

Clinton Water & Sewer East Plant

Annual Report
Permit AR0048836 & 5130-WR-2
January 2020 – December 2020



Environmental Services Company, Inc.

Corporate Office

13715 West Markham

Little Rock, Arkansas 72211

501-221-2565 (p)

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Carlsbad, New Mexico

575-887-7372 (7ESC)

Albuquerque, New Mexico

888-372-3477

Springdale, Arkansas

479-750-1170

**Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Irrigation Water
Calendar Year 2020**

Parameter	Annual Concentration (mg/L)	2020 Application Data				Total Application Since 2003 Pounds/Acre
		Million Gallons/ Year	Number of Acres	Gallons per Acre-Year	Pounds per Acre	
Total Kjeldahl Nitrogen	11.6500	43.296	1437.28	30,123.6	2.929	640.75
Ammonia Nitrogen	4.3400	43.296	1437.28	30,123.6	1.091	153.43
Nitrate + Nitrite Nitrogen	2.0150	43.296	1437.28	30,123.6	0.507	110.68
BOD-5	14.6600	43.296	1437.28	30,123.6	3.685	1,050.79
Arsenic	< 0.0070	43.296	1437.28	30,123.6	0.002	0.49
Cadmium	< 0.0064	43.296	1437.28	30,123.6	0.002	0.23
Copper	< 0.0070	43.296	1437.28	30,123.6	0.002	0.28
Lead	0.0090	43.296	1437.28	30,123.6	0.002	0.60
Mercury	< 0.0010	43.296	1437.28	30,123.6	0.000	0.09
Selenium	< 0.0109	43.296	1437.28	30,123.6	0.003	0.69
Zinc	0.0656	43.296	1437.28	30,123.6	0.016	4.43
Conductivity, minimum (mhos/cm)*	138.00					
Conductivity, maximum (mhos/cm)*	188.00					
pH, minimum (SU)*	7.20					
pH, maximum (SU)*	7.80					
Nitrogen Application Rate (lbs N/acre/year)	3.43					

*Current year values

Crop Grown: Bermuda Hay

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East 40.24 LA PB 3							
Control Number	2003010379							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	4.13						
Ammonia Nitrogen	03/23/20	3.4430						
PAN	03/23/20	7.57						
Phosphorous	03/23/20	324.8410						
Potassium	03/23/20	102.39						
Arsenic	03/23/20	.914						
Cadmium	03/23/20	1.289						
Copper	03/23/20	1.454						
Lead	03/23/20	3.854						
Magnesium	03/23/20	87.37						
Mercury	03/23/20	.0190						
Nickel	03/23/20	3.303						
Zinc	03/23/20	5.937						
Conductivity (mhos/cm)	03/23/20	64.6						
pH (SU)	03/23/20	5.9						

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East 40.24 LA PB 30							
Control Number	2003010380							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	6.970						
Ammonia Nitrogen	03/23/20	2.01						
PAN	03/23/20	8.98						
Phosphorous	03/23/20	376.3550						
Potassium	03/23/20	127.94						
Arsenic	03/23/20	1.147						
Cadmium	03/23/20	.716						
Copper	03/23/20	1.410						
Lead	03/23/20	3.243						
Magnesium	03/23/20	127.79						
Mercury	03/23/20	.0250						
Nickel	03/23/20	3.701						
Zinc	03/23/20	7.688						
Conductivity (mhos/cm)	03/23/20	12.9						
pH (SU)	03/23/20	6.6						

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East 55.57 LA PB 10							
Control Number	2003010381							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	4.22						
Ammonia Nitrogen	03/23/20	< 0.0594						
PAN	03/23/20	4.22						
Phosphorous	03/23/20	337.094						
Potassium	03/23/20	114.34						
Arsenic	03/23/20	.748						
Cadmium	03/23/20	1.172						
Copper	03/23/20	1.267						
Lead	03/23/20	3.517						
Magnesium	03/23/20	78.31						
Mercury	03/23/20	< 0.0140						
Nickel	03/23/20	2.961						
Zinc	03/23/20	4.841						
Conductivity (mhos/cm)	03/23/20	28.70						
pH (SU)	03/23/20	5.7						

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East 55.57 LA PB 3							
Control Number	2003010382							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	0.553						
Ammonia Nitrogen	03/23/20	3.0480						
PAN	03/23/20	3.60						
Phosphorous	03/23/20	357.1110						
Potassium	03/23/20	109.69						
Arsenic	03/23/20	0.980						
Cadmium	03/23/20	0.900						
Copper	03/23/20	1.285						
Lead	03/23/20	3.196						
Magnesium	03/23/20	97.90						
Mercury	03/23/20	< 0.022						
Nickel	03/23/20	3.074						
Zinc	03/23/20	5.638						
Conductivity (mhos/cm)	03/23/20	15.2						
pH (SU)	03/23/20	5.80						

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East 55.57 LA PB 30							
Control Number	2003010383							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	0.709						
Ammonia Nitrogen	03/23/20	< 0.0591						
PAN	03/23/20	0.7						
Phosphorous	03/23/20	353.1870						
Potassium	03/23/20	69.99						
Arsenic	03/23/20	0.639						
Cadmium	03/23/20	0.831						
Copper	03/23/20	0.976						
Lead	03/23/20	2.577						
Magnesium	03/23/20	58.51						
Mercury	03/23/20	< 0.009						
Nickel	03/23/20	2.175						
Zinc	03/23/20	3.926						
Conductivity (mhos/cm)	03/23/20	28.100						
pH (SU)	03/23/20	5.7						

Clinton Water and Sewer Department
Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East LA Airport 9							
Control Number	2003010384							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	2.041						
Ammonia Nitrogen	03/23/20	1.29						
PAN	03/23/20	3.33						
Phosphorous	03/23/20	305.0440						
Potassium	03/23/20	132.43						
Arsenic	03/23/20	0.992						
Cadmium	03/23/20	0.941						
Copper	03/23/20	1.347						
Lead	03/23/20	3.149						
Magnesium	03/23/20	92.25						
Mercury	03/23/20	< 0.0100						
Nickel	03/23/20	3.196						
Zinc	03/23/20	4.523						
Conductivity (mhos/cm)	03/23/20	26.6						
pH (SU)	03/23/20	5.3						

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Clinton, AR
East WWTP - AR0048836
Soil
Calendar Year 2020

Sample ID	Clinton East LA WD 13							
Control Number	2003010385							
Parameter	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter	
	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)	Sample Date	Analytical Results (mg/Kg)
Nitrate Nitrogen	03/23/20	5.289						
Ammonia Nitrogen	03/23/20	2.2140						
PAN	03/23/20	7.5						
Phosphorous	03/23/20	337.6750						
Potassium	03/23/20	98.36						
Arsenic	03/23/20	0.884						
Cadmium	03/23/20	0.739						
Copper	03/23/20	1.003						
Lead	03/23/20	2.689						
Magnesium	03/23/20	74.44						
Mercury	03/23/20	< 0.009						
Nickel	03/23/20	2.596						
Zinc	03/23/20	4.032						
Conductivity (mhos/cm)	03/23/20	23.4						
pH (SU)	03/23/20	5.1						

Environmental Services Company, Inc.

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Northwest Arkansas Branch
1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2009010455
Customer Name : CLINTON, EAST IW
Customer/Permit No. : 619 / AR0048836 001
Report Date : 10/02/20

Sample Date : 09/24/20
Sample Time : 1328
Sample Type : GRAB WWATER
Sample From : IRRIGATION WATER

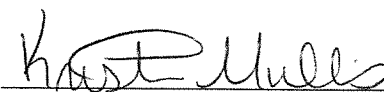
Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

<u>Laboratory Analysis</u>							<u>Quality Assurance</u>	
Analysis							Precision	Accuracy
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>% RPD</u>	<u>% Recovery</u>
09/25	0810	MRR	BOD, 5-day	18.70 mg/L		SM 2011 5210 B	3.51	101.0 *
09/28	1310	BXW	Ammonia as N, (HACH/SM)	0.28 mg/L		H/SM 11 10205/4500	3.79	107.0 *
09/29	1017	MRR	Total Kjeldahl Nitrogen	6.0 mg/L		02/2014 HACH 10242	0.84	107.0 *
09/24	1330	NTR	pH	7.2 S.U.		SM 2011 4500-H+B	0.00	N/A *
09/29	1726	KNM	Copper	< 0.0070 mg/L		EPA 200.8	1.18	104.2 *
09/29	1726	KNM	Zinc	0.0915 mg/L		EPA 200.8	1.20	104.8 *
10/01	1350	KNM	Arsenic	< 0.0070 mg/L		EPA 200.8	0.60	113.8 *
10/01	1601	KNM	Selenium	< 0.0109 mg/L		EPA 200.8	1.85	121.0 *
09/24	1330	NTR	Spec. Conductance @ 25 C	164.100 umho/c		SM1997 2510B	0.34	N/A *
09/24	1710	BXW	Fecal Coliform	12976.4 /100ml		06/2012 Colilert18	0.00	N/A *
09/29	1726	KNM	Cadmium	< 0.0064 mg/L		EPA 200.8	0.30	101.4 *
09/25	1333	KNM	Mercury	< 0.0010 mg/L		EPA 245.1	9.73	82.6 *
09/29	1726	KNM	Lead	0.0064 mg/L		EPA 200.8	1.67	94.7 *
09/28	1441	MRR	Nitrate + Nitrite	3.16 mg/L		HACH 10206	2.30	105.0 *

* QA data shown is from a different sample or standard on the same date.

All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of Environmental Quality. Analysis time indicates the time of the start of the analytical batch in which the specific sample was included.

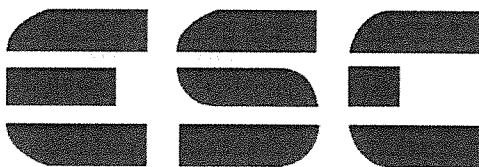
Signature



Environmental Services Co., Inc.

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Carlsbad, New Mexico
575-887-1ESC

CHAIN OF CUSTODY

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Northwest Arkansas Branch
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Control Number: 2010010320
Customer Name : CLINTON, EAST IW
Customer/Permit No. : 619 / AR0048836 001
Report Date : 11/04/20

Sample Date : 10/22/20
Sample Time : 1213
Sample Type : GRAB WWATER
Sample From : IRRIGATION WATER

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance	
Analysis							Precision	Accuracy
Date	Time	By	Parameter	Result	Notes	Quantity	% RPD	% Recovery
10/23	0645	KNM	BOD, 5-day	10.62 mg/L			13.57	87.0
10/26	1655	BXW	Ammonia as N, (HACH/SM)	8.40 mg/L			1.98	99.1 *
10/28	0905	KNM	Total Kjeldahl Nitrogen	17.3 mg/L			4.91	106.0
10/22	1214	NTR	pH	7.8 S.U.			0.00	N/A
10/27	1038	KNM	Copper	< 0.0070 mg/L			4.74	108.2
10/27	1038	KNM	Zinc	0.0396 mg/L			8.96	96.4
10/29	1254	KNM	Arsenic	< 0.0070 mg/L			2.04	97.5
10/29	1254	KNM	Selenium	< 0.0109 mg/L			3.48	96.1
10/22	1213	NTR	Spec. Conductance @ 25 C	265.000 umho/c			1.90	N/A
10/27	1038	KNM	Cadmium	< 0.0064 mg/L			0.86	107.4
10/29	1551	KNM	Mercury	< 0.0010 mg/L			12.26	122.0 *
10/29	1254	KNM	Lead	0.0115 mg/L			1.30	87.9
10/23	1430	EDA	Nitrate + Nitrite	0.87 mg/L			2.06	105.0

* QA data shown is from a different sample or standard on the same date.

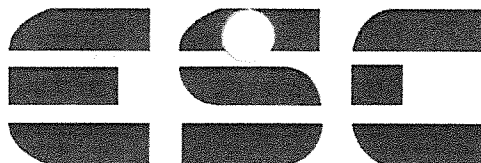
All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of Environmental Quality. Analysis time indicates the time of the start of the analytical batch in which the specific sample was included.

Signature


Environmental Services Co., Inc.

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Springdale, Arkansas
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Phone: 501-221-2565 Fax: 501-221-1341

CHAIN OF CUSTODY

Client Information				Project Information						Requested Parameters													
Client: Clinton, East IW				Permit/Project #: AR0048836						<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BOD(3.)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">NH3-N(15.A), NO3 + NO2(91.)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TKN(16.C)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Metals (See Comments)</div> </div>													
Address: P.O. Box 277				Purchase Order #:																			
Clinton, AR 72031				Work Order #:																			
Phone: 501-745-4320				Sampler Name(s): Ned Ryerson																			
Fax: 501-745-2164				and Signature(s): Ned Ryerson																			
Contact: Mr. Phil Graham																							
ESC Client Number: 619																							
Sample Identification		Sample Collection				Sample Containers																	
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#														
Irrigation Water	2010010320	10-22-20	1213	Grab	Wwater	Plastic	1 Liter	Cool ≤ 6° C	1	X													
+	L	+	L	Grab	Wwater	Plastic	8 oz	Cool ≤ 6° C, H2SO4 to pH <2	1		X	X											
				Grab	Wwater	Plastic	8 oz	HNO3 to pH <2	1				X										
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Custody Seals:															
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Used? <input checked="" type="checkbox"/> Intact? <input type="checkbox"/>															
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Turnaround: Regular <input checked="" type="checkbox"/> Special <input type="checkbox"/>															
Relinquished By: (Signature and Printed Name)		Date	Time	Received for Lab By: (Signature and Printed Name)		Date	Time	Were samples properly preserved: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>															
Flow Data		Meld Test		Time	Analyst	Result	Result	Units															
Comments: Metals: Hg(50.15), Cu(29.HW), Zn(30.HW), As(33.HW), Se(34.HW)		Analyst:		pH:	1214	NJR	7.8	7.8	S.U.														
Cd(48.HW), Pb(82.HW), 00.MD		Time:		Conduct:	1214	NJR	265	260	UMHOS														
		Reading:																					
		Units:																					
										This Document is Page 1 of 1													

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Control Number: 2003010539
Customer Name : CLINTON, EAST GW13
Customer/Permit No. : 507 / AR0048836 001
Report Date : 04/02/20

Sample Date : 03/23/20
Sample Time : 1130
Sample Type : GRAB WWATER
Sample From : WELL 13

Collected By: JGK
Delivery By : JGK
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance		
Analysis			Parameter	Result	Notes	Quantity	Method	Precision	Accuracy
Date	Time	By						% RPD	% Recovery
04/01	0915	DWC	Chloride (as Cl)	20.0 mg/L			SM1997 4500ClC	0.00	93.0 *
03/23	1130	JGK	pH	6.5 S.U.			SM 2011 4500-H+B	0.00	N/A *
03/27	1030	NTR	Solids, Total Dissolved	258.0 mg/L			SM1997 2540 C	0.34	N/A *
03/23	1135	JGK	Spec. Conductance @ 25 C	238.000 umho/c			SM1997 2510B	0.42	N/A
03/23	1135	JGK	Temperature	14.60 °C			SM 2000 2550 B	0.00	N/A
03/25	1450	KNM	Nitrate + Nitrite	0.16 mg/L			HACH 10206	4.20	99.8 *
03/23	1130	JGK	Well Depth, Total	15.40 Feet				N/A	N/A
03/23	1130	JGK	Depth to Water	5.60 Feet				N/A	N/A

* QA data shown is from a different sample or standard on the same date.

All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of Environmental Quality. Analysis time indicates the time of the start of the analytical batch in which the specific sample was included.

Signature


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KNM

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1107 Century Avenue
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Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2003010540
Customer Name : CLINTON, EAST GW14
Customer/Permit No. : 508 / AR0048836 001
Report Date : 04/02/20

Sample Date : 03/23/20
Sample Time : 1115
Sample Type : GRAB WWATER
Sample From : WELL 14

Collected By: JGK
Delivery By : JGK
Work Order :
Purchase Order :

Analysis							Quality Assurance		
<u>Laboratory Analysis</u>							Precision	Accuracy	
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>	<u>% RPD</u>	<u>% Recovery</u>
04/01	0915	DWC	Chloride (as Cl)	10.0 mg/L			SM1997 4500ClC	0.00	93.0 *
03/23	1115	JGK	pH	6.6 S.U.			SM 2011 4500-H+B	0.00	N/A *
03/27	1030	NTR	Solids, Total Dissolved	110.0 mg/L			SM1997 2540 C	0.34	N/A *
03/23	1120	JGK	Spec. Conductance @ 25 C	99.900 umho/c			SM1997 2510B	0.42	N/A *
03/23	1120	JGK	Temperature	14.70 °C			SM 2000 2550 B	0.00	N/A *
03/25	1450	KNM	Nitrate + Nitrite	4.51 mg/L			HACH 10206	4.20	99.8 *
03/23	1115	JGK	Well Depth, Total	13.10 Feet				N/A	N/A
03/23	1115	JGK	Depth to Water	4.10 Feet				N/A	N/A

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KNM

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1107 Century Avenue
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Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2003010542
Customer Name : CLINTON, EAST GW17
Customer/Permit No. : 649 / AR0048747 001
Report Date : 04/13/20

Sample Date : 03/23/20
Sample Time : 1020
Sample Type : GRAB WWATER
Sample From : WELL 17

Collected By: JGK
Delivery By : JGK
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance	
Analysis							Precision	Accuracy
Date	Time	By	Parameter	Result	Notes	Quantity	% RPD	% Recovery
04/01	0915	DWC	Chloride (as Cl)	< 0.1 mg/L			0.00	93.0 *
03/23	1020	JGK	pH	6.1 S.U.			0.00	N/A *
03/27	1030	NTR	Solids, Total Dissolved	142.0 mg/L			0.34	N/A *
03/23	1025	JGK	Spec. Conductance @ 25 C	76.600 umho/c			0.42	N/A *
03/23	1025	JGK	Temperature	15.20 °C			0.00	N/A *
03/25	1450	KNM	Nitrate + Nitrite	6.46 mg/L			4.20	99.8 *
03/23	1020	JGK	Well Depth, Total	17.60 Feet			N/A	N/A
03/23	1020	JGK	Depth to Water	7.20 Feet			N/A	N/A

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Signature


Environmental Services Co., Inc.

KNM

5): Jason Kneemsh'64

Sample Date: 3/23/20

[illegible]

G. Kr/T-Kwernsch. 2

Time: 1415

Paul Carter

Date: 3/23/20

Time: 1415

Comments:

Environmental Services Company, Inc.

Corporate Office
13715 West Markham
Little Rock, AR 72211
Tel. (501)221-2565 Fax (501)221-1341

Northwest Arkansas Branch
1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2009010451
Customer Name : CLINTON, EAST GW13
Customer/Permit No. : 507 / AR0048836 001
Report Date : 09/30/20

Sample Date : 09/24/20
Sample Time : 1449
Sample Type : GRAB WATER
Sample From : #13 (507)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance		
Analysis			Parameter	Result	Notes	Quantity	Method	Precision	Accuracy
Date	Time	By						% RPD	% Recovery
09/25	1446	MRR	Chloride (as Cl)	29.9 mg/L			SM1997 4500ClC	0.00	99.9 *
09/24	1450	NTR	pH	6.2 S.U.			SM 2011 4500-H+B	0.00	N/A
09/28	1439	BXW	Solids, Total Dissolved	< 2.5 mg/L			SM1997 2540 C	0.00	N/A *
09/24	1450	NTR	Spec. Conductance @ 25 C	145.400 umho/c			SM1997 2510B	0.57	N/A *
09/24	1450	NTR	Temperature	18.50 °C			SM 2000 2550 B	0.00	N/A
09/28	1441	MRR	Nitrate + Nitrite	1.91 mg/L			HACH 10206	2.30	105.0 *
09/24	1449	NTR	Well Depth, Total	15.33 Feet				N/A	N/A
09/24	1411	NTR	Depth to Water	9.33 Feet				N/A	N/A

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Signature


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Little Rock, AR 72211
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1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2009010452
Customer Name : CLINTON, EAST GW14
Customer/Permit No. : 508 / AR0048836 001
Report Date : 09/30/20

Sample Date : 09/24/20
Sample Time : 1411
Sample Type : GRAB WATER
Sample From : #14 (508)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance	
Analysis							Precision	Accuracy
Date	Time	By	Parameter	Result	Notes	Quantity	% RPD	% Recovery
09/25	1446	MRR	Chloride (as Cl)	9.9 mg/L			0.00	99.9 *
09/24	1413	NTR	pH	6.3 S.U.			0.00	N/A *
09/28	1439	BXW	Solids, Total Dissolved	150.0 mg/L			0.00	N/A *
09/24	1413	NTR	Spec. Conductance @ 25 C	119.600 umho/c			0.34	N/A
09/24	1413	NTR	Temperature	18.90 °C			0.00	N/A *
09/28	1441	MRR	Nitrate + Nitrite	1.20 mg/L			2.30	105.0 *
09/24	1411	NTR	Well Depth, Total	13.08 Feet			N/A	N/A
09/24	1411	NTR	Depth to Water	8.25 Feet			N/A	N/A

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Little Rock, AR 72211
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1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2009010453
Customer Name : CLINTON, EAST GW16
Customer/Permit No. : 509 / AR0048836 001
Report Date : 09/29/20

Sample Date : 09/24/20
Sample Time : 1347
Sample Type : GRAB WATER
Sample From : #16 (509)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

<u>Laboratory Analysis</u>							<u>Quality Assurance</u>	
Analysis							Precision	Accuracy
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>% RPD</u>	<u>% Recovery</u>
09/24	1347	NTR	Dry Well	0.00			N/A	N/A
* QA data shown is from a different sample or standard on the same date.								

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Northwest Arkansas Branch
1107 Century Avenue
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Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2009010454
Customer Name : CLINTON, EAST GW17
Customer/Permit No. : 649 / AR0048747 001
Report Date : 10/05/20

Sample Date : 09/24/20
Sample Time : 1352
Sample Type : GRAB WATER
Sample From : #17 (649)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

<u>Laboratory Analysis</u>							<u>Quality Assurance</u>	
<u>Analysis</u>							<u>Precision</u>	<u>Accuracy</u>
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>% RPD</u>	<u>% Recovery</u>
09/25	1446	MRR	Chloride (as Cl)	< 0.1 mg/L			0.00	99.9
09/24	1353	NTR	pH	6.1 S.U.			0.00	N/A *
10/01	0825	KNM	Solids, Total Dissolved	191.6 mg/L			0.00	N/A *
09/24	1353	NTR	Spec. Conductance @ 25 C	76.300 umho/c			0.34	N/A *
09/24	1353	NTR	Temperature	19.30 °C			0.00	N/A *
09/28	1441	MRR	Nitrate + Nitrite	6.02 mg/L			2.30	105.0 *
09/24	1352	NTR	Well Depth, Total	17.50 Feet			N/A	N/A
09/24	1352	NTR	Depth to Water	12.38 Feet			N/A	N/A

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Signature


Environmental Services Co., Inc.

24



Sampler Name(s): Ned Ryerson
and Signature: Ned Ryerson

Sample Date: 9-24-2020

[illegible]

Relinquished by: <u>Ned Ryan - Ned Ryans</u>	Time:	Received By Lab: <u>[Signature] Ben Wong</u>	Date: <u>7/24/20</u>	Time: <u>1645</u>
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Comments:

Environmental Services Company, Inc.

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Northwest Arkansas Branch
1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010010322
Customer Name : CLINTON, EAST GW13
Customer/Permit No. : 507 / AR0048836 001
Report Date : 10/30/20

Sample Date : 10/22/20
Sample Time : 1307
Sample Type : GRAB WATER
Sample From : 13 (507)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis							Quality Assurance	
Analysis							Precision	Accuracy
Date	Time	By	Parameter	Result	Notes	Quantity	% RPD	% Recovery
10/29	1450	BXW	Chloride (as Cl)	10.0 mg/L			0.00	90.0
10/22	1307	NTR	pH	6.2 S.U.			0.00	N/A *
10/23	1530	EDA	Solids, Total Dissolved	80.0 mg/L			4.45	N/A *
10/22	1307	NTR	Spec. Conductance @ 25 C	188.400 umho/c			1.90	N/A *
10/23	1430	EDA	Nitrate + Nitrite	1.12 mg/L			2.06	105.0 *
10/22	1307	NTR	Well Depth, Total	15.33 Feet			N/A	N/A
10/22	1307	NTR	Depth to Water	8.13 Feet			N/A	N/A

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1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010010323
Customer Name : CLINTON, EAST GW14
Customer/Permit No. : 508 / AR0048836 001
Report Date : 10/30/20

Sample Date : 10/22/20
Sample Time : 1250
Sample Type : GRAB WATER
Sample From : 14 (508)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis

Analysis

Date	Time	By	Parameter	Result	Notes	Quantity	Method
10/29	1450	BXW	Chloride (as Cl)	10.0 mg/L			SM1997 4500ClC
10/22	1250	NTR	pH	5.8 S.U.			SM 2011 4500-H+B
10/23	1530	EDA	Solids, Total Dissolved	< 2.5 mg/L			SM1997 2540 C
10/22	1250	NTR	Spec. Conductance @ 25 C	129.200 umho/c			SM1997 2510B
10/23	1430	EDA	Nitrate + Nitrite	< 0.23 mg/L			HACH 10206
10/22	1250	NTR	Well Depth, Total	13.08 Feet			
10/22	1250	NTR	Depth to Water	9.66 Feet			

Quality Assurance

Precision	Accuracy
% RPD	% Recovery
0.00	90.0 *
0.00	N/A *
4.45	N/A *
1.90	N/A *
2.06	105.0 *
N/A	N/A
N/A	N/A

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1107 Century Avenue
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Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010010324
Customer Name : CLINTON, EAST GW16
Customer/Permit No. : 509 / AR0048836 001
Report Date : 10/26/20

Sample Date : 10/22/20
Sample Time : NA
Sample Type : GRAB WATER
Sample From : 16 DRY WELL

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis

<u>Analysis</u>							<u>Quality Assurance</u>		
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>	<u>Precision</u>	<u>Accuracy</u>
								<u>% RPD</u>	<u>% Recovery</u>
10/22	1200	NTR	Dry Well	0.00				N/A	N/A

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Signature


Environmental Services Co., Inc.

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Environmental Services Company, Inc.

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1107 Century Avenue
Springdale, AR 72762
Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010010325
Customer Name : CLINTON, EAST GW17
Customer/Permit No. : 649 / AR0048747 001
Report Date : 10/30/20

Sample Date : 10/22/20
Sample Time : 1236
Sample Type : GRAB WATER
Sample From : 17 (649)

Collected By: NTR
Delivery By : NTR
Work Order :
Purchase Order :

Laboratory Analysis

Analysis							Precision	Accuracy	
Date	Time	By	Parameter	Result	Notes	Quantity	Method	% RPD	% Recovery
10/29	1450	BXW	Chloride (as Cl)	10.0 mg/L			SM1997 4500ClC	0.00	90.0 *
10/22	1236	NTR	pH	5.5 S.U.			SM 2011 4500-H+B	0.00	N/A *
10/23	1530	EDA	Solids, Total Dissolved	146.7 mg/L			SM1997 2540 C	4.45	N/A *
10/22	1236	NTR	Spec. Conductance @ 25 C	93.900 umho/c			SM1997 2510B	1.90	N/A *
10/23	1430	EDA	Nitrate + Nitrite	5.86 mg/L			HACH 10206	2.06	105.0 *
10/22	1236	NTR	Well Depth, Total	17.50 Feet				N/A	N/A
10/22	1236	NTR	Depth to Water	12.58 Feet				N/A	N/A

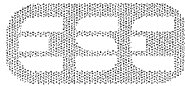
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Signature


Environmental Services Co., Inc.

ms



Environmental Services Company
Little Rock, AR 72211
Groundwater Monitoring Chain of Custody

Sampler Name(s): Ned Ryerson
 and Signature: Ned Ryerson

Sample Date: October 22, 2020

Sample Identification (Customer #)	Laboratory Control Number	Sample Time:	Depth To Water	Total Well Depth	pH				Specific Conductance				Temperature Degrees C				Cl, TDS (1L Plastic ≤ 6 Deg C)	NO3+N O2 (1 L Plastic H2SO4)
Clinton Wells					#1	#2	#3	Time	#1	#2	#3	Time	#1	#2	#3	Time		
#13 (507)	2010010322	1307	8' 1 1/2"	15' 4"	6.2	6.3	6.3	1307	188.4	188.1	188.2	1307	21.9	22.0	22.0	1307	X	X
#14 (508)	2010010323	1250	9' 8"	13' 1"	5.8	5.8	5.7	1250	129.2	129.6	130.0	1250	21.4	21.4	21.4	1250	X	X
#16 (509)	2010010324		14' 0"		DRY WELL												X	X
#17 (649)	2010100325	1236	12' 7"	17' 6"	5.5	5.5	5.5	1236	93.9	94.4	94.1	1236	20.6	20.4	20.3	1236	X	X

Relinquished by: Ned Ryerson Time: 1710 Received By Lab: Jeffrey Bergmann Date: 10/22/20 Time: 1710
 Comments:

CITY OF CLINTON
CLINTON WATER AND SEWER DEPARTMENT

P.O. BOX 277
CLINTON, AR 72031
TELEPHONE (501) 745-4320
FAX (501) 745-2164

TO: _____ ESC _____

ATTN: _____ JOYCE _____

FAX#: _____ 501-221-1341 _____

FROM: _____ DONNA _____

PAGES INCLUDING COVER PAGE: 1 _____

MESSAGE: Yearly Report 2020

East Plant: 43.296 mg 123 inches 1437.28 Acres

West Plant: No Spray

Crops Grown: Bermuda Hay

East Plant Owners : Steve Bone + Will Dawson

West Plant Owners : Danny Boone, Roy Gray Jennings, Virginia Stevens

IF ALL PAGES ARE NOT RECEIVED PLEASE NOTIFY AT ONCE!