

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

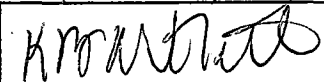
PERMITTEE NAME
CITY OF CAVE SPRINGS
PERMITTEE ADDRESS
PO Box 5 Cave Springs AR 72718

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
1/1/2021 TO 1/31/2021

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 (CBOD5)	30	< 2.0	< 2.0	MG/L	Once per Month / Grab	
TOTAL SUSPENDED SOLIDS (TSS)	45	5.8	13	MG/L		
FECAL COLIFORM BACTERIA (FCB)	10,000	8	< 4.0	COLONIES/100ml		
pH	6.0 - 9.0	6.9	7.1	s.u		
TOTAL PHOSPHOROUS (TP)	Report	6.07	6.67	MG/L		
TOTAL KJELDAHL NITROGEN (TKN)	Report	46.20	49.70	MG/L	Once per Quarter / Grab	
NITROGEN AMMONIA NITROGEN (NH ₃ - N)	Report	10.30	20.8	MG/L		
NITRITE NITROGEN (NO ₂ - N) + NITRATE NITROGEN (NO ₃ - N)	Report	34.2	30.6	MG/L		
PLANT AVAILABLE NITROGEN (PAN)	Report	55.3	60.1	MG/L		
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD		
		4,513,332	367,579			

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
			479	530-5926	2/12/2021
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	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

		Jan-21		DAILY MAXIMUM FLOW TOTAL		367,579
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum
Leach Field 1	0.55	gpd/ft ²	26,000	gpd	Daily	30026
Zone 1	0.42		19,524			zones not being used
Zone 2	0.45		19,309			
Zone 3	0.4		16,424			
Zone 4	0.46		10,811			
Zone 5	0.2		13,059			12108
Zone 6	0.2		7,723			10660
Zone 7	0.2		10,910			12668
Zone 8	0.3		7,081			9925
Zone 9	0.4		18,291			20368
Zone 10	0.3		9,450			10530
Zone 11	0.2		4,110			8147
Zone 12	0.4		7,522			7720
Zone 13	0.25		5,717			9882
Zone 14	0.15		6,097			9985
Zone 15	0.2		8,378			10660
Zone 16	0.4		9,427			11028
Zone 17	0.23		3,694			8676
Zone 19	0.35		13,778			17644
Zone 20	0.2		5,766			7882
Zone 21	0.4		17,040			22055
Zone 22	0.5		28,113			31560
Zone 23	0.25		15,640			19482
Zone 24	0.25		9,547			11028
Zone 25	0.2		4,436			6249
Zone 26	0.3		9,334			12660
Zone 27	0.31		16,511			21994
Zone 28	0.31		13,018			18012
Zone 29	0.2		3,923			6044
Zone 30	0.55		10,116			14704
Zone 31	0.3		5,714			5882

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: 2101020021
 Customer Name : CAVE SPRINGS UTILITY, PLANT 1
 Customer/Permit No. : 1826 / 4893-WR-2
 Report Date : 01/19/21

Sample Date : 01/06/21
 Sample Time : 1635
 Sample Type : GRAB
 Sample From : EFFLUENT

Collected By: TWM
 Delivery By : TWM
 Work Order :
 Purchase Order :

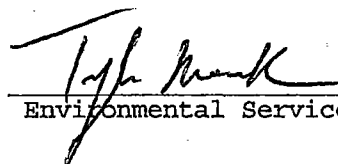
Laboratory Analysis

Analysis			Laboratory Analysis				Quality Assurance		
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
01/07	1020	NTR	Ammonia as N, (HACH 10205)	10.30 mg/L			SM 2011 4500-NH3 F	0.40	99.2 *
01/18	1500	TWM	Total Kjeldahl Nitrogen	46.2 mg/L			02/2014 HACH 10242	14.29	94.3 *
01/06	1640	TWM	pH	6.9 S.U.			SM 2011 4500-H+ B	1.46	N/A
01/07	1110	NTR	Phosphorous, Total (as P)	6.07 mg/L			EPA 365.3	0.59	100.6 *
01/08	1530	HNS	Solids, Total Suspended	5.8 mg/L			SM 2011 2540 D	66.67	N/A *
01/06	1740	TWM	Fecal Coliform (MPN/100mL)	8.0 /100ml			06/2012 Colilert18	0.00	N/A *
01/07	0730	TWM	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	0.00	92.4 *
01/07	1130	NTR	Nitrate + Nitrite	34.20 mg/L			01/2013 HACH 10206	0.71	98.2 *
01/19	1030	TWM	Nitrogen, Plant Available	55.3 mg/L			SM 1997 4500-N		

* 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.

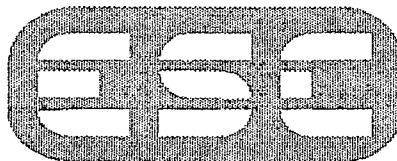
Signature



Environmental Services Co., Inc.

Kristin Mullins

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



Environmental Services Company, Inc.
 Northwest Branch
 1107 Century
 Springdale, AR 72764

Phone: 501-221-2565 Fax: 501-221-1341

CHAIN OF CUSTODY

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

Client Information				Project Information				Requested Parameters											
Company Name:		Cave Springs		Permit/Project #:		Quaterly		Fecal Coliform (43.1F)	CBOD (70), TSS (28)	T-Phosphorus (25)	NH3-N (15.A), s-TKN (16A),	NO3+NO2-N (91), PAN (99.99)	pH (23)						
Address:		PO BOX 5		Purchase Order #:															
		Cave Springs 72718		Sampler Name(s):		Tyler Mark Thom													
Telephone:		479 248-1040		and Signature(s):															
FAX:																			
ESC Client Number:		1826																	
Sample Identification			Sample Collection			Sample Containers													
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#	Fecal Coliform (43.1F)	CBOD (70), TSS (28)	T-Phosphorus (25)	NH3-N (15.A), s-TKN (16A),	NO3+NO2-N (91), PAN (99.99)	pH (23)				
Effluent/Dose Tank	2101020021	1/6/20	1635	Grab	Water	Sterile	120 mL	Ia 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	X	X					
Effluent/Dose Tank				Grab	Water	Glass	250 ml	None/Cool	0							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:											
Tyler Mark Thom		1/6/21	1730	[Signature]		1-6-21	1730	Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>									
Comments:				FLOW DATA		Field Test		Time	Analyst	Result	Result	Units							
				Analyst:		pH:		16:48	Tom	6.9	6.8								
				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									

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: 2101020022
 Customer Name : CAVE SPRINGS UTILITY, PLANT 2
 Customer/Permit No. : 2379 / 4893-WR-3 002
 Report Date : 01/19/21

Sample Date : 01/06/21
 Sample Time : 1705
 Sample Type : GRAB
 Sample From : EFFLUENT

Collected By: TWM
 Delivery By : TWM
 Work Order :
 Purchase Order :

Laboratory Analysis

Analysis			Laboratory Analysis				Quality Assurance		
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
01/07	1020	NTR	Ammonia as N, (HACH 10205)	20.80 mg/L			SM 2011 4500-NH3 F	0.40	99.2 *
01/18	1500	TWM	Total Kjeldahl Nitrogen	49.7 mg/L			02/2014 HACH 10242	14.29	94.3 *
01/06	1710	TWM	pH	7.1 S.U.			SM 2011 4500-H+ B	1.46	N/A *
01/07	1110	NTR	Phosphorous, Total (as P)	6.67 mg/L			EPA 365.3	0.59	100.6 *
01/08	1530	HNS	Solids, Total Suspended	13.0 mg/L			SM 2011 2540 D	66.67	N/A *
01/06	1740	TWM	Fecal Coliform (MPN/100mL)	< 4.0 /100ml			06/2012 Colilert18	0.00	N/A *
01/07	0730	TWM	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	0.00	92.4 *
01/07	1130	NTR	Nitrate + Nitrite	30.60 mg/L			01/2013 HACH 10206	0.71	98.2 *
01/19	1035	TWM	Nitrogen, Plant Available	60.1 mg/L			SM 1997 4500-N		

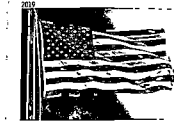
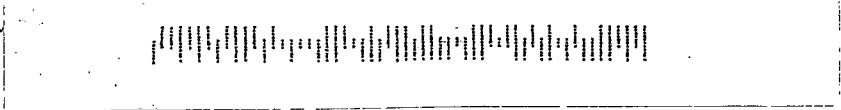
* QA data shown is from a different sample or standard on the same date.

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.

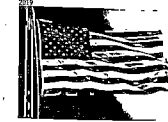
Signature


 Environmental Services Co., Inc.

4413332
 367529



FOREVER / USA



FOREVER / USA



FOREVER / USA




FOREVER / USA



FOREVER / USA



FOREVER / USA

 ***NWA Utility Services Inc***
PO Box 9299
Fayetteville, AR 72703

ADEQ
WATER DIVISION/PERMITS BRANCH
5301 Northshore Drive
N Little Rock, AR 72118-5317