

**OSAGE BEACH / LAKE OZARK
JOINT SEWER BOARD MEETING
AGENDA
SEPTEMBER 17, 2019 @ 4:00 p.m.
LAKE OZARK CITY HALL**

1. CALL TO ORDER

2. ROLL CALL

Mayor, Osage Beach, John Olivarri
Mayor, Lake Ozark, Gerry Murawski
City Administrator, Osage Beach, Jeana Woods
City Administrator, Lake Ozark, Dave Van Dee
Alderman, Lake Ozark, Judy Neels
Alderman, Osage Beach, Greg Massey
Public Works Director, Osage Beach,
Public Works Director, Lake Ozark, Matt Michalik
Resident Member, Mr. Gary Hamner

3. MINUTES

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4. REPORTS

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 August Alliance Report of Operations	 23-39
 Approval of Flow Charts August 2019	

5. OLD BUSINESS

A. Board Representative update

6. NEW BUSINESS

A. Discussion and possible action regarding the 2020 Budget

B. Discussion and possible action for repairs at the plant:

1. Bids for spare UV Quartz Sleeves and wipers
2. Bids for HACH LBOD and Ammonia probes
3. Bids for crack filling and sealcoat of asphalt parking lot

7. ADDITIONAL DISCUSSION ITEMS

8. ADJOURNMENT

**THE NEXT MEETING WILL BE OCTOBER 15, 2019 4:00 PM @ LAKE OZARK
CITY HALL**

**LAKE OZARK-OSAGE BEACH
JOINT SEWER BOARD**
Meeting Minutes – August 20, 2019

CALL TO ORDER:

Mayor John Olivarri called the meeting to order at 4:00pm on Tuesday, August 20, 2019 at Lake Ozark City Hall

ROLL CALL:

Mayor, Osage Beach, John Olivarri- Present
Mayor, Lake Ozark, Gerry Murawski - Present
City Administrator Osage Beach, Jeana Woods - Present
City Administrator Lake Ozark, Dave Van Dee – Present
Alderman Osage Beach, Greg Massey - Present
Alderman Lake Ozark, Judy Neels- Present
Public Works Director Osage Beach, Nick Edelman - Present
Public Works Director Lake Ozark, Matt Michalik – Present
Resident Member, Mr. Gary Hamner - Present

MINUTES:

Alderman Neels motioned to approve the meeting minutes of July 16, 2019. The motion was seconded by Director Michalik. The motion passed unanimously.

REPORTS:

The July Bill list and Revenue Budget, Expenditure Budget Analysis, Income & Expense Summary and Check Registers and Bank Statements were reviewed. Motion was made by Administrator Woods to approve the documents. Seconded by Administrator Van Dee. The motion passed unanimously.

After discussion, it was agreed that a list of bills will suffice in the meeting packets, and the original bills will be brought to the meetings for review if desired. Copies of any bills over \$1,000.00 *will* be included in the packets.

Alliance Report of Operations: The average daily incoming flow for July was 2.155 mgd. We had 4.8 inches of precipitation measured at the WWTP.

Operationally, the plant's discharge was excellent, with an effluent monthly average BOD of 1.5 mg/l and TSS of 1.3 mg/l respectively for July, which represents a 99.3% or better removal.

The MLSS average for both aeration basins was 5,620 mg/l in July. The total dry weight sludge inventory for July totaled 283,802 pounds. There were 37 tanker loads or 136,900 gallons of bio solids land applied. We also received 36 tanker loads or 84,000 gallons of septage for the month.

APPROVAL OF FLOW CHART

Motion was made by Director Edelman to approve the Flow Chart for June, seconded by Resident Hamner. Motion passed unanimously.

OLD BUSINESS:

- A. Director Edelman advised that a conference call was held on Friday, August 16th. The Generator is at Martins and ready to be shipped. The concrete should be installed this week. The subcontractor will be ready by the second week of September for installation. There will be a 4 – 6 hour “down” time during installation. Osage Beach will “hold back” as much sewage as possible during installation. Disinfection was also discussed.

NEW BUSINESS:

- A. Mr. Hutchcraft reviewed three bids to replace the parking lot lights. After discussion, a motion was made by Director Michalik to accept the bid of Catalyst Electric in the amount of \$3,899.00. The motion was seconded by Director Edelman, and was unanimously approved. It was noted that Catalyst will be installing the generator, and the lights will be done at the same time. It was also confirmed that the new LED lights will be white.

ADDITIONAL DISCUSSION ITEMS: None at this time.

ADJOURNMENT:

With no further business to discuss the meeting adjourned at 4:15 pm.

Approved On

Mayor, John Olivarri

City Clerk, Kathy Vance

JOINT SEWER BOARD
BILL LIST
SEPTEMBER 17, 2019

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	72,221.24
OPERATING FUND BILLS TO BE PAID:	\$	39,299.43
EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:	\$	-
EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:	\$	7,493.87
TOTAL	\$	119,014.54

OPERATING FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
4020	137	Menards	washing tool	\$ 22.99
4020	138	Crown Power	mower blades	\$ 49.69
4020	139	O'Reilly	mower belt	\$ 44.50
4020	140	JCI Industries, Inc.	2" nut, pin for RAS valves	\$ 349.06
4240	141	Martin Energy Group	Generator 50%	\$ 71,755.00
				\$ -
				\$ -
TOTAL				\$ 72,221.24

OPERATING FUND BILLS TO BE PAID:

Account	Check	Paid To:	Description:	Amount:
4000		Equipment Replacement Fund	Payment into ER Fund	\$ 3,467.00
4020				\$ -
4020		Jani King	Sept.	\$ 195.00
4020				\$ -
4020		Menards	Weed Killer	\$ 56.97
4020				\$ -
4020		Mission Comm.	Auto dialer Main.	\$ 407.40
4020		U OF MO Ext. County	Soil Samples	\$ 123.00
4150		Clark Tire Co.	Tire repair - Sludge Trk	\$ 65.00
4170		Alliance Water Resources, Inc.	September	\$ 24,966.00
4175		Ameren MO	11673321	\$ 9,733.90
4175		Ameren MO	98041275	\$ 50.02
4176		Republic	Sept.	\$ 144.29
4176		AT&T	Sept.	\$ 90.85
				\$ -
				\$ -
				\$ -
TOTAL				\$ 39,299.43

EQUIPMENT REPLACEMENT FUND BILLS PAID PRIOR TO BOARD MEETING:

Account	Check	Paid To:	Description:	Amount:
				\$ -
				\$ -
TOTAL				\$ -

EQUIPMENT REPLACEMENT FUND BILLS TO BE PAID:

Account	Check	Paid To:	Description:	Amount:
4000		TG Technical Servives	O2 Meter Replace	\$ 494.87
4000		Letts, Van Kirk & Assoc.	RAS Impellers Replace	\$ 6,999.00
TOTAL				\$ 7,493.87

Invoice



Martin Energy Group Services, LLC
PO BOX 729
Tipton, MO 65081
660-458-7000

Invoice Number: 0182319-IN
Invoice Date: 8/29/2019
Invoice Due Date: 8/29/2019
Order Number: 0155926
Order Date: 5/20/2019
Salesperson: Mike Massolini
Customer Number: JOISEW01

Sold To:

Joint Sewer Board
Lake of the Ozarks
Regional WWTP #1
PO Box 1985
Lake Ozark, MO 65049 United States

Confirm To:

Ship To:

Lake of the Ozarks
Regional WWTP #1
#3 Anderson Rd.
Lake Ozark, MO 65049 United States

Customer P.O.	Ship VIA	F.O.B.	Terms			
			Net Upon Receipt			
Item Code	Unit	Ordered	Shipped	Back Ordered	Price	Amount
700-0140220	EA	1.00	1.00	0.00	143,510.0000	143,510.00
Lake of the Ozarks WWTP #1 Genset -Diesel, 60Hz, 450 kWE-Standby Rating 850 Gallon Fuel Tank, Subbase, UL142 Compliant Engine Cooling - Radiator, 40C Ambient Green Steel Enclosure w/ Exhaust System ASCO Service Rated Transfer Switch Electronic Control, 1000 Amp, 3 Poles						
/MDOWNPAYMENT	EA	1.00	1.00	0.00	14,351.0000-	14,351.00-
50% Down Payment Already Paid						
/RETAINAGE	EA	1.00	1.00	0.00	57,404.0000-	57,404.00-
40% Retainage Invoiced Separately						

Please Remit Payment To:

Martin Energy Group Services, LLC
PO BOX 729
Tipton, MO 65081

Sale in accordance with Martin Energy Group Services, LLC Conditions of Sale.
1.5% per month Finance Charges may apply on overdue invoices.

Net Invoice: 71,755.00
Less Discount: 0.00
Freight: 0.00
Sales Tax: 0.00
Invoice Total: (USD) 71,755.00



- Pay by phone: 1.855.268.3725
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.425.3735

FOCUSED ENERGY. For life.

Account Number 4580005832
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD,
LAKE OZARK, MO 65049

Current Detail for Statement 09/09/2019

Total Electric Charges \$9,733.90
Total Amount Due \$9,733.90

AMOUNT DUE \$9,733.90

Due Date: 09/30/2019

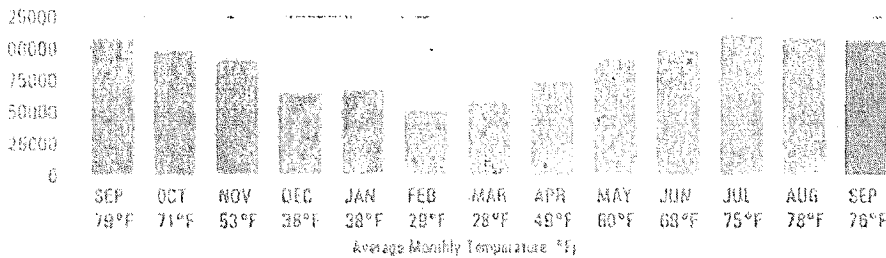
Amount After Due Date \$9,879.91

Previous Statement \$9,756.91

Total Payments \$9,756.91

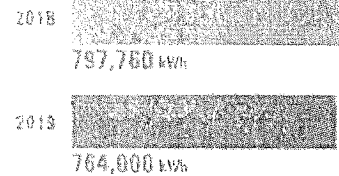
Payment Received. Thank You.

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

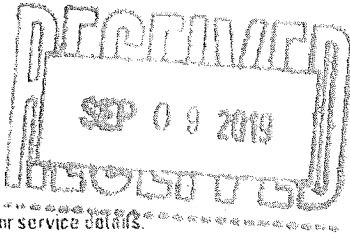
So far this year, you're using 4.2% less than last year.



Usage from Jan-Sep for 2018 & 2019

Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in.
Update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.



GL Acct#: 4175

Signature: [Signature]

Date: 9/9/19

Keep this part on for your records.

Please return this portion with your payment



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Amount Due	Due Date
\$9,733.90	September 30, 2019
Delinquent Amount After Due Date	Account Number
\$9,879.91	4580005832

Amount Enclosed \$

>000324 6167546 0003 092139 302

ALLIANCE WATER RESOURCES INC
PO BOX 1985
LAKE OZARK, MO 65049-1985

AMEREN MISSOURI
PO BOX 88068
CHICAGO IL 60680-1068

00600000 0045800058302 000009733900 000009733900



- Pay by phone: 1.866.268.3729
- Pay by mail: PO Box 98068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.3736

FOCUSED ENERGY. For life.

Electric Service Details

Service from 08/05/2019 - 08/05/2019 (30 days)

Electric Meter Read

METER NUMBER	SERVICE FROM - TO	NO. DAYS	USAGE TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	READING DIFFERENCE	MULTIPLIER	USAGE
11673321	08/05 - 08/05	30	Total kWh	Actual	54454.0000	54793.0000	338.0000	160.0000	105780.0000
11673321	08/05 - 08/05	30	Peak kW	Actual	1.3490	0.0000	1.3490	160.0000	222.2400

Usage Summary

Total kWh	105780.0000	Peak kW	222.2000
Billing Demand	222.2000	Total Billing Demand	222.2000

Rate 3M Large General Service

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Demand Charge	222.20	kW	@ \$ 5.40000000	\$1,189.88
Energy Charge/Hours Used	33,330.00	kWh	@ \$ 0.10580000	\$3,528.31
Energy Charge/Hours Used	44,440.00	kWh	@ \$ 0.07960000	\$3,537.42
Energy Charge/Hours Used	27,990.00	kWh	@ \$ 0.05350000	\$1,497.47
Customer Charge				\$95.07
Fuel Adjustment Charge	105,780.00	kWh	@ \$-0.00176000	\$-186.14
Energy Efficiency Program Charge	105,780.00	kWh	@ \$ 0.00030000	\$31.73
Energy Efficiency Investment Charge	105,780.00	kWh	@ \$ 0.00492400	\$520.77
Federal Tax Rate Reduction	105,780.00	kWh	@ \$-0.00462000	\$-488.81
Total Service Amount				\$9,733.90
Total Electric Charges				\$9,733.90

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
August 27, 2019	\$9,733.91

Questions? Contact Ameren Missouri at 1.877.426.3736 or visit AmerenMissouri.com.

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Address Changes or Corrections

Name _____
 Address _____
 City, State, Zip _____
 Phone Number _____

AmerenMissouri.com/WaysToPay



ONLINE
E-CHECK



PHONE
866.268.3729



IN PERSON
FIND A PAY STATION AT
AMERENMISSOURI.COM
PAYSTATION



ONLINE
CREDIT CARD



MAIL
STUB & CHECK



- Pay by phone: 1.855.268.3428
- Pay by mail: PO Box 88068, Chicago, IL 60680-1068
- Pay online or manage your account: AmerenMissouri.com
- Customer Service: 1.877.426.6730

FOCUSED ENERGY. For Life.

Account Number 5580005920
Customer Name ALLIANCE WATER RESOURCES INC
Service Address 3 ANDERSON RD
LAKE OZARK, MO 65049

Current Billing Period 09/01/2019

Total Electric Charges \$50.02

Total Amount Due \$50.02

AMOUNT DUE \$50.02

Due Date 09/30/2019

Amount After Due Date \$50.77

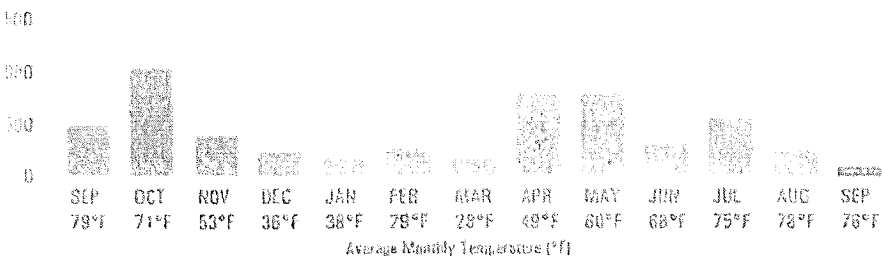
Previous Statement \$308.73

Total Payments \$308.73

Payment Received: Thank You.

Electric Usage History

Electric Usage in Kilowatt Hours (kWh)



Electric Usage Summary (kWh)

So far this year, you're using 25.1% less than last year.

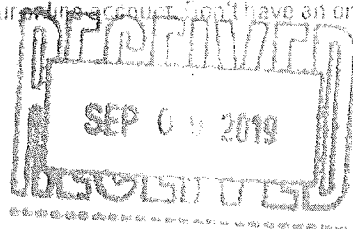
2018 13,510 kWh

2019 10,120 kWh

Usage from Jan-Sep for 2018 & 2019

Keeping You Informed.

Update your account information so we can contact you when crews are working in your neighborhood. Fill out the slip and mail it in.
Update your online account. Don't have an online account? Sign up today at AmerenMissouri.com.



GL Acct#: 4625

Signature: Gary Hatching

Date: 9/9/19

See next page for service details.

Keep this portion for your records.

Page 1 of 4

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Amount Due	Due Date
\$50.02	September 30, 2019
Delinquent Amount After Due Date	Account Number
\$50.77	5580005920

Amount Enclosed \$

>000193 6183548 0003 092139 102

ALLIANCE WATER RESOURCES INC
PO BOX 1985
LAKE OZARK, MO 65049-1985

AMEREN MISSOURI
PO BOX 88068
CHICAGO IL 60680-1068

50633000 0055800059200 000000050020 000000050020



- * Pay by phone: 1.866.266.3729
- * Pay by mail: PO Box 88688, Chicago, IL 60680-1068
- * Pay online or manage your account: AmerenMissouri.com
- * Customer Service: 1.877.426.3736

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Electric Service Due In 19 09/05/2019 (30 days)

Electric Meter Read

METER NUMBER	SERVICE FROM TO	UNIT	UNIT TYPE	READING TYPE	CURRENT READING	PREVIOUS READING	DIFFERENCE	MULTIPLIER	USAGE
8041275	08/06 - 09/05	30	Total kWh	Actual	19089.0000	19063.0000	26.0000	10.0000	260.0000
8041275	08/06 - 09/05	30	Peak kWh	Actual	0.3450	0.0000	0.3450	10.0000	3.4500

Usage Summary

Total kWh 260.0000

Rate 2M Sm Gen Svc - 3 Ph w/Dmd

Threshold - Peak Demand

DESCRIPTION	USAGE	UNIT	RATE	CHARGE
Total Energy Charge	260.00	kWh	@ \$ 0.11200000	\$28.12
Customer Charge				\$21.43
Fuel Adjustment Charge	260.00	kWh	@ \$ 0.00176000	\$0.46
Energy Efficiency Program Charge	260.00	kWh	@ \$ 0.00010000	\$0.03
Energy Efficiency Investment Charge	260.00	kWh	@ \$ 0.00542000	\$1.41
Federal Tax Rate Reduction	260.00	kWh	@ \$ 0.00581000	\$1.51
Total Service Amount				\$50.92
Total Electric Charges				\$50.92

Payments Since Previous Statement

DATE RECEIVED	AMOUNT
August 27, 2019	\$308.73

Questions? Contact Ameren Missouri at 1.877.426.3736 or visit AmerenMissouri.com.

Page 2 of 4

Address Changes or Corrections

Name _____
Address _____
City, State, Zip _____
Phone Number _____

AmerenMissouri.com/WaysToPay



ONLINE
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866.266.3729



IN PERSON
FIND A PAY STATION AT
AMERENMISSOURI.COM/
PAYSTATION



ONLINE
CREDIT CARD



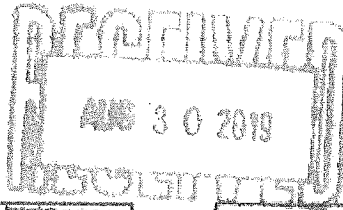
MAIL
STUB & CHECK



P.O Box 775
613 SW 3rd Street, Suite B
Lees Summit, MO 64063

Invoice

Date	Invoice #
8/27/2019	17693



Bill To	Ship To
Joint Board of the Sewage Treatment Plant Accounts Payable P.O. Box 1985 Lake Ozark, MO 65049	Alliance Water Resources Gary Hutchcraft # 3 Anderson Road Lake Ozark, MO 65049

		P.O. No.	Terms	Rep	Ship Via	FOB
			Net 30	BK	Federal Exp ..	PP & A
Qty	Item	Description			Amount - ...	Total Amount
1	TG-34GASCAL	3-4 Gas Instrument Calibration. Unit arrived with an LCD issue. After evaluation, the instrument has a bad board assembly and parts are no longer available. We recommend that the instrument is replaced. (X-am 2000, SN EREK-0042). Removed from service and replaced the GX-3R Serial # 964010089RN			0.00	0.00T
1	RK-72-RA-C	RK1 - GX-3R for LEL / O2 / H2S / CO with Li-Ion battery pack and I15 VAC charger Serial # 964010089RN			476.00	476.00T
1	Shipping	Shipping and Handling Fee Fedex 789406501404 <i>REPLACEMENT O2 METER</i> GL Acct#: <u>4600</u> Signature: <u>[Signature]</u> Date: <u>8/30/19</u>			18.87	18.87
					Subtotal	\$494.87
Phone #		Fax #		E-mail		Sales Tax (0.0%)
816-524-8100		816-278-5536		bill@tgtechservices.com		Total
						\$494.87

Letts, Van Kirk and Associates

Municipal Pumps and Equipment

5600 Inland Drive
Kansas City, KS
913-287-3900 Fax: 913-287-6641

Invoice

Date	Invoice #	S.O. No
8-30-2019	13960	41294

Sold To
JOINT SEWER BOARD P.O. BOX 1985 LAKE OZARK, MO 65049

Ship To
ALLIANCE WATER RESOURCES #3 ANDERSON ROAD LAKE OZARK, MO 65049

Customer Acct #	Terms	Ship Via	Customer P.O. No.	Sales Person
	Net 30	BEST WAY & ALLO	Verbal Gary	RVK

Quantity	Item	Description	Unit Price	Amount
3	IMA-04001-00431-101-Q	Impeller, Cast Iron	2,096.00	6,288.00
3	37-00000	Gasket, Volute, Veg Fiber	67.00	201.00
3	IMN-04017-00000-502-	Wear Ring, Impeller, 410 St.St.	170.00	510.00

ORDER SHIPPED COMPLETE 08-30-2019

RAS

REPLACEMENT IMPELLERS

GL Acct#: 4000

Signature: [Signature]

Date: 9/5/19

Sales Tax (0.0%)			\$0.00
Total			\$6,999.00

**MONTH-TO-DATE AND YEAR-TO-DATE
REVENUE/BUDGET ANALYSIS**

Account Number	Account Name	2017 Actual	8/31/2019 2018 Actual	2019 Budget	2019 Actual as of 8/31/2019	2019 August Revenue	Percent YTD
3020	Osage Beach	478,614.41	480,784.67	478,500.00	316,470.61	39,500.50	66%
3010	Lake Ozark	71,385.58	69,215.30	71,500.00	50,196.04	6,332.83	70%
3030	Misc.	0.00	1,485.00	0.00	0.00	0.00	
3100	Interest	781.57	1,484.82	400.00	1,527.03	202.64	382%
3060	Waste Haulers' Fee	30,500.00	25,780.00	30,000.00	17,460.00	2,820.00	58%
Total Operating Fund		581,281.56	578,749.79	580,400.00	385,653.68	48,855.97	66%
E/R Fund Income		2,319.07	4,281.74	3,000.00	2,969.03	111.29	99%
TOTAL INCOME		583,600.63	583,031.53	583,400.00	388,622.71	48,967.26	67%

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MONTH-TO-DATE AND YEAR-TO-DATE
EXPENDITURE/BUDGET ANALYSIS
8/31/2019

Account Number	Account Name	2017 Actual	2018 Actual	2019 Budget	2019 Actual as of 8/31/2019	2019 August Expenses	Percent YTD
4000	Equipment Replace Fund	41,604.17	41,604.17	41,604.00	27,736.00	3,467.00	67%
4020	*Maintenance & Repair	129,789.11	9,713.86	122,000.00	90,311.18	3,635.48	74%
4140	Insurance	17,144.00	18,475.25	19,030.25	18,624.00	0.00	98%
4150	Vehicle Repair/Maint	12,047.61	3,887.47	8,000.00	1,269.59	0.00	16%
4160	Haulers Fees to Contract	8,000.00	8,000.00	0.00	0.00	0.00	
4170	Contract Management	311,229.84	319,010.64	299,592.00	199,728.00	24,966.00	67%
4175	Electric	69,261.90	79,533.37	80,000.00	49,067.55	10,065.64	61%
4176	Utilities Misc	0.00	0.00	5,000.00	2,040.21	235.98	41%
4190	Bank Charges	24.35	24.00	60.00	53.80	3.00	0%
4200	Audit	2,200.00	2,300.00	2,400.00	2,400.00	0.00	100%
4220	Professional Service	1,200.00	0.00	0.00	0.00	0.00	0%
4240	Capital Purchases	0.00	0.00	152,000.00	14,351.00	0.00	9%
Totals		592,500.98	482,548.76	729,686.25	405,581.33	42,373.10	56%
**E/R Expenses		7,554.68	42,782.61	96,500.00	10,376.41	0.00	11%
TOTAL EXPENSES		600,055.66	525,331.37	826,186.25	415,957.74	42,373.10	50%

****Equipment & Replacement**

Rebuild Ducking Skimmer Arm	5,000.00	
Replace BOD & Ammonia probes	2,000.00	
Replace grit concentrator, volute & cart for pista	15,000.00	X
Replace wooden doors	2,000.00	
Replace impellers for RAS pumps	7,500.00	
Replace LED parking lot light	10,000.00	
Replace electric panel & pump	15,000.00	
Replace electric panel in RAS	40,000.00	
	<u>96,500.00</u>	

***Maintenance & Repair**

Auto Dialer Yrly Main Fee	500.00
Effluent Testing for Permit Renewal	1,500.00
Normal Maintenance	8,000.00
UV Spare Parts	8,000.00
Road and parking lot main.	4,000.00
#2 Aeration Basin repair valves lab testing	100,000.00
Sandblast & paint Clarifier #3	-
CARRYOVER 2018 \$68,900	-
	<u>122,000.00</u>

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OPERATING FUND INCOME AND EXPENSE SUMMARY
8/31/2019

Beginning Balance	347,909.10
Income - Osage Beach	39,500.50
Income - Lake Ozark	6,332.83
Income - Other	-
Income - Waste Haulers' Fees	2,820.00
Interest - Checking	19.59
Income - CD Interest	183.05
Transfers From E/R Fund	-
Transfers to E/R Fund	(3,467.00)
Expenses	(38,906.10)
Ending Fund Balance	354,391.97
Central Bank - NOW Acct.	152,985.24
	-
CD First Bank of the Lake, 11/19 #101318432	101,830.00
CD Central Bank, 1/20 #151763	100,000.00
	-
Outstanding Checks:	(423.27)
	354,391.97

EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY
8/31/2019

Beginning Balance	544,546.21
Interest - Checking	-
Income - CD Interest	111.29
Transfers to E/R Fund	3,467.00
Income - Miscellaneous	-
Expenses	-
Ending Fund Balance	548,124.50
First Bank of the Lake - Money Mkt.	138,060.45
CD Providence Bank, 8/20 #1268880	206,532.10
CD First Bank of the Lake, 11/19 #101318431	100,000.00
CD First Bank of the Lake, 04/20 #101318430	103,531.95
	-
Outstanding Checks:	-
	548,124.50

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CHECK REGISTER - JOINT SEWER BOARD OPERATION FUND

	reconciled balance 6/30/19			139,789.91
111	Equipment Replacement Fund	X	3,467.00	136,322.91
112	Menards	X	8.83	136,314.08
113	Jani-King	X	195.00	136,119.08
114	TG Technical Services	X	131.35	135,987.73
115	Clark Tire Company	X	209.00	135,778.73
116	Roemer's Heavy Equipment	X	186.98	135,591.75
117	Alliance Water Resources, Inc.	X	24,966.00	110,625.75
118	Republic Services	X	143.50	110,482.25
119	AT&T	X	89.90	110,392.35
120	Gerding, Korte & Chitwood	X	2,400.00	107,992.35
121	Ameren MO	X	10,074.12	97,918.23
122	Bankcard Services	X	110.99	97,807.24
123	Controlled Heating & Cooling	X	877.55	96,929.69
124	Clark Tire Company	X	97.00	96,832.69
125	Lake Recharge & Fire Equipment	X	146.25	96,686.44
	Two signature verification chg.	X	3.00	96,683.44
	Deposit	X		6,647.21
	Deposit	X		39,186.12
	Deposit	X		1,020.00
	Deposit	X		2,340.00
	Interest	X		202.33
	reconciled balance 7/31/19			146,079.10
126	Equipment Replacement Fund	X	3,467.00	142,612.10
127	Core & Main	X	250.60	142,361.50
128	Jani-King	X	195.00	142,166.50
129	Magruder Co.	X	1,526.58	140,639.92
130	Menards	X	62.42	140,577.50
131	Municipal Equipment Co.		423.27	140,154.23
132	USA Blue Book	X	711.37	139,442.86
133	Alliance Water Resources, Inc.	X	24,966.00	114,476.86
134	Ameren MO	X	10,065.64	104,411.22
135	Republic Services	X	142.68	104,268.54
136	AT&T	X	93.30	104,175.24
137	Menards	X	22.99	104,152.25
138	Crown Power & Equip	X	49.69	104,102.56
139	O'Reilly Auto	X	44.50	104,058.06
140	JCI Industries	X	349.06	103,709.00
	Two signature verification chg.	X	3.00	103,706.00
	Deposit LO	X		6,332.83
	Deposit OB	X		39,500.50
	Deposit HAULING	X		2,820.00
	Interest	X		202.64
	reconciled balance 8/31/19			152,561.97

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Central Bank
of Lake of the Ozarks

MEMBER FDIC

P.O. Box 4500, Jefferson City, MO 65102
(573) 348 2761

RETURN SERVICE REQUESTED

LAKE OZARK OSAGE BEACH JOINT SEWER
TREATMENT PLANT BOARD
LAKE OZARK OSAGE BEACH JOINT SEWER TRMT
1000 CITY PKWY
OSAGE BEACH MO 65065-3058

Period Page

08/01/2019 - 08/30/2019 1 of 4

Web Address
www.centralbank.net

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Your Financial Summary on August 30, 2019

	Bank Deposits	Totals
Bank Deposit Accounts:		
Checking	\$ 152,985.24	
Certificates of Deposit	\$ 100,000.00	
Bank Deposit Total		\$ 252,985.24
Total Assets:	\$ 252,985.24	\$ 252,985.24

Detailed Explanation of Account Balances and Other Assets

Basic Plus Interest Checking

No. 000007297 Beginning Balance July 31, 2019 \$ 148,479.10

Deposits

Aug. 19	CD Interest	000151763	183.05
Aug. 20	Deposit		6,332.83
Aug. 20	Deposit		39,500.50
Aug. 21	Deposit		2,820.00
Aug. 30	Interest Earned		19.59

Total +\$ 48,855.97

Checks

Check No.	Date Paid	Amount	Check No.	Date Paid	Amount
120	Aug. 02	2,400.00	134	Aug. 28	10,065.64
126	Aug. 22	3,467.00	135	Aug. 28	142.68
127	Aug. 27	250.60	136	Aug. 27	93.30
128	Aug. 26	195.00	138	Aug. 23	49.69
129	Aug. 27	1,526.58	139	Aug. 27	44.50
132	Aug. 29	711.37	140	Aug. 27	349.06
133	Aug. 22	24,966.00			

Total -\$ 44,261.42

Withdrawals and other charges

Date	Type	Transaction Description	
Aug. 01	07/2019 TWO SIGNATURE VERI		3.00
Aug. 26	MENARDS LAKE OZA8662377650 130		62.42
Aug. 26	MENARDS LAKE OZA8662377650 137		22.99

Total -\$ 88.41

Ending Balance August 30, 2019 \$ 152,985.24

CHECK REGISTER - JOINT SEWER BOARD EQUIPMENT REPLACEMENT FUND

reconciled balance 6/30/19			130,894.76
Interest	X	120.40	131,015.16
Deposit	X	3,467.00	134,482.16
reconciled balance 7/31/19			134,482.16
Interest	X	111.29	134,593.45
Deposit	X	3,467.00	138,060.45
reconciled balance 8/31/19			138,060.45

Summary of Accounts

Account Type	Account Number	Ending Balance
MONEY MARKET ACCOUNT		\$138,060.45

MONEY MARKET ACCOUNT-XXX

Account Summary

Date	Description	Amount	Interest Summary	Description	Amount
08/01/2019	Beginning Balance	\$134,482.16	Annual Percentage Yield Earned		1.00%
	2 Credit(s) This Period	\$3,578.29	Interest Days		30
	0 Debit(s) This Period	\$0.00	Interest Earned		\$111.29
08/30/2019	Ending Balance	\$138,060.45	Interest Paid This Period		\$111.29
			Interest Paid Year-to-Date		\$973.19
			Minimum Balance		\$0.00
			Average Available Balance		\$135,406.69

Deposits

Date	Description	Amount
08/21/2019	DEPOSIT	\$3,467.00

Other Credits

Date	Description	Amount
08/30/2019	INTEREST	\$111.29



**OUR
MISSION**

We partner with communities to deliver the finest water and wastewater services available at a competitive price. We are committed to keeping water safe and clean while serving people and taking care of communities with improved technical operations, careful management and financial oversight, and ensured regulatory compliance.

**Alliance Water
Resources,
Inc.**

**206 S. Keene
St.
Columbia, MO
65201**

(573)874-8080

WATER RESOURCES®
Alliance
Professional Water and Wastewater Operations

REPORT OF OPERATIONS

**LAKE OZARK/OSAGE BEACH
Joint Wastewater Treatment Plant No. 1**

Month of August 2019

Submitted by Alliance Water Resources, Inc. for the

September 2019

Joint Sewer Board Meeting

SUMMARY OF FACILITY OPERATION

The Lake Ozark/Osage Beach Joint WWTP produced superior effluent quality throughout the month and was in full compliance with effluent limitations established in NPDES Permit No. MO-0103241. No leaks, no spills, and no unauthorized releases to waters of the state. No work related lost time accidents have occurred during the month.

Detailed information relating to plant performance and operations is presented as follows.

PLANT EFFLUENT QUALITY

	BOD mg/l	TSS mg/l	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/L
Monthly Average	1.2	1.3	N/A	< 20		0.04	< 4.8	< 1.0
Peak Day	1.3	1.8	8.0	< 20		0.07	< 4.8	< 1.0
Percent Removal	99.3	99.5	N/A	N/A		N/A	N/A	N/A

NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	pH	E.coli Colonies/100 ml	Coliform	Ammonia as N mg/L	O&G mg/L	Metals Selenium ug/ L
Monthly Average	30	30	6-9	126		1.1	10	3.6
Weekly Average	45	45		630				
Daily Max				N/A		6.0	15	9.1

PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 1.977 MGD or 66% of Permitted flow with Lake Ozark contributing 13% of the total flow and Osage Beach contributing 87%. Daily influent flow BOD and TSS data is presented in Table A. Daily flow for the month and rainfall are shown in Figure 2. A three-year flow history for each of the two cities is presented in Table B.

Organic loading for the month was 86998 pounds of BOD.

BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 0 tanker loads of bio-solids during the month equivalent to a total of 0 gallons and 0 pounds dry weight solids.

247,450 pounds of dry weight solids have been land applied year to date.

Bio-solids inventory in the storage tanks at the end of the month was 517,500 gallons with a level of 5.5 feet in Tank 1 and 6.0 feet in Tank 2.

WASTEHAULERS

The plant received 29 loads of septage during the month totaling 72,500 gallons.

WWTP OPERATIONS

- Decanting digesters and wasting weekly.
- Normal operations.

WWTP MAINTENANCE AND REPAIR

- Performed routine maintenance throughout the month as per Antero Maintenance Data Management schedule. (New version of Operator 10 Software)

SAFETY

- We conducted our monthly routine Safety Meeting on Lockout/Tagout & Violence in the Workplace on the 13th of August.

REGULATORY AGENCY, INSPECTION AND REPORTS

- We filled out the EDMR on MDNR's website on the 6th of September.

MISCELLANEOUS AND RECOMMENDATIONS

- We solicited bids for the parking lot crack filling & sealcoat, replacement HACH LBOD & Ammonia probes & UV spare parts and received 3 back on each. (see attached bid sheet)

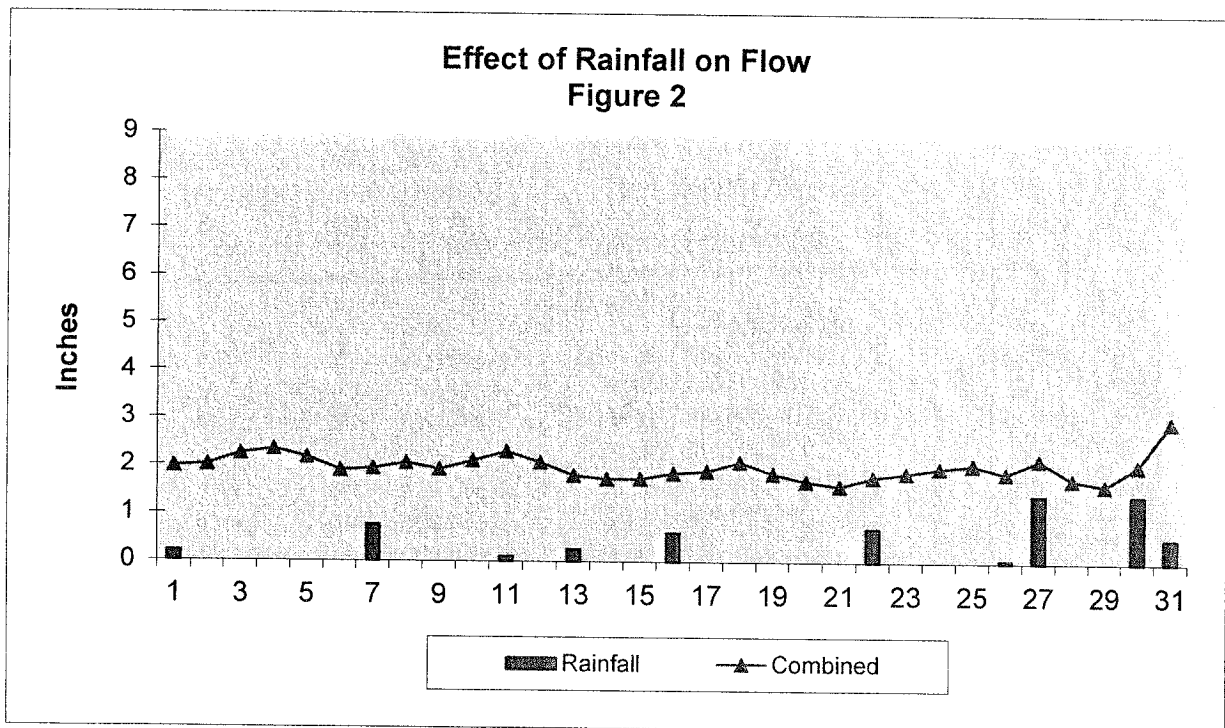
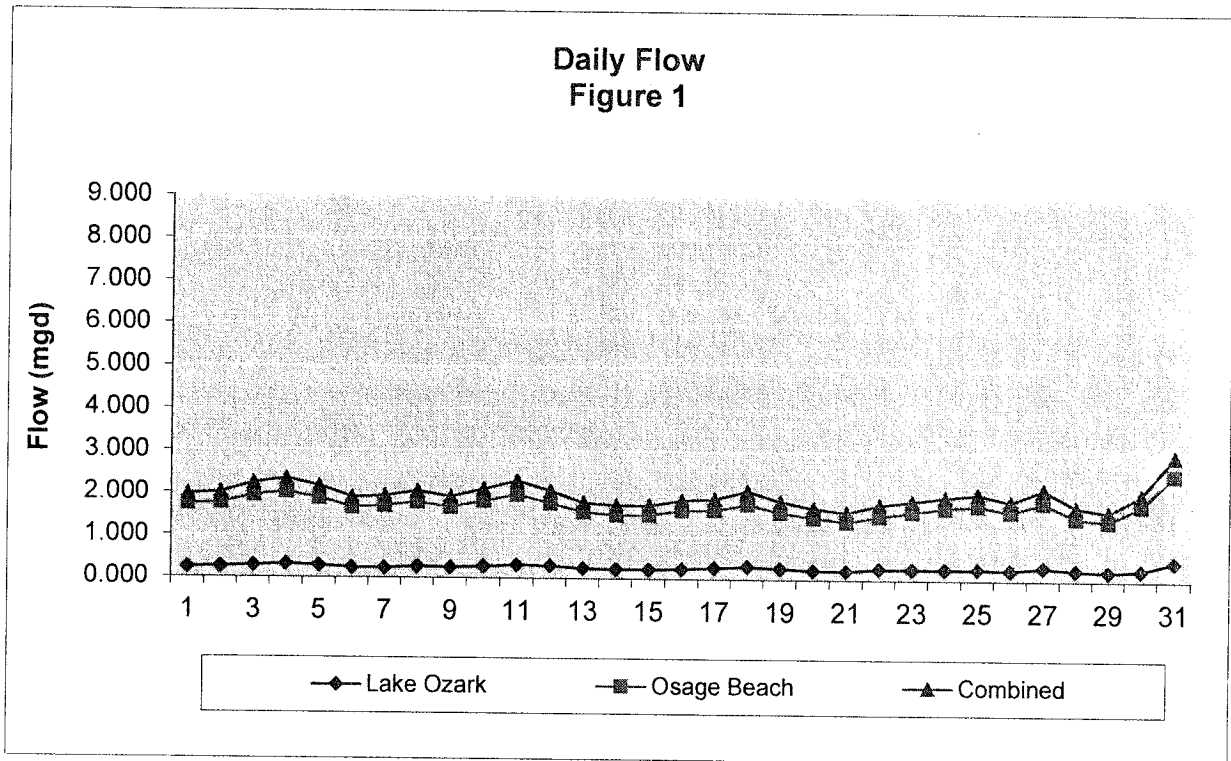
TABLE A
LAKE OZARK/OSAGE BEACH WWTP

MONTH OF August 2019

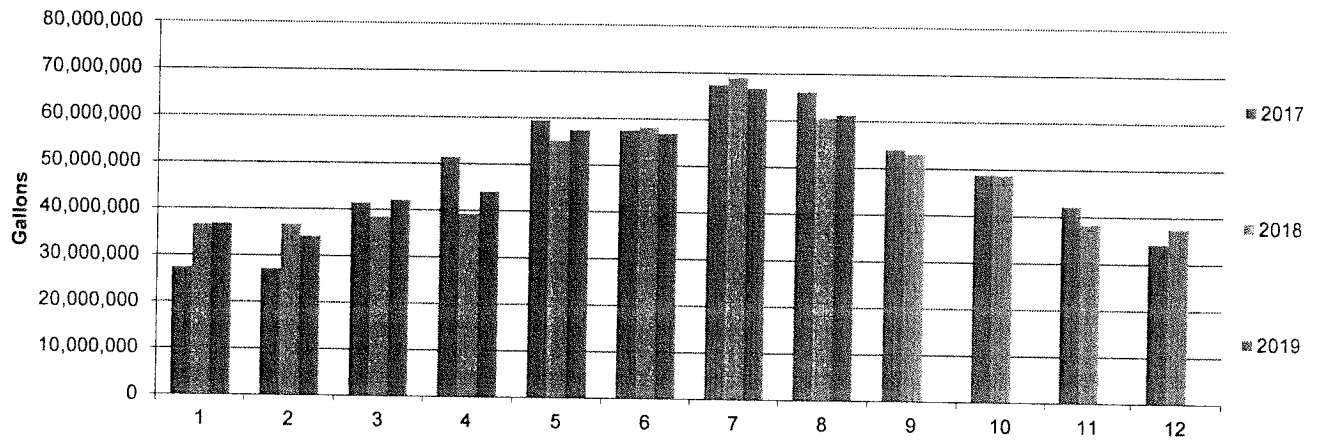
DATE		FLOW					BOD 5 MG/L			TSS MG/L		
	RAIN FALL IN.	LO mgd	OB mgd	COMB mgd	% LO	% OB	LO mg/l	OB mg/l	COMB mg/l	LO mg/l	OB mg/l	COMB mg/l
1-Aug	0.2	0.235	1.738	1.973	11.9	88.1						
2-Aug	0	0.249	1.763	2.012	12.4	87.6	243	210	173	208	200	266
3-Aug	0	0.290	1.948	2.238	13.0	87.0						
4-Aug	0	0.318	2.022	2.340	13.6	86.4						
5-Aug	0	0.285	1.882	2.167	13.2	86.8						
6-Aug	0	0.236	1.662	1.898	12.4	87.6						
7-Aug	0.75	0.232	1.702	1.934	12.0	88.0						
8-Aug	0	0.268	1.788	2.056	13.0	87.0						
9-Aug	0	0.249	1.676	1.925	12.9	87.1	183	155	215	186	170	324
10-Aug	0	0.277	1.825	2.102	13.2	86.8						
11-Aug	0.1	0.318	1.984	2.302	13.8	86.2						
12-Aug	0	0.293	1.778	2.071	14.1	85.9						
13-Aug	0.25	0.233	1.569	1.802	12.9	87.1						
14-Aug	0	0.225	1.506	1.731	13.0	87.0						
15-Aug	0.0	0.225	1.512	1.737	13.0	87.0						
16-Aug	0.6	0.234	1.621	1.855	12.6	87.4	240	223	163	248	232	232
17-Aug	0	0.271	1.628	1.899	14.3	85.7						
18-Aug	0	0.310	1.780	2.090	14.8	85.2						
19-Aug	0	0.264	1.588	1.852	14.3	85.7						
20-Aug	0	0.220	1.470	1.690	13.0	87.0						
21-Aug	0	0.216	1.377	1.593	13.6	86.4						
22-Aug	0.7	0.266	1.509	1.775	15.0	85.0						
23-Aug	0	0.255	1.609	1.864	13.7	86.3	310	173	165	354	156	212
24-Aug	0	0.257	1.712	1.969	13.1	86.9						
25-Aug	0	0.264	1.773	2.037	13.0	87.0						
26-Aug	0.05	0.243	1.625	1.868	13.0	87.0						
27-Aug	1.4	0.314	1.839	2.153	14.6	85.4						
28-Aug	0	0.252	1.488	1.740	14.5	85.5						
29-Aug	0	0.214	1.409	1.623	13.2	86.8						
30-Aug	1.4	0.255	1.782	2.037	12.5	87.5	158	180	135	136	214	198
31-Aug	0.5	0.447	2.509	2.956	15.1	84.9						
SUM	6.0	8.215	53.074	61.289								
AVG		0.265	1.712	1.977	13	87	227	188	170	226	194	246
NOTE: BOLD PRINT INDICATES WEEKEND DAYS												

TABLE B
JOINT SEWER BOARD
Monthly Flows

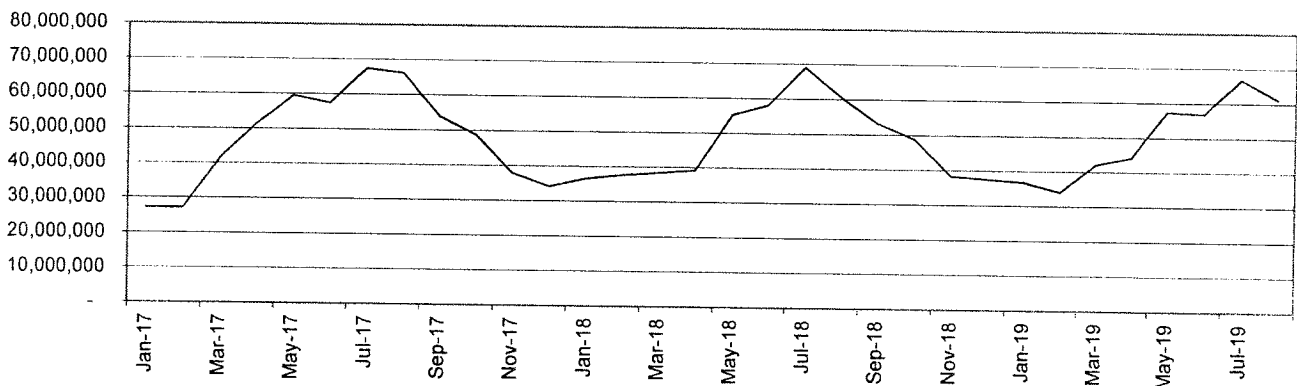
<u>2017</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	2.5	23,440,000	86%	3,909,000	14%	27,349,000	100%
February	0.7	23,345,000	86%	3,812,000	14%	27,157,000	100%
March	3.8	36,554,000	88%	4,844,000	12%	41,398,000	100%
April	9.8	44,665,000	87%	6,723,000	13%	51,388,000	100%
May	8.1	51,527,000	87%	7,979,000	13%	59,506,000	100%
June	2.9	50,926,000	88%	6,618,000	12%	57,544,000	100%
July	5.2	59,347,000	88%	8,092,000	12%	67,439,000	100%
August	12.4	57,736,000	87%	8,409,000	13%	66,145,000	100%
September	1.5	47,096,000	87%	6,866,000	13%	53,962,000	100%
October	7.4	42,489,000	87%	6,332,000	13%	48,821,000	100%
November	0.5	37,947,000	90%	4,244,000	10%	42,191,000	100%
December	0.9	30,459,000	89%	3,808,000	11%	34,267,000	100%
	55.6	505,531,000	88%	71,636,000	12%	577,167,000	100%
<u>2018</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	2.8	32,190,000	88%	4,345,000	12%	36,535,000	100%
February	5.4	31,846,000	87%	4,861,000	13%	36,707,000	100%
March	3.2	33,424,000	87%	5,010,000	13%	38,434,000	100%
April	1.9	34,339,000	88%	4,896,000	12%	39,235,000	100%
May	5.4	47,620,000	86%	7,610,000	14%	55,230,000	100%
June	3.2	51,063,000	88%	7,125,000	12%	58,188,000	100%
July	2.7	60,484,000	88%	8,550,000	12%	69,034,000	100%
August	6.9	52,916,000	87%	7,679,000	13%	60,595,000	100%
September	3.4	46,228,000	87%	7,013,000	13%	53,241,000	100%
October	7.5	42,037,000	86%	6,738,000	14%	48,775,000	100%
November	3.6	33,221,000	87%	5,089,000	13%	38,310,000	100%
December	6.3	32,452,000	86%	5,123,000	14%	37,575,000	100%
	52.3	497,820,000	87%	74,039,000	13%	571,859,000	100%
<u>2019</u>	<u>RAINFALL</u>	<u>OSAGE BEACH</u>		<u>LAKE OZARK</u>		<u>TOTAL</u>	<u>%</u>
January	2.1	32,085,000	87%	4,708,000	13%	36,793,000	100%
February	4.4	29,492,000	86%	4,650,000	14%	34,142,000	100%
March	6.3	36,210,000	86%	5,876,000	14%	42,086,000	100%
April	4.1	37,991,000	86%	6,135,000	14%	44,126,000	100%
May	9.9	49,124,000	85%	8,333,000	15%	57,457,000	100%
June	6.0	49,051,000	86%	7,864,000	14%	56,915,000	100%
July	4.8	57,666,000	86%	9,132,000	14%	66,798,000	100%
August	6.0	53,074,000	87%	8,215,000	13%	61,289,000	100%
September						-	
October						-	
November						-	
December						-	
	43.4	344,693,000	86%	54,913,000	14%	399,606,000	100%



Monthly Influent Flow
Figure 3A

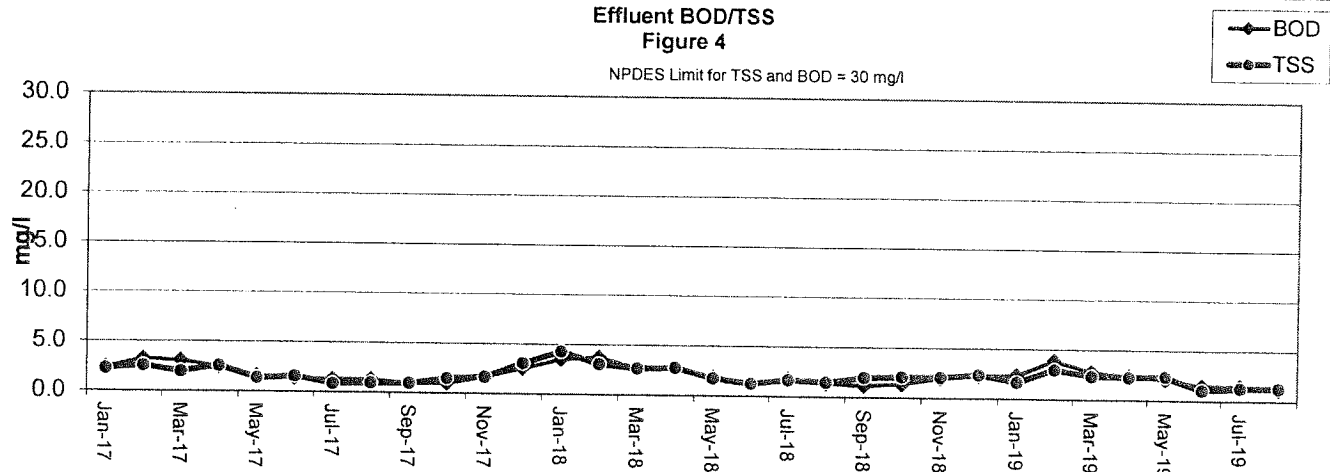


Monthly Influent Flow
Figure 3B

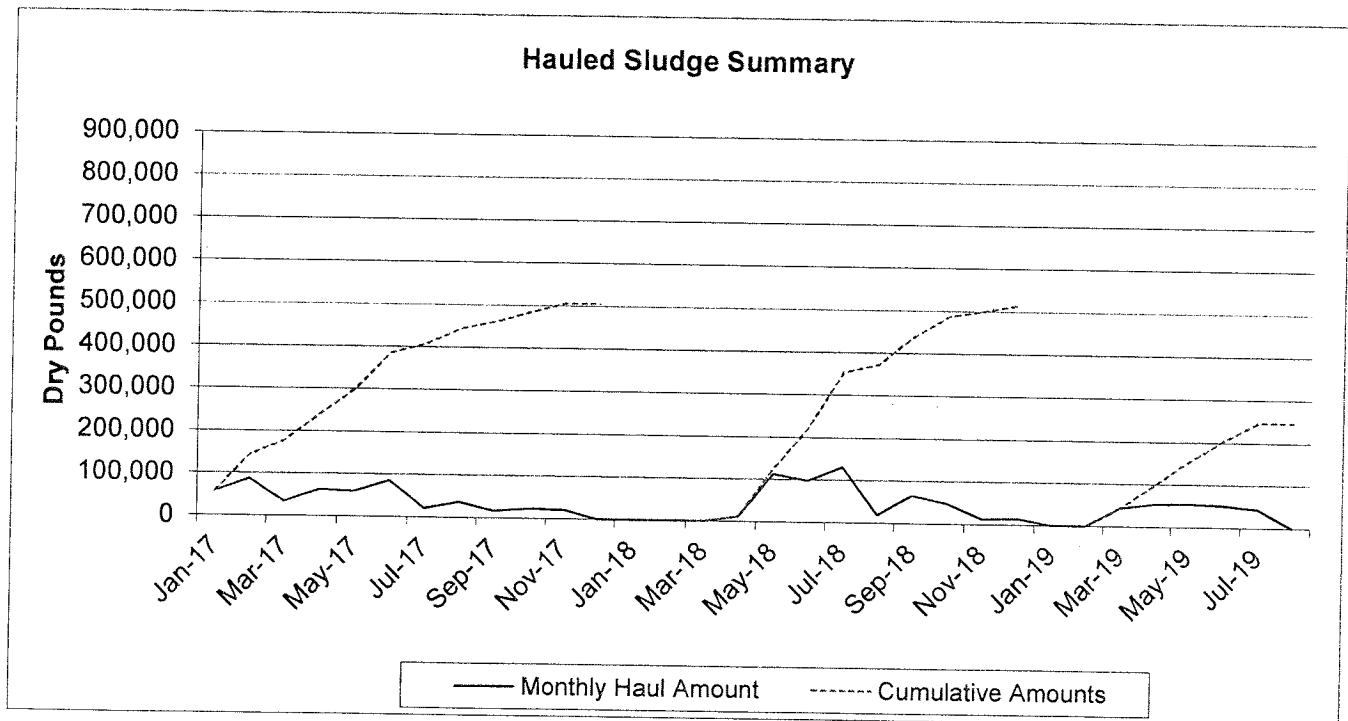
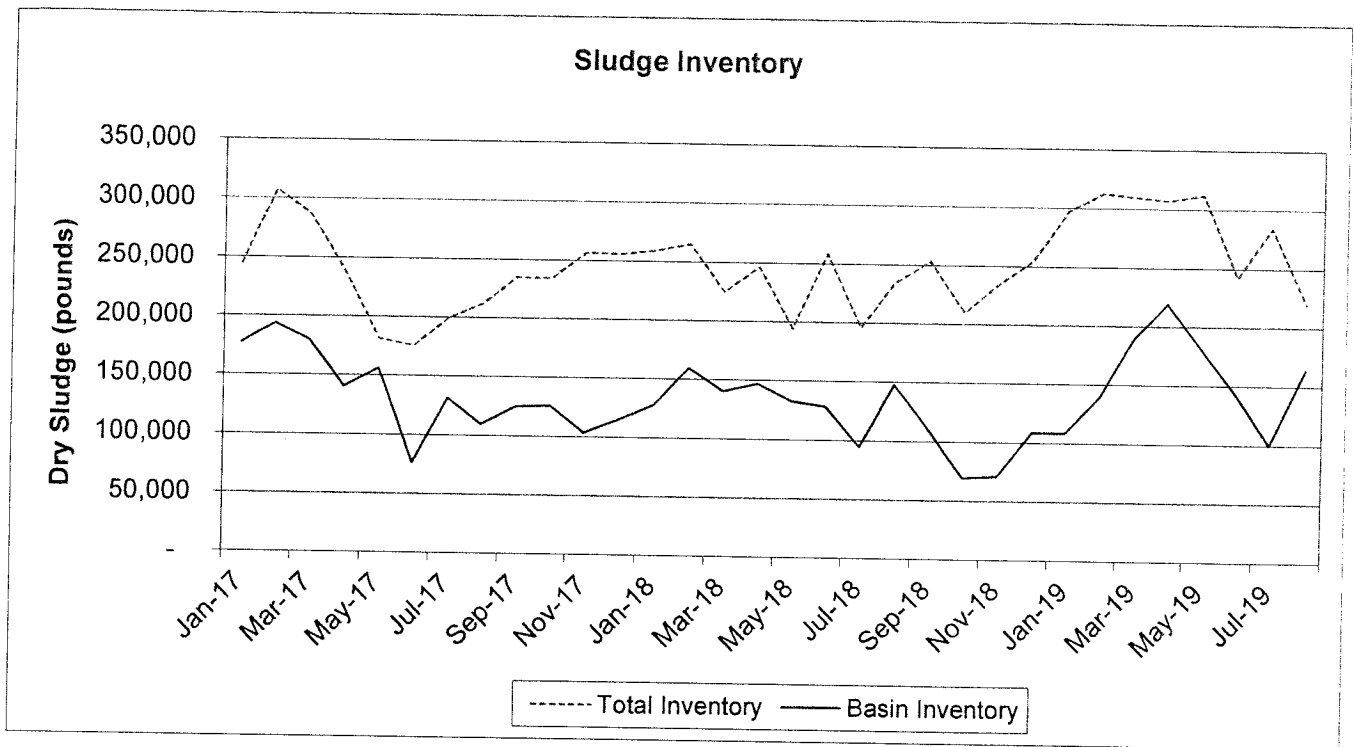


Effluent BOD/TSS
Figure 4

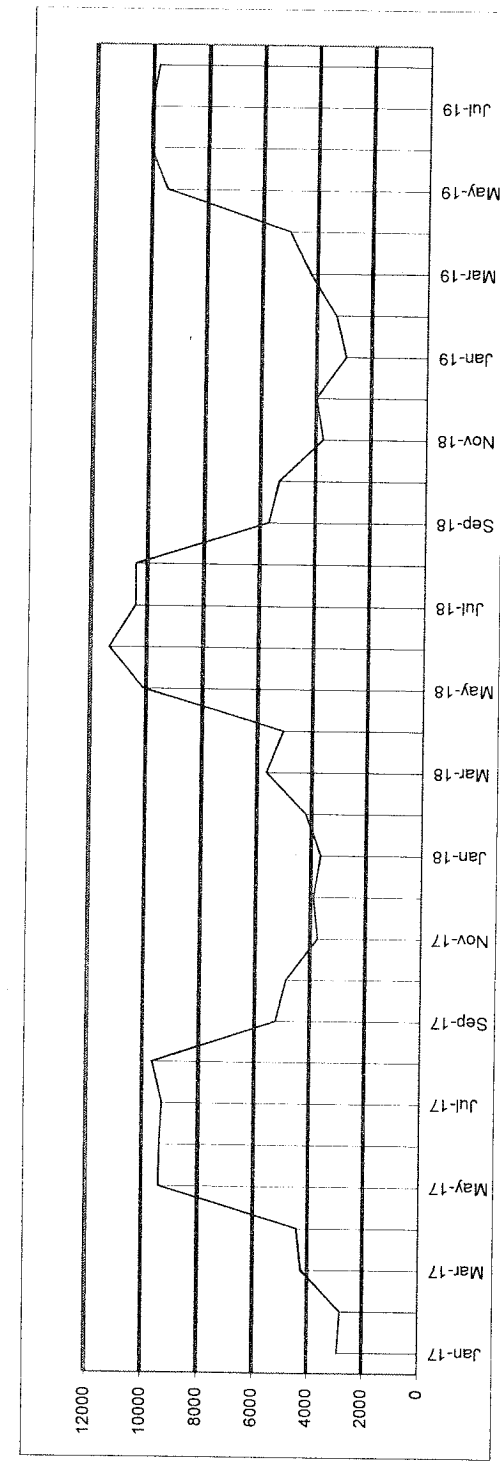
NPDES Limit for TSS and BOD = 30 mg/l



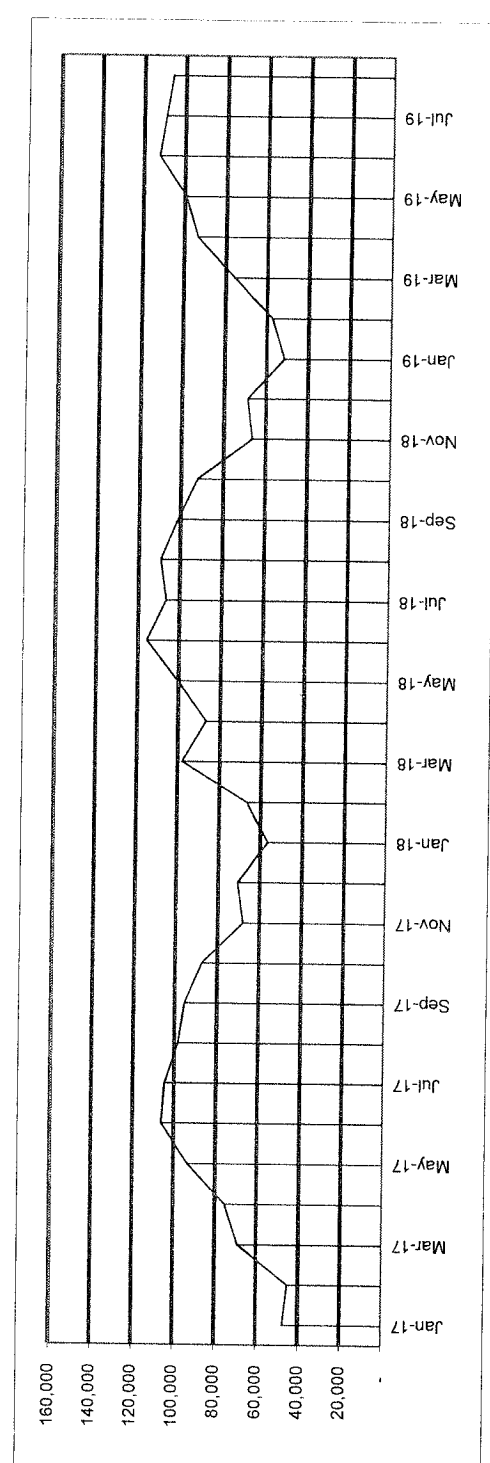
Date	Loads	Hauled Sludge			Basin Depths			Blanket Depths			MLSS Inventory			Blanket and MLSS Inventory		MLSS	Total Dry		Accepted Septage Loads	Septage Gallons
		Gallons	# Dry	% Solids	Annual Cumulative # Dry	Tank #1	Tank #2	AB #1	AB #2	Basin Gallons	# Dry	MLSS AB #1	MLSS AB #2	Gallons	# Dry	% Solids	Sludge Inventory	Sludge Inventory		
Jan-17	47	173,000	56,748	3.9%	56,748	6.0	6.0	0.0	0.0	540,000	177,132	-	-	5,080	1,861,190	78,853	0.00508	255,986	15	37,500
Feb-17	68	251,600	86,649	4.1%	143,397	5.5	7.0	0.0	0.0	562,500	193,720	-	-	4,090	1,913,499	66,271	0.00409	256,991	5	12,500
Mar-17	33	122,100	34,808	3.4%	178,205	7.5	6.5	0.0	0.0	490,000	179,599	-	-	5,400	1,896,714	85,420	0.0054	265,019	41	102,500
Apr-17	59	218,300	61,994	3.4%	240,199	6.5	4.5	0.0	0.0	495,000	140,573	-	-	4,630	2,184,858	84,367	0.00463	224,939	8	20,000
May-17	51	198,700	59,556	3.8%	299,755	7.0	4.0	0.0	0.0	495,000	156,228	-	-	2,480	3,066,119	90,198	0.00295	246,426	45	116,000
Jun-17	75	277,500	85,724	3.7%	385,479	2.5	3.0	0.0	0.0	247,500	76,467	3.420	3.420	3,000	3,657,238	118,153	0.00377	194,610	33	82,500
Jul-17	20	74,000	21,631	3.5%	407,110	4.5	5.5	0.0	0.0	490,000	131,540	4.530	4.530	2,740	3,670,071	126,886	0.00416	258,426	43	107,500
Aug-17	39	144,300	37,030	3.1%	444,140	5.0	4.5	0.0	0.0	427,500	109,704	4.670	4.670	3,000	3,670,071	109,884	0.00359	196,173	41	103,500
Sep-17	16	59,200	17,311	3.5%	461,451	6.0	3.5	0.0	0.0	405,000	125,008	2.910	2.910	3,880	3,670,071	127,025	0.00415	253,182	48	122,000
Oct-17	20	74,000	23,051	3.7%	484,502	8.0	1.0	0.0	0.0	405,000	126,158	4.380	4.380	3,780	3,670,071	106,250	0.00348	209,832	7	17,500
Nov-17	20	74,000	21,292	3.4%	505,794	4.5	3.5	0.0	0.0	450,000	127,602	4.380	4.380	4,040	3,626,643	127,488	0.00422	234,792	7	17,500
Dec-17	0	-	0	3.4%	505,794	6.0	3.0	0.0	0.0	405,000	103,583	2.890	2.890	4,060	3,666,119	106,250	0.00348	209,832	7	17,500
Jan-18	0	-	0	3.4%	-	6.0	3.0	0.0	0.0	450,000	127,602	4.380	4.380	4,040	3,626,643	127,488	0.00422	234,792	7	17,500
Feb-18	0	-	0	3.4%	-	5.5	4.5	0.0	0.0	450,000	127,602	4.380	4.380	4,040	3,626,643	127,488	0.00422	234,792	7	17,500
Mar-18	0	-	0	3.4%	-	7.5	5.0	0.0	0.0	450,000	127,602	4.380	4.380	4,040	3,626,643	127,488	0.00422	234,792	7	17,500
Apr-18	11	40,700	12,086	3.6%	12,086	5.5	5.5	0.0	0.0	495,000	140,362	5.590	5.590	3,920	3,750,000	137,610	0.0044	297,113	16	40,000
May-18	93	344,100	112,693	3.9%	124,789	5.0	6.0	0.0	0.0	495,000	147,114	5.590	5.590	3,920	3,750,000	137,610	0.0044	297,113	16	40,000
Jun-18	88	325,000	97,758	3.6%	222,547	4.5	4.5	0.0	0.0	405,000	132,638	5.590	5.590	3,920	3,750,000	137,610	0.0044	297,113	16	40,000
Jul-18	126	466,200	131,023	3.4%	353,570	4.0	5.5	0.0	0.0	427,500	128,589	5.593	5.593	5,547	3,639,476	162,542	0.00536	309,655	8	20,000
Aug-18	12	44,400	19,441	5.3%	373,011	3.0	4.5	0.0	0.0	337,500	94,853	6.190	6.190	5,490	3,767,762	174,663	0.00576	307,321	10	24,500
Sep-18	51	188,700	66,098	4.2%	439,109	5.0	2.5	0.0	0.0	337,500	147,778	4.570	4.570	4,990	3,691,785	147,174	0.00478	242,026	38	95,000
Oct-18	38	140,600	48,447	4.1%	487,556	4.5	2.5	0.0	0.0	315,000	110,338	4.570	4.570	4,990	3,691,785	147,174	0.00478	242,026	42	107,000
Nov-18	11	40,700	12,899	3.8%	500,455	3.0	1.5	0.0	0.0	202,500	69,776	4.290	4.290	3,640	3,626,643	109,794	0.00363	220,132	30	75,000
Dec-18	14	51,800	14,688	3.4%	515,143	2.5	2.5	0.0	0.0	225,000	71,309	4.290	4.290	3,640	3,626,643	109,794	0.00363	220,132	45	113,500
Jan-19	0	-	0	3.4%	-	6.5	2.0	0.0	0.0	382,500	108,459	4.120	4.120	3,420	4,008,524	132,500	0.00397	203,809	21	59,500
Feb-19	0	-	0	3.4%	-	5.0	3.5	0.0	0.0	382,500	108,459	4.120	4.120	3,420	4,008,524	132,500	0.00397	203,809	21	59,500
Mar-19	36	133,200	43,139	3.9%	43,139	6.0	7.0	0.0	0.0	495,000	140,362	4.650	4.650	4,480	4,008,524	132,500	0.00397	203,809	8	21,500
Apr-19	39	144,300	53,940	4.5%	97,079	6.0	7.0	0.0	0.0	495,000	140,362	4.650	4.650	4,480	4,008,524	132,500	0.00397	203,809	8	21,500
May-19	49	181,300	54,866	3.7%	151,945	5.5	7.5	0.0	0.0	585,000	190,277	4.780	4.780	3,920	3,626,643	131,571	0.00435	321,848	9	21,500
Jun-19	44	162,800	51,872	3.8%	203,817	8.0	5.0	0.0	0.0	585,000	180,519	5.720	5.720	4,530	3,678,952	157,248	0.00513	376,798	23	61,500
Jul-19	37	136,900	43,633	3.8%	247,450	7.0	3.0	0.0	0.0	450,000	142,614	5.160	5.160	5,160	3,723,357	160,077	0.00516	340,596	12	25,500
Aug-19	0	-	0	3.8%	-	3.0	4.0	0.0	0.0	315,000	98,830	6.060	6.060	4,810	3,771,714	163,886	0.00521	306,500	19	47,500
						5.5	6.0	0.0	0.0	517,500	184,006	5.680	5.680	5,680	3,763,810	177,982	0.00567	341,988	36	84,000
																			29	72,500



Electric Cost



Kilowatts Used



Electric Cost Kilowatts Used

Jan-17	2904	47,480
Feb-17	2796	45,240
Mar-17	4233	69,210
Apr-17	4411	75,480
May-17	9413	93,494
Jun-17	9388	106,070
Jul-17	9310	104,700
Aug-17	9666	98,220
Sep-17	5246	95,470
Oct-17	4874	87,240
Nov-17	3738	68,100
Dec-17	3909	70,820
Jan-18	3640	56,750
Feb-18	4207	66,930
Mar-18	5667	98,010
Apr-18	5060	86,650
May-18	10116	100,520
Jun-18	11336	115,750
Jul-18	10417	106,550
Aug-18	10400	109,290
Sep-18	5685	101,170
Oct-18	5317	92,210
Nov-18	3731	66,280
Dec-18	3990	68,840
Jan-19	2926	51,490
Feb-19	3295	57,450
Mar-19	4251	75,830
Apr-19	5014	93,570
May-19	9452	99,330
Jun-19	10074	112,400
Jul-19	10066	109,190
Aug-19	9784	106,020



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
 Discharge Monitoring Report For Municipal Wastewater Treatment Plants

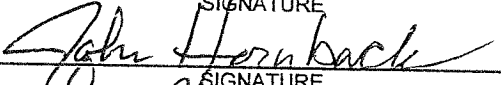
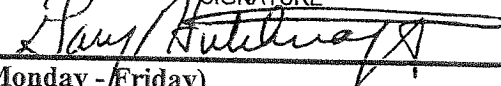
NAME OF FACILITY					LOCATION ADDRESS & CITY								COUNTY/REGION	
Lake of the Ozarks Regional WWTP #1					#3 Anderson Road								Miller/SWRO	
MONTH/YEAR		PERMIT NUMBER			OUTFALL NUMBER		TYPE TREATMENT FACILITY							
Aug-19		MO-0103241			#001		Oxidation Ditch/UV/Sludge Holding-sludge is land applied							
INFLUENT					EFFLUENT								% Removal	
DATE	pH UNITS	BOD mg/L	TSS mg/L	TEMP °C	FLOW MGD	pH UNITS	BOD mg/L	TSS mg/L	Ammonia as N mg/l	DO mg/L	E. coli COLFRM #/100 ML	TEMP °C	BOD mg/L	TSS mg/L
1	7.1			24.5	2.062	7.8				4.8		25.0		
2	7.1	173	266	23.9	2.022	7.8	1.2	1.1	0.05	5.5		25.0	99.3	99.6
3	7.2			23.3	2.467	7.7				5.1		24.4		
4	7.1			23.6	2.438	7.7				5.2		24.5		
5	7.2			24.1	2.235	7.8				5.0		25.0		
6	7.1			24.7	1.942	7.9				5.7		25.6		
7	7.0			23.8	2.005	7.7				5.3	< 20	25.1		
8	7.0			23.7	2.022	7.7			0.07	5.2		24.7		
9	7.1	215	324	24.6	2.023	7.8	1.2	1.3		5.1		25.3	99.4	99.6
10	7.1			23.8	2.109	7.8				5.6		25.0		
11	7.3			24.4	2.359	7.8				5.1		25.7		
12	7.1			24.7	2.083	7.9				5.5	< 20	26.2		
13	7.3			24.1	1.847	8.0				5.2		26.1		
14	7.2			24.7	1.653	8.0				5.4		26.1		
15	7.1			24.6	1.745	7.8			0.03	5.4		25.3		
16	7.3	223	232	23.8	1.927	7.9	1.3	1.1		5.0		24.5	99.4	99.5
17	7.2			23.5	1.917	7.9				5.9		24.4		
18	7.4			24.0	2.137	7.9				5.8		24.8		
19	7.2			24.7	1.841	7.8				5.0	< 20	25.9		
20	6.9			24.6	1.687	7.6				5.4		26.2		
21	7.3			24.8	1.494	7.8				5.6		26.3		
22	7.4			24.1	1.800	7.9			0.02	4.7		25.4		
23	7.2	165	212	24.0	1.916	7.8	1.2	1.3		5.1		25.2	99.3	99.4
24	7.1			23.8	1.935	7.8				5.6		24.2		
25	7.2			23.8	2.074	7.7				5.3		24.2		
26	7.3			24.0	1.906	7.8				5.2	< 20	24.7		
27	7.2			23.7	2.303	7.7				5.6		24.3		
28	7.2			22.9	1.761	7.7				5.8		23.8		
29	7.1			23.2	1.626	7.7			0.02	5.8		23.9		
30	7.2	135	198	23.5	2.021	7.7	1.1	1.8		4.4		23.9	99.2	99.1
31	7.2			22.5	3.252	7.6				5.7		23.0		
Total					62.609									
Avg		182	246	24.0	2.020		1.2	1.3	0.04	5.3	< 20	25.0	99.3	99.4
Min	6.9	135	198	22.5	1.494	7.6	1.1	1.1	0.02	4.4	< 20	23.0	99.2	99.1
Max	7.4	223	324	24.8	3.252	8.0	1.3	1.8	0.07	5.9	< 20	26.3	99.4	99.6

MONTHLY MONITORING					QUARTERLY MONITORING					
DATE	Oil & Grease mg/L	Selenium µg/L	SM1 Hardness mg/L	SM2 Hardness mg/L	Phosphorus mg/L	SM1 Phosphorus mg/L	T. Nitrogen mg/L	SM1 T. Nitrogen mg/L	TR. Cadmium ug/L	TR. Copper µg/L
1										
2										
3										
4										
5										
6										
7										
8	< 4.8	< 1.0	348	326						
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Total	< 4.8	< 1.0	348	326						
Avg	< 4.8	< 1.0	348	326						
Min	< 4.8	< 1.0	348	326						
Max	< 4.8	< 1.0	348	326						

OPERATIONAL CONTROLS/LABORATORY TEST REQUIRED FOR "ACTIVATED SLUDGE" PROCESSES

DATE	SLUDGE DISP. LBS. DRY WEIGHT	#1 Aeration Basin, O-Ditch, Etc.				#2 Aeration Basin, O-Ditch, Etc.				*Weather Conditions		
		MIXED LIQUOR				MIXED LIQUOR				Outside * Ambient Temp ° F	*RAIN inches	Time
		* DO mg/l	** MLSS mg/l	*Settleability		* DO mg/l	** MLSS mg/l	*Settleability				
				*30 min ml	Temp ° C			*30 min ml	Temp ° C			
1		1.2	6,130	860	24.8	1.2	5,810	860	24.7	71	0.2	7:30
2		1.4	6,000	850	24.5	1.5	5,700	840	24.7	68	0	7:30
3		1.5	6,230	860	24.2	1.5	5,700	850	24.2	68	0	7:30
4		1.5	6,040	850	24.3	1.6	5,110	800	24.2	69	0	7:30
5		1.3	6,670	890	24.6	1.2	5,380	810	24.6	66	0	7:30
6		1.8	6,450	890	25.6	1.9	5,650	800	25.3	74	0	7:30
7		2.0	6,580	860	24.9	2.0	5,810	850	24.9	73	0.75	7:30
8		1.8	6,260	880	24.4	1.7	5,660	830	24.4	68	0	7:30
9		0.9	5,930	850	25.1	1.0	5,640	860	25.0	70	0	7:30
10		1.4	5,910	840	24.8	1.7	5,640	840	24.8	73	0	7:30
11		1.1	5,390	800	25.5	1.1	5,250	800	25.5	76	0.1	7:30
12		0.9	6,100	850	26.0	1.1	5,890	850	26.0	75	0	7:30
13		1.2	5,840	850	25.7	0.9	5,940	870	25.8	75	0.25	7:30
14		0.9	5,740	840	25.8	1.1	5,530	830	25.5	70	0	7:30
15		1.0	6,150	860	25.2	1.4	5,480	830	25.1	67	0	7:30
16		1.2	5,650	830	24.4	1.1	5,890	860	24.3	69	0.6	7:30
17		2.3	5,630	850	24.2	1.7	5,930	890	24.2	73	0	7:30
18		1.8	5,440	760	24.6	1.5	5,800	860	24.6	75	0	7:30
19		1.1	5,820	810	25.6	1.2	5,960	840	25.4	74	0	7:30
20		1.4	5,430	800	26.1	1.3	5,690	830	26.0	76	0	7:30
21		1.2	5,650	700	26.0	1.1	5,830	750	25.6	73	0	7:30
22		1.0	6,190	820	25.1	1.1	5,760	820	25.2	71	0.7	7:30
23		1.4	5,170	750	24.6	1.2	6,110	850	24.9	72	0	7:30
24		1.3	5,830	820	24.0	1.4	5,540	780	24.0	68	0	7:30
25		1.1	4,680	800	23.8	1.1	5,420	830	23.8	70	0	7:30
26		1.1	5,510	810	24.4	1.1	5,490	820	24.5	73	0.05	7:30
27		1.2	5,530	820	23.9	1.2	5,760	800	23.9	69	1.4	7:30
28		1.3	5,810	810	23.3	1.3	5,610	840	23.4	62	0	7:30
29		1.3	6,330	860	23.4	1.5	5,250	730	23.6	64	0	7:30
30		1.3	5,090	800	23.4	1.3	5,230	750	23.6	69	1.4	7:30
31		2.0	5,660	770	22.9	1.1	5,680	770	22.9	65	0.5	7:30
COMMENTS:												

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback		(573)365-0455	9/6/2019
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft		(573)365-0455	9/6/2019

*Required Daily (Monday - Friday)

**Required 1/week

PERMITTEE NAME/ADDRESS

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources
(REGIONAL OFFICE)
Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

NAME: Lake of the Ozarks Regional WWTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241			001 A			
PERMIT NUMBER			DISCHARGE NUMBER			
MONITORING PERIOD						
YEAR	MO	DAY	YEAR	MO	DAY	
2019	08	01	TO	2019	08	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
BOD, 5-day, 20 deg. C (00310)	REPORTD	*****	*****	*****	1.3	1.8	Weekly	24 Hour Composite
Stage Type: End of Pipe	REQRMNT	*****	*****	*****	Weekly Average: 45	Monthly Average: 30	Weekly	24 Hour Composite
BOD, 5-day, percent removal (81010)	REPORTD	*****	*****	*****	*****	99.2	Monthly	Calculated
Stage Type: End of Pipe	REQRMNT	*****	*****	*****	*****	Monthly Average Minimum: 85	Monthly	Calculated
Escherichia coli (E. coli) (51040)	REPORTD	*****	*****	*****	<20	<20	Weekly	Grab
Stage Type: End of Pipe	REQRMNT	*****	*****	*****	7 Day Geometric Mean: 630	30 Day Geometric Mean: 126	Weekly	Grab
Flow, in conduit or thru treatment plant (50050)	REPORTD	3.252	2.020	*****	*****	*****	Daily	Total Measured
Stage Type: End of Pipe	REQRMNT	Daily Maximum: Monitoring Required	Monthly Average: Monitoring Required	*****	*****	*****	Daily	Total Measured
Nitrogen, ammonia total (as N) (00610)	REPORTD	*****	*****	0.07	*****	0.04	Weekly	Grab
Stage Type: End of Pipe	REQRMNT	*****	*****	Daily Maximum: 6.0	*****	Monthly Average: 1.1	Weekly	Grab
Oil and grease (soxhlet extr.) tot. (00550)	REPORTD	*****	*****	<4.8	*****	<4.8	Monthly	Grab
Stage Type: End of Pipe	REQRMNT	*****	*****	Daily Maximum: 15	*****	Monthly Average: 10	Monthly	Grab
pH (00400)	REPORTD	*****	*****	7.6	*****	8.0	Weekly	Grab
Stage Type: End of Pipe	REQRMNT	*****	*****	Minimum: 6.5	*****	Maximum: 9.0	Weekly	Grab

GENERAL PERMIT REQUIREMENTS OR COMMENTS:
OUTFALL-SPECIFIC COMMENTS:
PARAMETER-SPECIFIC COMMENTS:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Gary Hutchcraft		7305	
TYPED OR PRINTED NAME		CERTIFICATE NUMBER	
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE	
Gary F Hutchcraft	Gary F Hutchcraft	573-365-0455	
TYPED OR PRINTED NAME	SIGNATURE	2019-09-06 13:49:24	
		Date	

Page 1

PERMITTEE NAME/ADDRESS

State of Missouri
Department of Natural Resources
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Dep. of Natural Resources
(REGIONAL OFFICE)
Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

NAME: Lake of the Ozarks Regional WWTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241			001 A			
PERMIT NUMBER			DISCHARGE NUMBER			
MONITORING PERIOD						
YEAR	MO	DAY	YEAR	MO	DAY	
2019	08	01	TO	2019	08	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

Parameter		MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Selenium (Se), total recoverable (00981)	REPORTD	*****	*****	<1.0	*****	<1.0	Monthly	Grab
Stage Type: End of Pipe	REQRMNT	*****	*****	Daily Maximum: 9.1	*****	Monthly Average: 3.6	Monthly	Grab
Suspended Solids, percent removal (81011)	REPORTD	*****	*****	*****	*****	99.1	Monthly	Calculated
Stage Type: End of Pipe	REQRMNT	*****	*****	*****	*****	Monthly Average Minimum: 85	Monthly	Calculated
Total Suspended Solids (TSS) (00530)	REPORTD	*****	*****	*****	1.8	1.3	Weekly	24 Hour Composite
Stage Type: End of Pipe	REQRMNT	*****	*****	*****	Weekly Average: 45	Monthly Average: 30	Weekly	24 Hour Composite

GENERAL PERMIT REQUIREMENTS OR COMMENTS:
OUTFALL-SPECIFIC COMMENTS:
PARAMETER-SPECIFIC COMMENTS:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Gary Hutchcraft		7305	
TYPED OR PRINTED NAME		CERTIFICATE NUMBER	
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE	
Gary F Hutchcraft	Gary F Hutchcraft	573-365-0455	
TYPED OR PRINTED NAME	SIGNATURE	2019-09-06 13:49:24	
		Date	

Page 2

PERMITTEE NAME/ADDRESS

State of Missouri
Department of Natural Resources

Dep. of Natural Resources
(REGIONAL OFFICE)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Southwest Regional Office
2040 W. Woodland
Springfield, MO 65807-5912
4178914300
4178914399 (fax)

NAME: Lake of the Ozarks Regional WWTP 1
ADDRESS: #3 Anderson Road
LAKE OZARK, MO 65049

MO0103241		SM2 A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
YEAR	MO	DAY	YEAR
2019	08	01	2019
		MO	DAY
		08	31

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS
BEFORE COMPLETING THIS FORM.

Parameter	FROM	MASS	Unit	CONCENTRATION	Unit	FREQUENCY OF ANALYSIS	SAMPLE TYPE	LAB CODE
Hardness, total (as CaCO ₃) (00900)	REPORTD	*****	*****	326	*****	326	Monthly	Grab
Stage Type: Instream Monitoring	REQRMT	*****	*****	Daily Maximum : Monitoring Required	*****	Monthly Average : Monitoring Required	Monthly	Grab

GENERAL PERMIT REQUIREMENTS OR COMMENTS:

OUTFALL-SPECIFIC COMMENTS:

PARAMETER-SPECIFIC COMMENTS:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

OPERATOR IN RESPONSIBLE CHARGE			
Gary Hutchcraft		7305	
TYPED OR PRINTED NAME		CERTIFICATE NUMBER	
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE	
Gary F Hutchcraft	Gary F Hutchcraft	573-365-0455	
TYPED OR PRINTED NAME	SIGNATURE	2019-09-06 13:49:24	
		Date	

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LAKE OZARK/OSAGE BEACH WWTP

FOR AUGUST 2019

[illegible]

Use following abbreviations: P = positive; C = control; N = negative.

Decreased by
CH III



Bids for Spare UV Quartz Sleeves & Wipers

Bidder	Remaining Budget	Price each	Purchase Amount & Total
Vandevanter Eng.	\$5,240.18	Sleeves / \$141.75 ea.	20 sleeves - \$2,835.00
		Wipers / \$15.75 ea.	144 wipers - \$ 2,268.00
			\$5,103.00
Xylem Inc. (Wedeco)	"	Sleeves / \$135.00 ea.	20 sleeves - \$2,700.00
		Wipers/ \$15.00 ea.	144 wipers - \$ 2,160.00
			\$4,860.00
UV Doctor	"	Sleeve / \$133.00 ea.	20 sleeves - \$2,660.00
		Wipers / \$15.00 ea.	144 wipers \$2,160.00
			\$4,820.00

Freight is not included in any of these bids

Bids for HACH LBOD & Ammonia Probes

Bidder	Budget	Price each	Total Bid w/ freight
VWR	\$2,000.00	LBOD / \$	\$1,968.37
		Ammonia / \$	
HACH	"	LBOD / \$1,048.50	\$1,837.15
		Ammonia / \$717.25	
USA Bluebook	"	LBOD / \$1,009.85	\$1,727.08
		Ammonia / 690.65	

Bids for Crack filling & Sealcoat of Asphalt Parking Lot

Bidder	Remaining Budget	Total Bid
J & S Contruction	\$2,445.82	\$3,000.00
Bate Asphalt	"	\$2,295.00
Road Runners	"	\$1,400.00