

**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
3/1/2020		3/31/2020

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	5.7	< 2.0	MG/L	Once per Month / Grab	
TOTAL SUSPENDED SOLIDS (TSS)	45	6.1	12.8	MG/L		
FECAL COLIFORM BACTERIA (FCB)	10,000	1230.4	< 4.0	COLONIES/100ml		
pH	6.0 - 9.0	7.7	6.5	s.u		
TOTAL PHOSPHOROUS (TP)	Report	7.2	8.06	MG/L		
TOTAL KJELDAHL NITROGEN (TKN)	Report			MG/L	Once per Quarter / Grab	
NITROGEN AMMONIA NITROGEN (NH <sub>3</sub> - N)	Report			MG/L		
NITRITE NITROGEN (NO <sub>2</sub> - N) + NITRATE NITROGEN (NO <sub>3</sub> - N)	Report			MG/L		
PLANT AVAILABLE NITROGEN (PAN)	Report			MG/L		
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD		
		4,197,336	386,398			
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	4/13/2020
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	MM/DD/YYYY
COMMENTS AND EXPLANATION OF VIOLATIONS <i>(Reference all attachments here)</i>						
Surfacing in drip field noticed , replaced 2 electronic zone valves and 2 more are scheduled to be replaced						

**TABLE II**

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

		Mar-20		DAILY MAXIMUM FLOW TOTAL		386,398
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum
Leach Field 1	0.55	gpd/ft <sup>2</sup>	26,000	gpd	Daily	27821
<b>Zone 1</b>	0.42		19,524			<i>zones not being used</i>
<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			14297
Zone 6	0.2		7,723			8501
Zone 7	0.2		10,910			11592
Zone 8	0.3		7,081			7728
Zone 9	0.4		18,291			19707
Zone 10	0.3		9,450			10047
Zone 11	0.2		4,110			4637
Zone 12	0.4		7,522			8115
Zone 13	0.25		5,717			6183
Zone 14	0.15		6,097			6569
Zone 15	0.2		8,378			9274
Zone 16	0.4		9,427			10047
Zone 17	0.23		3,694			3864
Zone 19	0.35		13,778			14684
Zone 20	0.2		5,766			6183
Zone 21	0.4		17,040			18548
Zone 22	0.5		28,113			30140
Zone 23	0.25		15,640			16616
Zone 24	0.25		9,547			10433
Zone 25	0.2		4,436			4637
Zone 26	0.3		9,334			10047
Zone 27	0.31		16,511			17775
Zone 28	0.31		13,018			13911
Zone 29	0.2		3,923			4251
Zone 30	0.55		10,116			10820
Zone 31	0.3		5,714			6183

# 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: 2003020014	Sample Date : 03/10/20	Collected By: TWM/BRS
Customer Name : CAVE SPRINGS UTILITY, PLANT 1	Sample Time : 1345	Delivery By : BRS
Customer/Permit No. : 1826 / 4893-WR-2	Sample Type : GRAB	Work Order :
Report Date : 03/17/20	Sample From : EFFLUENT DOSE TANK	Purchase Order :

### Laboratory Analysis

Analysis			Laboratory Analysis				Quality Assurance		
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
03/10	1350	BRS	pH	7.7 S.U.			SM 2011 4500-H+ B	0.00	N/A
03/17	0815	TSB	Phosphorous, Total (as P)	7.20 mg/L			EPA 365.3	2.26	106.0 *
03/16	1230	TSB	Solids, Total Suspended	6.1 mg/L			SM 2011 2540 D	7.84	N/A *
03/10	1640	TSB	Fecal Coliform (MPN/100mL)	1230.4 /100ml			06/2012 Colilert18	0.00	0.0 *
03/11	1200	TSB	BOD, Carbonaceous	5.7 mg/L			SM 2001 5210 B	8.33	92.0 *

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

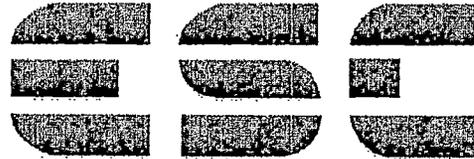
All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of 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.

2,197,336  
 386,398

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 #:						pH (23)	Fecal Coliform (43.IF)	CBOD (70), TSS (28)	T-Phosphorus						
Address:		PO BOX 5		Purchase Order #:															
		Cave Springs 72718		Sampler Name(s):		Nfer Mark TH													
Telephone:		479 248-1040		and Signature(s):		Brian Steichman, BSCM													
FAX:																			
ESC Client Number:		1826																	
Sample Identification		Sample Collection				Sample Containers													
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#										
Effluent/Dose Tank	2003020014	3/10/20	13:45	Grab	Water	Glass	250 ml	None	0	X									
Effluent/Dose Tank	↓	↓	↓	Grab	Water	Sterile	125 ml	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> /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 <sub>2</sub> SO <sub>4</sub> , pH <2	1				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"/>							
Brian Steichman BSCM		3/10/20	16:10	[Signature]				Turnaround:		Regular <input type="checkbox"/>		Special <input type="checkbox"/>							
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Were samples properly preserved:		Yes <input type="checkbox"/>		No <input type="checkbox"/>							
[Signature]				[Signature]		3/10/20	16:10												
Comments:				FLOW DATA		Field Test		Time		Analyst		Result		Result		Units			
				Analyst:		pH:		13:50		BRS		7.7		7.7					
				Time:		Temp.:		13:58		BKS		74.8		16.8		°C			
				Reading:		DO:													
				Units:		Debris:													
Cool all samples to 6 degrees C.						Chlorinated? Yes No						This Document is Part		of		1			

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Control Number: 2003020015	Sample Date : 03/10/20	Collected By: TWM/BRS
Customer Name : CAVE SPRINGS UTILITY, PLANT 2	Sample Time : 1330	Delivery By : BRS
Customer/Permit No. : 2379 / 4893-WR-3 002	Sample Type : GRAB	Work Order :
Report Date : 03/17/20	Sample From : EFFLUENT DIVERTER BX	Purchase Order :

### Laboratory Analysis

Analysis			Laboratory Analysis				Quality Assurance		
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
03/10	1335	BRS	pH	6.5 S.U.			SM 2011 4500-H+ B	0.00	N/A *
03/17	0815	TSB	Phosphorous, Total (as P)	8.06 mg/L			EPA 365.3	2.26	106.0 *
03/16	1230	TSB	Solids, Total Suspended	12.8 mg/L			SM 2011 2540 D	7.84	N/A *
03/10	1640	TSB	Fecal Coliform (MPN/100mL)	< 4.0 /100ml			06/2012 Colilert18	0.00	0.0 *
03/11	1200	TSB	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	8.33	92.0 *

\* 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.

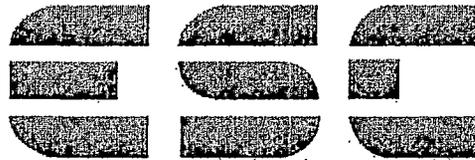
Signature \_\_\_\_\_



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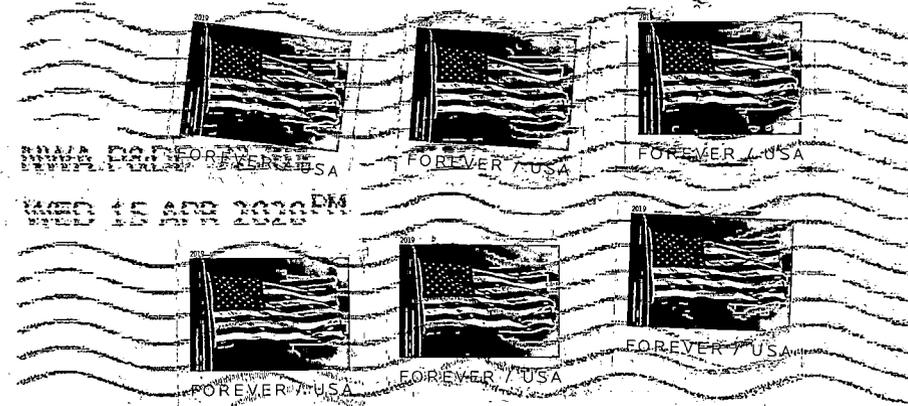
Phone: 479-750-1170 Fax: 479-750-1172

### CHAIN OF CUSTODY

Client Information						Project Information					Requested Parameters								
Company Name: Cave Springs Plant 2			Address: PO BOX 5 Cave Springs 72718			Telephone: 479 248-1040			FAX:			ESC Client Number: 2379			Permit/Project #:				
Address: PO BOX 5 Cave Springs 72718			Telephone: 479 248-1040			FAX:			ESC Client Number: 2379			Purchase Order #:							
Telephone: 479 248-1040			FAX:			ESC Client Number: 2379			Sampler Name(s): Tyler Mark Th					pH(23) Fecal Coliform(43.1F) CBOD(70), TSS(28) Total P (25)					
FAX:			ESC Client Number: 2379			and Signature(s): Brian Steichman													
Sample Identification		Sample Collection				Sample Containers													
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#										
Effluent Diverter Box	2003020015	3/10/20	13:30	Grab	Water	Teflon	150 ml	none	0	X									
Effluent Diverter Box	↓	↓	↓	Grab	Water	Sterile	100 ml	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	1		X								
Effluent Diverter Box	↓	↓	↓	Grab	Water	Plastic	1/2 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						
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:		FLOW DATA		Field Test	Time	Analyst	Result	Result	Units										
		Analyst:		pH:	13:35	PKS	6.5	6.6											
		Time:		Temp.:	↓	PKS	16.4	16.4	°F										
		Reading:		DO:															
		Units:		Debris:															
Cool all samples to 6 degrees C.						Chlorinated? Yes No				This Document is Page 1 of 1									

NWA UTILI

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72118