

**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
MONITORING PERIOD
MM/DD/YYYY TO MM/DD/YYYY
3/1/2021 TO 3/31/2021

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

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 (CBOD ₅)	30	11.2	8	MG/L	Once per Month / Grab	
TOTAL SUSPENDED SOLIDS (TSS)	45	8.7	13.6	MG/L		
FECAL COLIFORM BACTERIA (FCB)	10,000	24.2	8.0	COLONIES/100ml		
pH	6.0 - 9.0	7	7.1	s.u		
TOTAL PHOSPHOROUS (TP)	Report	7.36	6.84	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 4,075,465	DAILY MAX 211,137	GPD		
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	4/15/2021
TYPED OR PRINTED				AREA CODE	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF VIOLATIONS (Reference all attachments here)						

TABLE II

DRIP ZONES LOADING RATE LIMITS; MONITORING AND REPORTING REQUIREMENTS

		March			DAILY MAXIMUM FLOW TOTAL		211,137
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum	
Leach Field 1	0.55	gpd/ft2	26,000	gpd	Daily	17036	
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			8710	
Zone 6	0.2		7,723			4223	
Zone 7	0.2		10,910			12669	
Zone 8	0.3		7,081			5701	
Zone 9	0.4		18,291			16891	
Zone 10	0.3		9,450			6335	
Zone 11	0.2		4,110			2956	
Zone 12	0.4		7,522			4434	
Zone 13	0.25		5,717			3379	
Zone 14	0.15		6,097			4012	
Zone 15	0.2		8,378			6123	
Zone 16	0.4		9,427			6335	
Zone 17	0.23		3,694			2112	
Zone 19	0.35		13,778			10557	
Zone 20	0.2		5,766			3379	
Zone 21	0.4		17,040			12669	
Zone 22	0.5		28,113			19003	
Zone 23	0.25		15,640			11191	
Zone 24	0.25		9,547			6335	
Zone 25	0.2		4,436			3590	
Zone 26	0.3		9,334			6123	
Zone 27	0.31		16,511			12669	
Zone 28	0.31		13,018			10346	
Zone 29	0.2		3,923			2323	
Zone 30	0.55		10,116			8657	
Zone 31	0.3		5,714			3379	

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: 2103020009
 Customer Name : CAVE SPRINGS UTILITY, PLANT 1
 Customer/Permit No. : 1826 / 4893-WR-2
 Report Date : 03/12/21

Sample Date : 03/03/21
 Sample Time : 1320
 Sample Type : GRAB
 Sample From : EFFLUENT

Collected By: HNS
 Delivery By : HNS
 Work Order :
 Purchase Order :

Laboratory Analysis

Analysis			Parameter	Result	Notes	Quantity	Method
03/03	1322	HNS	pH	7.0	S.U.		SM 2011 4500-H+ B
03/10	1435	NTR	Phosphorous, Total (as P)	7.36	mg/L		EPA 365.3
03/05	1145	HNS	Solids, Total Suspended	8.7	mg/L		SM 2011 2540 D
03/03	1615	HNS	Fecal Coliform (MPN/100mL)	24.2	/100ml		06/2012 Colilert18
03/04	0735	TWM	BOD, Carbonaceous	11.2	mg/L		SM 2001 5210 B

Quality Assurance

Precision % RPD	Accuracy % Recovery
0.00	N/A
0.37	101.0 *
2.56	N/A *
0.00	N/A *
20.90	102.0 *

* 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.

Kristin Mullins

Environmental Services Company, Inc.
 Northwest Arkansas
 1107 Century Street
 Springdale, Arkansas 72762
 website: www.esclabs.com



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 #:			Sampler Name(s): <i>Hayden Smith</i> and Signature(s): <i>Hayden Smith</i>					pH (23)	Fecal Coliform (43.IF)	CBOD (70), TSS (28)	T-Phosphorus							
Address: PO BOX 5			Purchase Order #:																		
Cave Springs 72718																					
Telephone: 479 248-1040																					
FAX:																					
ESC Client Number: 1826																					
Sample Identification		Sample Collection				Sample Containers				pH (23)	Fecal Coliform (43.IF)	CBOD (70), TSS (28)	T-Phosphorus								
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#												
Effluent/Dose Tank	2103020009	3-3-21	1320	Grab	Water	Glass	250 ml	None	0	X											
Effluent/Dose Tank				Grab	Water	Sterile	125 ml	Na ₂ S ₂ O ₃ /Cool	1		X										
Effluent/Dose Tank				Grab	Water	Plastic	1/2 gal	None/Cool	1			X									
Effluent/Dose Tank				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?										
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										
<i>Hayden Smith</i>		3-3-21	1000	<i>Hayden Smith</i>		3/3/21	1600			<input checked="" type="checkbox"/>	<input type="checkbox"/>										
Comments:					FLOW DATA	Field Test	Time	Analyst	Result	Result	Units										
					Analyst:	pH:	1322	HNS	7.0	7.0											
					Time:	Temp.:						°C	°F								
					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: 2103020010
 Customer Name : CAVE SPRINGS UTILITY, PLANT 2
 Customer/Permit No. : 2379 / 4893-WR-3 002
 Report Date : 03/12/21

Sample Date : 03/03/21
 Sample Time : 1348
 Sample Type : GRAB
 Sample From : EFFLUENT

Collected By: HNS
 Delivery By : HNS
 Work Order :
 Purchase Order :

Laboratory Analysis

Analysis

<u>Date</u>	<u>Time</u>	<u>By</u>	<u>Parameter</u>	<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>
03/03	1348	HNS	pH	7.1	S.U.		SM 2011 4500-H+ B
03/10	1435	NTR	Phosphorous, Total (as P)	6.84	mg/L		EPA 365.3
03/05	1145	HNS	Solids, Total Suspended	13.6	mg/L		SM 2011 2540 D
03/03	1615	HNS	Fecal Coliform (MPN/100mL)	8.0	/100ml		06/2012 Colilert18
03/04	0735	TWM	BOD, Carbonaceous	8.0	mg/L		SM 2001 5210 B


Quality Assurance

<u>Precision</u>	<u>Accuracy</u>
<u>% RPD</u>	<u>% Recovery</u>
0.00	N/A *
0.12	101.0
2.56	N/A *
0.00	N/A *
20.90	102.0 *

* 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



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Kristin Mullins
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 21137

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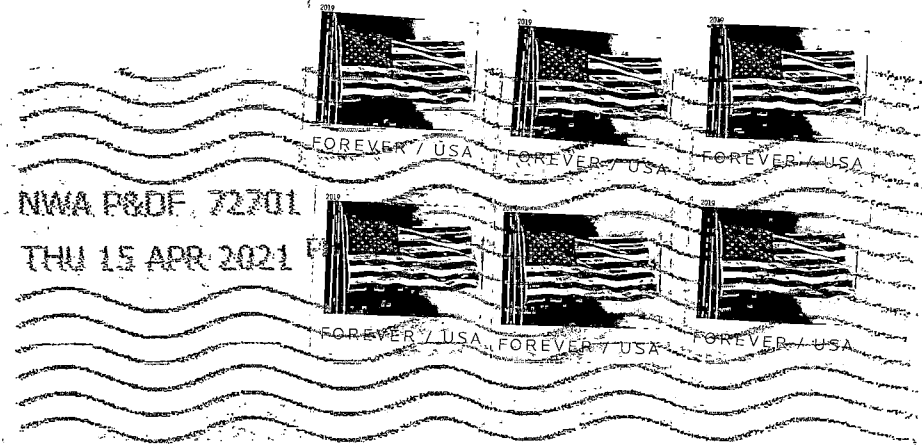
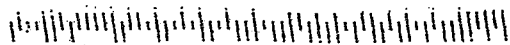
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Phone: 479-750-1170 Fax: 479-750-1172

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): Hayden Smith																	
Telephone: 479 248-1040				and Signature(s): <i>Hayden Smith</i>																	
FAX:																					
ESC Client Number: 2379																					
Sample Identification		Sample Collection				Sample Containers															
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#												
Effluent Diverter Box	2103620010	3-3-21	1348	Grab	Water	Teflon	150 ml	none	0	X											
Effluent Diverter Box	↓	↓	↓	Grab	Water	Sterile	100 ml	Na ₂ S ₂ O ₃	1		X										
Effluent Diverter Box	↓	↓	↓	Grab	Water	Plastic	1/2 gal	none/ice	1			X									
Effluent Diverter Box	↓	↓	↓	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"/> N	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"/> X	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"/> X	No	<input type="checkbox"/>								
Comments:		Date		Time		Date		Time		Result	Result	Units									
		3-3-21		1600		3/3/21		1600		Analyst:	Field Test:	Time:	Analyst:	Result:	Result:	Units:					
										Analyst:	pH:	1348	HWS	7.1	7.1						
										Time:	Temp.:					°C	°F				
										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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