# Clinton Water & Sewer East Plant

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



# Environmental Services Company, Inc.

<u>Corporate Office</u> <u>13715 West Markham</u> <u>Little Rock, Arkansas 72211</u> <u>501-221-2565 (p)</u> <u>501-221-1341 (f)</u> <u>www.esclabs.com</u> 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

			2020 Appl	ication Data		Total
	Annual	Million	Number	Gallons	Pounds	Application
Parameter	Concentration	Gallons/	of	per	per	Since 2003
	(mg/L)	Year	Acres	Acre-Year	Acre	<b>Pounds/Acre</b>
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

Sample ID	Clinton East	40.24 LA PB 3						
Control Number	2003010379							
				1.0				2
		t Quarter		l Quarter		l Quarter		n Quarter
	Sample	Analytical	Sample	Analytical	Sample	Analytical	Sample	Analytical
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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						

Sample ID	Clinton East	40.24 LA PB 30						
Control Number	2003010380							
	1s	t Quarter	2nc	d Quarter	3rc	1 Quarter	4t	h Quarter
	Sample	Analytical	Sample	Analytical	Sample	Analytical	Sample	Analytical
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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						

Sample ID	Clinton East	55.57 LA PB 10							
Control Number	2003010381								
	1s	1st Quarter		l Quarter	3rd	d Quarter	4tl	n Quarter	
	Sample	Analytical	Sample	Analytical	Sample Analytical		Sample	Analytical	
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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							

Sample ID	Clinton East	55.57 LA PB 3							
Control Number	2003010382								
	1s	t Quarter	2nc	d Quarter	3rc	d Quarter	4tl	n Quarter	
	Sample	Analytical	Sample	Analytical	Sample Analytical		Sample	Analytical	
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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							

Sample ID	Clinton East	55.57 LA PB 30							
Control Number	2003010383								
	1s	t Quarter	2nc	d Quarter	3rc	l Quarter	4th Quarter		
	Sample	Analytical	Sample	Analytical	Sample	Analytical	Sample	Analytical	
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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							

Sample ID	Clinton East	LA Airport 9							
Control Number	2003010384								
	1s	t Quarter	2nd	d Quarter	3rc	d Quarter	4th Quarter		
	Sample	Analytical	Sample	Analytical	Sample	Analytical	Sample	Analytical	
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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							

Sample ID	Clinton East	LA WD 13							
Control Number	2003010385								
	1s	1st Quarter		d Quarter	3rc	d Quarter	4th Quarter		
	Sample	Analytical	Sample Analytical		Sample	Analytical	Sample	Analytical	
Parameter	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	Results (mg/Kg)	Date	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							

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: 2009010455	Sample Date : 09/24/20	Collected By: NTR
Customer Name : CLINTON, EAST IW	Sample Time : 1328	Delivery By : NTR
Customer/Permit No. : 619 / AR0048836 001	Sample Type : GRAB WWATER	Work Order :
Report Date : 10/02/20	Sample From : IRRIGTION WATER	Purchase Order :

		Laboratory Analys	is			Quality A	Assurance
Analysis						Precision	Accuracy
<u>Date Time By</u>	Parameter	Result	<u>Notes</u>	<u>Quantity</u>	Method	% RPD	<u>% Recovery</u>
09/25 0810 MRR	BOD, 5-day	18.70 mg/			SM 2011 5210 B	3.51	101.0 *
09/28 1310 BXW	Ammonia as N, (HACH/SM)	0.28 mg/			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		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/1	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 umh	o/c		SM1997 2510B	0.34	N/A *
09/24 1710 BXW	Fecal Coliform	12976.4 /10			06/2012 Colilert18	0.00	N/A *
09/29 1726 KNM	Cadmium	< 0.0064 mg/1	L		EPA 200.8	0.30	101.4 *
09/25 1333 KNM	Mercury	< 0.0010 mg/1	L		EPA 245.1	9.73	82.6 *
09/29 1726 KNM	Lead	0.0064 mg/1	L		EPA 200.8	1.67	94.7 *
09/28 1441 MRR	Nitrate + Nitrite	3.16 mg/1	L		HACH 10206	2.30	105.0 *
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\* QA data shown is from a different sample or standard on the same date.

Signature

Environmental Services Co., Inc.

#### Environmental Services Company, Inc. Corporate Office

13715 West Markham P.O. Box 55146 Little Rock, AR 72211 Little Rock, AR 72215 website: www.esclabs.com



**CHAIN OF CUSTODY** 

Springdale, Arkansas 479-750-1170

Carlsbad, New Mexico 575-887-1ESC

Phone: 501-221-2565

Fax: 501-221-1341

(	Client Information				Pr	oject Inf	formatior	ן		Ι	Rec	ques	sted	Paran	neter	ſS
Client:	Clinton, East IW			Permit/Pro	oject #:		AR0048	836								
Address:	P.O. Box 277			Purchase	Order #:											
	Clinton, AR 72031			Work Ord	er#					1	91.)					
Phone:	501-745-4320			Sampler N	Name(s):		Ned	Ryenson		1	102(		s)			
Fax:	501-745-2164			]					<u> </u>	1	2+		Comments)			
Contact:	Mr. Phil Graham			and Signa	iture(s):		Mit.	Ris -	····	1	löz		omr			
ESC Client Number:				1				<u>v</u> z		1	5.A),	0	(See C			
Sample Ider	tification		Sample Collection				Sample	Containers		(;;)	N(1	16.0	ls (S			
Identification	ESC Control #	Date	Time	Туре	Matrix	Туре	Volume		#	BOD(3.)	NH3-N(15.A), NO3 + NO2(91.)	TKN(16.C)	Metals (			
Irrigation Water	2009010455	9-24-20	1328	Grab	Wwater	Plastic	1 Liter	Cool ≤ 6° C	1	x					1	
	]	(	Ĩ	Grab	Wwater	Plastic	8 oz	Cool < 6* C, H2SO4 to pH <2	1		X	x				1
		X	T	Grab	Wwater	Plastic	8 oz	HNO3 to pH <2	1				х		+	+
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Comments: Metals: Hg Cd(48.HVV)	(50.15), Cu(29.HW), 2 , Pb(82.HW), 00.MD	2n(30.HVV), A	4s(33.HW),	Se(34.HW)	Analyst: Time:		pH: Conduct:		JAC I		.2	<u>٦</u> ، ١.4		S.U. U MHOS		
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Collected By: NTR

Delivery By : NTR

Purchase Order :

Work Order :

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

	Quality 2	Assurance						
Analysis							Precision	Accuracy
Date Time By	Parameter	Result	NC	tes	Quantity	Method	% RPD	% Recovery
10/23 0645 KNM	BOD, 5-day	10.62	mg/L			SM 2011 5210 B	13.57	87.0
10/26 1655 BXW	Ammonia as N, (HACH/SM)	8.40	mg/L			H/SM 11 10205/4500	1.98	99.1 *
10/28 0905 KNM	Total Kjeldahl Nitrogen	17.3	mg/L			02/2014 HACH 10242	4.91	106.0
10/22 1214 NTR	pH	7.8	s.u.			SM 2011 4500-H+B	0.00	N/A
10/27 1038 KNM	Copper	< 0.0070	mg/L			EPA 200.8	4.74	108.2
10/27 1038 KNM	Zinc	0.0396	mg/L			EPA 200.8	8.96	96.4
10/29 1254 KNM	Arsenic	< 0.0070				EPA 200.8	2.04	97.5
10/29 1254 KNM	Selenium	< 0.0109	mg/L			EPA 200.8	3.48	96.1
10/22 1213 NTR	Spec. Conductance @ 25 C	265.000	umho/c			SM1997 2510B	1.90	N/A
10/27 1038 KNM	Cadmium	< 0.0064	mg/L			EPA 200.8	0.86	107.4
10/29 1551 KNM	Mercury	< 0.0010	mg/L			EPA 245.1	12.26	122.0 *
10/29 1254 KNM	Lead	0.0115	mg/L			EPA 200.8	1.30	87.9
10/23 1430 EDA	Nitrate + Nitrite	0.87	mg/L			HACH 10206	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.

ental Services Company, Inc. Envir Corporate Office 13715 West Markham P.O. Box 55146 Little Rock, AR 72215 Little Rock, AR 72211 website: www.esclabs.com



**CHAIN OF CUSTODY** 

Springdale, Arkansas 479-750-1170

Carlsbad, New Mexico 575-887-1ESC

Phone: 501-221-2565

Fax: 501-221-1341

	С	lient Information	*****		Project Information							Requested Parameters					
Client:		Clinton, East IW			Permit/Project #: AR00			AR00488	836								
Address:		P.O. Box 277			Purchase Order #:												
		Clinton, AR 72031			Work Order #							91.)					
Phone:		501-745-4320			Sampler Name(s):			Ned Diverson				02(		6			
Fax:		501-745-2164						- yco x y or ko				Z   +		Comments)			
Contact:		Mr. Phil Graham	····.		and Signature(s):		Ale Bar				NO3		umo				
ESC Client Number: 619					,00				(Å								
			Collection Sa		Sample Containers				N(15	16.C	s (Se						
Identificati		ESC Control #	Date	Time	Туре	Matrix	Туре	Volume	7		# BOD(3.)	NH3-N(15.A), NO3 + NO2(91.)	TKN(16.C)	Metals (See			
Irrigatio	n Water	2010010320	10-22 20	1213	Grab	Wwater	Plastic	1 Liter	Cool < 6° C			(	1			-	+
y	1	1	(		Grab	Wwater	Plastic	8 oz	Cool ≤ 6* C, H2SO4 to pH <2			X	x		┢╼╾┼╸		
	L				Grab	Wwater	Plastic	8 oz	HNO3 to pl			+^	+	x	┝╼╍┼╸		
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Comments: M	etals: Hg	(50.15), Cu(29.HW), 2 , Pb(82.HW), 00.MD	2n(30.HW), /	As(33.HW),	Se(34.HW)	Analyst: Time:		pH: Conduct:	1214	NA		1.8	17:	- Andrew - A	S.U. U MHO	S	
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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

Report Date : 04/02/20	Sample From : WELL 13 atory Analysis	Purchase Order : Quality Assurance
Customer/Permit No. : 507 / AR0048836 001	Sample Type : GRAB WWATER	Work Order :
Customer Name : CLINTON, EAST GW13	Sample Time : 1130	Delivery By : JGK
Control Number: 2003010539	Sample Date : 03/23/20	Collected By: JGK

Analysis							T c c u u c u
Date Time By	Parameter	Result	Notes	Quantity	Method	Precision	Accuracy
$\frac{Dace}{04/01} \frac{11me}{0915} \frac{By}{DWC}$		<u>Result</u> 20.0 r		Qualitity	SM1997 4500ClC	<u>% RPD</u> 0.00	<u>% Recovery</u> 93.0 *
03/23 1130 JGK		6.5 \$			SM 2011 4500-H+B	0.00	93.0 * N/A *
	Solids, Total Dissolved	258.0 r			SM 2011 4500-H+B SM1997 2540 C	0.00	N/A
	Spec. Conductance @ 25 C	238.000 1	-		SM1997 2510B	0.34	N/A -
03/23 1135 JGK		14.60			SM 2000 2550 B	0.42	N/A N/A
	Nitrate + Nitrite	0.16 r			HACH 10206	4.20	99.8 *
	Well Depth, Total	15.40			11ACH 10200	1.20 N/A	N/A
	Depth to Water	5.60 1				N/A	N/A
,		5.00				10/11	11/11
* QA data sho	wn is from a different sam	le or standard	on the same	date.			
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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

és Co., Inc.

Environmental

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

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

Control Number: 2003010540	Sample Date : 03/23/20	Collected By: JGK
Customer Name : CLINTON, EAST GW14	Sample Time : 1115	Delivery By : JGK
Customer/Permit No. : 508 / AR0048836 001	Sample Type : GRAB WWATER	Work Order :
Report Date : 04/02/20	Sample From : WELL 14	Purchase Order :
Labor	Quality Assurance	

						<u></u>	10001201100
Analysis						Precision	Accuracy
<u>Date Time By</u>	Parameter	Result	<u>Notes</u>	Quantity	Method	<u> </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	ſ.		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 umh	lo/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 Fee	t			N/A	N/A
03/23 1115 JGK	Depth to Water	4.10 Fee	t			N/A	N/A
* QA data sho	wn is from a different sampl	e or standard on	the same	date.			

Signature <u>IUU</u> <u>YUU</u> Environmental Services Co., Inc.

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03/23 1025 JGK Temperature

03/25 1450 KNM Nitrate + Nitrite

03/23 1020 JGK Well Depth, Total

03/23 1020 JGK Depth to Water

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

0.00

4.20

N/A

N/A

N/A \*

99.8 \*

N/A

N/A

	: CLINTON, EAST GW17 - No. : 649 / AR0048747 001	Sample Date : 03/23/20 Sample Time : 1020 Sample Type : GRAB WWATEF Sample From : WELL 17	Delive Work O	Collected By: JGK Delivery By : JGK Work Order : Purchase Order :			
	Lič	aboratory Analysis		Quality	Assurance		
Analysis				Precision	Accuracy		
<u>Date Time By</u>	Parameter	<u>Result</u> <u>Notes</u> <u>Quantit</u>	y Method	% RPD	% Recovery		
04/01 0915 DWC	Chloride (as Cl)	< 0.1 mg/L	SM1997 4500ClC	0.00	93.0 *		
03/23 1020 JGK	Hq	6.1 S.U.	SM 2011 4500-H+B	0.00	N/A *		
03/27 1030 NTR	Solids, Total Dissolved	142.0 mg/L	SM1997 2540 C	0.34	N/A *		
03/23 1025 JGK	Spec. Conductance @ 25 C	76.600 umho/c	SM1997 2510B	0.42	N/A *		
					=-/ -=		

15.20 °C

6.46 mg/L

7.20 Feet

17.60 Feet

\* 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 <u>Mud</u> <u>Juli</u> <u>Environmental Services Co., Inc.</u>

SM 2000 2550 B

HACH 10206



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

Sampler Name(s):	Tason	Knocmsch. W
and Signature:	- h	nad

								Samr	ple Da	te: 🦳	3/2	3/20						
Sample Identification (Customer #)		Sample Time:	Depth To Water	Total Well Depth		p	рΗ		Sp	ecific C	Conductar	nce			erature rees C		Cl, TDS (1L Plastic ≤ 6 Deg C)	NO3+N O2 (1 L Plastic H2SO4)
<b>Clinton Ea</b>	ast Wells				#1	#2	#3	Time	#1	#2	#3	Time	#1	#2	#3	Time		
#13 (507)	2003010539	1130	5'6"	15′ 4″	6.5	6.6	6.5	1135	238	239	238	1135	14.6	14.6	14.6	1135	x	x
#14 (508)	2003010540	1115	4.'1'					1	8		1				1		X	x
	2003010541			14' 0''		1			8		EON	1					x	x
#17 (649)	2003010542	1020			1			1	1		76.6	1	15.2	15.3	15.2	1025	x	x
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Polinguichod	min Kitt	Kanagar I		. 1418					L.a	1 ai	lout	لــــــا د		2/	27/2		<u> </u>	<u> </u>
Comments:	elinquished by: Q. K. J. Kwonsch, W Time: 1415 Received By Lab: face (allocet Date: 3/23/20) Time: 1415 Comments:																	

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Work Order : Purchase Order :
le Time : 1449 le Type : GRAB WATER le From : #13 (507)

						x diditate of 1	
Analysis						Precision	Accuracy
<u>Date Time By</u>	Parameter	Result		Quantity	Method	<u> </u>	<u>% Recovery</u>
09/25 1446 MRR	Chloride (as Cl)	29.9	mg/L		SM1997 4500ClC	0.00	99.9 *
09/24 1450 NTR	рH	6.2	S.U.		SM 2011 4500-H+B	0.00	N/A
09/28 1439 BXW	Solids, Total Dissolved	< 2.5			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	٥C		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

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

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Control Number:	2009010452
Customer Name :	CLINTON, EAST GW14
Customer/Permit	No. : 508 / AR0048836 001
Report Date : 09	9/30/20

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

Laboratory Analysis

R	Delivery By : NTR Work Order : Purchase Order :
	Quality Assurance
	Precision Accurac

Collected By: NTR

					200122071	100001000
Analysis					Precision	Accuracy
<u>Date Time By</u>	Parameter	<u>Result</u> <u>Notes</u>	Quantity	Method	_ % RPD	% Recovery
09/25 1446 MRR	Chloride (as Cl)	9.9 mg/L		SM1997 4500ClC	0.00	99.9 *
09/24 1413 NTR	рH	6.3 S.U.		SM 2011 4500-H+B	0.00	N/A *
09/28 1439 BXW	Solids, Total Dissolved	150.0 mg/L		SM1997 2540 C	0.00	N/A *
09/24 1413 NTR	Spec. Conductance @ 25 C	119.600 umho/c		SM1997 2510B	0.34	N/A
09/24 1413 NTR	Temperature	18.90 °C		SM 2000 2550 B	0.00	N/A *
09/28 1441 MRR	Nitrate + Nitrite	1.20 mg/L		HACH 10206	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

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

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Control Number: 2009010453 Customer Name : CLINTON, EAST GW16 Customer/Permit No. : 509 / AR0048836 ( Report Date : 09/29/20	Sample Date : 09/24/20 Sample Time : 1347 OO1 Sample Type : GRAB WATER Sample From : #16 (509)	Collected By: NTR Delivery By : NTR Work Order : Purchase Order :
Analysis <u>Date Time By</u> <u>Parameter</u> 09/24 1347 NTR Dry Well	Laboratory Analysis ResultNotesQuantity 0.00	Method Quality Assurance Precision Accuracy <u>% RPD % Recovery</u> N/A N/A
* QA data shown is from a different s	ample or standard on the same date.	

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Control Number: 2009010454	Sample Date : 09/24/20	Collected By: NTR
Customer Name : CLINTON, EAST GW17	Sample Time : 1352	Delivery By : NTR
Customer/Permit No. : 649 / AR0048747 001	Sample Type : GRAB WATER	Work Order :
Report Date : 10/05/20	Sample From : #17 (649)	Purchase Order :

	L	aboratory Analysi	5			Quality 2	Assurance
Analysis						Precision	Accuracy
<u>Date Time By</u>	Parameter	Result	Notes	Quantity	Method	% RPD	% Recovery
09/25 1446 MRR	Chloride (as Cl)	< 0.1 mg/L			SM1997 4500ClC	0.00	99.9
09/24 1353 NTR	pH	6.1 S.U.			SM 2011 4500-H+B	0.00	N/A *
10/01 0825 KNM	Solids, Total Dissolved	191.6 mg/L			SM1997 2540 C	0.00	N/A *
09/24 1353 NTR	Spec. Conductance @ 25 C	76.300 umho	/c		SM1997 2510B	0.34	N/A *
09/24 1353 NTR	Temperature	19.30 °C			SM 2000 2550 B	0.00	N/A *
09/28 1441 MRR	Nitrate + Nitrite	6.02 mg/L			HACH 10206	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
* QA data sho	wn is from a different sample	e or standard on t	he same c	late.			

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	Environmental S Little Rock, dwater Monitor	AR 722	211	-							:h		9	<u>ev sa</u>	1			
				-				Samp	ole Dat	:e:	1-24	-202	20					
Sample Identification (Customer #)	Number	Sample Time:	Depth To Water	Total Well Depth		p	Н				onductar				erature ees C		Cl, TDS (1L Plastic ≤ 6 Deg C)	NO3+N O2 (8 oz Plastic H2SO4)
Clinton Ea	ast Wells				#1	#2	#3	Time	#1	#2	#3	Time	#1	#2	#3	Time		
#13 (507)	2009010451	1449	9'4"	15′ 4″	6.2	6.2	6.2	1450	145:4	144.9	145.1	1450	18.5	18:7	15.6	1450	x	x
	2009010452		8'3"								119.2					1413		x
	20090,0453			14' 0"	$\mathcal{D}$	RY		EL	1									x
1 1	2009010454	1 1	•	17' 6"	6.1	6.0				76.5	76.6	1353	19.3	19.4	19.2	1353	X	x
									_12_2						1			
Relinquished	by: Ned Pyen - Ne	dRyens	Time:		R	leceive	d By La	1b: 10	M.	M.	Benl	Nog	Date	:: 1/z	4/70	Tiı	ne:1645	-
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Northwest Arkansas Branch 1107 Century Avenue Springdale, AR 72762 Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010010322	Sample Date : 10/22/20	Collected By: NTR
Customer Name : CLINTON, EAST GW13	Sample Time : 1307	Delivery By : NTR
Customer/Permit No. : 507 / AR0048836 001	Sample Type : GRAB WATER	Work Order :
Report Date : 10/30/20	Sample From : 13 (507)	Purchase Order :

	Quality	Assurance				
Analysis					Precision	Accuracy
Date Time By	Parameter	Result	<u> </u>	tyMethod	% RPD	% Recovery
10/29 1450 BXW	Chloride (as Cl)	10.0 mg	J/L	SM1997 4500ClC	0.00	90.0
10/22 1307 NTR	рН	6.2 S.	.U.	SM 2011 4500-H+E	0.00	N/A *
10/23 1530 EDA	Solids, Total Dissolved	80.0 mg	J/L	SM1997 2540 C	4.45	N/A *
10/22 1307 NTR	Spec. Conductance @ 25 C	188.400 um	nho/c	SM1997 2510B	1.90	N/A *
10/23 1430 EDA	Nitrate + Nitrite	1.12 mg	J/L	HACH 10206	2.06	105.0 *
10/22 1307 NTR	Well Depth, Total	15.33 Fe	et		N/A	N/A
10/22 1307 NTR	Depth to Water	8.13 Fe	et		N/A	N/A
	_					

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

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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 :

	Quality A	ssurance					
Analysis						Precision	Accuracy
Date Time By	Parameter	Result	Notes	Quantity	Method	<u> </u>	<u>% Recovery</u>
10/29 1450 BXW	Chloride (as Cl)	10.0 mg/L			SM1997 4500ClC	0.00	90.0 *
10/22 1250 NTR	рН	5.8 S.U.			SM 2011 4500-H+B	0.00	N/A *
10/23 1530 EDA	Solids, Total Dissolved	< 2.5 mg/L			SM1997 2540 C	4.45	N/A *
10/22 1250 NTR	Spec. Conductance @ 25 C	129.200 umho/c	;		SM1997 2510B	1.90	N/A *
10/23 1430 EDA	Nitrate + Nitrite	< 0.23 mg/L			HACH 10206	2.06	105.0 *
10/22 1250 NTR	Well Depth, Total	13.08 Feet				N/A	N/A
10/22 1250 NTR	Depth to Water	9.66 Feet				N/A	N/A

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

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	CLINTON, EAST GW16 No. : 509 / AR0048836 001	Sample Date : 10/ Sample Time : NA Sample Type : GRA Sample From : 16	B WATER	Delive: Work O:	ted By: NTR ry By : NTR rder : se Order :			
Analysis <u>Date Time By</u> 10/22 1200 NTR	Parameter	<u>aboratory Analysis</u> <u>ResultNotes</u> 0.00	Quantity	Method	Quality : Precision <u>% RPD</u> N/A	Accuracy Accuracy <u>% Recovery</u> N/A		
* QA data sho	wn is from a different sampl	e or standard on the same d	ate.					

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Control Number: 2010010325	Sample Date : 10/22/20	Collected By: NTR
Customer Name : CLINTON, EAST GW17	Sample Time : 1236	Delivery By : NTR
Customer/Permit No. : 649 / AR0048747 001	Sample Type : GRAB WATER	Work Order :
Report Date : 10/30/20	Sample From : 17 (649)	Purchase Order :

		Laboratory Ana	<u>alysis</u>			Quality A	Assurance
Analysis						Precision	Accuracy
Date Time By	Parameter	Result	<u>Notes</u>	Quantity	Method	<u> </u>	<u>% Recovery</u>
10/29 1450 BXW	Chloride (as Cl)	10.0	mg/L		SM1997 4500ClC	0.00	90.0 *
10/22 1236 NTR	рН	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

\* 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.

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	invironmental S Little Rock, dwater Monitori	AR 722	211	-							Ne n		<i>u</i>					
Sample	Laboratory Control	Sample	Depth To	Total Well		p	H	Samp			DCTU onductar		22,	Tempe	rature		Cl, TDS (1L Plastic ≤ 6 Deg C)	03+N 02 1 L astic S04)
(Customer #)	Number	Time:	Water	Depth		•		ſ						Degro	ees C		D, Patro	H P C
Clinton W			r	r	#1	#2	#3	Time	#1	#2	#3	Time	#1	#2	#3	Time		
#13 (507)	2010010322	1307	8 1112	15' 4"	6.2	6.3	6.3	1307	188.4	188.1	188.2	1307	219	22.0	2a. O	1307	X	Х
#14 (508)	2010010323			13' 1"													x	Х
#16 (509)	2010010 324			<del>14' 0''-</del>	-DR	γV	JEL		10000000000000000000000000000000000000	Na tera mana ka Cinca ka da taka					**************************************		X	х
#17 (649)	2010100325	1236	2'7"						93.9	944	94.1	1236	20.6	20.4	20.3	1236	x	х
X																		
																	**********	
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Comments										6	y Ber	Non C	Page	e le	sf i	1		

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		CITY OF CLI /ATER AND SEV P.O. BOX 277 CLINTON, AR 72 TELEPHONE (501) 74 FAX (501) 745-2	VER DEPARTMENT 2031 5-4320	• •
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East Plan West Plant	+: 43.296 n : No Spra	ng 123 inches	1437.28 Acres	
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