

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
MONITORING REPORT FOR DECENTRALIZED WASTEWATER TREATMENT FACILITIES VIA DRIP IRRIGATION
NO DISCHARGE MONTHLY MONITORING REPORT**

PERMITTEE NAME
CITY OF CAVE SPRINGS
PERMITTEE ADDRESS
PO Box 5 Cave Springs AR 72718

FACILITY NAME
CAVE SPRINGS WASTEWATER TREATMENT PLANT
FACILITY ADDRESS
The Creeks Golf Course 1499 S Main St Cave Springs AR 72718

PERMIT NO.
4893-WR-3
AFIN NO.
04-01642

MONITORING PERIOD		
MM/DD/YYYY	TO	MM/DD/YYYY
12/1/2019		12/31/2019

EFFLUENT LIMITS, MONITORING, AND REPORTING REQUIREMENTS							
PARAMETER	PERMIT LIMIT	SAMPLE MEASUREMENT		UNITS	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		Plant 1	Plant 2				
CARBONACEOUS BIOCHEMICAL OXYGEN DEMAND (CBOD5)	30	2.9	8.6	MG/L	Once per Month / Grab		
TOTAL SUSPENDED SOLIDS (TSS)	45	4.1	20.8	MG/L			
FECAL COLIFORM BACTERIA (FCB)	10,000	224.4	114	COLONIES/100ml			
pH	6.0 - 9.0	6	7	s.u			
TOTAL PHOSPHOROUS (TP)	Report	6.69	6.83	MG/L			
TOTAL KJELDAHL NITROGEN (TKN)	Report			MG/L	Once per Quarter / Grab		
NITROGEN AMMONIA NITROGEN (NH ₃ - N)	Report			MG/L			
NITRITE NITROGEN (NO ₂ - N) + NITRATE NITROGEN (NO ₃ - N)	Report			MG/L			
PLANT AVAILABLE NITROGEN (PAN)	Report			MG/L			
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD			
		2,770,789	0.171522				
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM WITH THE INFORMATION SUBMITTED HEREIN; AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.			TELEPHONE		DATE	
Kathy Bartlett				479	530-5926	1/13/2020	
TYPED OR PRINTED							
COMMENTS AND EXPLANATION OF VIOLATIONS (<i>Reference all attachments here</i>)							
REPAIRED 2 SUPPLY BREAKS AND ONE ELECTRONIC ZONE VALVE IN DRIP FIELD							

TABLE II

DRIP ZONES LOADING RATE LIMITS, MONITORING AND REPORTING REQUIREMENTS

		Dec-19		DAILY MAXIMUM FLOW TOTAL		171,522
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum
Leach Field 1	0.55	gpd/ft2	26,000	gpd	Daily	12350
Zone 1	0.42		19,524			<i>zones not being used</i>
Zone 2	0.45		19,309			
Zone 3	0.4		16,424			
Zone 4	0.46		10,811			
Zone 5	0.2		13,059			6347
Zone 6	0.2		7,723			3774
Zone 7	0.2		10,910			5146
Zone 8	0.3		7,081			3431
Zone 9	0.4		18,291			8748
Zone 10	0.3		9,450			4460
Zone 11	0.2		4,110			2059
Zone 12	0.4		7,522			3602
Zone 13	0.25		5,717			2745
Zone 14	0.15		6,097			2916
Zone 15	0.2		8,378			4117
Zone 16	0.4		9,427			4460
Zone 17	0.23		3,694			1716
Zone 19	0.35		13,778			6518
Zone 20	0.2		5,766			2745
Zone 21	0.4		17,040			8234
Zone 22	0.5		28,113			13379
Zone 23	0.25		15,640			7376
Zone 24	0.25		9,547			4632
Zone 25	0.2		4,436			2059
Zone 26	0.3		9,334			4460
Zone 27	0.31		16,511			7891
Zone 28	0.31		13,018			6175
Zone 29	0.2		3,923			1887
Zone 30	0.55		10,116			4803
Zone 31	0.3		5,714			2745

Environmental Services Company, Inc.

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 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: 1912020016	Sample Date : 12/04/19	Collected By: JEW
Customer Name : CAVE SPRINGS UTILITY, PLANT 1	Sample Time : 1445	Delivery By : JEW
Customer/Permit No. : 1826 / 4893-WR-2	Sample Type : GRAB	Work Order :
Report Date : 12/11/19	Sample From : EFFLUENT DOSE TANK	Purchase Order :

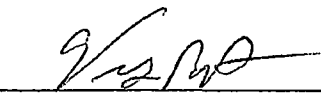
Laboratory Analysis

Analysis						Quality Assurance			
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
12/04	1445	JEW	pH	6.0 S.U.			SM 2011 4500-H+ B	0.00	N/A *
12/06	1130	TM	Phosphorous, Total (as P)	6.69 mg/L			EPA 365.3	1.23	115.0 *
12/09	1030	TSB	Solids, Total Suspended	4.1 mg/L			SM 2011 2540 D	2.90	N/A *
12/04	1705	TSB	Fecal Coliform (MPN/100mL)	224.4 /100ml			06/2012 Colilert18	0.00	0.0 *
12/05	1300	TM	BOD, Carbonaceous	2.9 mg/L			SM 2001 5210 B	21.54	79.3

* 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 _____

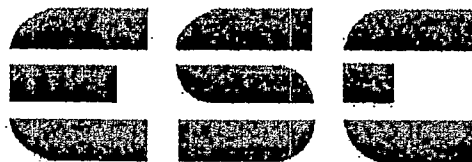


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Corporate Office, Little Rock, Arkansas
 501-221-2565

Carlsbad, New Mexico
 575-887-1ESC

Phone: 479-750-1170 Fax: 479-750-1172

CHAIN OF CUSTODY

Client Information						Project Information					Requested Parameters									
Company Name:		Cave Springs Plant 1				Permit/Project #:					pH (23)	Fecal Coliform (43.1F)	CBOD (70), TSS (28)	T-Phosphorus						
Address:		PO BOX 5 Cave Springs 72718				Purchase Order #:														
Telephone:		479 248-1040				Sampler Name(s):		James Wiltse James Wiltse												
FAX:						and Signature(s):														
ESC Client Number:		1826																		
Sample Identification			Sample Collection			Sample Containers														
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#											
Effluent/Dose Tank	1912020016	12-4-19	1445	Grab	Water	Glass	250 ml	None	0	X										
				Grab	Water	Sterile	100 ml	Na ₂ S ₂ O ₃ /Cool	1		X									
				Grab	Water	Plastic	1/2 gal	None/Cool	1			X								
				Grab	Water	Plastic	8 oz	H ₂ SO ₄ , pH <2	1				X							
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Custody Seals:		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"/>								
Comments:						FLOW DATA		Field Test	Time	Analyst	Result	Result	Units							
						Analyst:		pH:	1445	SEW	6.0	5.9								
						Time:		Temp.:	1445	(SEW)	15.7	15.6	°C							
						Reading:		DO:												
						Units:		Debris:												
Cool all samples to 6 degrees C.						Chlorinated? Yes No				This Document is Page 1 of 1										

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Control Number: 1912020017
 Customer Name : CAVE SPRINGS UTILITY, PLANT 2
 Customer/Permit No. : 2379 / 4893-WR-3 002
 Report Date : 12/13/19

Sample Date : 12/04/19
 Sample Time : 1420
 Sample Type : GRAB
 Sample From : EFFLUENT DIVERTER BX

Collected By: JEW
 Delivery By : JEW
 Work Order :
 Purchase Order :

Laboratory Analysis

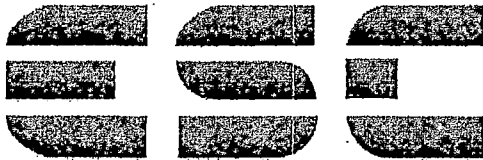
<u>Analysis</u>			<u>Laboratory Analysis</u>				<u>Quality Assurance</u>		
<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>	<u>Precision</u>	<u>Accuracy</u>
								<u>% RPD</u>	<u>% Recovery</u>
12/04	1420	JEW	pH	7.0 S.U.			SM 2011 4500-H+ B	0.00	N/A *
12/06	1130	TM	Phosphorous, Total (as P)	6.83 mg/L			EPA 365.3	1.23	115.0 *
12/09	1030	TSB	Solids, Total Suspended	20.8 mg/L			SM 2011 2540 D	2.90	N/A *
12/04	1705	TSB	Fecal Coliform (MPN/100mL)	114.0 /100ml			06/2012 Colilert18	0.00	0.0 *
12/05	1300	TM	BOD, Carbonaceous	8.6 mg/L			SM 2001 5210 B	21.54	79.3 *

* 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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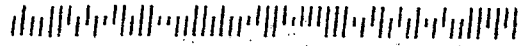


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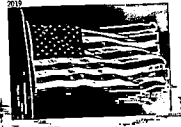
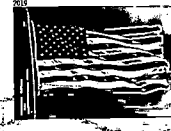
CHAIN OF CUSTODY

Client Information				Project Information						Requested Parameters												
Company Name: Cave Springs Plant 2				Permit/Project #:						pH(23)	Fecal Coliform(43.1F)	CBOD(70), TSS(28)	Total P (25)									
Address: PO BOX 5				Purchase Order #:																		
Cave Springs 72718				Sampler Name(s): James With James Withse																		
Telephone: 479 248-1040				and Signature(s):																		
FAX:																						
ESC Client Number: 2379																						
Sample Identification		Sample Collection				Sample Containers																
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#													
Effluent Diverter Box	1912020017	12-4-19	1420	Grab	Water	Teflon	150 ml	none	1	X												
				Grab	Water	whirlpak	100 ml	Na ₂ S ₂ O ₃	1		X											
				Grab	Water	Plastic	1/2 gal	none/ice	1			X										
				Grab	Water	Plastic	8 oz	H ₂ SO ₄ , pH <2	1				X									
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Custody Seals:		Used?	Intact?											
James With James Withse		12-4-19	1650	Samuel P. ...		12-4-19	1650	Regular		X	Special											
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Turnaround:		Regular	Special											
Relinquished By: (Signature and Printed Name)		Date	Time	Received for Lab By: (Signature and Printed Name)		Date	Time	Were samples properly preserved:		Yes	No											
				Samuel P. ...		12-4-19	1650	Yes		X	No											
Comments:				FLOW DATA		Field Test	Time	Analyst	Result	Result	Units											
				Analyst:		pH:	1420	GEW	7.0	7.0												
				Time:		Temp.:	1420	GEW	15.4	15.4	(C)	°F										
				Reading:		DO:																
				Units:		Debris:																
Cool all samples to 6 degrees C.						Chlorinated?	Yes	No	This Document is Page		L	of	L									



NWA UTILITY SERVICES, INC

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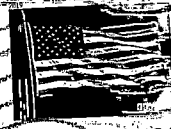


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ADEG

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