

Vincent W. Miles Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, AR 71601-6055 USA



NPDES Permit: AR0033316

**DMR-QA Study** 

Open Date: 04/15/2022

Close Date: 07/15/2022

Report Issued Date: 08/12/2022



August 12, 2022

Vincent W. Miles Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, AR 71601-6055

Enclosed is your final report for ERA's DMR-QA 42 Proficiency Testing study. Please note that reports were sent on your behalf to your state or regional DMR-QA coordinator. As the permit holder, you are required to review and sign the attached EPA forms and checklists and forward them to your DMR-QA coordinator by September 9, 2022. Your coordinator's contact information is provided below.

All analytes in ERA's DMR-QA 42 Proficiency Testing study have been evaluated by comparing the reported result to the acceptance limits generated using the criteria contained in the most current TNI Non-Potable Water and Whole Effluent Toxicity Testing-Non Potable Water Fields of Proficiency Testing (FoPT) tables.

If you have any "Not Acceptable" evaluations for the DMR-QA 42 study, a letter of corrective action and an order form for the required remedial samples are attached for your convenience. If you have a "Not Acceptable" evaluation, but there is not an order form or a list of standards for your in-house or outside laboratories, ERA recommends that you contact your DMR-QA coordinator for their corrective action requirements, if any.

Thank you for your participation in ERA's DMR-QA 42 Proficiency Testing study. If you have any questions, please contact the Proficiency Testing Department at 1-800-372-0122, option 2.

Your DMR-QA coordinator is:

Arkansas Department of Energy and Environment Yvette Wilkins 5301 Northshore Dr. North Little Rock, AR 72118 Phone: 501-682-0637 waterlab@adeq.state.ar.us

Sincerely,

Matthew Seebeck Quality Officer

attachments





## DMR-QA 42 Definitions & Study Discussion

Study Dates: 04/15/2022 - 07/15/2022

#### **DMRQA Study Discussion**

#### **DMRQA Study Definitions**

The Reported Value is the value that the laboratory reported to ERA.

The ERA Assigned Values are compliant with the most current TNI Fields of Proficiency Testing (FoPT) table. A parameter not added to the standard is given an Assigned Value of "< PTRL" per the guidelines contained in the 2016 TNI Standard. The assigned values are directly traceable to the commercially prepared starting materials used to manufacture the PT standards.

The Acceptance Limits are established per the criteria contained in the most current TNI FoPT table or ERA's SOP for the Generation of Performance Acceptance Limits™ as applicable.

The Performance Evaluation:

Acceptable

= Reported Value falls within the

Acceptance Limits.

Not Acceptable

= Reported Value falls outside the

Acceptance Limits.

No Evaluation

= Reported Value cannot be evaluated.

Not Reported

= No Value reported.

The Method Description is the method the laboratory reported to ERA.

ERA's DMR-QA 42 Proficiency Testing study has been reviewed by ERA senior management and certified compliant with the requirements of the 2016 TNI Standard and the criteria contained in the most current TNI Fields of Proficiency Testing (FoPT) table.

Report Issued: 08/12/2022

ERA's DMR-QA 42 study standards were examined for any anomalies. A full review of all homogeneity, stability and accuracy verification data was completed. All analytical verification data for all analytes met the acceptance criteria contained in the 2016 TNI Standard and the criteria contained in the most current TNI FoPT table.

All analytes are included in ERA's A2LA accreditation, certification number 1539.01.

All activities associated with this proficiency testing study were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers: 880, 935, 079, 077, 080, 595, 595A, 576, 576A

The data submitted by participating laboratories was also examined for study anomalies. There were no anomalies observed during the statistical review of the data.

ERA's DMR-QA 42 study reports shall not be reproduced except in their entirety and not without the permission of the participating laboratories. The report must not be used by the participating laboratories to claim product endorsement by any agency of the U. S. government.

The data contained herein are confidential and intended for your use only.

If you have any questions or concerns regarding your assessment in ERA's DMRQA Proficiency Testing program, please contact our Proficiency Testing Department at 1-800-372-0122, option 2.







Study: DMR-QA 42

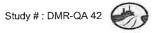
NPDES Permit #: AR0033316

Laboratory Name: Pine Bluff Wastewater

Utility

## Inorganic Results







## DMR-QA 42 Final Report

NPDES Permit #: AR0033316

**ERA Customer Number:** 

P136701 08/12/2022

Permit Holder:

Vincent W. Miles **Environmental Compliance**  Report Issued: Study Dates:

04/15/2022 - 07/15/2022

Supervisor

Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, AR 71601-6055

(870) 535-6603

TNI Analyte Code	Analyte	Units	Performance Evaluation	Reported Value	Assigned Value	Acceptance Limits	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
OMRQA	pH (cat# 577, lot# Q042-977)										
1900	рН	S.U.	Acceptable	7.83	7.83	7.63 - 8.03	SM4500H+ B online	7.88	0.0752	AR00926	DMRQA42
OMRQA	Solids Concentrate (cat# 4030, lot# Q042	?-4032)									
1960	Total Suspended Solids	mg/L	Acceptable	83.40	88.0	72.3 - 97.6	SM2540D online	83.8	3.94	AR00926	DMRQA42
OMRQA	Simple Nutrients (cat# 584, lot# Q042-50	5)				14 1	,				
	Ammonia as N	mg/L	Acceptable	1.22	1.12	0.698 - 1.64	SM 4500-NH3 B- 1997 1997	1.15	0.0984	AR00926	DMRQA42
OMRQA	Demand (cat# 578, lot# Q042-516)										-
1530	BOD	mg/L	Acceptable	99.38	95.5	51.2 - 140	SM 5210 B-1997 1997	94.6	18.2	AR00926	DMRQA42
1555	CBOD	mg/L	Acceptable	84.06	86.5	40.0 - 133	SM 5210 B-1997 1997	89.7	19.4	AR00926	DMRQA42
1565	COD	mg/L	Acceptable	154.25	155	123 - 181	HACH 8000 1979	156	14:6	AR00926	DMRQA42
2040	тос	mg/L	Acceptable	58.00	61.5	51.4 - 71.0	SM 5310 B-2011 2011	61.0	3.22	AR00926	DMRQA42
MRQA	Oil & Grease Concentrate (cat# 4120, lots	# Q042-4122)									
	n-Hexane Extractable Material(O&G)(Grav)	mg/L	Acceptable	77.35	88.1	61.8 - 103	EPA 1664A 1999	81.3	6.45	AR00926	DMRQA42
MRQA	Total Residual Chlorine (cat# 587, lot# Q	042-501)									
	Total Residual Chlorine	mg/L	Acceptable	1,77	1.72	1.27 - 2.02	EPA 330.5 1978	1.61	0,114	AR00926	DMRQA42







Study: DMR-QA 42

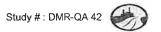
NPDES Permit #: AR0033316

Laboratory Name: Pine Bluff Wastewater

Utility

## Microbiology Results







## DMR-QA 42 Final Report

A Waters Company

NPDES Permit #: AR0033316

Permit Holder: Vincent W. Miles

**Environmental Compliance** 

Supervisor

Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, AR 71601-6055

(870) 535-6603

ERA Customer Number:

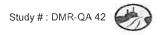
Report Issued:
Study Dates:

P136701 08/12/2022

04/15/2022 - 07/15/2022

TNI Analyte Code	Analyte	Units	Performance Reported Assigned Acceptance Evaluation Value Value Limits Method Description		Study Mean	Study Standard Deviation	USEPA Lab Code	Study			
DMRQA	WasteWatR™ Coliform MicrobE™ (cat	# 576, lot# Q042-08	93)								
2530	Fecal Coliforms (MF)	CFU/100mL	Acceptable	125.00	109	34.0 - 344	SM 9222 D (m-FC)-1997 1997	109	51.7	AR00926	DMRQA42







Study: DMR-QA 42

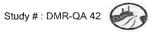
NPDES Permit #: AR0033316

Laboratory Name: Pine Bluff Wastewater

Utility

## **WET Results**







## DMR-QA 42 Final Report

NPDES Permit #: AR0033316

**ERA Customer Number:** 

P136701 08/12/2022

Permit Holder:

Vincent W. Miles **Environmental Compliance**  Report Issued: Study Dates:

04/15/2022 - 07/15/2022

Supervisor

Pine Bluff Wastewater Utility 1520 South Ohio Street

Analyte Code	Test End Point	Performance Evaluation	Reported Value %	Assigned Value %	Acceptance Limits %	Method Description	Study Mean	Study Standard Deviation	USEPA Lab Code	Study
day C	ı ıt Fathead minnow (Test Code 16) (cat# WET005, lot# Q04 hronic, Daily Renewal, 20% DMW um chloride	2-005)								
0812	IC25 (ON) Growth	Acceptable	55.02	56.0	43.2 - 68.9	EPA 1000.0 2002	56.0	6.44	TN00012	DMRWet42
0814	NOEC (ON) Growth	Acceptable	50	50.0	25.0 - 100	EPA 1000.0 2002			TN00012	DMRWet42
0759	NOEC Survival	Acceptable	25	50.0	25.0 - 100	EPA 1000.0 2002		[n]	TN00012	DMRWet42
	t Fathead minnow (Test Code 16) (cat# WET005, lot# Q04 hronic, Daily Renewal, 20% DMW um chloride	2-005) Acceptable	55.02	56.0	43.2 - 68.9	EPA 1000.0 DMW 2002	56.0	6.44	TN00012	DMRWet4
	IC25 (ON) Growth	Acceptable				2002			7.	
otassit 0812 0814	IC25 (ON) Growth NOEC (ON) Growth	Acceptable	50	50.0	25.0 - 100	EPA 1000.0 DMW 2002			TN00012	DMRWet42

#### DMRWet Ceriodaphnia dubia (Test Code 22) (cat# WET011, lot# Q042-011)

3-Brood Chronic, Daily Renewal, 20% DMW

#### Potassium chloride

0770	IC25 Reproduction	Acceptable	25.84	23.5	10.8 - 36.3	EPA 1002.0 2002	23.5	6.37	TN00012	DMRWet42
0771	NOEC Reproduction	Acceptable	25	25.0	12.5 - 50.0	EPA 1002.0 2002			TN00012	DMRWet42
0769	NOEC Survival	Acceptable	25	25.0	12.5 - 50.0	EPA 1002.0 2002			TN00012	DMRWet42

#### DMRWet Ceriodaphnia dubia (Test Code 22) (cat# WET011, lot# Q042-011)

3-Brood Chronic, Daily Renewal, 20% DMW

#### Potassium chloride

0770	IC25 Reproduction	Acceptable	25.84	23.5	10.8 - 36.3	EPA 1002.0 DMW 2002	23.5	6.37	TN00012	DMRWet42
0771	NOEC Reproduction	Acceptable	25	25.0	12.5 - 50.0	EPA 1002.0 DMW 2002		1	TN00012	DMRWet42
0769	NOEC Survival	Acceptable	25	25.0	12.5 - 50.0	EPA 1002 0 DMW 2002			TN00012	DMRWet42



## USEPA DMR-QA 42

### NPDES PERMITTEE DATA REPORT FORM



A Waters Company

Due Septemb	or 9 2022	USEPA NPDES	AR0033316		
Dae Oeptemb	01 3, 2022	Permit #:	A 2003	3316	Permit Ext:
Permittee Name:	Pine Bluff Wastewate	r Utility			
Facility Address:	Pine B 1520 South Ohio Stre		TAWITE	ERUT	ILITY
	1520 80	HO HTW	10 STR	EET	
City:	Pine Bluff		State: AR	Poeta	al Code: 71601-6055
Phone Number:	PINE BI	LUFF	Fax Number: (87	8	7.1601-6055
E-mail address:	y 76 - 53 s	*		Al	35-6243
9	TELL III	2 pbwas	TEW at e	al: WP study n	number(s):
For DMRQA-42, con	ducted in 2022, the P	ermittee ensured that t	their laboratory(s) pe	erforming the re	equired analyses:
Received PT Sa	mples	Submitted Comple by July 15, 2022	ete and Accurate Dat	а	Received a Graded Report by August 12, 2022
Yes 🗹 No		Yes 🗹 No			Yes No
	a—n	— Certification by Permit	Holder or Authorize	d Ranrasantati	ivo
qualified personnel prope responsible for gathering produced from a single a Pollutant Discharge Elim	law that this document an erly gather and evaluate th the information, the infor malylical run using the an ination System (NPDES) we reported our results to t	(as per d all attachments were prej ne information submitted. E mation submitted is, to the l alytical system that rountine Permit. Neither I nor any o	40 C.F.R. Section 122.22 pared under my direction Based on my inquiry of the best of my knowledge an ally performs these analys	or supervision in a e person or person d belief, true, accu les to produce con	accordance with a system designed to assure that ns who manage the system, or those persons directly urate and complete. Each reported value was appliance monitoring data required under our National or independent analyses conducted by us or any ting false information, including the possibility of fine
Name of					
Certifying Official:		171.0	T Note to de-	- 4.624	ental Compliance Supervisor
X-	ACHEENIA	C W. Mi	168	ENV.	LOMPLIANCE Sup.
Signature:	1 Kinsinol	solin hou			Date Signed: 0 1 2 1 7 2 2 3 2
Mailing Address:	1520 South Ohio Stre	eet	== 150 == 1		
enler only if different from address above)	1520 30	HO HTW	10 872	EET	
	TENT	77	CHENT		1. 481.
City:	Pine Bluff				
	2.411	-4-8 - 5 E-	State: AF	R Posta	al Code: 71601-6055
	18 3419	-WFF	State: AF	R Post	al Code: 71601-6055
Phone Number:	18 3419	[ ] 7   7   W  _	State: AF f E-mail address:	R	71601-6065

**United States** 

### **ENVIRONMENTAL PROTECTION AGENCY**

**Laboratory Performance Evaluation** Laboratory DMR-QA Evaluation Study 42

USEPA NPDES Permit #: AR0033316

Permit Ext:

Identification of a	all CHEM, MICRO and TOX la permit	ooratories who	did a	nalyse	s for th	nis	
Name of Laboratory	Address of Laboratory	U.S. EPA Lab Code	l	Analy k box(es apply		Lab	State- certified
		Gode	CHEM	MICRO	тох	Type*	Lab**
Pine Bluff Wastewater Utility	900 Island Harbor Marina Rd Pine Bluff,AR 71602	AR00926	×			G	
Waypoint Analytical, LLC	2790 Whitten Road Memphis,TN 38133	TN00012				C	

Permit Number: AR0033316

EPA Lab Code: AR00926

### Chemistry/Microbiology Analyte Checklist

DMRQA Study 42

		Laborato	ry's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
Minerals Alkalinity as CaCO3 Chloride Conductivity at 25°C Fluoride Potassium Sodium Sulfate Total Dissolved Solids at 180°C Total Solids at 105°C			(Servedire Meller)	State-definied lab
Hardness  Total Suspended Solids Calcium Magnesium Calcium Hardness as CaCO3 Total Hardness as CaCO3				
pH pH SM4500H+ B		X		
Settleable Solids Settleable Solids			100	
Solids Concentrate  Total Suspended Solids SM2540D  Total Dissolved Solids at 180°C Total Solids at 105°C		図		
Solids Total Suspended Solids Total Dissolved Solids at 180°C Total Solids at 105°C				
Simple Nutrients Ammonia as N SM 4500-NH3 B-1997 Nitrate + Nitrite as N Nitrate as N ortho-Phosphate as P Total Nitrogen		図		
Complex Nutrients Total Kjeldahl Nitrogen Total phosphorus as P Nitrite		2		
Nîtrite as N				

Permit Number: AR0033316

EPA Lab Code: AR00926

### Chemistry/Microbiology Analyte Checklist

DMRQA Study 42

		Laborator	y's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certifled lab
Demand			( constant of the control of the con	Otata sartifica las
BOD SM 5210 B-1997 CBOD		X		
SM 5210 B-1997		X		
HACH 8000		X		
SM 5310 B-2011		$\boxtimes$		
Oil & Grease Concentrate		LEJ		Ш.
n-Hexane Extractable Material(O&G) (Grav) EPA 1664A		×		
Oil & Grease		121	Ч	——————————————————————————————————————
n-Hexane Extractable Material(O&G) (Grav) n-Hexane Extractable Material(O&G) (IR)				
Trace Metals				
Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Chromium				
Cobalt Copper Iron Lead Manganese Molybdenum				
Nickel Selenium Silver Strontium Thallium Vanadium Zinc				
Mercury				
Mercury				
Low-Level Mercury			711	
Low Level Mercury	L			

Permit Number: AR0033316

EPA Lab Code: AR00926

### **Chemistry/Microbiology Analyte Checklist**

DMRQA Study 42

		Laborat	ory's Graded Result	
Analyte Test / Method	Test Required	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
Hexavalent Chromium			<del></del>	
Hexavalent Chromium				
Turbidity				
Turbidity				
Total Cyanide				
Cyanide, total Amenable Cyanide Available Cyanide				
Total Phenolics (4-AAP)				
Phenolics, total				
Total Residual Chlorine				
Free Residual Chlorine Total Residual Chlorine EPA 330.5		×	П	
Low-Level Total Residual Chlorine			·	
Low Level Total Residual Chlorine				
WasteWatR™ Coliform MicrobE™				
Total Coliforms (MF) Fecal Coliforms (MF) SM 9222 D (m-FC)-1997		$\boxtimes$		
E.coli (MF) Total Coliform (MPN-Multiple Well) Fecal Coliform (MPN-Multiple Well) E.coli (MPN-Multiple Well)				
WasteWatR™ Coliform MicrobE™ - SM 9221 Total Coliform (MPN-Multiple Tube)				
Fecal Coliform (MPN-Multiple Tube) E.coli (MPN-Multiple Tube)				

Signature/Title

Use a separate checklist for EACH lab used

Permit Number: AR0033316

EPA Lab Code: TN00012

### WET Organisms/Test Conditions/End Points Checklist

DMRWet Study 42

				Laboratory	s Graded Result	
Analyte					Not Acceptable	
Number	Organisms / Conditions	End Points	Test Req	Acceptable	(Corrective Action Required)	Analyte determined by state-certified lab
7.1100	ninnow (Test Code 13)		7			
0754	48Hr., Acute, Non-Renewal, 25° C, MHSF	LC50				
	ninnow (Test Code 14)					
0755	48Hr., Acute, Non-Renewal, 25° C, 20% DMW	LC50				
	ninnow (Test Code 15)					
0808	7-day Chronic, Daily Renewal, MHSF	IC25 (ON)				
0810	7-day Chronic, Daily Renewal, MHSF	Growth NOEC (ON)				
0756	7-day Chronic, Daily Renewal, MHSF	Growth NOEC Survival				
Fathead n	ninnow (Test Code 16)					
0812	7-day Chronic, Daily Renewal, 20% DMW	1C25 (ON)				
	EPA 1000.0 2002	Growth		×		
0814	7-day Chronic, Daily Renewal, 20% DMW	NOEC (ON)				
		Growth				
	EPA 1000.0 2002			$\boxtimes$		
0759	7-day Chronic, Daily Renewal, 20% DMW	NOEC Survival		l		
	EPA 1000.0 DMW			X		
Ceriodapl	nnia dubia (Test Code 19)					
0764	48-Hr Acute, Nonrenewal, 25° C, MHSF	LC50				
Ceriodapl	nnia dubia (Test Code 20)					
0765	48-Hr Acute, Nonrenewal, 25° C, 20% DMW	LC50				
Ceriodapl	nnia dubia (Test Code 21)					
0767	3-Brood Chronic, Daily Renewal, MHSF	IC25		1		
0768	3-Brood Chronic, Daily Renewal, MHSF	Reproduction NOEC				
0766	3-Brood Chronic, Daily Renewal, MHSF	Reproduction NOEC Survival				
Ceriodapi	nnia dubia (Test Code 22)					
0770	3-Brood Chronic, Daily Renewal, 20% DMW	IC25				1
	EPA 1002.0 2002	Reproduction				
0771	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC		X		
	EPA 1002.0 DMW 2002	Reproduction		×		
0769	3-Brood Chronic, Daily Renewal, 20% DMW	NOEC Survival			_	
	EPA 1002.0 2002			×		
Daphnia r	l nagna (Test Code 32)	Y	had.			
0788	48Hr., Acute, Non-Renewal, 25° C, MHSF	LC50				
Daphnia p	Dulex (Test Code 38)					ļ
0794	48Hr., Acute, Non-Renewal, 25° C, MHSF	LC50				
	st Code 42)				7	
0798	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				

Permit Number: AR0033316

EPA Lab Code: TN00012

### WET Organisms/Test Conditions/End Points Checklist

DMRWet Study 42

				Laboratory	's Graded Result	
Analyte Number	Organisms / Conditions	End Points	Test Req	Acceptable	Not Acceptable (Corrective Action Required)	Analyte determined by state-certified lab
Mysid (Te	st Code 43)					
0816	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth				
0818	7-day Chronic, Daily Renewal, SSW	NOEC (ON) Growth				
0799	7-day Chronic, Daily Renewal, SSW	NOEC Survival				
Inland silv	verside (Test Code 44)					
0803	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
Inland Silv	verside (Test Code 45)					
0825	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth				
0826	7-day Chronic, Daily Renewal, SSW	NOEC (ON) Growth				
0824	7-day Chronic, Daily Renewal, SSW	NOEC Survival		1		
Sheepshe	ead minnow (Test Code 46)					
0804	48-Hr Acute, Nonrenewal, 25° C, SSW	LC50				
Sheepshe	ead minnow (Test Code 47)					
0820	7-day Chronic, Daily Renewal, SSW	IC25 (ON) Growth				
0822	7-day Chronic, Daily Renewal, SSW	NOEC (ON) Growth				
0805	7-day Chronic, Daily Renewal, SSW	NOEC Survival				

Signature/Title

Use a separate checklist for EACH lab used

# GERTIFICATE OF REGOGNITION

### ERA congratulates PINE BLUFF WASTEWATER UTILITY

for your participation and successful evaluation in DMR-QA 42. We recognize the performance of this laboratory for achieving acceptable evaluations for the following analytes.

Ammonia as N

Fecal Coliforms (MF)

Total Residual Chlorine

BOD

n-Hexane Extractable Material Total Suspended Solids

(O&G)(Grav) **CBOD** 

COD

рΗ TOC

Matthew Seebeck

**Quality Officer**