

**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
10/1/2020 TO 10/31/2020

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	4.4	2.8	MG/L		
FECAL COLIFORM BACTERIA (FCB)	10,000	7.5	8.6	COLONIES/100ml		
pH	6.0 - 9.0	6.4	6.3	s.u		
TOTAL PHOSPHOROUS (TP)	Report	8.69	8.09	MG/L		
TOTAL KJELDAHL NITROGEN (TKN)	Report	43.30	47.50	MG/L	Once per Quarter / Grab	
NITROGEN AMMONIA NITROGEN (NH ₃ - N)	Report	5.37	6.35	MG/L		
NITRITE NITROGEN (NO ₂ - N) + NITRATE NITROGEN (NO ₃ - N)	Report	36.5	40.9	MG/L		
PLANT AVAILABLE NITROGEN (PAN)	Report	53.2	59.6	MG/L		
TOTAL FLOW		MONTHLY TOTAL	DAILY MAX	GPD		
		4,951,123	159,714			
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	11/12/2020
TYPED OR PRINTED				AREA CODE	NUMBER	MM/DD/YYYY
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT						
COMMENTS AND EXPLANATION OF VIOLATIONS (Reference all attachments here)						

TABLE II

DRIP ZONES LOADING RATE LIMITS, MONITORING AND REPORTING REQUIREMENTS

		Oct-20		DAILY MAXIMUM FLOW TOTAL		159,714
Zone ID	Limit	Units	Maximum Volume Limit	Units	Monitoring	Reported Maximum
Leach Field 1	0.55	gpd/ftz	26,000	gpd	Daily	6026
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			7986
Zone 5	0.2		13,059			4632
Zone 6	0.2		7,723			6389
Zone 7	0.2		10,910			4313
Zone 8	0.3		7,081			12193
Zone 9	0.4		18,291			6792
Zone 10	0.3		9,450			2236
Zone 11	0.2		4,110			3354
Zone 12	0.4		7,522			2556
Zone 13	0.25		5,717			3035
Zone 14	0.15		6,097			4632
Zone 15	0.2		8,378			4792
Zone 16	0.4		9,427			1598
Zone 17	0.23		3,694			7667
Zone 19	0.35		13,778			2556
Zone 20	0.2		5,766			9583
Zone 21	0.4		17,040			20658
Zone 22	0.5		28,113			8465
Zone 23	0.25		15,640			4792
Zone 24	0.25		9,547			2716
Zone 25	0.2		4,436			4632
Zone 26	0.3		9,334			9583
Zone 27	0.31		16,511			7826
Zone 28	0.31		13,018			1757
Zone 29	0.2		3,923			6389
Zone 30	0.55		10,116			2556
Zone 31	0.3		5,714			

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: 2010020012
 Customer Name : CAVE SPRINGS UTILITY, PLANT 1
 Customer/Permit No. : 1826 / 4893-WR-2
 Report Date : 10/14/20

Sample Date : 10/07/20
 Sample Time : 1124
 Sample Type : GRAB
 Sample From : EFFLUENT/DOSE TANK

Collected By: NTR
 Delivery By : NTR
 Work Order :
 Purchase Order :

Laboratory Analysis

Analysis			Laboratory Analysis				Quality Assurance		
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
10/07	1605	TWM	Ammonia as N, (HACH 10205)	5.37 mg/L			SM 2011 4500-NH3 F	3.64	100.0 *
10/07	1515	TWM	Total Kjeldahl Nitrogen	43.3 mg/L			02/2014 HACH 10242	0.96	97.4 *
10/07	1125	NTR	pH	6.4 S.U.			SM 2011 4500-H+ B	0.00	N/A
10/12	1325	TWM	Phosphorous, Total (as P)	8.69 mg/L			EPA 365.3	0.00	103.0 *
10/12	0900	HNS	Solids, Total Suspended	4.4 mg/L			SM 2011 2540 D	0.00	N/A *
10/07	1655	TWM	Fecal Coliform (MPN/100mL)	7.5 /100ml			06/2012 Colilert18	0.00	N/A
10/08	0730	TWM	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	0.00	85.0 *
10/09	0750	NTR	Nitrate + Nitrite	36.50 mg/L			01/2013 HACH 10206	0.80	101.8 *
10/13	1650	TWM	Nitrogen, Plant Available	53.2 mg/L			SM 1997 4500-N		

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

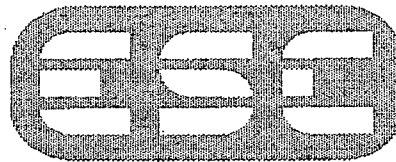
All equipment used is checked and/or calibrated daily. All NPDES testing is conducted in accordance with 40 CFR Part 136. A minimum of 10% spiked and duplicate samples is run on each parameter where applicable for Quality Assurance purposes. Quality Assurance Plan on file with Arkansas Department of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

KMM

Environmental Services Company, Inc.
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 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): Ned Ryerson														
Telephone: 479 248-1040				and Signature(s): <i>Ned Ryerson</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	2610020012	10-7-20	1124	Grab	Water	Sterile	120 mL	Ia ₂ S ₂ O ₃ /Cool	1	X								
Effluent/Dose Tank	I	I	I	Grab	Water	Plastic	1/2 gal	None/Cool	1		X							
Effluent/Dose Tank	I	I	I	Grab	Water	Plastic	8 oz	H ₂ SO ₄ , pH < 2	1			X	X	X				
Effluent/Dose Tank	I	I	I	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:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
Comments:				FLOW DATA		Field Test	Time	Analyst	Result	Result	Units							
				Analyst:		pH:	1125	NTR	6.4	6.4	54 °C °F							
				Time:		Temp.:												
				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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Northwest Arkansas Branch
 1107 Century Avenue
 Springdale, AR 72762
 Tel. (479)750-1170 Fax (479)750-1172

Control Number: 2010020013
 Customer Name : CAVE SPRINGS UTILITY, PLANT 2
 Customer/Permit No. : 2379 / 4893-WR-3 002
 Report Date : 10/14/20

Sample Date : 10/07/20
 Sample Time : 1149
 Sample Type : GRAB
 Sample From : EFFLUENT/DIVERTER

Collected By: NTR
 Delivery By : NTR
 Work Order :
 Purchase Order :

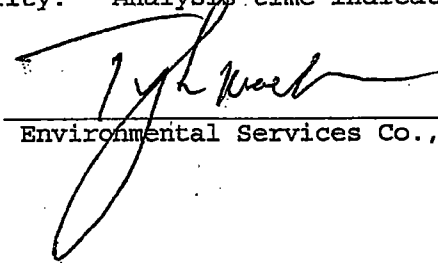
Laboratory Analysis

<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>
10/07	1605	TWM	Ammonia as N, (HACH 10205)	6.35 mg/L			SM 2011 4500-NH3 F	3.64	100.0 *
10/07	1515	TWM	Total Kjeldahl Nitrogen	47.5 mg/L			02/2014 HACH 10242	0.96	97.4 *
10/07	1157	NTR	pH	6.3 S.U.			SM 2011 4500-H+ B	0.00	N/A *
10/12	1325	TWM	Phosphorous, Total (as P)	8.09 mg/L			EPA 365.3	0.00	103.0 *
10/12	0900	HNS	Solids, Total Suspended	2.8 mg/L			SM 2011 2540 D	0.00	N/A *
10/07	1655	TWM	Fecal Coliform (MPN/100mL)	8.6 /100ml			06/2012 Colilert18	0.00	N/A *
10/08	0730	TWM	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	0.00	85.0 *
10/09	0750	NTR	Nitrate + Nitrite	40.90 mg/L			01/2013 HACH 10206	0.80	101.8 *
10/13	1650	TWM	Nitrogen, Plant Available	59.6 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.

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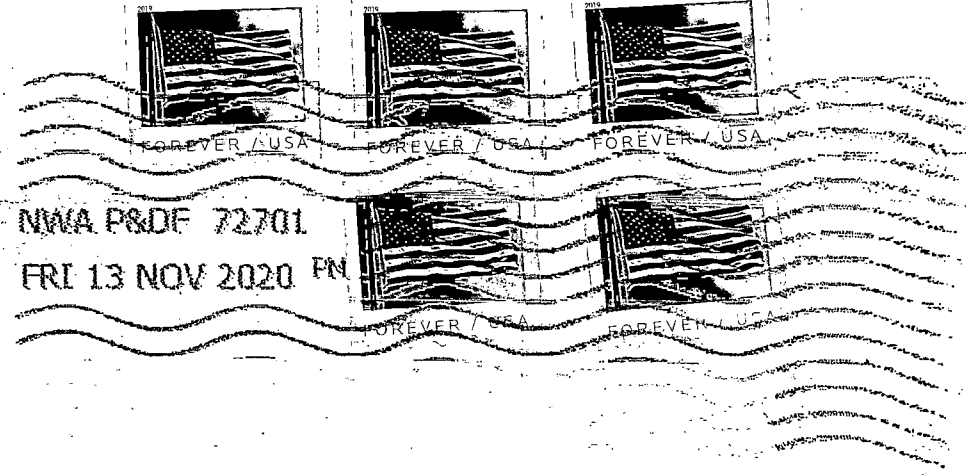
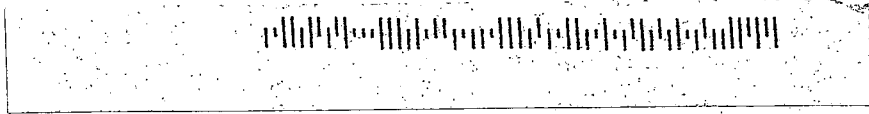
Environmental Services Co., Inc.

KNM
 4951123
 159714



NWA Utility Services Inc
PO Box 9299
Fayetteville, AR 72703

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



NWA P&DF 72701

FRI 13 NOV 2020 FN