
B-03	Depletion of the blank exceeded method requirements.
B-04	Test replicates show a >30% difference between the highest and lowest values .
B-06	Seed correction failed to meet method requirements.
CI-1	Estimated result due to treatment for excessive chlorine.
%D2 / E5	Laboratory Control Spike (LCS) and/or Laboratory Control Spike Duplicate (LCSD) failed to recover with acceptance criteria (%D2). Associated results were qualified as "estimated" (E5).

13 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 07-Aug-24 15:00



ANALYTICAL RESULTS

Lab Number:		2408126-01					
Sample Name:		Lagoon Discharge Grab (Wynne)					
Date/Time Collected:		8/7/24 10:00					
Sample Matrix:		Water					
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Ammonia as N	mg/L	0.604		8/9/24 8:14	B408154	SM 4500-NH3 B,D,C-2021/EPA 250.1	
Fecal Coliforms	MPN/100 mL	960		8/7/24 15:09	B408139	IDEXX Colilert-18	
TSS	mg/L	35.9		8/8/24 16:20	B408147	SM 2540 D-2015	
CBOD	mg/L	11.4	B-04	8/8/24 13:02	B408145	SM 5210B-2016	

ANALYTICAL RESULTS

Lab Number:		2408126-02					
Sample Name:		Lagoon Discharge Field Analysis (AR Analytical)					
Date/Time Collected:		8/7/24 11:50					
Sample Matrix:		Water					
<u>Field Analyses</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Dissolved Oxygen	mg/L	12.0		8/7/24 11:50	B408175	SM 4500-O G-2011	
pH	S.U.	8.58		8/7/24 11:50	B408173	SM 4500-H+ B-2011	
Temperature	°C	28.7		8/7/24 11:50	B408174	SM 2550B-2000	

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Wynne, AR 72396
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QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B408139 (Water)

Prepared: 07-Aug-24 15:09 By: KJ -- Analyzed: 07-Aug-24 15:09 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	ND MPN/100 mL	NA	

Wet Chemistry -- Batch: B408145 (Water)

Prepared: 08-Aug-24 13:02 By: KD -- Analyzed: 08-Aug-24 13:02 By: KD

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	128% / 124%	NA / NA		3.04%	

Wet Chemistry -- Batch: B408147 (Water)

Prepared: 08-Aug-24 16:20 By: MH -- Analyzed: 08-Aug-24 16:20 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	92.0% / 86.0%	NA / NA		6.74%	

Wet Chemistry -- Batch: B408154 (Water)

Prepared: 09-Aug-24 08:14 By: KJ -- Analyzed: 09-Aug-24 08:14 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	93.9% / NA	101% / 101%		0.677%	

Field Analyses -- Batch: B408173 (Water)

Prepared: 07-Aug-24 08:36 By: MH -- Analyzed: 07-Aug-24 08:36 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	101% / 101%	NA / NA		0.00%	

Field Analyses -- Batch: B408174 (Water)

Prepared: 07-Aug-24 13:52 By: MH -- Analyzed: 07-Aug-24 13:52 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	28.9 °C	0.345%	

Field Analyses -- Batch: B408175 (Water)

Prepared: 07-Aug-24 13:52 By: MH -- Analyzed: 07-Aug-24 13:52 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	6.97 mg/L	0.287%	

QUALIFIER(S)

*B-04: Test replicates show a >30% difference between the highest and lowest values

13 August 2024

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Project Number: August 2024
Date Received: 07-Aug-24 15:00



All Analysis performed according to EPA approved methodology when available :
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

A handwritten signature in blue ink, reading "Norma James", is positioned above a horizontal line.

Reviewed by:

Norma James
Technical Director



8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION				Project Description				Turnaround Time		Preservation Codes:										
Wynne Water Utilities				Lagoon Discharge Sample				1 Day (100%)	1. Cool, 6 Degrees Centigrade						4. Thiosulfate for Dechlorination					
121 East Merriman				Weekly Sample				2 Day (50%)	2. Sulfuric Acid (H ₂ SO ₄), pH < 2						5. Hydrochloric Acid(HCl)					
Wynne, AR 72396				Reporting Information				3 Day (25%)	3. Nitric Acid (HNO ₃), pH < 2						6. Sodium Hydroxide (NaOH), pH > 12					
Attn: Josh Weaver				Telephone: 870-238-2751				5 Day (Routine)	TEST PARAMETERS										Bottle Type Code	
				Fax: 870-238-2044				Preservative Code:	1	1	1,2	1,4						G = Glass; P = Plastic		
				Email: jweaver.wwu@gmail.com				Bottle Type:	P	P	P	P						V = Septum; A = Amber		
Sampler(s) Signature:				Sampler(s) Printed: Josh Weaver														Arkansas Analytical Work Order Number: 2408124		
Field Number	SAMPLE COLLECTION		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION		Field (pH, D.O., Temperature)	CBOD, TSS	Ammonia	Fecal Coliform								
	8/7	10 AM	X		3	Water	Lagoon Discharge Grab (Wynne)		X	X	X						01			
	8/7/24	1150	X		0	Water	Lagoon Discharge Field Analysis (AR Analytical)	X									02			
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 8/7/24																				
		Sample		Duplicate		QC		QC Duplicate		Field Calibration Record -- DATE: 8/7/24										
		pH (S.U.)		858		864		705		705		pH / Time		D.O.		Chlorine				
		Time		1150		1155		835		836										
		Temperature (°C)		28.7		28.5		24.1		24.0		4		Time		QC Time				
		Time		1150		1155		835		836		7		Slope		1				
		Dissolved Oxygen (mg/L)		11.96		11.90						10				2				
		Time		1150		1155														
1. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		SAMPLE CONDITION UPON RECEIPT IN LAB						REMARKS / SAMPLE COMMENTS								
		8/7/24				1. CUSTODY SEALS: <input checked="" type="checkbox"/> Yes ___ No														
						2. CONTAINERS CORRECT: <input checked="" type="checkbox"/> Yes ___ No														
						3. COC/LABELS AGREE: <input checked="" type="checkbox"/> Yes ___ No														
3. Relinquished by: (Signature)		Date/Time		4. Received by lab: (Signature)		4. RECEIVED ON ICE: <input checked="" type="checkbox"/> Yes ___ No														
		1500				5. TEMPERATURE ON RECEIPT: 2°C														
		8/7/24				6. TEMPERATURE GUN ID: HHT#														
Revision 3 1/4/16																				
FOR COMPLETION BY LAB ONLY																				



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501-455-3233 Fax 501-455-6118

21 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396

Project: Lagoon Discharge Sample

Project Number: August 2024

SDG Number: 2408299

Enclosed are the results of analyses for samples received by the laboratory on 14-Aug-24 15:15. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Received On Ice	✓
Temperature on Receipt	3.0°C

Sincerely,

A handwritten signature in blue ink that reads "Norma James".

Norma James
Technical Director

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21 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 14-Aug-24 15:15



CASE NARRATIVE

Sample Delivery Group – 2408299

One OR more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

QUALIFIERS:

<u>Qualifier</u>	<u>Description</u>
FC	The sample result is actually GREATER THAN the 2420 MPN/100 mL. The sample growth exceeded the limit of the procedure.
TNTC	Too Numerous to Count

21 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 14-Aug-24 15:15



ANALYTICAL RESULTS

Lab Number:		2408299-01					
Sample Name:		Lagoon Discharge Grab (Wynne)					
Date/Time Collected:		8/14/24 10:00					
Sample Matrix:		Water					
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Ammonia as N	mg/L	< 0.500		8/16/24 8:15	B408306	SM 4500-NH3 B,D,C-2021/EPA	
Fecal Coliforms	MPN/100 mL	TNTC	FC, TNTC	8/14/24 15:10	B408275	IDEXX Colilert-18	
TSS	mg/L	51.5		8/15/24 16:25	B408284	SM 2540 D-2015	
CBOD	mg/L	12.1		8/15/24 7:42	B408271	SM 5210B-2016	

ANALYTICAL RESULTS

Lab Number:		2408299-02					
Sample Name:		Lagoon Discharge Field Analysis (AR Analytical)					
Date/Time Collected:		8/14/24 12:10					
Sample Matrix:		Water					
<u>Field Analyses</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Dissolved Oxygen	mg/L	9.90		8/14/24 12:10	B408336	SM 4500-O G-2011	
pH	S.U.	8.75		8/14/24 12:10	B408334	SM 4500-H+ B-2011	
Temperature	°C	27.8		8/14/24 12:10	B408335	SM 2550B-2000	

21 August 2024

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Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 14-Aug-24 15:15



QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B408271 (Water)

Prepared: 15-Aug-24 07:42 By: MB -- Analyzed: 15-Aug-24 07:42 By: CGF

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
CBOD	<2.00 mg/L	115% / 116%	NA / NA		0.764%	

Wet Chemistry -- Batch: B408275 (Water)

Prepared: 14-Aug-24 15:10 By: KJ -- Analyzed: 14-Aug-24 15:10 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	ND MPN/100 mL	NA	

Wet Chemistry -- Batch: B408284 (Water)

Prepared: 15-Aug-24 16:25 By: MH -- Analyzed: 15-Aug-24 16:25 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TSS	<1.00 mg/L	89.0% / 93.0%	NA / NA		4.40%	

Wet Chemistry -- Batch: B408306 (Water)

Prepared: 16-Aug-24 08:15 By: KJ -- Analyzed: 16-Aug-24 08:15 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Ammonia as N	<0.500 mg/L	94.9% / NA	93.5% / 88.5%		5.30%	

Field Analyses -- Batch: B408334 (Water)

Prepared: 14-Aug-24 08:47 By: MH -- Analyzed: 14-Aug-24 08:47 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
pH (Field)	NA	101% / 101%	NA / NA		0.00%	

Field Analyses -- Batch: B408335 (Water)

Prepared: 14-Aug-24 14:03 By: MH -- Analyzed: 14-Aug-24 14:03 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Temperature (Field)	NA	NA / NA	NA / NA	29.8 °C	0.00%	

Field Analyses -- Batch: B408336 (Water)

Prepared: 14-Aug-24 14:03 By: MH -- Analyzed: 14-Aug-24 14:03 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	6.50 mg/L	0.307%	

21 August 2024

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121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 14-Aug-24 15:15



QUALIFIER(S)

*FC: The sample result is actually GREATER THAN 2420 MPN/100mL. The sample growth exceeded the limit of the procedure.
*TNTC: Too Numerous To Count

All Analysis performed according to EPA approved methodology when available :
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

A handwritten signature in blue ink, reading "Norma James", is positioned above a horizontal line.

Reviewed by: _____
Norma James
Technical Director



8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION			Project Description			Turnaround Time		Preservation Codes:											
Wynne Water Utilities			Lagoon Discharge Sample			1 Day (100%)		1. Cool, 6 Degrees Centigrade					4. Thiosulfate for Dechlorination						
121 East Merriman			Weekly Sample			2 Day (50%)		2. Sulfuric Acid (H ₂ SO ₄), pH < 2					5. Hydrochloric Acid(HCl)						
Wynne, AR 72396			Reporting Information			3 Day (25%)		3. Nitric Acid (HNO ₃), pH < 2					6. Sodium Hydroxide (NaOH), pH > 12						
Attn: Josh Weaver			Telephone: 870-238-2751			5 Day (Routine)		TEST PARAMETERS										Bottle Type Code	
			Fax: 870-238-2044			Preservative Code:		1	1	1,2	1,4						G = Glass; P = Plastic		
			Email: jweaver.wvu@gmail.com			Bottle Type:		P	P	P	P						V = Septum; A = Amber		
Sampler(s) Signature:			Sampler(s) Printed: Josh Weaver															Arkansas Analytical Work Order Number: 2408299	
Field Number	SAMPLE COLLECTION		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION		Field (pH, D.O., Temperature)	CBOD, TSS	Ammonia	Fecal Coliform							
	8/14	10 AM	X		3	Water	Lagoon Discharge Grab (Wynne)		X	X	X						01		
	8/14/24	1210	X		0	Water	Lagoon Discharge Field Analysis (AR Analytical)	X									02		
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 8/14/24																			
		Sample	Duplicate		QC	QC Duplicate	Field Calibration Record -- DATE: 8/14/24												
pH (S.U.)		8.75	8.79		7.05	7.05	pH / Time	D.O.		Chlorine									
Time		1210	1215		846	847	Time		Slope		QC Time								
Temperature (°C)		27.8	27.7		23.7	23.6	4				1								
Time		1210	1215		846	847	7				2								
Dissolved Oxygen (mg/L)		9.90	9.94				10												
Time		1210	1215				844												
1. Relinquished by: (Signature)			Date/Time			2. Received by: (Signature)			SAMPLE CONDITION UPON RECEIPT IN LAB					REMARKS / SAMPLE COMMENTS					
			8/14						1. CUSTODY SEALS: Yes ___ No ___										
									2. CONTAINERS CORRECT: Yes ___ No ___										
									3. COC/LABELS AGREE: Yes ___ No ___										
3. Relinquished by: (Signature)			Date/Time			4. Received by lab: (Signature)			4. RECEIVED ON ICE: Yes ___ No ___										
			1515						5. TEMPERATURE ON RECEIPT: 3 °C										
			8/14/24						6. TEMPERATURE GUN ID: HHT#										
Revision 3 1/4/16																			
FOR COMPLETION BY LAB ONLY																			



8100 National Dr. - Little Rock, AR 72209
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28 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396

Project: Lagoon Discharge Sample
Project Number: August 2024
SDG Number: 2408466

Enclosed are the results of analyses for samples received by the laboratory on 21-Aug-24 16:00. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Received On Ice	✓
Temperature on Receipt	3.0°C

Sincerely,

A handwritten signature in blue ink that reads "Norma James".

Norma James
Technical Director

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28 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 21-Aug-24 16:00



CASE NARRATIVE

Sample Delivery Group – 2408466

One OR more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

BOD/CBOD QUALIFIERS:

<u>Qualifier</u>	<u>Description</u>
B-01	Method requirements for oxygen depletion failed.
B-02	Method requirements for residual oxygen failed.
B-03	Depletion of the blank exceeded method requirements.
B-04	Test replicates show a >30% difference between the highest and lowest values .
B-06	Seed correction failed to meet method requirements.
CI-1	Estimated result due to treatment for excessive chlorine.
%D2 / E5	Laboratory Control Spike (LCS) and/or Laboratory Control Spike Duplicate (LCSD) failed to recover with acceptance criteria (%D2). Associated results were qualified as "estimated" (E5).

28 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 21-Aug-24 16:00



ANALYTICAL RESULTS

Lab Number:		2408466-01					
Sample Name:		Lagoon Discharge Grab (Wynne)					
Date/Time Collected:		8/21/24 10:00					
Sample Matrix:		Water					
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Ammonia as N	mg/L	< 0.500		8/23/24 8:28	B408447	SM 4500-NH3 B,D,C-2021/EPA	
Fecal Coliforms	MPN/100 mL	1200		8/21/24 15:40	B408422	IDEXX Colilert-18	
TSS	mg/L	36.0		8/26/24 9:10	B408440	SM 2540 D-2015	
CBOD	mg/L	20.9	B-04	8/23/24 7:00	B408441	SM 5210B-2016	

ANALYTICAL RESULTS

Lab Number:		2408466-02					
Sample Name:		Lagoon Discharge Field Analysis (AR Analytical)					
Date/Time Collected:		8/21/24 12:57					
Sample Matrix:		Water					
<u>Field Analyses</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Dissolved Oxygen	mg/L	14.6		8/21/24 12:57	B408478	SM 4500-O G-2011	
pH	S.U.	8.90		8/21/24 12:57	B408476	SM 4500-H+ B-2011	
Temperature	°C	26.9		8/21/24 12:57	B408477	SM 2550B-2000	

28 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 21-Aug-24 16:00



QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B408422 (Water)

Prepared: 21-Aug-24 15:40 By: KJ -- Analyzed: 21-Aug-24 15:40 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	14 MPN/100 mL	73.5%	

Wet Chemistry -- Batch: B408440 (Water)

Prepared: 26-Aug-24 09:10 By: MH -- Analyzed: 26-Aug-24 09:10 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TSS	<1.00 mg/L	92.0% / 94.0%	NA / NA		2.15%	

Wet Chemistry -- Batch: B408441 (Water)

Prepared: 23-Aug-24 07:00 By: KD -- Analyzed: 23-Aug-24 07:00 By: KD

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
CBOD	<2.00 mg/L	135% / 138%	NA / NA		2.15%	

Wet Chemistry -- Batch: B408447 (Water)

Prepared: 23-Aug-24 08:28 By: KJ -- Analyzed: 23-Aug-24 08:28 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Ammonia as N	<0.500 mg/L	98.0% / NA	102% / 102%		0.454%	

Field Analyses -- Batch: B408476 (Water)

Prepared: 21-Aug-24 08:37 By: MH -- Analyzed: 21-Aug-24 08:37 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
pH (Field)	NA	101% / 101%	NA / NA		0.284%	

Field Analyses -- Batch: B408477 (Water)

Prepared: 21-Aug-24 14:45 By: MH -- Analyzed: 21-Aug-24 14:45 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Temperature (Field)	NA	NA / NA	NA / NA	27.7 °C	0.362%	

Field Analyses -- Batch: B408478 (Water)

Prepared: 21-Aug-24 14:45 By: MH -- Analyzed: 21-Aug-24 14:45 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	7.13 mg/L	0.420%	

QUALIFIER(S)

*B-04: Test replicates show a >30% difference between the highest and lowest values

28 August 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 21-Aug-24 16:00



All Analysis performed according to EPA approved methodology when available :
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

A handwritten signature in blue ink, reading "Norma James", is positioned above a horizontal line.

Reviewed by:

Norma James
Technical Director

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION						Project Description				Turnaround Time		Preservation Codes:									
Wynne Water Utilities						Lagoon Discharge Sample				1 Day (100%)		1. Cool, 6 Degrees Centigrade				4. Thiosulfate for Dechlorination					
121 East Merriman						Weekly Sample				2 Day (50%)		2. Sulfuric Acid (H ₂ SO ₄), pH < 2				5. Hydrochloric Acid(HCl)					
Wynne, AR 72396						Reporting Information				3 Day (25%)		3. Nitric Acid (HNO ₃), pH < 2				6. Sodium Hydroxide (NaOH), pH > 12					
						Telephone: 870-238-2751				5 Day (Routine)		TEST PARAMETERS								Bottle Type Code	
Attn: Josh Weaver						Fax: 870-238-2044				Preservative Code:		1	1	1,2	1,4					G = Glass; P = Plastic	
						Email: jweaver.wvu@gmail.com				Bottle Type:		P	P	P	P					V = Septum; A = Amber	
Sampler(s) Signature: [Signature]						Sampler(s) Printed: Josh Weaver						Field (pH, D.O., Temperature)		CBOD, TSS		Ammonia		Fecal Coliform		Arkansas Analytical Work Order Number: 2408466	
Field Number		SAMPLE COLLECTION Date/s Time/s		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION													
		8/21 10AM		X		3	Water	Lagoon Discharge Grab (Wynne)						X		X		X		01	
		8/21/24 1257		X		0	Water	Lagoon Discharge Field Analysis (AR Analytical)				X								02	
								ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 8/21/24													
								pH (S.U.)	890	893	706	704	Field Calibration Record -- DATE: 8/21/24								
								Time	1257	1300	836	837	pH / Time		D.O.		Chlorine				
								Temperature (°C)	26.9	27.0	21.0	21.1	4 ↓		Time		QC Time				
								Time	1257	1300	836	837	7 ↓		Slope		1				
								Dissolved Oxygen (mg/L)	14.64	14.69			10 ↓				2				
								Time	1257	1300			832								
1. Relinquished by: (Signature)				Date/Time		2. Received by: (Signature)				SAMPLE CONDITION UPON RECEIPT IN LAB				REMARKS / SAMPLE COMMENTS							
[Signature]				8/21/24		[Signature]				1. CUSTODY SEALS: ✓ Yes ___ No											
						[Signature]				2. CONTAINERS CORRECT: ✓ Yes ___ No											
										3. COC/LABELS AGREE: ✓ Yes ___ No											
3. Relinquished by: (Signature)				Date/Time		4. Received by lab: (Signature)				4. RECEIVED ON ICE: ___ Yes ___ No											
[Signature]				8/21/24		Jami Nelson				5. TEMPERATURE ON RECEIPT: 3 °C											
										6. TEMPERATURE GUN ID: HHT# 5											
FOR COMPLETION BY LAB ONLY																					



8100 National Dr. - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

04 September 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396

Project: Lagoon Discharge Sample

Project Number: August 2024

SDG Number: 2408630

Enclosed are the results of analyses for samples received by the laboratory on 28-Aug-24 14:50. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Received On Ice	✓
Temperature on Receipt	2.0°C

Sincerely,

A handwritten signature in blue ink that reads "Norma James".

Norma James
Technical Director

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04 September 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 28-Aug-24 14:50



CASE NARRATIVE

Sample Delivery Group – 2408630

One OR more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

BOD/CBOD QUALIFIERS:

<u>Qualifier</u>	<u>Description</u>
B-01	Method requirements for oxygen depletion failed.
B-02	Method requirements for residual oxygen failed.
B-03	Depletion of the blank exceeded method requirements.
B-04	Test replicates show a >30% difference between the highest and lowest values .
B-06	Seed correction failed to meet method requirements.
CI-1	Estimated result due to treatment for excessive chlorine.
%D2 / E5	Laboratory Control Spike (LCS) and/or Laboratory Control Spike Duplicate (LCSD) failed to recover with acceptance criteria (%D2). Associated results were qualified as "estimated" (E5).

04 September 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 28-Aug-24 14:50



ANALYTICAL RESULTS

Lab Number:		2408630-01					
Sample Name:		Lagoon Discharge Grab (Wynne)					
Date/Time Collected:		8/28/24 10:00					
Sample Matrix:		Water					
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Ammonia as N	mg/L	< 0.500		8/30/24 8:21	B408607	SM 4500-NH3 B,D,C-2021/EPA	
Fecal Coliforms	MPN/100 mL	1600		8/28/24 15:00	B408600	IDEXX Colilert-18	
TSS	mg/L	57.5		8/30/24 14:59	B408605	SM 2540 D-2015	
CBOD	mg/L	12.4	B-04	8/29/24 7:45	B408568	SM 5210B-2016	

ANALYTICAL RESULTS

Lab Number:		2408630-02					
Sample Name:		Lagoon Discharge Field Analysis (AR Analytical)					
Date/Time Collected:		8/28/24 11:29					
Sample Matrix:		Water					
<u>Field Analyses</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>	
Dissolved Oxygen	mg/L	16.6		8/28/24 11:29	B409020	SM 4500-O G-2011	
pH	S.U.	9.15		8/28/24 11:29	B409018	SM 4500-H+ B-2011	
Temperature	°C	30.9		8/28/24 11:29	B409019	SM 2550B-2000	

04 September 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 28-Aug-24 14:50



QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B408568 (Water)

Prepared: 29-Aug-24 07:45 By: KD -- Analyzed: 29-Aug-24 07:45 By: CGF

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
CBOD	<2.00 mg/L	137% / 126%	NA / NA		8.48%	

Wet Chemistry -- Batch: B408600 (Water)

Prepared: 28-Aug-24 14:30 By: KJ -- Analyzed: 28-Aug-24 14:30 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	ND MPN/100 mL	NA	

Wet Chemistry -- Batch: B408605 (Water)

Prepared: 30-Aug-24 08:20 By: BH -- Analyzed: 30-Aug-24 14:59 By: BH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TSS	<1.00 mg/L	86.0% / 95.0%	NA / NA		9.94%	

Wet Chemistry -- Batch: B408607 (Water)

Prepared: 30-Aug-24 08:21 By: KJ -- Analyzed: 30-Aug-24 08:21 By: KJ

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Ammonia as N	<0.500 mg/L	98.2% / NA	97.5% / 98.3%		0.756%	

Field Analyses -- Batch: B409018 (Water)

Prepared: 28-Aug-24 08:41 By: MH -- Analyzed: 28-Aug-24 08:41 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
pH (Field)	NA	100% / 100%	NA / NA		0.00%	

Field Analyses -- Batch: B409019 (Water)

Prepared: 28-Aug-24 13:35 By: MH -- Analyzed: 28-Aug-24 13:35 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Temperature (Field)	NA	NA / NA	NA / NA	30.0 °C	0.333%	

Field Analyses -- Batch: B409020 (Water)

Prepared: 28-Aug-24 13:35 By: MH -- Analyzed: 28-Aug-24 13:35 By: MH

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	4.60 mg/L	0.650%	

QUALIFIER(S)

*B-04: Test replicates show a >30% difference between the highest and lowest values

04 September 2024

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2024
Date Received: 28-Aug-24 14:50

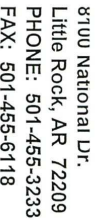


All Analysis performed according to EPA approved methodology when available :
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

A handwritten signature in blue ink, reading "Norma James", is positioned above a horizontal line.

Reviewed by:

Norma James
Technical Director



CHAIN OF CUSTODY RECORD

[illegible]