



Springdale Water Utilities

526 Oak Avenue P.O. Box 769 Springdale, Arkansas 72765-0769 (479) 751-5751

Enforcement Branch
Arkansas Dept. of Environmental Quality
5301 Northshore Dr.
North Little Rock, AR 72118-5317

RE: NPDES Permit No. AR0022063
AFIN #72-00003
Springdale, AR

December 15, 2014

Dear Sir or Madame:

Enclosed please find the results of fourth quarter Ceriodaphnia dubia and Pimephales promelas analyses, and fourth quarter Table III analyses conducted on Springdale Water Utilities' wastewater treatment facility influent, effluent, and sludge (belt press influent) for 2014. These analyses are required by our NPDES Permit.

Please feel free to call Ms. Jennifer Enos at (479)756-3657 if you have any questions concerning these analyses.

Sincerely yours,

Heath A. Ward
Executive Director

JEE/jee

Enclosures

Cc: Jennifer Enos, SWU
Mary Barnett, ADEQ
File

Springdale Water Utilities

Springdale, Arkansas

System Overflow Report for November 2014

NO OVERFLOWS TO REPORT

This report submitted to Arkansas Department of Environmental Quality in compliance with Permit Number AR0022063 AFIN: 72-00003

Date	Time	Duration	Address	Est. Vol.	Cause of overflow	Remedial Action	Environmental Impact	Discharge Location

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that all qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature Heath A. Tubus

Date 12-15-14

**CITY OF SPRINGDALE WWTF
 NPDES PERMIT NO. AR0022063
 AFIN NO. 72-00003
 BIOMONITORING REPORTING
 TEST DATE: 11/18/14**

I. *Ceriodaphnia dubia*

Response

(A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP3B.	0
(B) Report the NOEC value for survival, Parameter No. TOP3B.	97%
(C) Report the NOEC value for reproduction, Parameter No. TPP3B.	97%
(D) If the NOEC for reproduction is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TGP3B.	0
(E) Report the higher (critical dilution or control) Coefficient of Variation, Parameter No. TQP3B.	6.90%

II. *Pimephales promelas* (fathead minnow)

Response

(A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TLP6C.	0
(B) Report the NOEC value for survival, Parameter No. TOP6C.	97%
(C) Report the NOEC value for growth, Parameter No. TPP6C.	97%
(D) If the No Observed Effect Concentration (NOEC) for growth is less than the critical dilution, enter a "1"; otherwise, enter a "0". Parameter No. TGP6C.	0
(E) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQP6C.	8.00%

22415 Retest Number 1

Leave Blank

22416 Retest Number 2

Leave Blank

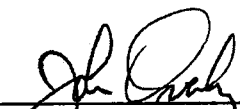


Springdale Water Utilities
ATTN: Mr. Brad Stewart
Post Office Box 769
Springdale, AR 72762

This report contains the analytical results and supporting information for samples submitted on November 25, 2014. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.



John Overbey
Laboratory Director

This document has been distributed to the following:

PDF cc: Springdale Water Utilities
ATTN: Mr. Brad Stewart
bstewart@springdalewater.com



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SAMPLE INFORMATION

Project Description:

Four (4) water and one (1) sludge sample(s) received on November 25, 2014
Table III
P.O. No. 0018303 00

Receipt Details:

A Chain of Custody was provided. The samples were delivered in one (1) ice chest.
Ice chest #1 was delivered with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

Sample Identification:

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Sampled Date/Time</u>	<u>Notes</u>
185025-1	Influent 11/17-18/14 1400, 2000, 0200, 0800	18-Nov-2014 0800	
185025-2	Influent 11/17-18/14 1400-1200	18-Nov-2014 1200	
185025-3	Effluent 11/20/14 0600, 1200, 1800, 2400	20-Nov-2014 2359	
185025-4	Effluent 11/20-21/14 0600-0600	21-Nov-2014 0600	
185025-5	Belt Press Influent 11/21/14 0700	21-Nov-2014 0700	

Qualifiers:

- D Result is from a secondary dilution factor
- X Spiking level is invalid due to the high concentration of analyte in the spiked sample

Case Narrative:

Analysis of soils/sludges are reported on a dry-weight basis unless otherwise specified.

References:

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", (SM).
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).



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ANALYTICAL RESULTS

AIC No. 185025-1

Sample Identification: Influent 11/17-18/14 1400, 2000, 0200, 0800

Analyte	Result	RL	Units	Qualifier
Total Recoverable Phenolics EPA 420.1	100 Prep: 26-Nov-2014 0801 by 308	5 Analyzed: 26-Nov-2014 1105 by 308	ug/l Batch: W50067	
Total Cyanide SM 4500-CN C,E 1999	< 10 Prep: 01-Dec-2014 0759 by 308	10 Analyzed: 01-Dec-2014 1214 by 308	ug/l Batch: W50084	

AIC No. 185025-2

Sample Identification: Influent 11/17-18/14 1400-1200

Analyte	Result	RL	Units	Qualifier
Total Recoverable Antimony EPA 200.8	< 60 Prep: 01-Dec-2014 1412 by 313	60 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Arsenic EPA 200.8	1.0 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Beryllium EPA 200.8	< 0.5 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Cadmium EPA 200.8	< 0.5 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Chromium EPA 200.8	< 10 Prep: 01-Dec-2014 1412 by 313	10 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Copper EPA 200.8	30 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Lead EPA 200.8	1.5 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Molybdenum EPA 200.8	< 8 Prep: 01-Dec-2014 1412 by 313	8 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Nickel EPA 200.8	9.9 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Selenium EPA 200.8	< 5 Prep: 01-Dec-2014 1412 by 313	5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Silver EPA 200.8	< 0.5 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Thallium EPA 200.8	< 0.5 Prep: 01-Dec-2014 1412 by 313	0.5 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	
Total Recoverable Zinc EPA 200.8	110 Prep: 01-Dec-2014 1412 by 313	20 Analyzed: 04-Dec-2014 1051 by 302	ug/l Batch: S37816	

AIC No. 185025-3

Sample Identification: Effluent 11/20/14 0600, 1200, 1800, 2400

Analyte	Result	RL	Units	Qualifier
Total Recoverable Phenolics EPA 420.1	21 Prep: 26-Nov-2014 0801 by 308	5 Analyzed: 26-Nov-2014 1105 by 308	ug/l Batch: W50067	



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ANALYTICAL RESULTS

AIC No. 185025-3 (Continued)

Sample Identification: Effluent 11/20/14 0600, 1200, 1800, 2400

Analyte	Result	RL	Units	Qualifier
Total Cyanide SM 4500-CN C,E 1999	< 10	10	ug/l	
Prep: 01-Dec-2014 0759 by 308	Analyzed: 01-Dec-2014 1207 by 308		Batch: W50084	

AIC No. 185025-4

Sample Identification: Effluent 11/20-21/14 0600-0600

Analyte	Result	RL	Units	Qualifier
Total Recoverable Antimony EPA 200.8	< 60	60	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Arsenic EPA 200.8	0.50	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Beryllium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Cadmium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Chromium EPA 200.8	< 10	10	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Copper EPA 200.8	7.4	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Lead EPA 200.8	< 0.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Molybdenum EPA 200.8	< 8	8	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Nickel EPA 200.8	4.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Selenium EPA 200.8	< 5	5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Silver EPA 200.8	< 0.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Thallium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	
Total Recoverable Zinc EPA 200.8	81	20	ug/l	
Prep: 01-Dec-2014 1412 by 313	Analyzed: 04-Dec-2014 1056 by 302		Batch: S37816	

AIC No. 185025-5

Sample Identification: Belt Press Influent 11/21/14 0700

Analyte	Result	RL	Units	Qualifier
Total Cyanide EPA 9010C, 9014	< 3	3	mg/Kg	
Prep: 01-Dec-2014 1008 by 308	Analyzed: 01-Dec-2014 1355 by 308		Batch: W50091	
Total Recoverable Phenolics EPA 9065	46	20	mg/Kg	
Prep: 26-Nov-2014 0801 by 308	Analyzed: 26-Nov-2014 1105 by 308		Batch: W50068	



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ANALYTICAL RESULTS

AIC No. 185025-5 (Continued)

Sample Identification: Belt Press Influent 11/21/14 0700

Analyte		Result	RL	Units	Qualifier
Total Solids		3.9	0.01	wt %	
SM 2540 G 1997	Prep: 25-Nov-2014 1639 by 271	Analyzed: 26-Nov-2014 1408 by 271		Batch: W50066	
Antimony		< 3	3	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Arsenic		< 5	5	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Beryllium		< 0.03	0.03	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Cadmium		< 0.4	0.4	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 03-Dec-2014 1245 by 311		Batch: S37823	
Chromium		18	0.7	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Copper		100	0.6	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Lead		< 4	4	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Molybdenum		8.1	0.8	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Nickel		20	1	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Selenium		< 7	7	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 03-Dec-2014 1152 by 311		Batch: S37823	
Silver		2.3	0.7	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Thallium		< 4	4	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Zinc		270	0.2	mg/Kg	
EPA 3051A, 6010C	Prep: 02-Dec-2014 1203 by 313	Analyzed: 02-Dec-2014 1829 by 311		Batch: S37823	
Mercury		0.24	0.1	mg/Kg	
EPA 7471B	Prep: 01-Dec-2014 1118 by 311	Analyzed: 01-Dec-2014 1538 by 311		Batch: S37814	



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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD		Preparation Date	Analysis Date	Dil	Qual
			RPD	Limit				
Total Solids	184982-1	13 wt %			25Nov14 1639 by 271	26Nov14 1408 by 271		
	Batch: W50066 Duplicate	13 wt %	1.07	10.0	25Nov14 1640 by 271	26Nov14 1408 by 271		

LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	0.1 mg/l	104	85.0-115			W50067	26Nov14 0801 by 308	26Nov14 1105 by 308		
Total Cyanide	0.1 mg/l	97.4	85.0-115			W50084	01Dec14 0800 by 308	01Dec14 1205 by 308		
Total Recoverable Antimony	0.05 mg/l	102	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Arsenic	0.05 mg/l	96.6	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Beryllium	0.05 mg/l	91.7	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Cadmium	0.05 mg/l	103	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Chromium	0.05 mg/l	90.4	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Copper	0.05 mg/l	107	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Lead	0.05 mg/l	102	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Molybdenum	0.05 mg/l	95.9	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Nickel	0.05 mg/l	107	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Selenium	0.05 mg/l	92.8	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Silver	0.02 mg/l	107	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Thallium	0.05 mg/l	106	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Recoverable Zinc	0.05 mg/l	110	85.0-115			S37816	01Dec14 1413 by 313	02Dec14 1156 by 302		
Total Cyanide	0.500 mg/Kg	96.8	85.0-115			W50091	01Dec14 1008 by 308	01Dec14 1353 by 308		
Total Recoverable Phenolics	10.0 mg/Kg	104	85.0-115			W50068	26Nov14 0802 by 308	26Nov14 1105 by 308		
Antimony	500 mg/Kg	88.4	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Arsenic	500 mg/Kg	88.1	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Beryllium	50.0 mg/Kg	91.3	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Cadmium	500 mg/Kg	86.9	85.0-115			S37823	02Dec14 1202 by 313	03Dec14 1231 by 311		
Chromium	50.0 mg/Kg	94.6	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Copper	50.0 mg/Kg	89.8	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Lead	500 mg/Kg	91.7	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Molybdenum	50.0 mg/Kg	88.9	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Nickel	50.0 mg/Kg	91.2	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Selenium	500 mg/Kg	99.2	85.0-115			S37823	02Dec14 1202 by 313	03Dec14 1138 by 311		
Silver	10.0 mg/Kg	96.1	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Thallium	500 mg/Kg	90.1	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Zinc	50.0 mg/Kg	87.4	85.0-115			S37823	02Dec14 1202 by 313	02Dec14 1752 by 311		
Mercury	1.25 mg/Kg	106	85.0-115			S37814	01Dec14 1118 by 311	01Dec14 1508 by 311		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	185025-3	0.1 mg/l	99.3	80.0-120	W50067	26Nov14 0801 by 308	26Nov14 1105 by 308		
	185025-3	0.1 mg/l	97.6	80.0-120	W50067	26Nov14 0801 by 308	26Nov14 1105 by 308		
	Relative Percent Difference:		1.42	10.0	W50067				
Total Cyanide	185025-3	0.1 mg/l	96.9	75.0-125	W50084	01Dec14 0800 by 308	01Dec14 1208 by 308		
	185025-3	0.1 mg/l	91.9	75.0-125	W50084	01Dec14 0800 by 308	01Dec14 1210 by 308		
	Relative Percent Difference:		5.30	20.0	W50084				
Total Recoverable Antimony	185010-1	0.05 mg/l	103	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	103	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.00234	20.0	S37816				
Total Recoverable Arsenic	185010-1	0.05 mg/l	104	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	102	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		1.26	20.0	S37816				
Total Recoverable Beryllium	185010-1	0.05 mg/l	94.3	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	94.5	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.122	20.0	S37816				
Total Recoverable Cadmium	185010-1	0.05 mg/l	112	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	112	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.0827	20.0	S37816				
Total Recoverable Chromium	185010-1	0.05 mg/l	97.7	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	96.6	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		1.16	20.0	S37816				
Total Recoverable Copper	185010-1	0.05 mg/l	105	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	107	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		1.99	20.0	S37816				
Total Recoverable Lead	185010-1	0.05 mg/l	93.0	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	93.3	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.311	20.0	S37816				
Total Recoverable Molybdenum	185010-1	0.05 mg/l	96.1	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	96.7	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.657	20.0	S37816				
Total Recoverable Nickel	185010-1	0.05 mg/l	106	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	108	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		2.29	20.0	S37816				
Total Recoverable Selenium	185010-1	0.05 mg/l	93.9	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	93.2	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.735	20.0	S37816				
Total Recoverable Silver	185010-1	0.02 mg/l	106	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.02 mg/l	104	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		1.77	20.0	S37816				
Total Recoverable Thallium	185010-1	0.05 mg/l	97.5	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1204 by 302		
	185010-1	0.05 mg/l	97.6	75.0-125	S37816	01Dec14 1413 by 313	02Dec14 1212 by 302		
	Relative Percent Difference:		0.101	20.0	S37816				
Total Recoverable Zinc	185010-1	0.05 mg/l	76.2	75.0-125	S37816	01Dec14 1413 by 313	04Dec14 1027 by 302	5	D
	185010-1	0.05 mg/l	85.8	75.0-125	S37816	01Dec14 1413 by 313	04Dec14 1032 by 302	5	D
	Relative Percent Difference:		0.714	20.0	S37816				
Total Cyanide	185025-5	0.987 mg/Kg	87.0	75.0-125	W50091	01Dec14 1008 by 308	01Dec14 1357 by 308		
	185025-5	0.984 mg/Kg	87.0	75.0-125	W50091	01Dec14 1008 by 308	01Dec14 1359 by 308		
	Relative Percent Difference:		0.0429	20.0	W50091				
Total Recoverable Phenolics	185025-5	9.85 mg/Kg	99.8	80.0-120	W50068	26Nov14 0802 by 308	26Nov14 1105 by 308		
	185025-5	9.47 mg/Kg	104	80.0-120	W50068	26Nov14 0802 by 308	26Nov14 1105 by 308		
	Relative Percent Difference:		3.33	10.0	W50068				



Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Antimony	184982-1	496 mg/Kg	90.2	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	493 mg/Kg	92.3	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		2.37	20.0	S37823				
Arsenic	184982-1	496 mg/Kg	95.1	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	493 mg/Kg	94.8	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		0.256	20.0	S37823				
Beryllium	184982-1	49.6 mg/Kg	101	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	49.3 mg/Kg	99.0	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		2.36	20.0	S37823				
Cadmium	184982-1	496 mg/Kg	91.4	75.0-125	S37823	02Dec14 1202 by 313	03Dec14 1234 by 311		
	184982-1	493 mg/Kg	91.8	75.0-125	S37823	02Dec14 1202 by 313	03Dec14 1237 by 311		
	Relative Percent Difference:		0.437	20.0	S37823				
Chromium	184982-1	49.6 mg/Kg	96.4	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	49.3 mg/Kg	99.8	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		3.01	20.0	S37823				
Copper	184982-1	49.6 mg/Kg	98.5	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	49.3 mg/Kg	92.0	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		4.61	20.0	S37823				
Lead	184982-1	496 mg/Kg	96.9	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	493 mg/Kg	96.2	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		0.763	20.0	S37823				
Molybdenum	184982-1	49.6 mg/Kg	98.4	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	49.3 mg/Kg	95.9	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		2.31	20.0	S37823				
Nickel	184982-1	49.6 mg/Kg	90.9	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	49.3 mg/Kg	94.1	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		3.30	20.0	S37823				
Selenium	184982-1	496 mg/Kg	89.6	75.0-125	S37823	02Dec14 1202 by 313	03Dec14 1141 by 311		
	184982-1	493 mg/Kg	85.2	75.0-125	S37823	02Dec14 1202 by 313	03Dec14 1144 by 311		
	Relative Percent Difference:		5.03	20.0	S37823				
Silver	184982-1	9.91 mg/Kg	100	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	9.86 mg/Kg	98.6	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		1.86	20.0	S37823				
Thallium	184982-1	496 mg/Kg	93.6	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		
	184982-1	493 mg/Kg	91.1	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		
	Relative Percent Difference:		2.71	20.0	S37823				
Zinc	184982-1	49.6 mg/Kg	-	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1757 by 311		X
	184982-1	49.3 mg/Kg	-	75.0-125	S37823	02Dec14 1202 by 313	02Dec14 1803 by 311		X
	Relative Percent Difference:		0.466	20.0	S37823				
Mercury	184982-1	2.38 mg/Kg	89.5	70.0-130	S37814	01Dec14 1118 by 311	01Dec14 1512 by 311		
	184982-1	2.46 mg/Kg	90.8	70.0-130	S37814	01Dec14 1118 by 311	01Dec14 1516 by 311		
	Relative Percent Difference:		1.08	20.0	S37814				



Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Total Recoverable Phenolics	< 0.005 mg/l	0.005	0.005	W50067-1	26Nov14 0801 by 308	26Nov14 1105 by 308	
Total Cyanide	< 0.01 mg/l	0.01	0.01	W50084-1	01Dec14 0800 by 308	01Dec14 1203 by 308	
Total Recoverable Antimony	< 0.03 mg/l	0.03	0.03	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Arsenic	< 0.0005 mg/l	0.0005	0.0005	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Beryllium	< 0.0003 mg/l	0.0003	0.0003	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Cadmium	< 0.0001 mg/l	0.0001	0.0001	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Chromium	< 0.007 mg/l	0.007	0.007	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Copper	< 0.0005 mg/l	0.0005	0.0005	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Lead	< 0.0005 mg/l	0.0005	0.0005	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Molybdenum	< 0.008 mg/l	0.008	0.008	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Nickel	< 0.0005 mg/l	0.0005	0.0005	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Selenium	< 0.002 mg/l	0.002	0.002	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Silver	< 0.0002 mg/l	0.0002	0.0002	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Thallium	< 0.0005 mg/l	0.0005	0.0005	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Recoverable Zinc	< 0.002 mg/l	0.002	0.002	S37816-1	01Dec14 1413 by 313	02Dec14 1151 by 302	
Total Cyanide	< 0.1 mg/Kg	0.1	0.1	W50091-1	01Dec14 1008 by 308	01Dec14 1352 by 308	
Total Recoverable Phenolics	< 0.5 mg/Kg	0.5	0.5	W50068-1	26Nov14 0802 by 308	26Nov14 1105 by 308	
Total Solids	< 0.01 wt %	0.01	0.01	W50066-1	25Nov14 1640 by 271	26Nov14 1408 by 271	
Antimony	< 3 mg/Kg	3	3	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Arsenic	< 5 mg/Kg	5	5	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Beryllium	< 0.03 mg/Kg	0.03	0.03	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Cadmium	< 0.4 mg/Kg	0.4	0.4	S37823-1	02Dec14 1202 by 313	03Dec14 1228 by 311	
Chromium	< 0.7 mg/Kg	0.7	0.7	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Copper	< 0.6 mg/Kg	0.6	0.6	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Lead	< 4 mg/Kg	4	4	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Molybdenum	< 0.8 mg/Kg	0.8	0.8	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Nickel	< 1 mg/Kg	1	1	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Selenium	< 7 mg/Kg	7	7	S37823-1	02Dec14 1202 by 313	03Dec14 1133 by 311	
Silver	< 0.7 mg/Kg	0.7	0.7	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Thallium	< 4 mg/Kg	4	4	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Zinc	< 0.2 mg/Kg	0.2	0.2	S37823-1	02Dec14 1202 by 313	02Dec14 1748 by 311	
Mercury	< 0.1 mg/Kg	0.1	0.1	S37814-1	01Dec14 1118 by 311	01Dec14 1504 by 311	



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>SPRINGDALE WATER UTILITIES</u>			PO No. <u>001830300</u>		NO OF BOTTLES	ANALYSES REQUESTED										AIC CONTROL NO: <u>185025</u>			
Project Reference: <u>TABLE III</u>			MATRIX		BOTTLES	T. CYANIDE	T. PHENOLICS	PP METALS + MB * EXCLUDE Hg	TABLE III: CN, T, Phenolics	PP METALS + Mo - include Hg								AIC-PROPOSAL-NO:	
Project Manager: <u>BRAD STEWART</u>			G	C	W	S	O	I	L	S							Carrier: <u>FED EX</u>		
Sampled By: <u>OPERATIONS/BIOSOLIDS</u>			A	O	A	T	E	R									Received Temperature C <u>1.3</u>		
AIC No.	Sample Identification	Date/Time Collected															Remarks		
<u>1</u>	<u>INFLUENT</u>	<u>1400, 2000, 0200, 0800</u> <u>11/17-18/14</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>1</u>	<u>INFLUENT</u>	<u>1400, 2000, 0200, 0800</u> <u>11/17-18/14</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>2</u>	<u>INFLUENT</u>	<u>0600-1200</u> <u>11/17-18/14</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>3</u>	<u>EFFLUENT</u>	<u>0600, 1200, 1800, 2400</u> <u>11/20/14</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>3</u>	<u>EFFLUENT</u>	<u>0600, 1200, 1800, 2400</u> <u>11/20/14</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>4</u>	<u>EFFLUENT</u>	<u>0600-0800</u> <u>11/20-21/14</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<u>5</u>	<u>BELT PRESS INFLUENT</u>	<u>11/21/14</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Time: 0700</u> Field pH calibration	
Container Type																		on _____ @ _____	
Preservative																		Buffer:	
G = Glass NO = none			P = Plastic S = Sulfuric acid pH2			V = VOA vials N = Nitric acid pH2			H = HCl to pH2 B = NaOH to pH12			T = Sodium Thiosulfate Z = Zinc acetate			A = (NH ₄) ₂ SO ₄ , NH ₄ OH				
Turnaround Time Requested: (Please circle) <u>NORMAL</u> or EXPEDITED IN <u>N/A</u> DAYS					Relinquished By: <u>Josh Waare</u>					Date/Time: <u>11/24/14-1000</u>					Received By:				
Expedited results requested by: <u>N/A</u>					Relinquished By:					Date/Time:					Received in Lab By: <u>[Signature]</u>				
Who should AIC contact with questions: Phone: <u>479-755-3657</u> Fax: <u>479-750-7195</u>					Comments: <u>* EXCLUDE MERCURY (Hg) - PLANT INFLUENT + EFFLUENT</u>														
Report Attention to: <u>BRAD STEWART</u>					<u>- INCLUDE MERCURY (Hg) - BELT PRESS INFLUENT</u>														
Report Address to: <u>P.O. BOX 769</u> <u>SPRINGDALE, AR 72762</u>																			
Email Address: <u>BSTEWART@SPRINGDALEWATER.COM</u>																			

Mercury One LTD

Mercury Analysis

Analytical Report

EPA Method 1631E

Report #: 14-2212

Page 1 of 2

Customer Name:

Springdale Water Utilities
P.O. Box 769
Springdale, AR 72765-0769

12/5/14

Attention:

Jennefer Enos

Project/PO#

0

Lab /(Field ID) or (Customer ID)	Results ng/L	Results ng/L	Results ng/L	Results ng/L	Mercury One ID:
Influent (Composite Samples 1-4)	61.8				141201-01
Effluent (Composite Samples 1-4)		16.1*			141201-02
Field Blank			<0.5		141201-03
Sample Type	Influent	Effluent	Field Blank		
Date Sampled:	11/21-22/14	11/24-25/14	11/24/14		
Date Received:	12/1/14	12/1/14	12/1/14		
Date Prepared:	12/1/14	12/1/14	12/1/14		
Date Analyzed:	12/4/14	12/4/14	12/4/14		
Time Analyzed:	10:52	10:56	11:20		
Dilution Factor					QCS/MS/MSD
High Cal Used					Acceptable Range
QCS (Quality Control Standard)	91%				71-124%
Method Blank Result	<0.2	Method Blank Requirement			<0.2

M= Modified: See Below for Explanation

Dilution Factors are calculated into the results.

Method Reporting Limit

0.5ng/L

RPD Acceptable Range <20%

Matrix Spike/ Matrix Spike Duplicate Recoveries

MS/MSD Acceptable Range

71-129%

Mercury One Sample ID

% MS Recovery

% MSD Recovery

RPD

New Reporting Requirements- Some states now require reporting values between the detection limit (MDL) and the reporting limit (PQL) rather than using a <0.5 value

***J See Below**

The results are related only to the samples presented on this report.

Arkansas Cert# 88-0911

The test results are certified to meet all requirements of NELAC.

West Virginia Cert # 348

Other Codes

North Carolina Cert # 662

Other Comments: J = Estimated result , R = Rejected.

Reason for J or R flag:

* A value found between the Reporting Limit and the Method Detection Limit is considered estimated

William W. Purves

Rev 4 6/23/11

Phone: 330-963-0843

2241 Pinnacle Parkway, Suite B, Twinsburg, OH 44087

Fax: 330-963-1016

Chain of Custody

Mercury One Ltd.
2241 Pinnacle Parkway, Suite B
Twinsburg, OH 44087

Phone: 330-963-0843
Fax: 330-963-1016
E-Mail: customerservice@mercuryoneltd.com

Method 1631 Mercury

Other: _____

ATTN: BRAD STEWART

Client: SPRINGDALE WATER UTILITIES

Address: P.O. BOX 769

City: SPRINGDALE State: AR Zip: 72762

Phone: 479-756-3659 Fax: 479-750-1170 E-Mail: bstewart@springdalewater.com

Sampled By: _____

Collection Date	Time	Sample Matrix	Comp/Grab	Sample Description/Comments	Mercury One Lab ID
11/21/14	0800	WATER	GRAB	INFLUENT	141201-1a
11/21/14	1200	WATER	GRAB	INFLUENT	141201-1b
11/21/14	1400	WATER	GRAB	INFLUENT	141201-1c
11/22/14	0800	WATER	GRAB	INFLUENT	141201-1d
11/24/14	0800	WATER	GRAB	EFFLUENT	141201-2a
11/24/14	1200	WATER	GRAB	EFFLUENT	141201-2b
11/24/14	1500	WATER	GRAB	EFFLUENT	141201-2c
11/25/14	0800	WATER	GRAB	EFFLUENT	141201-2d
11/24/14	1200	WATER		BLANK	141201-3

Relinquished By: Josh Weaver Date: 11/25/14 Time: 0900

Received By: Ann Howard Date: 12/1/14 Time: 1300

Relinquished By: _____ Date: _____ Time: _____

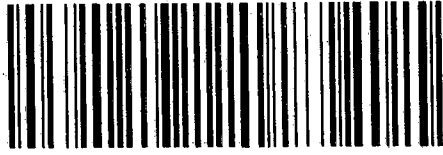
Received By: _____ Date: _____ Time: _____

Use multiple lines for description if necessary.

Temp

Springdale Water Utilities
P.O. Box 769
Springdale, AR 72765

CERTIFIED MAIL™



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		U.S. POSTAGE PAID GREENLAND, AR 72737 DEC 16, 14 AMOUNT
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**Arkansas Dept. of Environmental Quality
NPDES Enforcement Section
5301 Northshore Drive
North Little Rock, AR 72118-5317**

