

**ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONITORING REPORT FOR DECENTRALIZED WASTEWATER TREATMENT FACILITIES VIA DRIP IRRIGATION  
MONTHLY MONITORING REPORT**

<b>PERMITTEE NAME</b> Bethel Oaks Subdivision
<b>PERMITTEE ADDRESS</b> PO Box 3008 Fort Smith AR 72901

<b>FACILITY NAME (IF DIFFERENT)</b> Bethel Oaks Subdivision
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<b>PERMIT NO.</b> 4875-WR-1
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<b>FACILITY ADDRESS</b> WA County Hwy 62 at Bethel Blacktop Rd Farmington AR
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<b>AFIN NO.</b> 72-01656
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WASTEWATER EFFLUENT MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
9/1/2017	9/30/2017

TREATED WASTEWATER EFFLUENT SAMPLING					
PARAMETER	Limit	Sample Measurement	UNITS	Monitoring	Reporting
Flow, Monthly total	REPORT	0.137357	MGD	Grab Sample once per month	Prior to the 15th of the following Month
Flow, daily maximum	REPORT	0.006948	MGD		
Carbonaceous Biochemical Oxygen Demand (CBOD5)	15	< 2	mg/l		
Total Suspended Solids (TSS)	15	48.3	mg/l		
Fecal Coliform Bacteria (FCB)	7,800	< 4	colonies/100ml		
pH	6.0 - 9.0	7	s.u.		
Total Phosphorus (TP)	REPORT	9	mg/l		
Total Kjeldahl Nitrogen (TKN)	REPORT	30.8	mg/l		
Ammonia Nitrogen	REPORT	30.6	mg/l		
Nitrate Nitrogen ( NO3-N)	REPORT	19.38	mg/l		
Nitrite Nitrogen ( NO2-N)	REPORT	0.0117	mg/l		
Plant Available Nitrogen (PAN)	REPORT	50.4	mg/l		
Total Solids	REPORT	0.034	Percentage (%)		
Loading Rate	0.138	959	gpd/ft 2		

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  Ken Gregory  TYPED OR PRINTED	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.	 <b>SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT</b>	TELEPHONE	DATE
			(479) 530-5926	10/4/2017  MM/DD/YYYY

COMMENTS AND EXPLANATION OF VIOLATIONS (*Reference all attachments here*) we noticed discharge lines in Post Treatment Lift Station had broken. We have since repaired those, and installed "tee" fittings on the baffles of the Final Settling Tank and into the Drip Pump Tank in an effort to "slow" the flow through the tank and allow for more solids to settle. We have also increased the run time in the treatment plant sludge pump in an effort to pump settled sludge back to the Primary Settling Tank. We will monitor our effluent and if needed, make further adjustments in order to meet our TSS permit limits.

BETHEL OAKS LOADING RATES 6,948 Max Day Flow

Zone Identification	.138 GPD/sq 2
Zone 1	959
Zone 2	959
Zone 3	959
Zone 4	959
Zone 5	959
Zone 6	959
Zone 7	959
Zone 8	959
Zone 9	959
Zone 10	959
Zone 11	959
Zone 12	959

# 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: 1709020163	Sample Date : 09/15/17	Collected By: RHB
Customer Name : GREENFIELD CAP DEV-BETHEL OAKS	Sample Time : 1033	Delivery By : RHB
Customer/Permit No. : 1855 / 4875-WR-2	Sample Type : GRAB	Work Order :
Report Date : 09/22/17	Sample From : EFFLUENT	Purchase Order :

### Laboratory Analysis

Analysis						Quality Assurance			
Date	Time	By	Parameter	Result	Notes	Quantity	Method	Precision % RPD	Accuracy % Recovery
09/15	0930	TSB	Ammonia Nitrogen	30.6 mg/L			SM 1997 4500-NH3 F	0.00	103.8 *
09/19	0800	TSB	Total Kjeldahl Nitrogen	30.80 mg/L			02/2014 HACH 10242	1.08	95.7 *
09/21	0900	TSB	Nitrate Nitrogen	19.38 mg/L			SM 2000 4500-NO3 E	0.95	100.0 *
09/15	1400	TSB	Nitrite Nitrogen	0.117 mg/L			SM 2000 4500 NO2 B	0.45	100.0
09/15	1035	RHB	pH	7.0 S.U.			SM 2000 4500-H+ B	0.00	N/A
09/19	0945	TSB	Phosphorous, Total (as P)	9.0 mg/L			EPA 365.3	0.00	98.1 *
09/21	1045	JCB	Solids, Total Suspended	48.3 mg/L	(b)		SM 1997 2540 D	0.00	N/A *
09/15	1655	JCB	Coliform, Fecal	< 4 /100ml			SM 9222 D 1997	0.00	N/A
09/15	1400	TSB	BOD, Carbonaceous	< 2.0 mg/L			SM 2001 5210 B	6.92	88.0 *
09/18	1200	JCB	Solids, % Total by mass	0.034 %			SM 1997 2540 G	35.29	N/A
09/21	1520	TSB	Nitrogen, Plant Available	50.4 mg/L			SM 1997 4500-N		

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

(b) Exceeds Permit Limits for Maximum Concentration

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

*Richard Brown*

Environmental Services Co., Inc.

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: Bethel Oaks				Permit/Project #:						pH(23)	P(25), NH <sub>3</sub> -N(15-A), NO <sub>3</sub> (18), TKN(16-A)	CBOD(70), TSS(28), N02(19)	F. COLIFORM(43)	%Solids (82), PAN(99.99)							
Address: 1849 N. Trillium Lane Fayetteville, AR 72704				Purchase Order #:																	
Telephone: 479-790-3813				Sampler Name(s): RICHARD BROWN																	
Telephone:				and Signature(s): Richard Brown																	
ESC Client Number: 1855																					
Sample Identification		Sample Collection				Sample Containers															
Identification	ESC Control #	Date	Time	Type	Matrix	Type	Volume	Preservative	#												
EFFLUENT	1709020163	9-15-17	10:33	GRAB	Water	teflon	150 ml	none	1	x											
EFFLUENT	/	/		GRAB	Water	Plastic	8 oz	H <sub>2</sub> SO <sub>4</sub> , pH<2	1		x										
EFFLUENT	/	/		GRAB	Water	Plastic	1 qt	none/ice	1			x			x						
EFFLUENT	/	/		GRAB	Water	Whirlpak	125 ml	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	1				x								
Cool all samples to 6 degrees C.																					
Relinquished By: (Signature and Printed Name) Richard Brown RICHARD BROWN		Date	Time	Received By: (Signature and Printed Name) John Byrd		Date	Time	Custody Seals:		Used?	Intact?										
Relinquished By: (Signature and Printed Name) [Signature]		Date	Time	Received By: (Signature and Printed Name) [Signature]		Date	Time	Turnaround:		Regular	Special										
Relinquished By: (Signature and Printed Name) [Signature]		Date	Time	Received for Lab By: (Signature and Printed Name) John Byrd		Date	Time	Were samples properly preserved:		Yes	No										
Comments:				FLOW DATA		Field Test		Time	Analyst	Result	Result	Units									
				Analyst:		pH:		10:35	RHB	7.0	7.0										
				Time:		Temp.:		1	1	26.6	26.6	°C °F									
				Reading:		DO:															
				Units:		Debris:															
Cool all samples to 6 degrees C.						Chlorinated? Yes No			This Document is Page 1 of 1												