Springdale Water Utilities

Springdale, Arkansas

System Overflow Report for March 2014

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
03/31/2014	4:30 pm-5:30 pm	1 hr.	317 N 6th Place Lowell, AR 72745	200 gal	Debris	Jet-Vac/Spread Lime on Affected Area	None	Manhole overflow soaked into ground.

"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 Keith A. Wood **Date** 4-14-2014

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

March 14, 2014

Dear Sir or Madame:

Enclosed please find the results of first quarter Ceriodaphnia dubia and Pimephales promelas analyses, and first 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 G. Ward

Heath Ward
Executive Director

JEE/jee
Enclosures
Cc: Jennifer Enos, SWU
Alison West, ADEQ
Mary Barnett, ADEQ
File

Huther and Associates, Inc.

environmental toxicologists, biologists, and consultants

CITY OF SPRINGDALE WWTF
NPDES PERMIT NO. AR0022063
AFIN NO. 72-00003
BIOMONITORING REPORTING
TEST DATE: 03/18/14

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.	13.12%

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.	9.75%
22415 Retest Number 1	Leave Blank
22416 Retest Number 2	Leave Blank

1156 North Bonnie Brae Denton, Texas 76201 Ph: (940) 387-1025 Fax: (940) 387-1036

AMERICAN INTERPLEX CORPORATION
LABORATORIES

April 8, 2014
Control No. 176725

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 March 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

AMERICAN INTERPLEX CORPORATION LABORATORIES

Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

SAMPLE INFORMATION

Project Description:
Four (4) water and one (1) sludge sample(s) received on March 25, 2014
Table III
P.O. No. 0017912 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:

Laboratory ID	Client Sample ID	Sampled Date/Time	Notes
176725-1	Influent 03/17-18/14 1100, 1700, 2300, 0600	18-Mar-2014 0600	
176725-2	Influent 03/17-18/14 1100-0900	18-Mar-2014 0900	
176725-3	Effluent 03/20/14 0000, 0600, 1200, 1800	20-Mar-2014 1800	
176725-4	Effluent 03/20/14 0000 - 2400	20-Mar-2014 2359	
176725-5	Belt Press Influent 03/21/14 0715	21-Mar-2014 0715	

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", 21st edition.
"American Society for Testing and Materials" (ASTM).
"Association of Analytical Chemists" (AOAC).

AMERICAN INTERPLEX CORPORATION LABORATORIES

Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

ANALYTICAL RESULTS

AIC No. 176725-1
Sample Identification: Influent 03/17-18/14 1100, 1700, 2300, 0600

Analyte		Result	RL	Units	Qualifier
Total Recoverable Phenolics		**63**	0.5	ug/l	
EPA 420.1	Prep: 26-Mar-2014 0823 by 308	Analyzed: 26-Mar-2014 1110 by 308		Batch: W47094	
Total Cyanide		**< 10**	10	ug/l	
SM 4500-CN C,E 1999	Prep: 26-Mar-2014 1345 by 308	Analyzed: 27-Mar-2014 1016 by 308		Batch: W47104	

AIC No. 176725-2
Sample Identification: Influent 03/17-18/14 1100-0900

Analyte		Result	RL	Units	Qualifier
Total Recoverable Antimony		**< 60**	60	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Arsenic		**< 0.5**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Beryllium		**< 0.5**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Cadmium		**< 0.5**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Chromium		**< 10**	10	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Copper		**26**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Lead		**0.72**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Molybdenum		**9.0**	8	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 26-Mar-2014 1415 by 305		Batch: S36499	
Total Recoverable Nickel		**5.1**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Selenium		**< 5**	5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Silver		**< 0.5**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Thallium		**< 0.5**	0.5	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	
Total Recoverable Zinc		**73**	20	ug/l	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1909 by 305		Batch: S36499	

AIC No. 176725-3
Sample Identification: Effluent 03/20/14 0000, 0600, 1200, 1800

Analyte		Result	RL	Units	Qualifier
Total Recoverable Phenolics		**33**	0.5	ug/l	
EPA 420.1	Prep: 26-Mar-2014 0823 by 308	Analyzed: 26-Mar-2014 1110 by 308		Batch: W47094	

Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

ANALYTICAL RESULTS

AIC No. 176725-3 (Continued)
Sample Identification: Effluent 03/20/14 0000, 0600, 1200, 1800

Analyte		Result	RL	Units	Qualifier
Total Cyanide		**< 10**	10	**ug/l**	
SM 4500-CN C,E 1999	Prep: 26-Mar-2014 1345 by 308	Analyzed: 27-Mar-2014 1005 by 308		Batch: W47104	

AIC No. 176725-4
Sample Identification: Effluent 03/20/14 0000 - 2400

Analyte		Result	RL	Units	Qualifier
Total Recoverable Antimony		**< 60**	60	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Arsenic		**< 0.5**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Beryllium		**< 0.5**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Cadmium		**< 0.5**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Chromium		**< 10**	10	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Copper		**13**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Lead		**0.75**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Molybdenum		**< 8**	8	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 26-Mar-2014 1420 by 305		Batch: S36499	
Total Recoverable Nickel		**3.2**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Selenium		**< 5**	5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Silver		**< 0.5**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Thallium		**< 0.5**	0.5	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	
Total Recoverable Zinc		**47**	20	**ug/l**	
EPA 200.8	Prep: 25-Mar-2014 1446 by 285	Analyzed: 25-Mar-2014 1914 by 305		Batch: S36499	

AIC No. 176725-5
Sample Identification: Belt Press Influent 03/21/14 0715

Analyte		Result	RL	Units	Qualifier
Total Cyanide		**< 2**	2	**mg/Kg**	
EPA 9010C, 9014	Prep: 26-Mar-2014 0849 by 308	Analyzed: 27-Mar-2014 0900 by 308		Batch: W47095	
Total Recoverable Phenolics		**38**	20	**mg/Kg**	
EPA 9065	Prep: 27-Mar-2014 0748 by 308	Analyzed: 27-Mar-2014 1125 by 308		Batch: W47116	

AMERICAN INTERPLEX CORPORATION LABORATORIES

Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

ANALYTICAL RESULTS

AIC No. 176725-5 (Continued)
Sample Identification: Belt Press Influent 03/21/14 0715

Analyte		Result	RL	Units	Qualifier
Total Solids		**4.7**	0.01	**wt %**	
SM 2540 G 1997	Prep: 26-Mar-2014 1044 by 302	Analyzed: 26-Mar-2014 1648 by 302		Batch: W47100	
Antimony		**< 3**	3	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Arsenic		**< 5**	5	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Beryllium		**0.060**	0.03	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Cadmium		**< 0.4**	0.4	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Chromium		**17**	0.7	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Copper		**90**	0.6	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Lead		**< 4**	4	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Molybdenum		**4.3**	0.8	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Nickel		**17**	1	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Selenium		**< 7**	7	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Silver		**1.7**	0.7	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Thallium		**< 4**	4	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Zinc		**230**	0.2	**mg/Kg**	
EPA 3051A, 6010C	Prep: 27-Mar-2014 1321 by 305	Analyzed: 27-Mar-2014 1818 by 305		Batch: S36518	
Mercury		**0.35**	0.1	**mg/Kg**	
EPA 7471B	Prep: 27-Mar-2014 1123 by 311	Analyzed: 27-Mar-2014 1515 by 311		Batch: S36514	

AMERICAN INTERPLEX CORPORATION LABORATORIES

Springdale Water Utilities
Post Office Box 769
Springdale, AR 72762

DUPLICATE RESULTS

Analyte		AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Total Solids		176746-1	74 wt %			26Mar14 1044 by 302	26Mar14 1648 by 302		
	Batch: W47100	Duplicate	76 wt %	3.27	10.0	26Mar14 1044 by 302	26Mar14 1648 by 302		

LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	0.1 mg/l	86.2	85.0-115			W47094	26Mar14 0823 by 308	26Mar14 1110 by 308		
Total Cyanide	0.1 mg/l	101	85.0-115			W47104	26Mar14 1345 by 308	27Mar14 1003 by 308		
Total Recoverable Antimony	0.05 mg/l	102	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Arsenic	0.05 mg/l	98.8	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Beryllium	0.05 mg/l	100	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Cadmium	0.05 mg/l	103	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Chromium	0.05 mg/l	102	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Copper	0.05 mg/l	103	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Lead	0.05 mg/l	105	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Molybdenum	0.05 mg/l	109	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Nickel	0.05 mg/l	103	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Selenium	0.05 mg/l	103	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Silver	0.02 mg/l	102	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Thallium	0.05 mg/l	105	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Recoverable Zinc	0.05 mg/l	106	85.0-115			S36499	25Mar14 1446 by 285	25Mar14 1737 by 305		
Total Cyanide	0.500 mg/Kg	102	85.0-115			W47095	26Mar14 0849 by 308	27Mar14 0858 by 308		
Total Recoverable Phenolics	10.0 mg/Kg	99.8	85.0-115			W47116	27Mar14 0749 by 308	27Mar14 1125 by 308		
Antimony	500 mg/Kg	101	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Arsenic	500 mg/Kg	95.8	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Beryllium	50.0 mg/Kg	93.8	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Cadmium	500 mg/Kg	96.6	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Chromium	50.0 mg/Kg	95.8	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Copper	50.0 mg/Kg	98.5	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Lead	500 mg/Kg	96.7	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Molybdenum	50.0 mg/Kg	97.6	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Nickel	50.0 mg/Kg	97.9	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Selenium	500 mg/Kg	95.6	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Silver	10.0 mg/Kg	98.6	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Thallium	500 mg/Kg	97.2	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Zinc	50.0 mg/Kg	92.0	85.0-115			S36518	27Mar14 1321 by 305	28Mar14 0929 by 305		
Mercury	1.25 mg/Kg	90.6	85.0-115			S36514	27Mar14 1123 by 311	27Mar14 1423 by 311		

AMERICAN INTERPLEX CORPORATION LABORATORIES

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
Total Recoverable Phenolics	176728-1	0.1 mg/l	91.5	80.0-120	W47094	26Mar14 0823 by 308	26Mar14 1110 by 308		
	176728-1	0.1 mg/l	92.8	80.0-120	W47094	26Mar14 0823 by 308	26Mar14 1110 by 308		
	Relative Percent Difference:		1.15	10.0	W47094				
Total Cyanide	176725-3	0.1 mg/l	98.3	75.0-125	W47104	26Mar14 1345 by 308	27Mar14 1007 by 308		
	176725-3	0.1 mg/l	97.0	75.0-125	W47104	26Mar14 1345 by 308	27Mar14 1012 by 308		
	Relative Percent Difference:		1.27	20.0	W47104				
Total Recoverable Antimony	176712-1	0.05 mg/l	103	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	105	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		1.90	20.0	S36499				
Total Recoverable Arsenic	176712-1	0.05 mg/l	98.9	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	99.7	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		0.792	20.0	S36499				
Total Recoverable Beryllium	176712-1	0.05 mg/l	99.0	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	99.9	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		0.895	20.0	S36499				
Total Recoverable Cadmium	176712-1	0.05 mg/l	99.9	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	101	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		0.655	20.0	S36499				
Total Recoverable Chromium	176712-1	0.05 mg/l	102	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	104	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		2.56	20.0	S36499				
Total Recoverable Copper	176712-1	0.05 mg/l	97.0	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	99.3	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		2.36	20.0	S36499				
Total Recoverable Lead	176712-1	0.05 mg/l	101	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	103	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		2.06	20.0	S36499				
Total Recoverable Molybdenum	176712-1	0.05 mg/l	113	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	114	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		1.18	20.0	S36499				
Total Recoverable Nickel	176712-1	0.05 mg/l	100	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	102	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		1.95	20.0	S36499				
Total Recoverable Selenium	176712-1	0.05 mg/l	100	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	100	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		0.452	20.0	S36499				
Total Recoverable Silver	176712-1	0.02 mg/l	98.9	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.02 mg/l	100	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		1.60	20.0	S36499				
Total Recoverable Thallium	176712-1	0.05 mg/l	101	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	104	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		2.18	20.0	S36499				
Total Recoverable Zinc	176712-1	0.05 mg/l	101	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1742 by 305		
	176712-1	0.05 mg/l	103	75.0-125	S36499	25Mar14 1446 by 285	25Mar14 1747 by 305		
	Relative Percent Difference:		1.82	20.0	S36499				
Total Cyanide	176725-5	0.985 mg/Kg	97.7	75.0-125	W47095	26Mar14 0849 by 308	27Mar14 0902 by 308		
	176725-5	0.992 mg/Kg	92.7	75.0-125	W47095	26Mar14 0849 by 308	27Mar14 0904 by 308		
	Relative Percent Difference:		5.04	20.0	W47095				
Total Recoverable Phenolics	176725-5	9.89 mg/Kg	100	80.0-120	W47116	27Mar14 0749 by 308	27Mar14 1125 by 308		
	176725-5	9.68 mg/Kg	96.7	80.0-120	W47116	27Mar14 0749 by 308	27Mar14 1125 by 308		
	Relative Percent Difference:		3.18	10.0	W47116				

AMERICAN INTERPLEX CORPORATION LABORATORIES

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	176667-1	500 mg/Kg	97.2	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	97.8	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.633	20.0	S36518				
Arsenic	176667-1	500 mg/Kg	92.4	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	92.4	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.110	20.0	S36518				
Beryllium	176667-1	50.0 mg/Kg	92.2	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	92.1	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.0408	20.0	S36518				
Cadmium	176667-1	500 mg/Kg	96.0	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	96.3	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.266	20.0	S36518				
Chromium	176667-1	50.0 mg/Kg	92.5	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	92.5	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.129	20.0	S36518				
Copper	176667-1	50.0 mg/Kg	105	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	105	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.0729	20.0	S36518				
Lead	176667-1	500 mg/Kg	96.0	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	96.0	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.0435	20.0	S36518				
Molybdenum	176667-1	50.0 mg/Kg	98.4	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	98.6	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.255	20.0	S36518				
Nickel	176667-1	50.0 mg/Kg	92.9	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	92.8	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.00331	20.0	S36518				
Selenium	176667-1	500 mg/Kg	81.8	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	81.6	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.0704	20.0	S36518				
Silver	176667-1	9.99 mg/Kg	101	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	9.87 mg/Kg	101	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.148	20.0	S36518				
Thallium	176667-1	500 mg/Kg	98.5	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	494 mg/Kg	97.8	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.652	20.0	S36518				
Zinc	176667-1	50.0 mg/Kg	80.9	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0933 by 305		
	176667-1	49.4 mg/Kg	79.9	75.0-125	S36518	27Mar14 1321 by 305	28Mar14 0938 by 305		
	Relative Percent Difference:		0.503	20.0	S36518				
Mercury	176807-9	2.35 mg/Kg	84.1	70.0-130	S36514	27Mar14 1123 by 311	27Mar14 1426 by 311		
	176807-9	2.38 mg/Kg	83.1	70.0-130	S36514	27Mar14 1123 by 311	27Mar14 1430 by 311		
	Relative Percent Difference:		1.37	20.0	S36514				

AMERICAN INTERPLEX CORPORATION LABORATORIES

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	W47094-1	26Mar14 0823 by 308	26Mar14 1110 by 308	
Total Cyanide	< 0.01 mg/l	0.01	0.01	W47104-1	26Mar14 1345 by 308	27Mar14 1001 by 308	
Total Recoverable Antimony	< 0.03 mg/l	0.03	0.03	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Arsenic	< 0.001 mg/l	0.001	0.001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Beryllium	< 0.0003 mg/l	0.0003	0.0003	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Cadmium	< 0.0001 mg/l	0.0001	0.0001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Chromium	< 0.007 mg/l	0.007	0.007	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Copper	< 0.001 mg/l	0.001	0.001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Lead	< 0.001 mg/l	0.001	0.001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Molybdenum	< 0.008 mg/l	0.008	0.008	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Nickel	< 0.001 mg/l	0.001	0.001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Selenium	< 0.002 mg/l	0.002	0.002	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Silver	< 0.0002 mg/l	0.0002	0.0002	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Thallium	< 0.001 mg/l	0.001	0.001	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Recoverable Zinc	< 0.002 mg/l	0.002	0.002	S36499-1	25Mar14 1446 by 285	25Mar14 1732 by 305	
Total Cyanide	< 0.1 mg/Kg	0.1	0.1	W47095-1	26Mar14 0849 by 308	27Mar14 0856 by 308	
Total Recoverable Phenolics	< 0.5 mg/Kg	0.5	0.5	W47116-1	27Mar14 0749 by 308	27Mar14 1125 by 308	
Total Solids	< 0.01 wt %	0.01	0.01	W47100-1	26Mar14 1044 by 302	26Mar14 1648 by 302	
Antimony	< 3 mg/Kg	3	3	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Arsenic	< 5 mg/Kg	5	5	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Beryllium	< 0.03 mg/Kg	0.03	0.03	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Cadmium	< 0.4 mg/Kg	0.4	0.4	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Chromium	< 0.7 mg/Kg	0.7	0.7	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Copper	< 0.6 mg/Kg	0.6	0.6	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Lead	< 4 mg/Kg	4	4	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Molybdenum	< 0.8 mg/Kg	0.8	0.8	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Nickel	< 1 mg/Kg	1	1	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Selenium	< 7 mg/Kg	7	7	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Silver	< 0.7 mg/Kg	0.7	0.7	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Thallium	< 4 mg/Kg	4	4	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Zinc	< 0.2 mg/Kg	0.2	0.2	S36518-1	27Mar14 1321 by 305	27Mar14 1715 by 305	
Mercury	< 0.1 mg/Kg	0.1	0.1	S36514-1	27Mar14 1123 by 311	27Mar14 1419 by 311	

AMERICAN INTERPLEX CORPORATION
LABORATORIES

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: Springdale Water Utilities
Project Reference: Table III
Project Manager: Brad Stewart
Sampled By: Operations Staff

PO No.

AIC CONTROL NO: 176725
AIC PROPOSAL NO:
Carrier: Fed-X
Received Temperature C: 1.6

AIC No.	Sample Identification	Date/Time Collected	GRAB	COMP	SAMPLE MATRIX: WATER	SOIL	SLUDGE	NO OF BOTTLES	T. Cyanide	T. Phenolics	Metals + MD * -Hg	TCL: T. cyanide, T. phenolics, PP Metals + MD	Remarks
1	Influent	03/17-18/14 1100, 1700, 2300, 0600		✓	✓			1	✓				
1	Influent	03/17-18/14 1100, 1700, 2300, 0600		✓	✓			1		✓			
2	Influent	03/17-18/14 1100-0900		✓	✓			1			✓		
3	Effluent	0000, 0400, 1200, 1800 03/20/14		✓	✓			1	✓				
3	Effluent	0000, 0600, 1200, 1800 03/20/14		✓	✓			1		✓			
4	Effluent	0000-2400 03/20/14		✓	✓			1			✓		
5	Belt Press Influent	0715 03/21/14	✓				✓	1				✓	
		Container Type							P	G	P	G	
		Preservative							B	S	N	NO	

Field pH calibration
on _____ @ _____
Buffer:

G = Glass, P = Plastic, V = VOA vials, H = HCl to pH2, T = Sodium Thiosulfate
NO = none, S = Sulfuric acid pH2, N = Nitric acid pH2, B = NaOH to pH12, Z = Zinc acetate

Turnaround Time Requested: (Please circle)
(NORMAL) or EXPEDITED IN ____ DAYS
Expedited results requested by: N/A
Who should AIC contact with questions: Brad Stewart
Phone: 479-756-3657 Fax: 479-750-7195
Report Attention to: Brad Stewart
Report Address to: P.O. Box 769
Springdale, AR 72762

Relinquished By:	Date/Time	Received By:	Date/Time
Nadine	03/24/14 - 0853		
Relinquished By:	Date/Time	Received in Lab By:	Date/Time
		Lisa Hyatt	3-25-14 1230

Comments: * Do not analyze Hg on Influent or Effluent Metals Samples
7949 3342 6219

5/01 WS 5981 8/02 FORM 0060

Mercury One LTD

Mercury Analysis

Analytical Report
EPA Method 1631E

Report #: 14-0473
Page 1 of 2
3/26/14

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

Attention: Jennefer Enos
Project/PO# 0017911 00

Lab /(Field ID) or (Customer ID)	Results ng/L	Results ng/L	Results ng/L	Results ng/L	Mercury One ID:
Plant Influent (Composite 1-4)	**127**				140321-17
Plant Effluent (Composite 1-4)		**1.57**			140321-18
Field Blank			**<0.2**		140321-19
Sample Type	Influent	Effluent	Field Blank		
Date Sampled:	3/10-11/14	3/13-14/14	3/13/14		
Date Received:	3/21/14	3/21/14	3/21/14		
Date Prepared:	3/21/14	3/21/14	3/21/14		
Date Analyzed:	3/25/14	3/25/14	3/25/14		
Time Analyzed:	6:11	12:27	12:51		
Dilution Factor					**QCS/MS/MSD**
High Cal used	*				**Acceptable Range**
QCS (Quality Control Standard)	96%				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.

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

Arkansas Cert# 88-0911
West Virginia Cert # 348
North Carolina Cert # 662

Other Codes

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**

Rev 4 6/23/11

William W. Purves

Phone: 330-963-0843 2241 Pinnacle Parkway, Suite B, Twinsburg, OH 44087 Fax: 330-963-1016

Mercury One LTD

Mercury Analysis

Analytical Report **Report #: 14-0473**

EPA Method 1631E

The Calibration Range of the Instrument
0.5 to 250 ng/L
The instrument detection Limit for 2014 is 0.06ng/L

swu01 Springdale Water Utlilities

High Cal
Calibration Range for High Concentration Samples
5 to 2000 ng/L
The instrument detection Limit for 2014 is 1ng/L
High cal Detection Limit 2 ng/L
High cal Reporting Limit 5 ng/L

Dilutions occur for the following reasons:

1. **Sample concentration is over the analytical range of the instrument.**
2. **Sample contains high solids and must be diluted to avoid interference.**
3. **Sample foams during purge and the sample is diluted to avoid foam entering the analytical cell.**
4. **Sample foams and an interference is perceived during analysis, sample is diluted to avoid interference.**

Comments:

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) 756-3657 **Fax:** (479) 750-7195 **E-Mail:** bstewart@springdalewater.com

Sampled By: Laboratory staff

Collection Date	Time	Sample Matrix	Comp/ Grab	Sample Description/Comments	Mercury One Lab ID
03/10/14	0800	water	grab	Plant Influent }	140321-17a
03/10/14	1300	water	grab	Plant Influent } to	140321-17b
03/10/14	1600	water	grab	Plant Influent } be	140321-17c
03/11/14	0800	water	grab	Plant Influent } composited	140321-17d
03/13/14	0800	water	grab	Plant Effluent } to	140321-18a
03/13/14	1200	water	grab	Plant Effluent } be	140321-18b
03/13/14	1530	water	grab	Plant Effluent } composited	140321-18c
03/14/14	0800	water	grab	Plant Effluent }	140321-18d
03/13/14	1200	water	grab	Blank	140321-19

Relinquished By: Rachel T **Date:** 03/18/14 **Time:** 1420

Received By: MEstes OKC **Date:** 3/21/14 **Time:** 1315

Relinquished By: **Date:** **Time:**

Received By: **Date:** **Time:**

Use multiple lines for description if necessary.

Temp

CERTIFIED MAIL™

7013 1090 0002 0959 2002

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

UNITED STATES POSTAL SERVICE

1000

72118

U.S. POSTAGE
PAID
SPRINGDALE,AR
72764
APR 15, 14
AMOUNT
$7.82
00062537-07

Arkansas Dept. of Environmental Quality
NPDES Enforcement Section
5301 Northshore Drive
North Little Rock, AR 72118-5317