



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

18 May 2023

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

Project: Lagoon Discharge Sample

Project Number: May 2023

SDG Number: 2305347

Enclosed are the results of analyses for samples received by the laboratory on 10-May-23 15:15. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	5.0°C

Sincerely,

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

Norma James
Technical Director

This document is intended only for the use of the person(s) to whom it is expressly addressed. This document may contain information that is confidential and legally privileged. If you are not the intended recipient, you are notified that any disclosure, distribution, or copying of this document is strictly prohibited. If you have received this document in error, please destroy.

18 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 10-May-23 15:15

ANALYTICAL RESULTS

Lab Number: 2305347-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 5/10/23 11:45
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		5/12/23 8:30	B305260	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	< 1		5/10/23 15:30	B305255	IDEXX Colilert-18
TSS	mg/L	19.5		5/12/23 10:25	B305256	SM 2540 D-2015
CBOD	mg/L	4.95		5/12/23 7:26	B305257	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2305347-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 5/10/23 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	7.55		5/10/23 11:54	B305304	SM 4500-O G-2011
pH	S.U.	7.62		5/10/23 11:50	B305307	SM 4500-H+ B-2011
Temperature	°C	28.3		5/10/23 11:52	B305305	SM 2550B-2000

18 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 10-May-23 15:15

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B305255 (Water)

Prepared: 10-May-23 15:30 By: KJ -- Analyzed: 10-May-23 15:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	3 MPN/100 mL	135%	

Wet Chemistry -- Batch: B305256 (Water)

Prepared: 12-May-23 10:25 By: MH -- Analyzed: 12-May-23 10:25 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	90.0% / 91.0%	NA / NA		1.10%	

Wet Chemistry -- Batch: B305257 (Water)

Prepared: 12-May-23 07:26 By: MB -- Analyzed: 12-May-23 07:26 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	92.1% / 98.5%	NA / NA		6.79%	

Wet Chemistry -- Batch: B305260 (Water)

Prepared: 12-May-23 08:30 By: KJ -- Analyzed: 12-May-23 08:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	89.3% / NA	99.8% / 96.5%		3.34%	

Field Analyses -- Batch: B305304 (Water)

Prepared: 10-May-23 14:05 By: MH -- Analyzed: 10-May-23 14:05 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	7.19 mg/L	0.00%	

Field Analyses -- Batch: B305305 (Water)

Prepared: 10-May-23 14:03 By: MH -- Analyzed: 10-May-23 14:03 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	23.4 °C	0.00%	

Field Analyses -- Batch: B305307 (Water)

Prepared: 10-May-23 09:12 By: MH -- Analyzed: 10-May-23 09:12 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	99.7% / 99.7%	NA / NA		0.00%	

18 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 10-May-23 15:15

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 that reads "Norma James". The signature is written in a cursive style and 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 121 East Merriman Wynne, AR 72396			Lagoon Discharge Sample Weekly Sample Reporting Information			1 Day (100%) 2 Day (50%) 3 Day (25%) 5 Day (routine)			1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid (HCl) 6. Sodium Hydroxide (NaOH), pH > 12										
Attn: Josh Weaver			Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.www@gmail.com			Preservative Code: Bottle Type:			TEST PARAMETERS 1 1 1,2 1,4 P P P P Field (pH, D.O., Temperature) CBOD, TSS Ammonia Fecal Coliform										
Sampler(s) Signature: <i>Josh Weaver</i>			Sampler(s) Printed: <i>Josh Weaver</i>			Sample of Bottles Matrix			Bottle Type Code G = Glass, P = Plastic V = Septum, A = Amber										
SAMPLE COLLECTION		IDENTIFICATION/ DESCRIPTION		SAMPLE		ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 5/10/23													
Field Number	Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	Sample	Duplicate	QC	QC Duplicate	Field Calibration Record -- DATE: 5/10/23								
	5/10	1145	X		3	Water	762	762	698	698	pH / Time	D.O.	Time	QC	Time				
	5/10/23	1150	X		0	Water	1150	1151	910	912	4		1154		1				
							2833	2833			7				2				
							1152	1153			10								
							755	755			9.00								
							1154	1155											
1. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		Date/Time		3. Relinquished by: (Signature)						Date/Time					
<i>Josh Weaver</i>		5/10		<i>Natasha</i>		5/10		<i>Natasha</i>						1515 5/10/23					
3. Relinquished by: (Signature)		Date/Time		4. Received on receipt:		Temperature on receipt: °C		5. Temperature gun ID:						HHT#					
<i>Josh Weaver</i>		1515 5/10/23		1145 5/10/23		3		11446						FOR COMPLETION BY LAB ONLY					



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

24 May 2023

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

Project: Lagoon Discharge Sample
Project Number: May 2023
SDG Number: 2305501

Enclosed are the results of analyses for samples received by the laboratory on 17-May-23 15:15. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	1.0°C

Sincerely,

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

Norma James
Technical Director

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24 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 17-May-23 15:15

ANALYTICAL RESULTS

Lab Number: 2305501-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 5/17/23 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	3.23		5/22/23 8:30	B305517	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	190		5/17/23 15:51	B305514	IDEXX Colilert-18
TSS	mg/L	14.5		5/19/23 8:45	B305402	SM 2540 D-2015
CBOD	mg/L	9.08		5/18/23 7:27	B305403	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2305501-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 5/17/23 13:25
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	9.67		5/17/23 13:29	B305495	SM 4500-O G-2011
pH	S.U.	8.35		5/17/23 13:25	B305494	SM 4500-H+ B-2011
Temperature	°C	25.0		5/17/23 13:27	B305497	SM 2550B-2000

24 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 17-May-23 15:15

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B305402 (Water)

Prepared: 19-May-23 08:45 By: MH -- Analyzed: 19-May-23 08:45 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	94.0% / 90.0%	NA / NA		4.35%	

Wet Chemistry -- Batch: B305403 (Water)

Prepared: 18-May-23 07:27 By: MB -- Analyzed: 18-May-23 07:27 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	119% / 109%	NA / NA		9.28%	

Field Analyses -- Batch: B305494 (Water)

Prepared: 17-May-23 08:52 By: MH -- Analyzed: 17-May-23 08:52 By: MH

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

Field Analyses -- Batch: B305495 (Water)

Prepared: 17-May-23 09:05 By: MH -- Analyzed: 17-May-23 09:05 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	7.49 mg/L	0.267%	

Field Analyses -- Batch: B305497 (Water)

Prepared: 17-May-23 09:03 By: MH -- Analyzed: 17-May-23 09:03 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	23.7 °C	0.00%	

Wet Chemistry -- Batch: B305514 (Water)

Prepared: 17-May-23 15:51 By: KJ -- Analyzed: 17-May-23 15:51 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: B305517 (Water)

Prepared: 22-May-23 08:30 By: KJ -- Analyzed: 22-May-23 08:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	91.0% / NA	91.9% / 89.0%		2.55%	

24 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 17-May-23 15:15

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 that reads "Norma James". The signature is written in a cursive style and is positioned above a horizontal line.

Reviewed by: _____
Norma James
Technical Director



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

30 May 2023

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

Project: Lagoon Discharge Sample
Project Number: May 2023
SDG Number: 2305656

Enclosed are the results of analyses for samples received by the laboratory on 24-May-23 15:10. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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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30 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 24-May-23 15:10

ANALYTICAL RESULTS

Lab Number: 2305656-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 5/24/23 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	4.35		5/26/23 10:00	B305624	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	29		5/24/23 15:40	B305604	IDEXX Colilert-18
TSS	mg/L	26.5		5/25/23 15:25	B305572	SM 2540 D-2015
CBOD	mg/L	9.52		5/25/23 7:25	B305577	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2305656-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 5/24/23 11:55
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	9.95		5/24/23 11:59	B305643	SM 4500-O G-2011
pH	S.U.	8.50		5/24/23 11:55	B305641	SM 4500-H+ B-2011
Temperature	°C	26.7		5/24/23 11:57	B305642	SM 2550B-2000

30 May 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 24-May-23 15:10

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B305572 (Water)

Prepared: 25-May-23 15:25 By: MH -- Analyzed: 25-May-23 15:25 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	92.0% / 89.0%	NA / NA		3.31%	

Wet Chemistry -- Batch: B305577 (Water)

Prepared: 25-May-23 07:25 By: MB -- Analyzed: 25-May-23 07:25 By: MB

<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	103% / 103%	NA / NA		0.00%	

Wet Chemistry -- Batch: B305604 (Water)

Prepared: 24-May-23 15:40 By: KJ -- Analyzed: 24-May-23 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	ND MPN/100 mL	200%	

Wet Chemistry -- Batch: B305624 (Water)

Prepared: 26-May-23 10:00 By: KJ -- Analyzed: 26-May-23 10:00 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	91.0% / NA	93.7% / 92.3%		1.46%	

Field Analyses -- Batch: B305641 (Water)

Prepared: 24-May-23 09:27 By: MH -- Analyzed: 24-May-23 09:27 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	99.9% / 99.9%	NA / NA		0.00%	

Field Analyses -- Batch: B305642 (Water)

Prepared: 17-May-23 13:53 By: MH -- Analyzed: 17-May-23 13:53 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	25.4 °C	0.00%	

Field Analyses -- Batch: B305643 (Water)

Prepared: 24-May-23 13:55 By: MH -- Analyzed: 24-May-23 13:55 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	6.30 mg/L	0.00%	

30 May 2023

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 24-May-23 15:10



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 that reads "Norma James". The signature is written in a cursive style and 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 121 East Merriman Wynne, AR 72396			Lagoon Discharge Sample Weekly Sample Reporting Information Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.wvu@gmail.com			1 Day (100%) 2 Day (50%) 3 Day (25%) 5 Day (Routine)			1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid (HCl) 6. Sodium Hydroxide (NaOH), pH > 12					
Attn: Josh Weaver			Preservative Code: Bottle Type:			1 P			TEST PARAMETERS 1 1,2 1,4 P P P P Field (pH, D.O., Temperature) CBOD, TSS Ammonia Fecal Coliform					
Sampler(s) Signature: <i>Josh Weaver</i> Date/s: 5/24 Time/s: 10 AM 5/24/23			Number of Bottles: 3 Sample Matrix: Water Grab: X Comp: X			Sample Identification/Description: Lagoon Discharge Grab (Wynne) Lagoon Discharge Field Analysis (AR Analytical)			Bottle Type Code: G = Glass; P = Plastic V = Septum; A = Amber Arkansas Analytical Work Order Number: 23056056					
Field Number: Date/Time: Signature: <i>Josh Weaver</i>			Onsite Measurements by Arkansas Analytical -- DATE: 5/24/23 QC Duplicate pH (S.U.) 850 850 659 659 Time 1155 1156 925 927 Temperature (°C) 26.7 26.7 Time 1157 1158 Dissolved Oxygen (mg/L) 9.95 9.95 Time 1159 1200			Field Calibration Record -- DATE: 5/24/23 pH / Time D.O. 4 Time 9:29 7 Slope 100.0 10			Chlorine Time 1 2					
1. Relinquished by: (Signature) Date/Time: 5/24 Signature: <i>Josh Weaver</i>			2. Received by: (Signature) 1150 5/24/23 Signature: <i>Natasha Howard</i>			SAMPLE CONDITION UPON RECEIPT IN LAB 1. CUSTODY SEALS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. CONTAINERS CORRECT: Yes <input type="checkbox"/> No <input type="checkbox"/> 3. COC/LABELS AGREE: Yes <input type="checkbox"/> No <input type="checkbox"/> 4. RECEIVED ON ICE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 5. TEMPERATURE ON RECEIPT: °C 5 6. TEMPERATURE GUN ID: HHT#			REMARKS / SAMPLE COMMENTS					
3. Relinquished by: (Signature) Date/Time: 1510 5/24/23 Signature: <i>Josh Weaver</i>			4. Received by lab: (Signature) Signature: <i>Natasha Howard</i>			FOR COMPLETION BY LAB ONLY								



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

07 June 2023

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

Project: Lagoon Discharge Sample

Project Number: May 2023

SDG Number: 2305760

Enclosed are the results of analyses for samples received by the laboratory on 31-May-23 15:00. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	1.0°C

Sincerely,

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

Norma James
Technical Director

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07 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 31-May-23 15:00

ANALYTICAL RESULTS

Lab Number: 2305760-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 5/31/23 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	3.23		6/2/23 8:30	B306033	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	58		5/31/23 15:20	B306027	IDEXX Colilert-18
TSS	mg/L	14.0		6/1/23 15:50	B306014	SM 2540 D-2015
CBOD	mg/L	5.39		6/1/23 7:32	B306001	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2305760-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 5/31/23 11:30
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	7.47		5/31/23 11:34	B306025	SM 4500-O G-2011
pH	S.U.	7.85		5/31/23 11:30	B306022	SM 4500-H+ B-2011
Temperature	°C	28.6		5/31/23 11:32	B306024	SM 2550B-2000

07 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 31-May-23 15:00

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B306001 (Water)

Prepared: 01-Jun-23 07:32 By: MB -- Analyzed: 01-Jun-23 07:32 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	117% / 115%	NA / NA		1.77%	

Wet Chemistry -- Batch: B306014 (Water)

Prepared: 01-Jun-23 15:50 By: MH -- Analyzed: 01-Jun-23 15:50 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	90.0% / 94.0%	NA / NA		4.35%	

Field Analyses -- Batch: B306022 (Water)

Prepared: 31-May-23 09:32 By: MH -- Analyzed: 31-May-23 09:32 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	101% / 101%	NA / NA		0.142%	

Field Analyses -- Batch: B306024 (Water)

Prepared: 31-May-23 13:48 By: MH -- Analyzed: 31-May-23 13:48 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	26.0 °C	0.00%	

Field Analyses -- Batch: B306025 (Water)

Prepared: 31-May-23 13:35 By: MH -- Analyzed: 31-May-23 13:35 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	7.24 mg/L	0.138%	

Wet Chemistry -- Batch: B306027 (Water)

Prepared: 31-May-23 15:20 By: KJ -- Analyzed: 31-May-23 15:20 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	77 MPN/100 mL	27.2%	

Wet Chemistry -- Batch: B306033 (Water)

Prepared: 02-Jun-23 08:30 By: KJ -- Analyzed: 02-Jun-23 08:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	91.6% / NA	89.0% / 87.5%		1.59%	

07 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: May 2023
Date Received: 31-May-23 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 that reads "Norma James". The signature is written in a cursive style and 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 121 East Merriman Wynne, AR 72396			Lagoon Discharge Sample Weekly Sample Reporting Information			1 Day (100%) 2 Day (50%) 3 Day (25%) 5 Day (Routine)			1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid (HCl) 6. Sodium Hydroxide (NaOH), pH > 12								
Attn: Josh Weaver			Telephone: 870-238-2751			Preservative Code: 1 1 1,2 1,4			TEST PARAMETERS 1 1 1,2 1,4 P P P P Field (pH, D.O., Temperature) C BOD, TSS Ammonia Fecal Coliform								
Josh Weaver Sampler(s) Signature: <i>Josh Weaver</i> Sampler(s) Printed: <i>Josh Weaver</i>			Email: jweaver.wvu@gmail.com Bottle Type:			Bottle Type Code: G = Glass, P = Plastic V = Septum, A = Amber			Arkansas Analytical Work Order Number: <i>23057600</i>								
Field Number	Sample Collection Date/s	Time/s	Grab	Number of Bottles	Sample Matrix	IDENTIFICATION/ DESCRIPTION			ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: <i>5/31/23</i>								
	<i>5/31</i>	<i>10AM</i>	X	3	Water	Lagoon Discharge Grab (Wynne)	Sample	Duplicate	QC	QC Duplicate	Field Calibration Record -- DATE: <i>5/31/23</i>						
	<i>5/31/23</i>	<i>1130</i>	X	0	Water	Lagoon Discharge Field Analysis (AR Analytical)	pH (S.U.)	<i>785</i>	<i>787</i>	<i>765</i>	<i>704</i>	pH / Time	D.O.	Time	QC	Time	
							Temperature (°C)	<i>28.6</i>	<i>28.6</i>	<i>930</i>	<i>932</i>	7					
							Time	<i>1132</i>	<i>1133</i>			10					
							Dissolved Oxygen (mg/L)	<i>747</i>	<i>749</i>								
							Time	<i>1134</i>	<i>1135</i>								
1. Relinquished by: (Signature)			Date/Time			2. Received by: (Signature)			Date/Time			REMARKS / SAMPLE COMMENTS					
<i>Josh Weaver</i>			<i>5/31</i>			<i>1140</i>			<i>5/31/23</i>			1. CUSTODY SEALS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. CONTAINERS CORRECT: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 3. COC/LABELS AGREE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 4. RECEIVED ON ICE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 5. TEMPERATURE ON RECEIPT: °C <i>5</i> 6. TEMPERATURE GUN ID: HHT#					
3. Relinquished by: (Signature)			Date/Time			4. Received by: (Signature)			Date/Time			FOR COMPLETION BY LAB ONLY					
<i>Josh Weaver</i>			<i>1500</i>			<i>Natascha Howard</i>			<i>1500</i>			Revision-3 44446					



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

15 June 2023

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

Project: Lagoon Discharge Sample

Project Number: June 2023

SDG Number: 2306133

Enclosed are the results of analyses for samples received by the laboratory on 07-Jun-23 15:08. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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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15 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 07-Jun-23 15:08

ANALYTICAL RESULTS

Lab Number: 2306133-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 6/7/23 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	2.36		6/12/23 8:30	B306241	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	1		6/7/23 15:50	B306173	IDEXX Colilert-18
TSS	mg/L	14.0		6/8/23 16:10	B306134	SM 2540 D-2015
CBOD	mg/L	15.3		6/9/23 8:09	B306176	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2306133-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 6/7/23 11:55
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	11.5		6/7/23 11:59	B306233	SM 4500-O G-2011
pH	S.U.	9.41		6/7/23 11:55	B306230	SM 4500-H+ B-2011
Temperature	°C	29.6		6/7/23 11:57	B306232	SM 2550B-2000

15 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 07-Jun-23 15:08

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B306134 (Water)

Prepared: 08-Jun-23 16:10 By: MH -- Analyzed: 08-Jun-23 16:10 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	91.0% / 94.0%	NA / NA		3.24%	

Wet Chemistry -- Batch: B306173 (Water)

Prepared: 07-Jun-23 15:50 By: KJ -- Analyzed: 07-Jun-23 15:50 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: B306176 (Water)

Prepared: 09-Jun-23 08:09 By: MB -- Analyzed: 09-Jun-23 08:09 By: MB

<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	100% / 106%	NA / NA		5.71%	

Field Analyses -- Batch: B306230 (Water)

Prepared: 07-Jun-23 09:27 By: MH -- Analyzed: 07-Jun-23 09:27 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	NA / NA	NA / NA		0.00%	

Field Analyses -- Batch: B306232 (Water)

Prepared: 07-Jun-23 10:53 By: MH -- Analyzed: 07-Jun-23 10:53 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	27.6 °C	0.00%	

Field Analyses -- Batch: B306233 (Water)

Prepared: 07-Jun-23 10:55 By: MH -- Analyzed: 07-Jun-23 10:55 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	6.08 mg/L	0.328%	

Wet Chemistry -- Batch: B306241 (Water)

Prepared: 12-Jun-23 08:30 By: KJ -- Analyzed: 12-Jun-23 08:30 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>
Ammonia as N	<0.500 mg/L	103% / NA	105% / 107%		1.95%	

15 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 07-Jun-23 15:08

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 that reads "Norma James". The signature is written in a cursive style and 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 Utilifies 121 East Merriman Wynne, AR 72396		Lagoon Discharge Sample Weekly Sample Reporting Information		1 Day (100%) 2 Day (50%) 3 Day (25%)		1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid(HCl) 6. Sodium Hydroxide (NaOH), pH > 12	
Attn: Josh Weaver		Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.www@gmail.com		5 Day (routine) Preservative Code: Bottle Type:		TEST PARAMETERS	
Sampler(s) Signature: <i>Josh Weaver</i>		Sampler(s) Printed: <i>Josh Weaver</i>		1 P 1 P 1,2 P 1,4 P		Bottle Type Code	
Field Number		SAMPLE COLLECTION Date/s Time/s		SAMPLE IDENTIFICATION/ DESCRIPTION		Arkansas Analytical Work Order Number:	
67703		6/17 1555		Lagoon Discharge Grab (Wynne) Lagoon Discharge Field Analysis (AR Analytical)		2306133	
Grab		Comp		Number of Bottles		Sample Matrix	
X		X		3		Water	
X		X		0		Water	
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 6/7/03		pH (S.U.)		941		946	
Time		1155		1156		925	
Temperature (°C)		29.6		29.6		927	
Time		1157		1158			
Dissolved Oxygen (mg/l)		11.53		11.55			
Time		1159		1200			
Field Calibration Record -- DATE: 6/7/03		pH / Time		D.O.		Chlorine	
		7		928		1	
		10		Slope		2	
1. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		SAMPLE CONDITION UPON RECEIPT IN LAB	
<i>Josh Weaver</i>		6/17		<i>Josh Weaver</i>		1. CUSTODY SEALS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3. Relinquished by: (Signature)		Date/Time		4. Received by lab: (Signature)		2. CONTAINERS CORRECT: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<i>Josh Weaver</i>		1508 6/7/03		<i>Sydney James</i>		3. COC/LABELS AGREE: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Revision: 3		14449		5. TEMPERATURE ON RECEIPT: 2 °C		4. RECEIVED ON ICE: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
				6. TEMPERATURE GUN ID: HHT# 5		5. TEMPERATURE ON RECEIPT: 2 °C	
				REMARKS / SAMPLE COMMENTS			



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

21 June 2023

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

Project: Lagoon Discharge Sample

Project Number: June 2023

SDG Number: 2306295

Enclosed are the results of analyses for samples received by the laboratory on 14-Jun-23 15:20. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 14-Jun-23 15:20

ANALYTICAL RESULTS

Lab Number: 2306295-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 6/14/23 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	4.58		6/19/23 8:30	B306393	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	< 1		6/14/23 15:40	B306341	IDEXX Colilert-18
TSS	mg/L	25.5		6/15/23 16:30	B306312	SM 2540 D-2015
CBOD	mg/L	11.2		6/15/23 6:50	B306317	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2306295-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 6/14/23 12:30
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	13.4		6/14/23 12:34	B306373	SM 4500-O G-2011
pH	S.U.	8.78		6/14/23 12:30	B306371	SM 4500-H+ B-2011
Temperature	°C	27.8		6/14/23 12:32	B306372	SM 2550B-2000

21 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 14-Jun-23 15:20

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B306312 (Water)

Prepared: 15-Jun-23 16:30 By: MH -- Analyzed: 15-Jun-23 16:30 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	93.0% / 97.0%	NA / NA		4.21%	

Wet Chemistry -- Batch: B306317 (Water)

Prepared: 15-Jun-23 06:50 By: MB -- Analyzed: 15-Jun-23 06:50 By: MB

<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	103% / 103%	NA / NA		0.00%	

Wet Chemistry -- Batch: B306341 (Water)

Prepared: 14-Jun-23 15:40 By: KJ -- Analyzed: 14-Jun-23 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	2 MPN/100 mL	200%	

Field Analyses -- Batch: B306371 (Water)

Prepared: 14-Jun-23 08:57 By: MH -- Analyzed: 14-Jun-23 08:57 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	NA / NA	NA / NA		0.00%	

Field Analyses -- Batch: B306372 (Water)

Prepared: 14-Jun-23 14:08 By: MH -- Analyzed: 14-Jun-23 14:08 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	25.3 °C	0.00%	

Field Analyses -- Batch: B306373 (Water)

Prepared: 14-Jun-23 14:10 By: MH -- Analyzed: 14-Jun-23 14:10 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>
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	7.98 mg/L	0.00%	

Wet Chemistry -- Batch: B306393 (Water)

Prepared: 19-Jun-23 08:30 By: KJ -- Analyzed: 19-Jun-23 08:30 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>
Ammonia as N	<0.500 mg/L	102% / NA	102% / 100%		1.09%	

21 June 2023

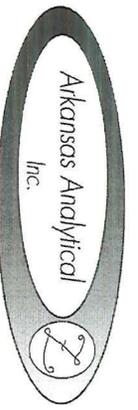


Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 14-Jun-23 15:20

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 that reads "Norma James".

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				Preservation Codes:															
Wynne Water Utilities				Lagoon Discharge Sample				1. Cool, 6 Degrees Centigrade															
121 East Merriman				Weekly Sample				2. Sulfuric Acid (H ₂ SO ₄), pH < 2															
Wynne, AR 72396				Reporting Information				3. Nitric Acid (HNO ₃), pH < 2															
Attn: Josh Weaver				Telephone: 870-238-2751				5 Day (Routine)															
				Fax: 870-238-2044				TEST PARAMETERS															
				Email: jweaver.www@gmail.com				1. P															
				Bottle Type:				2. P															
				Preservative Code:				3. P															
				Field (pH, D.O., Temperature)				4. P															
				CBOD, TSS				5. P															
				Ammonia				6. P															
				Fecal Coliform				7. P															
Sampler(s) Signature: <i>Josh Weaver</i>				Sampler(s) Printed: <i>Josh Weaver</i>				Arkansas Analytical Work Order Number: <i>19306295</i>															
Field Number	SAMPLE COLLECTION Dates	Times	Grab	Comp	Number of Bottles	Sample Matrix	IDENTIFICATION/ DESCRIPTION																
	6/14/23	12:45	X		3	Water	Lagoon Discharge Grab (Wynne)		X	X	X												
	6/14/23	12:30	X		0	Water	Lagoon Discharge Field Analysis (AR Analytical)	X															
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 6/14/23												pH (S.U.)		878		858		706		706			
												Time		1230		1231		855		857			
												Temperature (°C)		22.8		22.8							
												Time		1232		1233							
												Dissolved Oxygen (mg/L)		1345		1345							
												Time		1234		1235							
1. Relinquished by: (Signature)												Date/Time				2. Received by: (Signature)				Date/Time			
												6/14/23								6/14/23			
3. Relinquished by: (Signature)												Date/Time				4. Received by lab: (Signature)				Date/Time			
												1520								6/14/23			
Revision: 3												44446											
SAMPLE CONDITION UPON RECEIPT IN LAB												REMARKS / SAMPLE COMMENTS											
1. CUSTODY SEALS: <input checked="" type="checkbox"/> Yes ___ No												Field Calibration Record -- DATE: 6/14/23											
2. CONTAINERS CORRECT: <input checked="" type="checkbox"/> Yes ___ No												pH / Time											
3. COC/LABELS AGREE: <input checked="" type="checkbox"/> Yes ___ No												D.O.											
4. RECEIVED ON ICE: <input checked="" type="checkbox"/> Yes ___ No												Time											
5. TEMPERATURE ON RECEIPT: <input checked="" type="checkbox"/> 3°C												QC Time											
6. TEMPERATURE GUN ID: HHT# 5												Chlorine											
												Slope											
												855											
												98.2											



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

28 June 2023

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

Project: Lagoon Discharge Sample

Project Number: June 2023

SDG Number: 2306491

Enclosed are the results of analyses for samples received by the laboratory on 21-Jun-23 15:20. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	1.0°C

Sincerely,

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

Norma James
Technical Director

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28 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 21-Jun-23 15:20

ANALYTICAL RESULTS

Lab Number: 2306491-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 6/21/23 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	2.73		6/26/23 8:15	B306567	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	< 1		6/21/23 15:30	B306493	IDEXX Colilert-18
TSS	mg/L	20.5		6/23/23 10:25	B306502	SM 2540 D-2015
CBOD	mg/L	9.92		6/22/23 7:09	B306473	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2306491-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 6/21/23 12:20
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	13.4		6/21/23 12:24	B306561	SM 4500-O G-2011
pH	S.U.	8.92		6/21/23 12:20	B306558	SM 4500-H+ B-2011
Temperature	°C	29.1		6/21/23 12:22	B306559	SM 2550B-2000

28 June 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 21-Jun-23 15:20

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B306473 (Water)

Prepared: 22-Jun-23 07:09 By: MB -- Analyzed: 22-Jun-23 07:09 By: MB

<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	116% / 115%	NA / NA		0.764%	

Wet Chemistry -- Batch: B306493 (Water)

Prepared: 21-Jun-23 15:30 By: KJ -- Analyzed: 21-Jun-23 15:30 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	1 MPN/100 mL	66.7%	

Wet Chemistry -- Batch: B306502 (Water)

Prepared: 23-Jun-23 10:25 By: MH -- Analyzed: 23-Jun-23 10:25 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	93.0% / 88.0%	NA / NA		5.52%	

Field Analyses -- Batch: B306558 (Water)

Prepared: 21-Jun-23 09:22 By: MH -- Analyzed: 21-Jun-23 09:22 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	NA / NA	NA / NA		0.142%	

Field Analyses -- Batch: B306559 (Water)

Prepared: 21-Jun-23 14:03 By: MH -- Analyzed: 21-Jun-23 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	28.1 °C	0.00%	

Field Analyses -- Batch: B306561 (Water)

Prepared: 21-Jun-23 14:05 By: MH -- Analyzed: 21-Jun-23 14:05 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	6.15 mg/L	0.00%	

Wet Chemistry -- Batch: B306567 (Water)

Prepared: 26-Jun-23 08:15 By: KJ -- Analyzed: 26-Jun-23 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	89.6% / NA	85.3% / 89.3%		4.11%	

28 June 2023

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 21-Jun-23 15:20



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 that reads "Norma James".

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							
		Fax: 870-238-2044		Preservative Code:		1	1	1,2	1,4				Bottle Type Code
		Email: jweaver.wvu@gmail.com		Bottle Type:		P	P	P	P				G = Glass; P = Plastic V = Septum; A = Amber
Sampler(s) Signature <i>Josh Weaver</i>		Sampler(s) Printed: <i>Josh Weaver</i>		Sample Identification/Description		Arkansas Analytical Work Order Number: <i>2306491</i>							
Field Number	Sample Collection Date/s	Time/s	Grab	Number of Bottles	Sample Matrix	ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: <i>6/21/23</i>							
	<i>6/21/23</i>	<i>10 AM</i>	X	3	Water	pH (S.U.)	Sample	Duplicate	QC	QC Duplicate	Field Calibration Record -- DATE: <i>6/28/23</i>		
	<i>6/21/23</i>	<i>1220</i>	X	0	Water	Time	<i>892</i>	<i>892</i>	<i>703</i>	<i>704</i>	pH / Time	D.O.	
						Temperature (°C)	<i>1020</i>	<i>1021</i>	<i>920</i>	<i>922</i>	Time	Time	
						Dissolved Oxygen (mg/L)	<i>29.1</i>	<i>29.1</i>			7	QC Time	
						Time	<i>1022</i>	<i>1023</i>			10	2	
							<i>13.40</i>	<i>13.40</i>					
							<i>1024</i>	<i>1025</i>			<i>915</i>	<i>913</i>	
1. Relinquished by: (Signature) <i>Josh Weaver</i>		Date/Time	2. Received by: (Signature) <i>Natasha Howard</i>		SAMPLE CONDITION UPON RECEIPT IN LAB								
		<i>6/21</i>			1. CUSTODY SEALS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
3. Relinquished by: (Signature) <i>Josh Weaver</i>		Date/Time			2. CONTAINERS CORRECT: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
		<i>1520</i>			3. COC/LABELS AGREE: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
		<i>6/21/23</i>			4. RECEIVED ON ICE: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
					5. TEMPERATURE ON RECEIPT: <i>1</i> °C <i>5</i>								
					6. TEMPERATURE GUN ID: HHT#								
					REMARKS / SAMPLE COMMENTS								
					FOR COMPLETION BY LAB ONLY								



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

05 July 2023

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

Project: Lagoon Discharge Sample
Project Number: June 2023
SDG Number: 2306651

Enclosed are the results of analyses for samples received by the laboratory on 28-Jun-23 15:00. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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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05 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 28-Jun-23 15:00

CASE NARRATIVE

Sample Delivery Group – 2306651

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.
Cl-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).

05 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 28-Jun-23 15:00

ANALYTICAL RESULTS

Lab Number: 2306651-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 6/28/23 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	3.58		6/30/23 10:00	B306695	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	1		6/28/23 14:50	B306683	IDEXX Colilert-18
TSS	mg/L	42.2		6/30/23 9:15	B306686	SM 2540 D-2015
CBOD	mg/L	30.6	B-02	6/29/23 7:33	B306650	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2306651-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 6/28/23 11:45
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	13.1		6/28/23 11:49	B306736	SM 4500-O G-2011
pH	S.U.	8.69		6/28/23 11:45	B306734	SM 4500-H+ B-2011
Temperature	°C	29.6		6/28/23 11:47	B306735	SM 2550B-2000

05 July 2023



Josh Weaver
 Wynne Water Utilities
 121 East Merriman
 Wynne, AR 72396
 Project: Lagoon Discharge Sample
 Project Number: June 2023
 Date Received: 28-Jun-23 15:00

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B306650 (Water)

Prepared: 29-Jun-23 07:33 By: MB -- Analyzed: 29-Jun-23 07:33 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	93.2% / 111%	NA / NA		17.6%	

Wet Chemistry -- Batch: B306683 (Water)

Prepared: 28-Jun-23 14:50 By: KJ -- Analyzed: 28-Jun-23 14:50 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	4700 MPN/100 mL	47.4%	

Wet Chemistry -- Batch: B306686 (Water)

Prepared: 30-Jun-23 16:24 By: MH -- Analyzed: 30-Jun-23 16:24 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	93.0% / 98.0%	NA / NA		5.24%	

Wet Chemistry -- Batch: B306695 (Water)

Prepared: 30-Jun-23 10:00 By: KJ -- Analyzed: 30-Jun-23 10:00 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	90.0% / NA	94.7% / 92.1%		2.40%	

Field Analyses -- Batch: B306734 (Water)

Prepared: 28-Jun-23 09:22 By: MH -- Analyzed: 28-Jun-23 09:22 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	NA / NA	NA / NA		0.142%	

Field Analyses -- Batch: B306735 (Water)

Prepared: 28-Jun-23 13:34 By: MH -- Analyzed: 28-Jun-23 13:34 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	28.8 °C	0.00%	

Field Analyses -- Batch: B306736 (Water)

Prepared: 28-Jun-23 13:36 By: MH -- Analyzed: 28-Jun-23 13:36 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	6.55 mg/L	0.00%	

QUALIFIER(S)

*B-02: Method requirements for residual oxygen failed. Result may be higher than reported. Data is qualified as estimated.

05 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: June 2023
Date Received: 28-Jun-23 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 that reads "Norma James". The signature is written in a cursive style and is positioned above a horizontal line.

Reviewed by: _____

Norma James
Technical Director



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

12 July 2023

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

Project: Lagoon Discharge Sample
Project Number: July 2023
SDG Number: 2307050

Enclosed are the results of analyses for samples received by the laboratory on 05-Jul-23 15:22. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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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12 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 05-Jul-23 15:22

ANALYTICAL RESULTS

Lab Number: 2307050-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 7/5/23 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	0.999		7/7/23 8:30	B307088	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	< 2		7/5/23 15:10	B307075	IDEXX Colilert-18
TSS	mg/L	64.7		7/6/23 16:10	B307073	SM 2540 D-2015
CBOD	mg/L	17.7		7/6/23 7:13	B307056	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2307050-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 7/5/23 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	13.8		7/5/23 12:14	B307122	SM 4500-O G-2011
pH	S.U.	8.90		7/5/23 12:10	B307120	SM 4500-H+ B-2011
Temperature	°C	30.4		7/5/23 12:12	B307121	SM 2550B-2000

12 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 05-Jul-23 15:22

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B307056 (Water)

Prepared: 06-Jul-23 07:13 By: MB -- Analyzed: 06-Jul-23 07:13 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	103% / 103%	NA / NA		0.285%	

Wet Chemistry -- Batch: B307073 (Water)

Prepared: 06-Jul-23 16:10 By: MH -- Analyzed: 06-Jul-23 16:10 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	89.0% / 88.0%	NA / NA		1.13%	

Wet Chemistry -- Batch: B307075 (Water)

Prepared: 05-Jul-23 15:10 By: KJ -- Analyzed: 05-Jul-23 15:10 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 MPN/100 mL	NA / NA	NA / NA	51 MPN/100 mL	163%	

Wet Chemistry -- Batch: B307088 (Water)

Prepared: 07-Jul-23 08:30 By: KJ -- Analyzed: 07-Jul-23 08:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	98.2% / NA	105% / 100%		3.64%	

Field Analyses -- Batch: B307120 (Water)

Prepared: 05-Jul-23 09:22 By: MH -- Analyzed: 05-Jul-23 09:22 By: MH

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

Field Analyses -- Batch: B307121 (Water)

Prepared: 05-Jul-23 13:53 By: MH -- Analyzed: 05-Jul-23 13:53 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	29.3 °C	0.00%	

Field Analyses -- Batch: B307122 (Water)

Prepared: 05-Jul-23 13:55 By: MH -- Analyzed: 05-Jul-23 13:55 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	6.03 mg/L	0.166%	

12 July 2023

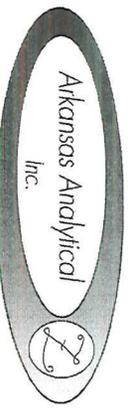
Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 05-Jul-23 15:22



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 that reads "Norma James". The signature is written in a cursive style and 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	
121 East Merriman		Weekly Sample		2 Day (50%)		2. Sulfuric Acid (H ₂ SO ₄), pH < 2	
Wynne, AR 72396		Reporting Information		3 Day (25%)		3. Nitric Acid (HNO ₃), pH < 2	
Attn: Josh Weaver		Telephone: 870-238-2751		5 Day (routine)		TEST PARAMETERS	
Email: jweaver.www@gmail.com		Fax: 870-238-2044		Preservative Code: P		4. Thiosulfate for Dechlorination	
		Bottle Type:		1		5. Hydrochloric Acid(HCl)	
				1,2		6. Sodium Hydroxide (NaOH), pH > 12	
				1,4		Bottle Type Code	
				P		G = Glass; P = Plastic	
				P		V = Septum; A = Amber	
Sample(s) Signature: <i>Josh Weaver</i>		Sampler(s) Printed: <i>Josh Weaver</i>		Field (pH, D.O., Temperature)		Arkansas Analytical Work Order Number: <i>2204050</i>	
Field Number	SAMPLE COLLECTION Dates	Times	Grab	Comp	Number of Sample Matrix	IDENTIFICATION/ DESCRIPTION	SAMPLE
	7/15	10:30 AM	X		3	Water	Lagoon Discharge Grab (Wynne)
	7/5/03	1210	X		0	Water	Lagoon Discharge Field Analysis (AR Analytical)
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 7/5/03							
							Sample
							Duplicate
							QC
							QC Duplicate
							pH (S.U.)
							850
							870
							703
							920
							703
							592
							Time
							1210
							1211
							920
							30.4
							30.4
							Time
							1212
							1213
							13.84
							13.84
							Time
							1214
							1215
1. Relinquished by: (Signature) <i>Josh Weaver</i>							
Date/Time 7/15							
2. Received by: (Signature) <i>Josh Weaver</i>							
Date/Time 1200							
3. Relinquished by: (Signature) <i>Josh Weaver</i>							
Date/Time 1500							
4. Received by lab: (Signature) <i>Josh Weaver</i>							
Date/Time 7/5/03							
5. TEMPERATURE ON RECEIPT: 3°C							
6. TEMPERATURE GUN ID: HHT# 5							
FOR COMPLETION BY LAB ONLY							
REMARKS / SAMPLE COMMENTS							
Field Calibration Record -- DATE: 7/5/03							
							pH / Time
							D.O.
							Time
							QC Time
							Chlorine
							915
							913
							Slope
							98.9

Revision 3
 44446



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

18 July 2023

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

Project: Lagoon Discharge Sample
Project Number: July 2023
SDG Number: 2307220

Enclosed are the results of analyses for samples received by the laboratory on 12-Jul-23 15:40. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

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

Sincerely,

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

Norma James
Technical Director

This document is intended only for the use of the person(s) to whom it is expressly addressed. This document may contain information that is confidential and legally privileged. If you are not the intended recipient, you are notified that any disclosure, distribution, or copying of this document is strictly prohibited. If you have received this document in error, please destroy.

18 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 12-Jul-23 15:40

ANALYTICAL RESULTS

Lab Number: 2307220-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 7/12/23 12:00
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	2.47		7/14/23 8:30	B307249	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	20		7/12/23 15:30	B307240	IDEXX Colilert-18
TSS	mg/L	49.5		7/13/23 17:10	B307222	SM 2540 D-2015
CBOD	mg/L	12.8		7/13/23 6:54	B307224	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2307220-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 7/12/23 12:35
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	15.1		7/12/23 12:39	B307294	SM 4500-O G-2011
pH	S.U.	8.86		7/12/23 12:35	B307292	SM 4500-H+ B-2011
Temperature	°C	29.2		7/12/23 12:35	B307293	SM 2550B-2000

18 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 12-Jul-23 15:40

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B307222 (Water)

Prepared: 13-Jul-23 17:10 By: MH -- Analyzed: 13-Jul-23 17:10 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	98.0% / 96.0%	NA / NA		2.06%	

Wet Chemistry -- Batch: B307224 (Water)

Prepared: 13-Jul-23 06:54 By: MB -- Analyzed: 13-Jul-23 06:54 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
CBOD	<2.00 mg/L	96.8% / 101%	NA / NA		3.87%	

Wet Chemistry -- Batch: B307240 (Water)

Prepared: 12-Jul-23 15:30 By: KJ -- Analyzed: 12-Jul-23 15:30 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: B307249 (Water)

Prepared: 14-Jul-23 08:30 By: KJ -- Analyzed: 14-Jul-23 08:30 By: KJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	94.6% / NA	87.0% / 82.2%		5.28%	

Field Analyses -- Batch: B307292 (Water)

Prepared: 12-Jul-23 08:37 By: MH -- Analyzed: 12-Jul-23 08:37 By: MH

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

Field Analyses -- Batch: B307293 (Water)

Prepared: 12-Jul-23 13:52 By: MH -- Analyzed: 12-Jul-23 13:52 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	28.7 °C	0.00%	

Field Analyses -- Batch: B307294 (Water)

Prepared: 12-Jul-23 13:55 By: MH -- Analyzed: 12-Jul-23 13:55 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Dissolved Oxygen (Field)	NA	NA / NA	NA / NA	6.76 mg/L	0.148%	

18 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 12-Jul-23 15:40

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 that reads "Norma James".

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 121 East Merriman Wynne, AR 72396			Lagoon Discharge Sample Weekly Sample Reporting Information		1 Day (100%) 2 Day (50%) 3 Day (25%) 5 Day (routine)		1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid (HCl) 6. Sodium Hydroxide (NaOH), pH > 12																																	
Attn: Josh Weaver			Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.wvu@gmail.com		Preservative Code: Bottle Type:		TEST PARAMETERS 1 1,2 1,4 P P P CBOD, TSS Fecal Coliform Ammonia Temperature Field (pH, D.O.)																																	
Sampler(s) Signature: <i>Josh Weaver</i> Sampler(s) Printed: <i>Josh Weaver</i>			Number of Bottles/Matrix: 3 Water Grab: X X		Identification/Description: Lagoon Discharge Grab (Wynne) Lagoon Discharge Field Analysis (AR Analytical)		Bottle Type Code: G = Glass; P = Plastic V = Septum; A = Amber Arkansas Analytical Work Order Number: <i>230720</i>																																	
Field Number: <i>7/12</i> <i>7/12/03</i>			Date/s: <i>7/12</i> <i>7/12/03</i>		Time/s: <i>1200</i> <i>1235</i>		ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 7/12/03 <table border="1"> <thead> <tr> <th>Sample</th> <th>Duplicate</th> <th>QC</th> <th>QC Duplicate</th> </tr> </thead> <tbody> <tr> <td>pH (S.U.)</td> <td><i>886</i></td> <td><i>703</i></td> <td><i>703</i></td> </tr> <tr> <td>Time</td> <td><i>1235</i></td> <td><i>835</i></td> <td><i>837</i></td> </tr> <tr> <td>Temperature (°C)</td> <td><i>29.2</i></td> <td><i>27.2</i></td> <td></td> </tr> <tr> <td>Time</td> <td><i>1235</i></td> <td></td> <td></td> </tr> <tr> <td>Dissolved Oxygen (mg/L)</td> <td><i>15.1</i></td> <td></td> <td></td> </tr> <tr> <td>Time</td> <td><i>1239</i></td> <td></td> <td></td> </tr> </tbody> </table>						Sample	Duplicate	QC	QC Duplicate	pH (S.U.)	<i>886</i>	<i>703</i>	<i>703</i>	Time	<i>1235</i>	<i>835</i>	<i>837</i>	Temperature (°C)	<i>29.2</i>	<i>27.2</i>		Time	<i>1235</i>			Dissolved Oxygen (mg/L)	<i>15.1</i>			Time	<i>1239</i>		
Sample	Duplicate	QC	QC Duplicate																																					
pH (S.U.)	<i>886</i>	<i>703</i>	<i>703</i>																																					
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Time	<i>1235</i>																																							
Dissolved Oxygen (mg/L)	<i>15.1</i>																																							
Time	<i>1239</i>																																							
1. Relinquished by: (Signature) <i>Josh Weaver</i> Date/Time: <i>7/12</i>			2. Received by: (Signature) <i>Natasha Howard</i> <i>1230</i> <i>7/12/03</i>		SAMPLE CONDITION UPON RECEIPT IN LAB 1. CUSTODY SEALS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 2. CONTAINERS CORRECT: Yes <input type="checkbox"/> No <input type="checkbox"/> 3. COC/LABELS AGREE: Yes <input type="checkbox"/> No <input type="checkbox"/> 4. RECEIVED ON ICE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 5. TEMPERATURE ON RECEIPT: <i>3</i> °C 6. TEMPERATURE GUN ID: <i>5</i>		REMARKS / SAMPLE COMMENTS Field Calibration Record -- DATE: <i>7/12/03</i> pH / Time: <i>845</i> D.O. Time: <i>845</i> Slope: <i>99.0</i> Chlorine: <i>830</i>																																	
3. Relinquished by: (Signature) <i>Josh Weaver</i> Date/Time: <i>1540</i> <i>7/12/03</i>			4. Received by lab: (Signature) <i>Natasha Howard</i> <i>1540</i> <i>7/12/03</i>		Revisions: <i>1446</i>																																			



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

26 July 2023

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

Project: Lagoon Discharge Sample
Project Number: July 2023
SDG Number: 2307398

Enclosed are the results of analyses for samples received by the laboratory on 19-Jul-23 15:25. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
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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26 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 19-Jul-23 15:25

ANALYTICAL RESULTS

Lab Number: 2307398-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 7/19/23 12:00
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	2.00		7/21/23 8:20	B307427	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	83		7/19/23 15:30	B307414	IDEXX Colilert-18
TSS	mg/L	50.5		7/20/23 15:40	B307405	SM 2540 D-2015
CBOD	mg/L	15.6		7/20/23 6:58	B307373	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2307398-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 7/19/23 12:25
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	12.2		7/19/23 12:29	B307486	SM 4500-O G-2011
pH	S.U.	8.34		7/19/23 12:25	B307409	SM 4500-H+ B-2011
Temperature	°C	29.8		7/19/23 12:27	B307485	SM 2550B-2000

26 July 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 19-Jul-23 15:25

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B307373 (Water)

Prepared: 20-Jul-23 06:58 By: MB -- Analyzed: 20-Jul-23 06:58 By: MB

<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	110% / 110%	NA / NA		0.268%	

Wet Chemistry -- Batch: B307405 (Water)

Prepared: 20-Jul-23 15:40 By: MH -- Analyzed: 20-Jul-23 15:40 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%	

Field Analyses -- Batch: B307409 (Water)

Prepared: 19-Jul-23 09:43 By: CJ -- Analyzed: 19-Jul-23 09:43 By: CJ

<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		0.142%	

Wet Chemistry -- Batch: B307414 (Water)

Prepared: 19-Jul-23 15:30 By: KJ -- Analyzed: 19-Jul-23 15:30 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: B307427 (Water)

Prepared: 21-Jul-23 08:20 By: KJ -- Analyzed: 21-Jul-23 08:20 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	86.0% / NA	81.3% / 83.4%		2.30%	

Field Analyses -- Batch: B307485 (Water)

Prepared: 19-Jul-23 11:17 By: MH -- Analyzed: 19-Jul-23 11:17 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	29.2 °C	0.00%	

Field Analyses -- Batch: B307486 (Water)

Prepared: 19-Jul-23 11:20 By: MH -- Analyzed: 19-Jul-23 11:20 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	4.41 mg/L	0.227%	

26 July 2023

Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 19-Jul-23 15:25



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 that reads "Norma James".

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 121 East Merriam Wynne, AR 72396		Lagoon Discharge Sample Weekly Sample		1 Day (100%) 2 Day (50%) 3 Day (25%)		1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid(HCl) 6. Sodium Hydroxide (NaOH), pH > 12	
Attn: Josh Weaver		Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.wvu@gmail.com		5 Day (Routine) Preservative Code: Bottle Type:		TEST PARAMETERS	
Sampler(s) Signature: <i>[Signature]</i>		Sampler(s) Printed: <i>Josh Weaver</i>		1 P 1 P 1,2 P 1,4 P		Bottle Type Code	
Field Number		SAMPLE COLLECTION Dates/Time/s		SAMPLE IDENTIFICATION/ DESCRIPTION		Arkansas Analytical Work Order Number:	
7119		12:00		Lagoon Discharge Grab (Wynne)		2307398	
71923		12:25		Lagoon Discharge Field Analysis (AR Analytical)		02	
				ON-SITE MEASUREMENTS by Arkansas Analytical -- DATE: 7/19/23			
				Sample Duplicate QC QC Duplicate		Field Calibration Record -- DATE: 7/19/23	
				834 834 704 704		pH / Time D.O. Chlorine	
				1225 1227 855 857		4 7 9:00	
				29.8 29.8		10 100.3	
				1215 1217			
				1225 1230			
1. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		REMARKS / SAMPLE COMMENTS	
<i>[Signature]</i>		7/19		<i>[Signature]</i>			
3. Relinquished by: (Signature)		Date/Time		4. Received by lab: (Signature)			
<i>[Signature]</i>		7/19/23		SYDNEY JAMES			
Revision 3		1525 7/19/23					



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

02 August 2023

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

Project: Lagoon Discharge Sample
Project Number: July 2023
SDG Number: 2307583

Enclosed are the results of analyses for samples received by the laboratory on 26-Jul-23 15:05. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	4.0°C

Sincerely,

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

Norma James
Technical Director

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02 August 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 26-Jul-23 15:05

ANALYTICAL RESULTS

Lab Number: 2307583-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 7/26/23 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		7/28/23 8:20	B307600	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	87		7/26/23 15:45	B307590	IDEXX Colilert-18
TSS	mg/L	3.50		7/27/23 16:25	B307544	SM 2540 D-2015
CBOD	mg/L	< 2.00		7/28/23 6:50	B307595	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2307583-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 7/26/23 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	4.20		7/26/23 11:54	B307592	SM 4500-O G-2011
pH	S.U.	8.08		7/26/23 11:50	B307587	SM 4500-H+ B-2011
Temperature	°C	30.5		7/26/23 11:50	B307589	SM 2550B-2000

Josh Weaver
 Wynne Water Utilities
 121 East Merriman
 Wynne, AR 72396
 Project: Lagoon Discharge Sample
 Project Number: July 2023
 Date Received: 26-Jul-23 15:05

QUALITY CONTROL RESULTS
Wet Chemistry -- Batch: B307544 (Water)

Prepared: 27-Jul-23 16:25 By: MH -- Analyzed: 27-Jul-23 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	91.0% / 95.0%	NA / NA		4.30%	

Field Analyses -- Batch: B307587 (Water)

Prepared: 26-Jul-23 09:17 By: MH -- Analyzed: 26-Jul-23 09:17 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: B307589 (Water)

Prepared: 26-Jul-23 13:42 By: MH -- Analyzed: 26-Jul-23 13:42 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	29.0 °C	0.00%	

Wet Chemistry -- Batch: B307590 (Water)

Prepared: 26-Jul-23 15:45 By: KJ -- Analyzed: 26-Jul-23 15:45 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	24 MPN/100 mL	21.8%	

Field Analyses -- Batch: B307592 (Water)

Prepared: 26-Jul-23 13:45 By: MH -- Analyzed: 26-Jul-23 13:45 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	6.22 mg/L	0.161%	

Wet Chemistry -- Batch: B307595 (Water)

Prepared: 28-Jul-23 06:50 By: MB -- Analyzed: 28-Jul-23 06:50 By: MB

<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	91.2% / 105%	NA / NA		13.8%	

Wet Chemistry -- Batch: B307600 (Water)

Prepared: 28-Jul-23 08:20 By: KJ -- Analyzed: 28-Jul-23 08:20 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	95.5% / NA	99.8% / 96.9%		2.96%	

02 August 2023



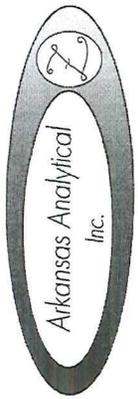
Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: July 2023
Date Received: 26-Jul-23 15:05

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 that reads "Norma James". The signature is written in a cursive style and 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 121 East Merriman Wynne, AR 72396			Lagoon Discharge Sample Weekly Sample Reporting Information			1 Day (100%) 2 Day (50%) 3 Day (25%) 5 Day (Routine)			1. Cool, 6 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2 4. Thiosulfate for Dechlorination 5. Hydrochloric Acid(HCl) 6. Sodium Hydroxide (NaOH), pH > 12					
Attn: Josh Weaver			Telephone: 870-238-2751 Fax: 870-238-2044 Email: jweaver.wvu@gmail.com			Preservative Code: Bottle Type:			TEST PARAMETERS 1 1,2 1,4 P P P Field (pH, D.O., Temperature) Ammonia Fecal Coliform					
Sampler(s) Signature: <i>Josh Weaver</i> Sampler(s) Printed: <i>Josh Weaver</i>			Number of Sample Bottles: 3 Main: 3 Grab: X X			SAMPLE COLLECTION Date/Time: 7/26/23 10:40 AM 7/26/23 11:50			SAMPLE IDENTIFICATION/ DESCRIPTION Lagoon Discharge Grab (Wynne) Lagoon Discharge Field Analysis (AR Analytical)					
Field Number: 01 02			BOD, TSS X X X X			QC Duplicate 708 708 915 917			Field Calibration Record -- DATE: 7/26/23 pH / Time: 4 910 7 920 10 93.0 D.O. Chlorine Time QC Time Slope					
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 7/26/23												REMARKS / SAMPLE COMMENTS		
1. Relinquished by: (Signature) <i>Josh Weaver</i>			Date/Time: 7/26/23			2. Received by: (Signature) <i>1130</i> <i>7/26/23</i> <i>Forbush</i>			SAMPLE CONDITION UPON RECEIPT IN LAB 1. CUSTODY SEALS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 2. CONTAINERS CORRECT: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 3. COC/LABELS AGREE: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 4. RECEIVED ON ICE: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 5. TEMPERATURE ON RECEIPT: 4 °C 6. TEMPERATURE GUN ID: HHT# 5					
3. Relinquished by: (Signature) <i>Josh Weaver</i>			Date/Time: 7/26/23			4. Received by: (Signature) <i>1505</i> <i>7/26/23</i> <i>Forbush</i>			FOR COMPLETION BY LAB ONLY					



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

09 August 2023

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

Project: Lagoon Discharge Sample
Project Number: August 2023
SDG Number: 2308043

Enclosed are the results of analyses for samples received by the laboratory on 02-Aug-23 15:10. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

<u>Custody Seals</u>	✓
<u>Containers Correct</u>	✓
<u>COC/Labels Agree</u>	✓
<u>Received On Ice</u>	✓
Temperature on Receipt	4.0°C

Sincerely,

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

Norma James
Technical Director

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09 August 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2023
Date Received: 02-Aug-23 15:10

ANALYTICAL RESULTS

Lab Number: 2308043-01
Sample Name: Lagoon Discharge Grab (Wynne)
Date/Time Collected: 8/2/23 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	5.72		8/4/23 8:08	B308072	SM 4500-NH3 B,D,C-2011
Fecal Coliforms	MPN/100 mL	34		8/2/23 15:40	B308066	IDEXX Colilert-18
TSS	mg/L	38.5		8/3/23 16:20	B308013	SM 2540 D-2015
CBOD	mg/L	12.4		8/3/23 7:02	B308043	SM 5210B-2016

ANALYTICAL RESULTS

Lab Number: 2308043-02
Sample Name: Lagoon Discharge Field Analysis (AR Analytical)
Date/Time Collected: 8/2/23 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	9.27		8/2/23 11:54	B308091	SM 4500-O G-2011
pH	S.U.	8.32		8/2/23 11:50	B308088	SM 4500-H+ B-2011
Temperature	°C	30.8		8/2/23 11:50	B308089	SM 2550B-2000

09 August 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2023
Date Received: 02-Aug-23 15:10

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B308013 (Water)

Prepared: 03-Aug-23 16:20 By: MH -- Analyzed: 03-Aug-23 16:20 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: B308043 (Water)

Prepared: 03-Aug-23 07:02 By: MB -- Analyzed: 03-Aug-23 07:02 By: MB

<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	89.7% / 93.2%	NA / NA		3.86%	

Wet Chemistry -- Batch: B308066 (Water)

Prepared: 02-Aug-23 15:40 By: KJ -- Analyzed: 02-Aug-23 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	ND MPN/100 mL	NA	

Wet Chemistry -- Batch: B308072 (Water)

Prepared: 04-Aug-23 08:20 By: KJ -- Analyzed: 04-Aug-23 08:20 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	94.2% / NA	88.1% / 95.5%		7.70%	

Field Analyses -- Batch: B308088 (Water)

Prepared: 02-Aug-23 09:12 By: MH -- Analyzed: 02-Aug-23 09:12 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		0.142%	

Field Analyses -- Batch: B308089 (Water)

Prepared: 02-Aug-23 13:42 By: MH -- Analyzed: 02-Aug-23 13:42 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	29.6 °C	0.00%	

Field Analyses -- Batch: B308091 (Water)

Prepared: 02-Aug-23 13:45 By: MH -- Analyzed: 02-Aug-23 13:45 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	6.14 mg/L	0.163%	

09 August 2023



Josh Weaver
Wynne Water Utilities
121 East Merriman
Wynne, AR 72396
Project: Lagoon Discharge Sample
Project Number: August 2023
Date Received: 02-Aug-23 15:10

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 that reads "Norma James".

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							
		Fax: 870-238-2044		Preservative Code:		1	1	1,2	1,4				Bottle Type Code
		Email: jweaver.wvu@gmail.com		Bottle Type:		P	P	P	P				G = Glass; P = Plastic
Sampler(s) Signature: <i>Josh Weaver</i>		Sampler(s) Printed: <i>Josh Weaver</i>		Sample Matrix		Arkansas Analytical Work Order Number: <i>2308043</i>							
Field Number	Date/s	Time/s	Grab	Comp	Number of Bottles	IDENTIFICATION/ DESCRIPTION		Field (pH, D.O., Temperature)	COD, TSS	Ammonia	Fecal Coliform		
	8/2	1044	X	3	Water	Lagoon Discharge Grab (Wynne)		X	X	X		01	
	8/23	1150	X	0	Water	Lagoon Discharge Field Analysis (AR Analytical)		X				02	
ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 8/23													
						Sample	Duplicate	QC	QC Duplicate				
						pH (S.U.)	832	906	707				
						Time	1150	910	912				
						Temperature (°C)	30.8						
						Time	1150						
						Dissolved Oxygen (mg/L)	927						
						Time	1155						
1. Relinquished by: (Signature)		Date/Time		2. Received by: (Signature)		SAMPLE CONDITION UPON RECEIPT IN LAB						REMARKS / SAMPLE COMMENTS	
<i>Josh Weaver</i>		8/2		<i>Natasha Howard</i>		1. CUSTODY SEALS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						Field Calibration Record -- DATE: 8/23	
						2. CONTAINERS CORRECT: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						pH / Time D.O.	
						3. COC/LABELS AGREE: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						Time	
						4. RECEIVED ON ICE: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						915	
						5. TEMPERATURE ON RECEIPT: °C <i>45</i>						Slope	
						6. TEMPERATURE GUN ID: HHT#						100.2	
3. Relinquished by: (Signature)		Date/Time		4. Received by: (Signature)		FOR COMPLETION BY LAB ONLY							
<i>Josh Weaver</i>		1510		<i>Natasha Howard</i>									
Revisions													
14446													