

**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
2/1/2020		2/29/2020

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	6.5	MG/L	Once per Month / Grab		
TOTAL SUSPENDED SOLIDS (TSS)	45	6	26	MG/L			
FECAL COLIFORM BACTERIA (FCB)	10,000	97	> 24196.0	COLONIES/100ml			
pH	6.0 - 9.0	7.8	7	s.u			
TOTAL PHOSPHOROUS (TP)	Report	7.06	7.05	MG/L			
TOTAL KJELDAHL NITROGEN (TKN)	Report	16.78	17.50	MG/L	Once per Quarter / Grab		
NITROGEN AMMONIA NITROGEN (NH ₃ - N)	Report	9.25	12.7	MG/L			
NITRITE NITROGEN (NO ₂ - N) + NITRATE NITROGEN (NO ₃ - N)	Report	42.2	42	MG/L			
PLANT AVAILABLE NITROGEN (PAN)	Report	53.7	56.1	MG/L			
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD			
		3,375,707	132,796				
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	3/13/2020	
TYPED OR PRINTED				AREA CODE	NUMBER	MM/DD/YYYY	
COMMENTS AND EXPLANATION OF VIOLATIONS (Reference all attachments here)							
Plant 1 pH was being oxidized out due to low flow entering the plant. We had the City open the valve that feeds plant 1 and our pH went up. Fecal coliform levels were elevated because the clarifier sludge pumps were down and could not pump out sludge, thus giving the bacteria food to populate the fecals to above permit limits Surfacing in drip field noticed , replaced 2 electronic zone valves and 2 separate areas had the broken fittings and supply lines repaired							

Environmental Services Company, Inc.

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 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: 2002020014	Sample Date : 02/05/20	Collected By: TWM/BRS
Customer Name : CAVE SPRINGS UTILITY, PLANT 1	Sample Time : 1220	Delivery By : BRS
Customer/Permit No. : 1826 / 4893-WR-2	Sample Type : GRAB	Work Order :
Report Date : 02/12/20	Sample From : EFFLUENT DOSE TANK	Purchase Order :

Laboratory Analysis

Analysis						Quality Assurance			
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision	Accuracy
								% RPD	% Recovery
02/05	1217	BRS	pH	5.6 S.U.	(b)		SM 2011 4500-H+ B		
02/10	1300	TSB	Phosphorous, Total (as P)	7.06 mg/L			EPA 365.3	0.66	109.0 *
02/06	0900	TSB	Solids, Total Suspended	6.0 mg/L			SM 2011 2540 D	5.13	N/A *
02/05	1655	TSB	Fecal Coliform (MPN/100mL)	97.0 /100ml			06/2012 Colilert18	0.00	0.0 *
02/05	1645	TSB	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	6.04	86.1 *

* QA data shown is from a different sample or standard on the same date.
 (b) Under Minimum Permit Limits

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.

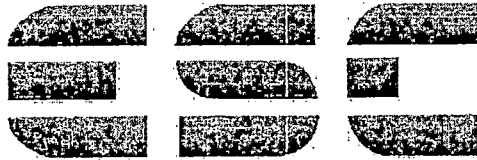
Signature _____

Environmental Services Co., Inc.

CMB

3,375,707
132,796

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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.IF)	CBOD (70), TSS (28)	T- Phosphorus						
Address: PO BOX 5				Purchase Order #:															
Cave Springs 72718				Sampler Name(s): <i>Tyler Brock TR</i>															
Telephone: 479 248-1040				and Signature(s): <i>Brian Steichman Bryan</i>															
FAX:				ESC Client Number: 1826															
Sample Identification		Sample Collection				Sample Containers													
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#										
Effluent/Dose Tank	2002020014	2/5/20	12:20	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?	Intact?								
<i>Brian Steichman</i>		2/5/20	16:30							<input type="checkbox"/>	<input type="checkbox"/>								
Relinquished By: (Signature and Printed Name)		Date	Time	Received By: (Signature and Printed Name)		Date	Time	Turnaround:		Regular	Special								
							1630			<input type="checkbox"/>	<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	No								
				<i>Tamara Brooks</i>		2-5-20	25:40			<input type="checkbox"/>	<input type="checkbox"/>								
Comments:				FLOW DATA		Field Test		Time	Analyst	Result	Result	Units							
				Analyst:		pH:		12:12	BRG	5.6	5.5								
				Time:		Temp.:		↓	↓	9.3	9.2	°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: 2002020197
 Customer Name : CAVE SPRINGS UTILITY, PLANT 1
 Customer/Permit No. : 1826 / 4893-WR-2
 Report Date : 02/26/20

Sample Date : 02/25/20
 Sample Time : 1100
 Sample Type : GRAB
 Sample From : EFFLUENT

Collected By: TWM
 Delivery By : TWM
 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>
02/25	1100	TWM	pH	7.8	S.U.		SM 2011 4500-H+ B	1.29	N/A

Quality Assurance
 Precision Accuracy
 % RPD % Recovery
 1.29 N/A

* 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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CHAIN OF CUSTODY

Client Information				Project Information						Requested Parameters				
Company Name: Cave Springs Plant 1				Permit/Project #:						pH (23)				
Address: PO BOX 5				Purchase Order #:										
Cave Springs 72718				Sampler Name(s): <i>Tyler Mack</i>										
Telephone: 479 248-1040				and Signature(s):										
FAX:														
ESC Client Number: 1826														
Sample Identification		Sample Collection				Sample Containers				pH (23)				
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#					
Effluent/Dose Tank	2602620197	2/25/20	11:00	Grab	Water	Glass	250 ml	None	0	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?	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:						
Relinquished By: <i>Tyler Mack</i>		2/25/20	12:00	Received for Lab By: <i>Armen Brooks</i>		2/25/20	12:00	Yes	No					
Comments:				FLOW DATA		Field Test		Time	Analyst	Result	Result	Units		
				Analyst:		pH:		11:06	<i>Thm</i>	7.7	7.8	°F		
				Time:		Temp.:		11:05	<i>Thm</i>	12.3	12.3	°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: 2002020015	Sample Date : 02/05/20	Collected By: TWM
Customer Name : CAVE SPRINGS UTILITY, PLANT 2	Sample Time : 1255	Delivery By : BRS
Customer/Permit No. : 2379 / 4893-WR-3 002	Sample Type : GRAB	Work Order :
Report Date : 02/12/20	Sample From : EFFLUENT	Purchase Order :

Laboratory Analysis

Analysis						Quality Assurance			
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision	Accuracy
								% RPD	% Recovery
02/05	1307	BRS	pH	7.0	S.U.		SM 2011 4500-H+ B		
02/10	1300	TSB	Phosphorous, Total (as P)	7.05	mg/L		EPA 365.3	0.66	109.0 *
02/06	0900	TSB	Solids, Total Suspended	26.0	mg/L		SM 2011 2540 D	5.13	N/A *
02/05	1655	TSB	Fecal Coliform (MPN/100mL)	> 24196.0	/100mL		06/2012 Colilert18	0.00	0.0 *
02/05	1645	TSB	BOD, Carbonaceous	6.5	mg/L		SM 2001 5210 B	6.04	86.1 *

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

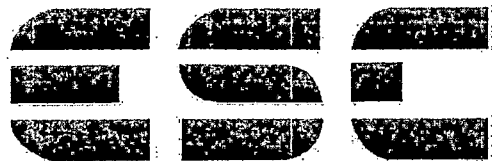
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Signature _____

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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.IF)	CBOD(70),TSS(28)	Total P (25)						
Address:		PO BOX 5		Purchase Order #:																
		Cave Springs 72718		Sampler Name(s):																
Telephone:		479 248-1040		and Signature(s):																
FAX:				Brian Steichman																
ESC Client Number: 2379																				
Sample Identification		Sample Collection				Sample Containers														
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#											
Effluent Diverter Box	2002020815	2/5/20	12:55	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?								
Bryan Steichman		2/5/20	16:30	Damen Brooks			2-5-20	1630	Were samples properly preserved:		Yes	No								
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								
Comments:		FLOW DATA		Field Test	Time	Analyst	Result	Result	Units											
		Analyst:		pH:	19:07	BRJ	7.0	7.0												
		Time:		Temp.:	↓	+	10.1	10.1	°C											
		Reading:		DO:																
		Units:		Debris:																
Cool all samples to 6 degrees C.							Chlorinated? Yes No			This Document is Page 1 of 1										

SAR



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LABORATORY ANALYSIS OVER/UNDER PERMIT LIMITS

CUSTOMER Cave Springs

SAMPLE LOCATION: Plant 2

SAMPLE DATE: 2/5/20 **DATE ANALYZED:** 2/5/20

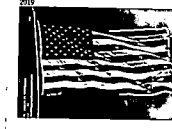
Test Name	Control Number	Permit Limit	Results	Over/Under
f.coli	2002020015	10,000.0	>24,196.0	over

Fax Notes:

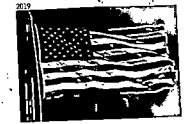
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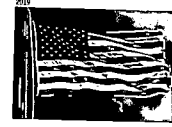
PO Box 9299
Fayetteville, AR
72703



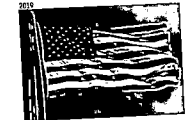
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