

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

<b>PERMITTEE NAME</b>
CITY OF CAVE SPRINGS
<b>PERMITTEE ADDRESS</b>
PO Box 5 Cave Springs AR 72718

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

<b>PERMIT NO.</b>
4893-WR-3
<b>AFIN NO.</b>
04-01642

<b>MONITORING PERIOD</b>
MM/DD/YYYY TO MM/DD/YYYY
7/1/2020 TO 7/31/2020

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	4.8	MG/L	Once per Month / Grab	
TOTAL SUSPENDED SOLIDS (TSS)	45	7	18.4	MG/L		
FECAL COLIFORM BACTERIA (FCB)	10,000	114	86.5	COLONIES/100ml		
pH	6.0 - 9.0	7.5	6	s.u		
TOTAL PHOSPHOROUS (TP)	Report	9.13	7.03	MG/L		
TOTAL KJELDAHL NITROGEN (TKN)	Report	80.00	25.20	MG/L	Once per Quarter / Grab	
NITROGEN AMMONIA NITROGEN (NH <sub>3</sub> - N)	Report	64.00	13.3	MG/L		
NITRITE NITROGEN (NO <sub>2</sub> - N) + NITRATE NITROGEN (NO <sub>3</sub> - N)	Report	10.3	46.4	MG/L		
PLANT AVAILABLE NITROGEN (PAN)	Report	79.1	63.3	MG/L		
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD		h m u t h
		3,973,056	252,894			
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.	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE		DATE
Kathy Bartlett				479	530-5926	8/15/2020
				TYPED OR PRINTED	AREA CODE	NUMBER
COMMENTS AND EXPLANATION OF VIOLATIONS (Reference all attachments here)						

**TABLE II**

**DRIP ZONES LOADING RATE LIMITS, MONITORING AND REPORTING REQUIREMENTS**

		Jul-20		DAILY MAXIMUM FLOW TOTAL		252,894
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum
Leach Field 1	0.55	gpd/ft2	26,000	gpd	Daily	21740
<b>Zone 1</b>	0.42		19,524			<b>zones not being used</b>
<b>Zone 2</b>	0.45		19,309			
<b>Zone 3</b>	0.4		16,424			
<b>Zone 4</b>	0.46		10,811			
Zone 5	0.2		13,059			12645
Zone 6	0.2		7,723			7334
Zone 7	0.2		10,910			10116
Zone 8	0.3		7,081			6829
Zone 9	0.4		18,291			17703
Zone 10	0.3		9,450			7587
Zone 11	0.2		4,110			3541
Zone 12	0.4		7,522			5311
Zone 13	0.25		5,717			4047
Zone 14	0.15		6,097			4805
Zone 15	0.2		8,378			7334
Zone 16	0.4		9,427			7587
Zone 17	0.23		3,694			2529
Zone 19	0.35		13,778			12139
Zone 20	0.2		5,766			4047
Zone 21	0.4		17,040			15174
Zone 22	0.5		28,113			25290
Zone 23	0.25		15,640			13404
Zone 24	0.25		9,547			7587
Zone 25	0.2		4,436			4300
Zone 26	0.3		9,334			7334
Zone 27	0.31		16,511			15174
Zone 28	0.31		13,018			12392
Zone 29	0.2		3,923			2782
Zone 30	0.55		10,116			10116
Zone 31	0.3		5,714			4047

# 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: 2007020006	Sample Date : 07/08/20	Collected By: TWM
Customer Name : CAVE SPRINGS UTILITY, PLANT 1	Sample Time : 1505	Delivery By : TWM
Customer/Permit No. : 1826 / 4893-WR-2	Sample Type : GRAB	Work Order :
Report Date : 07/15/20	Sample From : EFFLUENT	Purchase Order :

<u>Laboratory Analysis</u>							<u>Quality Assurance</u>	
<u>Analysis</u>			<u>Result</u>	<u>Notes</u>	<u>Quantity</u>	<u>Method</u>	<u>Precision</u>	<u>Accuracy</u>
<u>Date</u>	<u>Time</u>	<u>By</u>					<u>Parameter</u>	<u>% RPD</u>
07/09	0900	TSB	Ammonia as N, (HACH 10205)	64.00 mg/L		SM 2011 4500-NH3 F	1.56	98.0 *
07/13	0830	NTR	Kjeldahl Nitrogen Total	80.00 mg/L		SM 1997 4500-NorgB	1.68	110.8 *
07/08	1510	TWM	pH	7.5 S.U.		SM 2011 4500-H+ B	0.00	N/A
07/13	1000	NTR	Phosphorous, Total (as P)	9.13 mg/L		EPA 365.3	0.85	95.8 *
07/13	1515	TSB	Solids, Total Suspended	7.0 mg/L		SM 2011 2540 D	6.80	N/A *
07/08	1630	TSB	Fecal Coliform (MPN/100mL)	114.0 /100ml		06/2012 Colilert18	0.00	N/A *
07/08	1630	TSB	BOD, Carbonaceous	< 2.0 mg/L		SM 2001 5210 B	0.00	89.0 *
07/14	1640	NTR	Nitrate + Nitrite	10.30 mg/L		01/2013 HACH 10206	0.65	101.8
07/15	0910	TWM	Nitrogen, Plant Available	79.1 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.

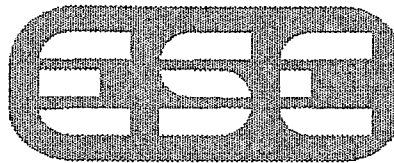
Signature



Environmental Services Co., Inc.

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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 #:												
Address:		PO BOX 5		Purchase Order #:												
		Cave Springs 72718		Sampler Name(s):		Tyler Markham										
Telephone:		479 248-1040		and Signature(s):												
FAX:																
ESC Client Number:		1826														
Sample Identification		Sample Collection				Sample Containers				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)	
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#							
Effluent/Dose Tank	2007125004	7/8/20	1505	Grab	Water	Sterile	120 mL	Na2S2O3/Cool	1	X						
Effluent/Dose Tank	↓	↓	↓	Grab	Water	Plastic	1/2 gal	None/Cool	1		X					
Effluent/Dose Tank	↓	↓	↓	Grab	Water	Plastic	8 oz	H2SO4, 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 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 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 type="checkbox"/>		No <input type="checkbox"/>				
Comments:				FLOW DATA		Field Test		Time	Analyst	Result	Result	Units				
						Analyst:		pH:	1510	Thwv	2.5	2.5				
						Time:		Temp.:					°C	°F		
						Reading:		DO:								
						Units:		Debris:								
Cool all samples to 6 degrees C.								Chlorinated? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		This Document is Page 1 of 1						

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

Control Number: 2007020007  
 Customer Name : CAVE SPRINGS UTILITY, PLANT 2  
 Customer/Permit No. : 2379 / 4893-WR-3 002  
 Report Date : 07/15/20

Sample Date : 07/08/20  
 Sample Time : 1540  
 Sample Type : GRAB  
 Sample From : EFFLUENT

Collected By: TWM  
 Delivery By : TWM  
 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>
07/09	0900	TSB	Ammonia as N, (HACH 10205)	13.30 mg/L			SM 2011 4500-NH3 F	1.56	98.0 *
07/13	0830	NTR	Total Kjeldahl Nitrogen	25.2 mg/L			02/2014 HACH 10242	1.53	110.8 *
07/08	1545	TWM	pH	6.0 S.U.			SM 2011 4500-H+ B	0.00	N/A *
07/13	1000	NTR	Phosphorous, Total (as P)	7.03 mg/L			EPA 365.3	0.85	95.8 *
07/13	1515	TSB	Solids, Total Suspended	18.4 mg/L			SM 2011 2540 D	6.80	N/A *
07/08	1630	TSB	Fecal Coliform (MPN/100mL)	86.5 /100ml			06/2012 Colilert18	0.00	N/A *
07/08	1630	TSB	BOD, Carbonaceous	4.8 mg/L			SM 2001 5210 B	0.00	89.0 *
07/14	1640	NTR	Nitrate + Nitrite	46.40 mg/L			01/2013 HACH 10206	0.65	101.8 *
07/15	0915	TWM	Nitrogen, Plant Available	63.3 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.

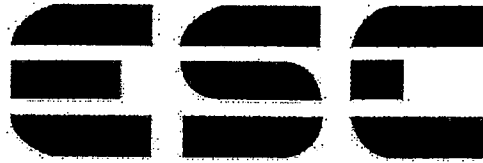
Signature \_\_\_\_\_

Environmental Services Co., Inc.

JB

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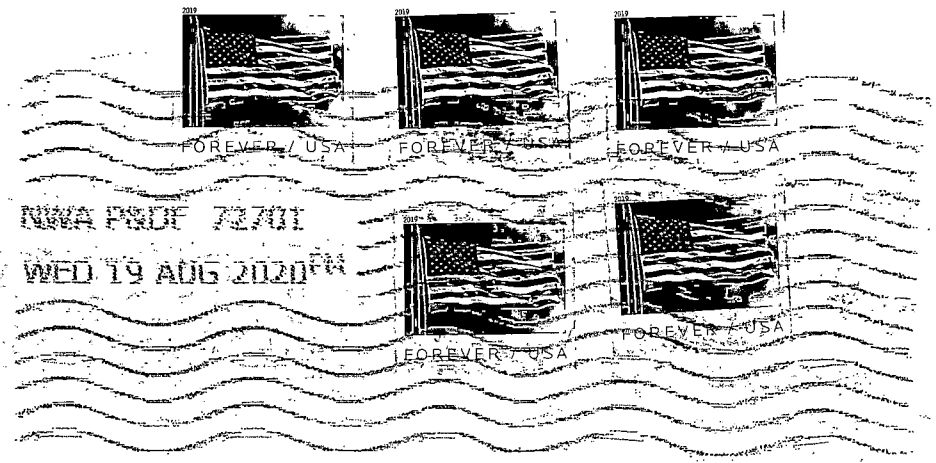
Carlsbad, New Mexico  
 575-887-1ESC

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

## CHAIN OF CUSTODY

Client Information						Project Information					Requested Parameters					
Company Name:		Cave Springs Plant 2		Permit/Project #:												
Address:		PO BOX 5		Purchase Order #:												
		Cave Springs 72718		Sampler Name(s):		1/yr mark TR										
Telephone:		479 248-1040		and Signature(s):												
FAX:																
ESC Client Number:		2379														
Sample Identification			Sample Collection			Sample Containers				Fecal Coliform(43.1F)	CBOD(70),TSS(28)	NH3(15.A), P(25),TKN(16.A)	PAN(99.99), NO3+NO2 (91)	pH(23)		
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#							
Effluent Diverter Box	205702057	7/8/20	1540	Grab	Water	Sterile	300 ml	none/ice	1	X						
Effluent Diverter Box	↓	↓		Grab	Water	Plastic	0.5 gal	none/ice	1		X					
Effluent Diverter Box				Grab	Water	Plastic	8 oz	H <sub>2</sub> SO <sub>4</sub> ,pH <2	1			X	X			
Effluent Diverter Box	↓	↓		Grab	Water	Glass	150 ml	none <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 type="checkbox"/> Intact? <input type="checkbox"/>						
Relinquished By: (Signature and Printed Name)			Date	Time	Received By: (Signature and Printed Name)			Date	Time	Turnaround:						
1/yr mark			7/8/20	1630	JANOME PROX Tamer Brooks			7-8-20	1630	Regular <input type="checkbox"/> Special <input type="checkbox"/>						
Comments:			Were samples properly preserved:			Yes <input type="checkbox"/> No <input type="checkbox"/>										
FLOW DATA		Field Test		Time	Analyst	Result	Result	Units								
Analyst:		pH:		1545	TR	6.0	6.0									
Time:		Temp.:						°C °F								
Reading:		DO:														
Units:		Debris:														
Cool all samples to 6 degrees C.									Chlorinated? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		This Document is Page ___ of ___					

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NWA P&D 72701  
WED 19 AUG 2020

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