# OSAGE BEACH/LAKE OZARK JOINT SEWER BOARD MEETING AGENDA JULY 16, 2013 4:00 p.m. LAKE OZARK CITY HALL

#### 1. CALL TO ORDER

#### 2. ROLL CALL

Penny Lyons, Mayor, Osage Beach
Johnnie Franzeskos, Mayor, Lake Ozark
Nancy Viselli, City Administrator, Osage Beach
Dave Van Dee, City Administrator, Lake Ozark
Don Langley, Alderman, Lake Ozark
John Olivarri, Alderman, Osage Beach
Rick King, Public Works Director, Osage Beach
Matt Michalik, Public Works Director, Lake Ozark
Gary Hamner

3. MINUTES	Page Numbers
Regular Meeting; June 26, 2013	3-5
4. REPORTS	
Bill List	7-20
Revenue Budget Analysis	22
Expenditure Budget Analysis	24
Income & Expense Summary	26
Cash Flow Analysis	28
Balance Sheet	30
Check Registers & Bank Statements	32-35
June 2013 Alliance and Flow Report	37-60

# 5. OLD BUSINESS

Magruder Litigation

#### 6. NEW BUSINESS

#### 7. DISCUSSION

#### 8. ADJOURNMENT

THE NEXT MEETING WILL BE AUGUST 20, 2013, 4:00 PM @ LAKE OZARK CITY HALL

# LAKE OZARK - OSAGE BEACH JOINT SEWER BOARD Meeting Minutes – June 26, 2013

# Call to Order:

Mayor Penny Lyons called the meeting to order at 4:52 p.m. at Osage Beach City Hall.

# Roll Call:

Present: Mayor Penny Lyons

Mayor John Franzeskos

City Administrator Nancy Viselli City Administrator, Dave Van Dee Osage Beach Alderman John Olivarri

Osage Beach Public Works Director, Rick King Lake Ozark Public Works Director, Matt Michalik

Gary Hamner

Absent: Lake Ozark Alderman, Don Langley

Others Present: Gary Hutchcraft, Plant Manager

Gary Johnson, Alliance Water Resources

Karri Bell, Osage Beach Treasurer

Mike Welty, Osage Beach Staff Accountant

# **MINUTES OF PAST MEETING:**

Mayor Penny Lyons noted a correction to the minutes that the spelling of Saxton is spelled Saxony. With that correction, Mayor John Franzeskos motioned to approve the minutes second by Gary Hutchcraft, all voted and unanimously approved.

**PUBLIC COMMENT:** None to report

**BILLS LIST:** Members reviewed. Gary Hamner pointed out that on the Budget Analysis report, on page 21, and the Cash Flow Analysis report, on page 25, that we are still on track but will if we don't get some outside funding or reimbursement, we will be short about \$50,000.00. It was discussed to delay the #1 Aeration Basin that is budgeted for \$45,000 by a year or two. Public Works Director, Rick King said it would not be a problem to delay it. The \$45,000 and the \$5,000 from the savings off the insurance policy can be used to pay attorney fees on the quarry litigation to compensate the \$50,000 shortage.

### **REPORTS:**

REVENUE BUDGET ANALYSIS
EXPENDITURE BUDGET ANALYSIS
INCOME & EXPENSE SUMMARY
CASH FLOW ANALYSIS
BALANCE SHEET
CHECK REGISTERS & BANK STATEMENTS

#### **ALLIANCE REPORT & FLOW CHARTS:**

Gary Hutchcraft went over the May 2013 summary report of operations, a copy of which was included in the meeting packet. Gary talked about the 8 year old lawn mower needs to be replaced. He currently has three (3) bids on it. The bid for the Kubota mower is the lesser of all three of \$4,449.99 which also includes a 4 year warranty. Mayor John Franzeskos motioned to approve the purchase of the Kubota mower; second by Public Works Director, Matt Michalik. All voted and unanimously approved. Mayor John Franzeskos motioned to approve the May 2013 Alliance Report and Flow Chart; second by Gary Hamner. All voted and unanimously approved.

# **OLD BUSINESS:**

Conference call with Steve Maur. Mr. Maur gave us an update on the litigation. He said the Commissioner has not made a ruling. The most recent development with the appeal on the Saxony Lutheran School case has recently been decided and that's what the Commissioner was waiting for. The Commission modified the permit from what was requested the mine boundaries and allowed and authorized a permit with conditions with a smaller area from what the original applicant requested. With that said, Steve Maur believes that she is not inclined to just grant the application submitted from Magruder. He thinks that it is a positive indication that she does not believe that a permit for the whole 205 acres would be warranted and justified. Steve thinks that since she has waited this long, if she's going to recommend anything for a permit, it will be somehow reduced from the request that Magruder has made for the whole 205 acres, and it could be just the 90 acres that was first submitted. He does not think she is going to ask us for any conditions at this point. We could expect a decision within a couple of months. Mayor Lyons asked how is the Lutheran School case applicable with the treatment plant. Steve replied and said because of the legislative ruling that said you have to be within 1000 feet of the school, the blasting had impacted our sewage treatment plant and the blasting was further away from the 50 feet boundary that they want to have. He doesn't think she is going to find anything in the record to point to a safe distance away from the sewage treatment plant. Gary Hamner asked how can we recover legal fees. Steve said if we prevail in front of the Commissioner, and the permit is denied, he thinks the judge will award us all our legal fees. If we don't win, we should re-coop some of the legal fees.

**NEW BUSINESS:** None to report

<u>OPEN DISCUSSION</u>: City Administrator, Dave Van Dee was approached by Alderman Don Langley to pass on a suggestion to the sewage treatment plant that he has experience with solar power. Gary mentioned that only the office could be solar powered.

# **ADJOURMENT:**

With nothing further to discuss, the meeting was adjourned at 5:30 pm. The next regularly scheduled meeting is Tuesday, July 16, 2013, 4:00 pm. at Lake Ozark City Hall.

Penny Lyons Mardonna Phillips
Mayor, Osage Beach Joint Sewer Clerk, Lake Ozark

# JOINT SEWER BOARD BILL LIST July 16, 2013

OPERAT EQUIPM	'ING FUNI ENT REPI	D BILLS PAID PRIOR TO BOARD M D BILLS TO BE PAID: LACEMENT FUND BILLS PAID PRI LACEMENT FUND BILLS TO BE PA	IOR TO BOARD MEETING:	\$ \$ \$	47,353.13
			TOTAL	\$	47,353.13
OPERAT	ING FUNI	D BILLS PAID PRIOR TO BOARD N	MEETING:		
Account	Check	Paid To:	Description:		Amount:
			TOTAL	\$	-
OPERATI	NG FUND	BILLS TO BE PAID:			
Account 4170 4000 4170 4020 4160 4220 4020 4020	Check 3307 3308 3308 3309 3310 3311 3312 3313	Paid To: Alliance Water Resources, Inc. Equipment Replacement Fund Equipment Replacement Fund Alliance Water Resources, Inc. Alliance Water Resources, Inc. Zerger & Mauer Crown Powe & Equip Vandevanter Eng	Description: June 2013 Management Fee New Basin -Loan Payment Payment into ER Fund Misc Repair/Main Hauled Waste Magruder Lawsuit Partial Payment Riding Lawn Mower UV panel repair	\$\$\$\$\$\$\$\$	Amount: 23,450.82 2,330.12 3,467.17 720.71 570.00 10,000.00 4,449.00 2,365.31
				\$	47,353.13
EQUIPME	NT REPLA	ACEMENT FUND BILLS PAID PRIC	OR TO BOARD MEETING:		
Account	Check	Paid To:	Description:		Amount:
				\$	~
EQUIPMEN Account	NT REPLA Check	CEMENT FUND BILLS TO BE PAIL Paid To:	D: Description:	,	Amount:
				\$	-

# Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

# **INVOICE**

invoice No:

5683

SOLD TO

01-Jul-13

Lake Ozark/Osage Beach Joint Utility Board

c/o Karri Bell

**Customer No:** 

20220

City of Osage Beach 1000 City Parkway

Terms:

30 days

Osage Beach, MO 65065

REFERENCE	DESCRIPTION	AMOUNT
		1
	Wastewater Plant operating service for month of: Jul-13	
	Base Fee	\$23,450.82
	Dase ree	\$25,100.02
	TOTAL DUE	\$23,450.82

P8

# Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

INVOICE

5684

SOLD TO:

Lake Ozark/Osage Beach Joint Utility Board c/o Karri Bell City of Osage Beach

**Customer No:** 

Invoice Date:

invoice No:

20220

1000 City Parkway Osage Beach, MO 65065

Terms:

30 days

01-Jui-13

REFERENCE	DESCRIPTION	AMOUNT
	John Henry Foster - 1 Invoice - 50%	\$267.18
	Menards - 1 Invoice - 50%	\$104.00
	The Home Depot - 1 Invoice - 50%	\$443.58
	The Home Depot (3/4HP Sump Pump Returned)- 1 Invoice - 50%	(\$94.05)
	TOTAL DUE	\$720.71

DO



pheumatic and hydraulic equipmen

REMIT TO: P.O. BOX 419161

Creve Coeur, MO 63141-9161

Ph (314) 427-0600 Fax (314) 427-3502 Invoice # 01248535

Page # 1

Date 06/28/2013

" ORIGINAL INVOICE "

We accept Visa and Mastercard

SOLD TO

Account #: 30796

ALLIANCE WATER RESOURCES

#3 ANDERSON ROAD P.O. BOX #1985

LAKE OZARK, MO 65049-

**SHIP TO** 30796

ALLIANCE WATER RESOURCES

#3 ANDERSON ROAD P.O. BOX #1985

LAKE OZARK, MO 65049-

Customer PO Number	Ship Date	Salesperso	n			Terms	Order Date
GARY HUTCHCRAFT	06/27/2013	Neil Burton	among the speech bit among the first H			Net 20 Days	06/21/2013
JHF Order #	Order Entered By	P	aced By	******		Ship <b>V</b> i	a
01529066	Dave Huber	GARY	1UTCHCRAF	Т		UPS	
Part Number / Descrip	tion	Ordered	Shipped	Backe	order	Price Ea.	Extension
1134-00760		2	2		0	256.16	512.3
	S-20 312.89		<b>\$</b> 267,	18		FOFTING JUL 0 1 28	13



# How are we doing? How can we help you? Please send us a note. feedback@jhf.com

Review and place orders at www.jhf.com!	Subtotal	Freight	Sales Tax	TOTAL			
	512.32	22.03	45.72	580.07			
	į.		<u></u>	***************************************			

QF-03-02 10-1-2005

Subject to Terms and Conditions at http://www.jhf.com/terms\_of\_purchase.htm



# MENARDS - LAKE DZARK 1015 Barred Owl Lane Lake Ozark, MO 65049

KEEP YOUR RECEIPT
RETURN POLICY VARIES BY PRODUCT TYPE

Unless noted below allowable returns for items on this receipt will be in the form of an in store credit voucher if the return is done after 09/16/13



Sale Transaction

1 1/2" RUBBER CHECK VALV	
0.11562	8.99
1'2HP CASTIRON SEWAGEPUM	D0
1311678	199.00
:UTAL	207.99
HILLER/LAKE U-MO TAX 7.975%	16.59
OTAL SALE	224.58
Menard Commercial Card 3423	224.58
ง10688	
Swiped	
PO # gary	

SUMP PUMP FOR RAS BASEMENT

TOTAL NUMBER OF ITEMS =

**GUEST COPY** 

The Cardholder acknowledges receipt of goods/services in the total amount shown hereon and agrees to pay the card issuer according to its current terms.

THIS IS YOUR CREDIT CARD SALES SLIP PLEASE RETAIN FOR YOUR RECORDS.

DO = The following item, if opened or defective, cannot be returned due to health and sanitary hazards. For Decko sewage pump warranty issues/concerns or claims call 800-495-9278.

THANK YOU, YOUR CASHIER, Caitlan

2/4/4 OB SIGNO CONTROLLY 10.23AM SIGNO

DEPENDENT DESCRIPTION OF THE PROPERTY OF THE P

GL Acct#: 6705-20 \$120.58 1220-20 \$104.00 4020 Signature: Ray PH. I. V. (200)

Date: 6/18/13



4030 HWY 54 OSAGE BEACH, MO 65065 (573)348-0082

3027 00056 84204 06/11/13 01:49 PM CASHIER SELF CHECK OUT - SC0T56

130.00N

198.00

0000-200-637 3 YR REPAIR <A,U> 130 3 YR REPAIR PLAN \$500-\$799.99 022315345799 3/4HP SUMP <A> 198 3/4HP CAST IRON PROFESSIONAL SUMP MAX REFUND VALUE \$188.10 04823136805 LW2511ER <A> 599

599.00 24,500 BTU WINDOW A/C W/REMOTE MAX REFUND VALUE \$569.05

-----5% Off Credit Offer-----

No Deferred

797.00 5% Off Credit Offer MUST RETURN ALL ITEMS FOR A FULL REFUND

SUBTOTAL SALES TAX 887.15 - 1 58.49

TOTAL XXXXXXXXXXXXX6759 HOME DEPOT AUTH CODE 011299/2563163

\$945.64 945.64

CREDIT PROMOTION 6737

8970

ALLIANCE WATER RESOURCES WATER RESOURCES ALLIANCE

P.O.#/JOB NAME: GARY

<u> - NON-DISCOUNTABLE ITEM



3027 56 84204 06/11/2013 0858

RETURN POLICY DEFINITIONS
POLICY ID DAYS POLICY EXPIRES ON
1 90 09/09/2013 THE HOME DEPOT RESERVES THE RIGHT TO LIMIT / DENY RETURNS. PLEASE SEE THE RETURN POLICY SIGN IN STORES FOR DETAILS.

BUY ONLINE PICK-UP IN STORE AVAILABLE NOW ON TOTAL DESCRIPTION.

-RETURNED

GL Acct#: 6705-20 502.06 1220-20 443.58 4020

Signature:

Date:

P12



# More saving. More doing."

4030 HWY 54 OSAGE BEACH, MO 65065 (573)348-0082

3027 00012 42882 06/11/13 03:11 PM CASHIER TODD - IJD090 \* ORIG REC: 3027 056 84204 06/11/13 TA \*

022315345799 3/4HP SUMP

-188.10

SUBTOTAL SALES TAX TOTAL

-188.10 -14.53 -\$202.63

XXXXXXXXXXXXXXX6759 HOME DEPOT INVOICE 2120747

REFUND-CUSTOMER COPY

BUY ONLINE PICK-UP IN STORF Control of the second of the s

CREDIT

6705-20 108.58 1220-20 94.05 4020

Signature:

# Alliance Water Resources, Inc.

Professional Water and Wastewater Operations 206 South Keene Street Columbia, Missouri 65201 (573) 874-8080 Fax (573) 443-0833

INVOICE

5682

Invoice Date:

Invoice No:

30-Jun-13

Lake Ozark/Osage Beach Joint Utility Board

**Customer No:** 

20220

c/o Karri Bell

City of Osage Beach 1000 City Parkway

Terms:

30 days

Osage Beach, MO 65065

REFERENCE	DESCRIPTION		AMOUNT
REFERENCE	DESCRIPTION  Hauled waste payments for the month of  Hauled waste load @ \$10.00 each  11 Hauled waste load @ \$50.00 each	Jun-13	\$20.00 \$550.00
		TOTAL DUE	\$570.0

P14

# Zerger and Maur LLP Balance Sheet

Date	Description	Amount
11/19/2012	Statement # 2006	\$ 103,768.83
12/13/2012	Check # 3255	\$ (27,187.56)
12/28/2012	Statement # 2095	\$ 9,210.13
1/15/2013	Check # 3265	\$ (6,133.55)
1/30/2013	Statement #2170	\$ 13,235.39
2/19/2013	Check # 3273	\$ (10,000.00)
2/19/2013	Statement #2236	\$ 9,869.73
3/26/2013	Check # 3281	\$ (10,000.00)
4/16/2013	Check # 3291	\$ (10,000.00)
4/30/2013	Statement #2399	\$197.32
5/10/2013	Check # 3298	\$ (10,000.00)
5/30/2013	Statement #2596	\$127.62
6/24/2013	Statement #2689	\$929.92
6/26/2013	Check # 3306	\$ (10,000.00)
	Current Balance	\$ 54,017.83
7/16/2013	Check # 3311 (Pending)	\$ (10,000.00)
	New Balance	\$ 44,017.83

City of Osage Beach Account No. 1014.0002 RE: Magruder

Statement Date: 06/24/2013 Statement No. 2689 Page No. 2

929.92 Total Current Work

\$73,087.91 Previous Balance

**Payments** 

-10,000.00 Payment 05/24/2013

> \$64,017.83 Balance Due

Federal ID Na. 27-5426971



# PRIVILEGED & CONFIDENTIAL

City of Osage Beach c/o Nancy Viselli 1000 City Parkway Osage Beach, MO 65065

Account No.

1014.0002

RE: Magruder

Statement Date: 06/24/2013 Statement No.

2689 1

Page No.

Fees

	rees			
05/44/0042		Rate	Hours	
05/14/2013 SEM	Telephone conference with E. Rucker regarding decision in Saxony School case; prepare notes regarding same. NO CHARGE	280.00		
05/15/2013 MLR	Review and analyze opinion from Missouri Court of Appeals regarding authority of Commission to condition quarry permit; communicate internally regarding same.	250.00	0.60	150.00
05/16/2013 SEM	Prepare letter to E. Rucker regarding Saxony School case; attorney conference regarding preparing supplemental briefing to Commissioner Winn regarding same. NO CHARGE	280.00		
05/29/2013 MLR	Draft and revise supplemental brief to address issues raised by recent decision from Missouri Court of Appeals regarding authority of LRC to modify permit.	250.00	3.10	775.00
05/31/2013 SEM	Attorney conference regarding denial of permit by LRC for quarry permit in Taney County; prepare notes regarding same. NO CHARGE For Current Services Rendered	280.00	3.70	925.00
	Expenses			
05/17/2013 05/17/2013	Photocopy charges Postage Total Expenses			3.40 1.52 4.92

# CROUN

# Power and Equipment

3369 Hwy 52 West PO Box 152 Eldon, MO 65026 Phone:

573-392-0230

Toll free:

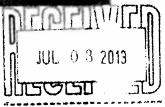
866-392-0230

Fax:

573-392-1888

E-mail:

cpe.eld@crown-power.com



Invoice #

ice# 2540E

# INVOICE

BILL TO:

SHIP TO:

Joint Sewer Board

PO Box 1985

Lake Ozark MO 65049

5

Date

7/3/2013

PO# 1046-20

Alliance Water Resources, Inc.	
#3 Anderson Rd	
Lake Ozark MO 65049	

Qty	Make	Model	Description	Serial	Unit Price	Total
1	Kubota	ZG123S-48	Zero Turn Mower w/48" Deck	11501	\$ 4,949.00	\$ 4,949.00
			for RTV400 Utility vehicle			
1	Craftsman	GT5000	Trade-in Mower	031105B001804	\$ (500.00)	\$ (500.00)
			Government - Tax Exempt			
						<b>*</b> 4.40.00

4020

Please mail payments to:

Crown Power & Equipment Co. PO Box 152 Eldon, MO 65026

Attn: Pat Wittrock

Questions and Inquiries: 866-392-0230

# **INVOICE**



Remit to: P.O. Box 411832 - Dept. 100 Kansas City, MO 64141-1832

1-816-221-0650

INVOI	CE
52922	42
Invoice Date	Page
07/09/2013	I of 2
ORDER NU	<b>IMBER</b>
123028	38

Bill To:

Joint Sewer Board c/o Alliance Water Resources Lake Ozark, MO 65049 Ship To:

Alliance Water Resources #3 Anderson Road ATTN: UV System Repair Lake Ozark, MO 65049

Ordered By: Mr. Gary Hutchcraft

Customer ID: 301774

	PO N	umber			Term Description Net Due Date Disc Due D			ue Date	Discou	nt Amount
					Net 30	8/8/2013	8/8/	2013		.00
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/12/2013 14	:20:23	3289891			Brandon i	Vienaber		TAN	1MY VUYL	STEKE
	Qu	antities			Item ID					
Ordered	Shipped	Remaining	<i>UОМ</i>	Disp.	Item Description		Pricing UOM		Unit Price	Extende Price
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# **INVOICE**



Remit to: P.O. Box 411832 - Dept. 100 Kansas City, MO 64141-1832 1-816-221-0650

INVOI	CE					
52922	42					
Invoice Date	Page					
07/09/2013 2 of 2						
ORDER NU	JMBER					
12302	88					

			Item ID			antities	Qua	
Extended Price	Unit Price	Pricing UOM	Item Description	Dlsp.	иом	Remaining	Shipped	Ordered
			Signal Converter Interface					
			2814508	d As:	Ordere			
1540.3	tal Parts Price:	To						
			Labor					
		HR	L25		HR	0.0000	5.5000	5.5000
			Technical Solutions Group (TSG) Labor					
		HR	L25		HR	0.0000	2.0000	2.0000
225.00	al Labor Price:	Tot	Technical Solutions Group (TSG) Labor					
825.00	ui Luvor Price:	100						
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114.38	i Sales Tax :	Missour						
114.38	MT (credit) :	MEMO A						
2,365.31	OUNT DUE:	AMO						
2013: 2402.51	ount Due after 8/8/2	Am						

All past due invoices are subject to a 1.5% per month finance charge.



			6/30/2013				
Account		2011	2012	2013	2013	2013	Percent
Number	Number Account Name	Actual	Actual	Budget	Actual as of 6/30/2013	June Revenue	YTD
3020	Osage Beach	399,428.80	403,305.55	451,000.00	223,696.82	36,992.19	20%
3010	Lake Ozark	90,571.18	86,694.44	99,000.00	46,303.18	8,841.14	47%
3100	Interest	804.37	537.49	200.00	21.95	3.44	11%
3060	Waste Haulers' Fee	39,457.00	40,820.00	38,000.00	19,560.00	4,700.00	51%
	Total Operating Fund	530,261.35	531,357.48	588,200.00	289,581.95	50,536.77	49%
	E/R Fund Income	1,355.61	1,374.82	1,500.00	730.50	3.70	49%
	TOTAL INCOME	531,616.96	532,732.30	589,700.00	290,312.45	50,540.47	49%

# MONTH-TO-DATE AND YEAR-TO-DATE EXPENDITURE/BUDGET ANALYSIS 6/30/2013

Percent YTD	50% 13% 74% 03% 03% 00% 00% 00% 00%	5,000.00 2,000.00 500.00 2,000.00 6,000.00 6,000.00 6,000.00
2013 June Expenses	3,467.17 2,330.12 1,704.15 0.00 1,710.00 23,450.82 9,135.46 0.00 10,000.00 51,797.72	epair s w/ Fiberglass Software Fee se r Aain.
2013 Actual as of 6/30/2013	20,803.02 13,980.72 8,390.83 15,641.00 0.00 7,430.00 140,704.92 30,103.91 0.00 59,639.73 0.00 296,694.13	**Maintenance & Repair Paid 05/13 UV Spare Parts Replace Wooden drs w/ Fiberglass Auto Dialer Yearly Software Fee Rock for Road Normal Maintenance Riding Lawn Mower #1 Aeration Basin Main.
2013 Budget	41,606.04 27,961.44 66,500.00 21,000.00 3,000.00 74,000.00 1,750.00 67,000.00 591,817.48	Paid 05/13 U Ra
2012 Actual	41,606.04 27,961.44 88,400.79 20,962.00 5,649.28 8,000.00 272,948.40 60,862.46 1,700.00 168,904.97 0.00 696,995.38 5,368.50	67,000.00 67,000.00
2011 Actual	41,606.04 27,961.44 46,319.94 17,127.00 2,835.38 8,000.00 266,524.58 61,407.39 1,650.00 19,298.33 13,241.91 505,972.01 1,523.00	'
Account Name	Equipment Replace Fund ERF Repayment "Maintenance & Repair Insurance Vehicle Repair/Maint Haulers Fees to Contractor Contract Management Electric Audit ""Professional Service "Capital Purchases Totals "E/R Expenses	Normal/Magruder Lawsuit
Account	4000 4010 4010 4140 4150 4170 4220 4220 4240	

# OPERATING FUND INCOME AND EXPENSE SUMMARY 6/30/2013

Beginning Balance	29,341.85
Income - Osage Beach	36,992.19
Income - Lake Ozark	8,841.14
Income - Other	0.00
Income - Waste Haulers' Fees	4,700.00
Interest - Checking	3.44
Income - CD Interest	0.00
Transfers From E/R Fund	0.00
Transfers to E/R fund	-5,797.29
Expenses	-44,604.32
Ending Fund Balance	29,477.01
NOW Account - Central Bank	39,477.01
Outstanding Checks:	-10,000.00
Deposit in Transit:	0.00
	29,477.01

# EQUIPMENT REPLACEMENT FUND INCOME AND EXPENSE SUMMARY 6/30/2013

Beginning Balance	338,743.57
Interest - Checking	3.70
Income - CD Interest	0.00
Transfers From E/R Fund	5,797.29
Transfers to E/R Fund	0.00
Income - Miscellaneous	0.00
Expenses	0.00
Ending Fund Balance	344,544.56
NOW Account - First Bank	54,044.95
CD First National Bank, 07/13 #000048178	113,241.94
CD Providence Bank, 07/14	75,989.01
CD First National Bank, 07/13 #000049153	101,268.66
Deposit in Transit	0.00
Outstanding Checks:	0.00
	344,544.56

CASH FLOW ANALYSIS - OPERATING FUND 2013

		,			)	5								
Lake Ozark and Osage Beach	ŧ													
	JAN	FED	MAR	APR	MAY	N N	JOL	AUG	SEP	OCT	NOV	DEC	TOTAL	BUDGET
CASH BALANCE:	36,590	36,837	40,956	43,218	31,428	29,343	29,477	21,189	11,160	2,964	(3,731)	(10,094)		
Osage Beach	34,638	38,604	38,005	37,996	37,463	36,992	38,081	37,583	37,583	37,583	37,583	37,583	449,696	451.000
Lake Ozark	6,195	7,230	7,829	7,838	8,370	8,841	7,753	8,800	8.800	8,800	8.800	8,250	97,506	000'66
Interest	4		S	က	0	60	8	9	6	က	6	e	39	200
Waste Haulers' Fees	2,320	4.680	2,100	2,340	3,420	4,700	2,600	3,167	3,167	3,167	3,167	3,167	37,993	38,000
Transfers to ER Fund	(5.798)	(5.798)	9)	(5,797)	(5,797)	(5,787)	(5.798)	(5.798)	(5.798)	(5,798)	(5,798)	(5.798)	(69,569)	(69,567)
Equip & Bidg Repair/Main	(190)	(1.610)	(160)	(331)	(5,791)	(308)	(7,535)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(20,925)	(21,500)
#1 Aeration Basin						<del></del>	r	(000'6)	(000'6)	(9,000)	(000'6)	(000'6)	(45,000)	(45,000)
insurance				(15,641)		**********							(15,641)	(21,000)
Vehicle Repair/Main.		,	•	,	,	,	(200)	(200)	(200)	(200)	(200)	(200)	(3,000)	(3.000)
Hauters Fees to Contractor		(1,300)	9	(1,051)	(1,170)	(1,710)	(699)	,	,				(8,000)	(8,000)
Contract Management	(23,451)	_	(23	_	(23,451)	(23,451)	(23,451)	(23,451)	(23,451)	(23,451)	(23,451)	(23,451)	(281,411)	3
Electric	(3,472)		æ	(4,056)	(5,132)	(9,135)	(8,862)	(8,094)	(8,000)	(6.500)	(6,167)	(6,163)	(73,890)	
Audit								(1,750)					(1,750)	
Professional Services	(10,000)	(10.000)	(10,000)	(9,640)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(3.088)	(112,728)	(67,000)
							-						, ,	
	36,837	40,956	43,218	31,428	29,343	29,477	21,199	11,160	2,964	(3,731)	(10,094)	(10,090)		

# OPERATING FUND BALANCE SHEET

6/30/2013

DEBITS CREDITS

ASSETS CASH AND INVESTMENTS 29,477.01

ACCOUNTS PAYABLE DUE TO E.R. FUND - BASIN 13,739.30

EQUITY FUND BALANCE 15,737.71

TOTAL OPERATING FUND 29,477.01 29,477.01

# **EQUIPMENT REPLACEMENT FUND**

BALANCE SHEET 6/30/2013

DEBITS CREDITS

ASSETS CASH AND INVESTMENTS 344,544.56

ACCOUNTS RECEIVABLE DUE FROM OPERATING FUND - BASIN 13,739.30

EQUITY FUND BALANCE 358,283.86

TOTAL EQUIPMENT REPLACEMENT FUND 358,283.86 358,283.86

# Operating Fund

CHECK REGISTER -	JOINT	<b>SEWER</b>	<b>BOARD</b>	<b>OPERATION FUND</b>
------------------	-------	--------------	--------------	-----------------------

	reconciled balance 4/30/13				41,427.41
3291	Zerger & Mauer	Х	10,000.00		31,427.41
3292	Ameren UE	Х	5,132.47		26,294.94
3294	Alliance Water Resources, Inc.	Х	23,450.82		2,844.12
3295	Alliance Water Resources, Inc.	Х	5,797.29		(2,953.17)
3296	Alliance Water Resources, Inc.	Χ	727.35		(3,680.52)
3297	Alliance Water Resources, Inc.	Х	1,170.00		(4,850.52)
3299	UV Doctor	Х	3,668.16		(8,518.68)
3300	G & L. Welding	Χ	1,396.11		(9,914.79)
	Deposit	Х		37,462.85	27,548.06
	Deposit	Х		8,370.49	35,918.55
	Deposit	Х		3,420.00	39,338.55
	Interest	Х		3.30	39,341.85
	reconciled balance 5/31/13				39,341.85
3298	Zerger & Mauer	Х	10,000.00		29,341.85
3301	Ameren UE	Х	9,135.46		20,206.39
3302	Alliance Water Resources, Inc.	Х	23,450.82		(3,244.43)
3303	Alliance Water Resources, Inc.	X	5,797.29		(9,041.72)
3304	Alliance Water Resources, Inc.	Х	308.04		(9,349.76)
3305	Alliance Water Resources, Inc.	Χ	1,710.00		(11,059.76)
	Deposit	Х		38,085.59	27,025.83
	Deposit	Χ		7,747.74	34,773.57
	Deposit	Х		4,700.00	39,473.57
	Interest	Χ		3.44	39,477.01
	reconciled balance 6/30/13				39,477.01



P.O. Box 4500, Jefferson City, MO 65102 (573) 348-2761 001937

#### Return Service Requested

միութիկութիկիներինիններիներինինիներներ

Period Page 06/01/2013-06/28/2013 1 of 2

LAKE OZARK OSAGE BEACH JOINT SEWER TREATMENT PLANT BOARD

1000 CITY PKWY **OSAGE BEACH MO 65065-3058** 

М

Web Address

www.cbolobank.com

000007297 M

6

# Your Financial Summary on June 28, 2013

#### **Account Balances & Other Assets**

Checking Total

4

39,477.01

39,477.01

# Detailed Explanation of Account Balances and Other Assets

# **Basic Plus Interest Checking**

No. 000007297 Beginning Balance May 31, 2013 \$ 39,341.85

Deposits

June 13Deposit 8,841.14 June 13Deposit 36,992.19 June 14Deposit 3,900.00 June 27Deposit 800.00 June 28Interest Earned 3.44

**Total** +\$ 50,536.77

Checks

Check No.	Date Paid	Amount	Check No.	Date Paid	Amount
3298	June 03	10,000,00	3303	June 28	5,797,29
3301	June 18	9,135.46	3304	June 28	308.04
3302	June 28	23,450.82	3305	June 28	1.710.00

Total -\$ 50,401.61

Ending Balance June 28, 2013 \$ 39,477.01

Number of days since last statement/interest cycle 30

Beginning and ending dates for calculation of statement/interest cycle are 06/01/2013 through 06/30/2013

Average collected balance 52,353.00

Interest rate 0.08%

Annual percentage yield earned 0.00%

# JSB - CHECK REGISTERS 2013.xls

CHE	CK REGISTER - JOINT SEWER	BO	ARD EQUIPME	NT REPLAC	EMENT FUND
	reconciled balance 7/31/12				96,695.16
	Interest	X		12.98	96,708.14
	Deposit	X		5,797.29	102,505.43
	reconciled balance 8/31/12				102,505.43
	Interest	X		15.89	102,521.32
	Deposit	X		5,797.29	108,318.61
	reconciled balance 9/30/12				108,318.61
	Interest	Χ		19.90	108,338.51
	Deposit	X		5,797.29	114,135.80
	reconciled balance 10/31/12				114,135.80
1002	Check	X	101,131.60		13,004.20
1003	Check	Χ	1,113.50		11,890.70
1004	Check	Χ	4,255.00		7,635.70
	Interest	X		13.90	7,649.60
	Deposit	Χ		5,797.29	13,446.89
	reconciled balance 11/30/12				13,446.89
	Interest	Χ		0.69	13,447.58
	Deposit	X		5,797.29	19,244.87
	reconciled balance 12/31/12				19,244.87
	Interest	X		1.20	19,246.07
	Deposit	X		5,797.29	25,043.36
	reconciled balance 1/31/13				25,043.36
	Interest	Χ		2.03	25,045.39
	Deposit	Χ		5,797.29	30,842.68
	reconciled balance 2/28/13				30,842.68
	Interest	Χ		2.45	30,845.13
	Deposit	Χ		5,797.29	36,642.42
	reconciled balance 3/31/13				36,642.42
	Interest	Χ		3.32	36,645.74
	Deposit	Χ		5,797.29	42,443.03
	reconciled balance 4/30/13				42,443.03
	Interest	Χ		3.64	42,446.67
	Deposit	Χ		5,797.29	48,243.96
	reconciled balance 5/31/13				48,243.96
	Interest	X		3.70	48,247.66
	Deposit	X		5,797.29	54,044.95
	reconciled balance 6/30/13				54,044.95



4558 Osage Beach Pkwy, Suite 100 536 00010 26 Osage Beach, MO 65065 (573) 348-2265

ACCOUNT: DOCUMENTS:

PAGE: 101318411 06/28/2013

84

LAKE OZARK-OSAGE BEACH JOINT SEWER BD.-TREATMENT PLANT BD. 1000 CITY PKWY OSAGE BEACH MO 65065-3058

NOTICE OF EXPIRATION OF THE TEMPORARY FULL FDIC INSURANCE COVERAGE FOR NONINTEREST-BEARING TRANSACTION ACCOUNTS

By operation of federal law, beginning Jan. 01, 2013, funds deposited in a noninterest-bearing transaction account (including an Interest on Lawyer Trust Account) no longer will recieve unlimited deposit insurance coverage by the Federal Deposit Insurance Corporation (FDIC). Beginning Jan. 01, 2013, all of a depositor's accounts at an insured depository institution, including all noninterest-bearing transaction accounts, will be insured by the FDIC up to the standard maximum deposit insurance amount (\$250,000), for each deposit insurance ownership category. For more information about FDIC insurance coverage of noninterest-bearing transaction accounts, visit http://www.fdic.gov/deposit/deposits/unlimited/expiration.html

BUSINESS MMDA ACCOUNT 101318411

LAST STATEMENT 05/31/13 48,243.96 2 CREDITS 5,800.99 DEBITS .00 THIS STATEMENT 06/28/13 54,044.95

- - - - - - - DEPOSITS - - - - - -REF #....DATE.....AMOUNT REF #....DATE.....AMOUNT REF #....DATE.....AMOUNT 06/27 5,797.29

---- OTHER CREDITS -----

DESCRIPTION DATE AMOUNT INTEREST 06/28 3.70

----INTEREST-----

AVERAGE LEDGER BALANCE: 48,658.05 INTEREST EARNED: AVERAGE AVAILABLE BALANCE:

48,243.96 DAYS IN PERIOD: 28 INTEREST PAID THIS PERIOD: 3.70 ANNUAL PERCENTAGE YIELD EARNED: .10% INTEREST PAID 2013: 16.34

\* \* \* CONTINUED \* \* \*





3.70



#### OPERATING DIVISIONS

MISSOUR!

**Bonne Terre** 

Boonville

**Bowling Green** 

**Buchanan County #1** 

Cameron

Cape Girardeau

East Central Missouri Water & Sewer Authority

Elsberry

Franklin County #1

Franklin County #3

Henry County Water Company

Henry County #3

Lake Ozark/ Osage Beach

Lincoln County #1

Nevada

**Parkville** 

Phelps County #2

Platte County #C-1

**Proctor & Gamble** 

Raffs County #1

Russellville

Sedalia

St Charles County #2

St Genevieve

Versailles

IOWA

Maquoketa

Tipton

TENNESSEE

South Fulton

#### REPORT OF OPERATIONS

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

Month of June 2013

Submitted by Alliance Water Resources, Inc. for the

July 2013

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-01013241. No leaks, no spills, and no unauthorized releases have occurred 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	рН	Fecal Coliform Colonies/100 ml
Monthly Average	1.1	1.2	NA	< 20
Peak Day	1.3	1.4	8.0	< 20
Percent Removal	99.5	99.5	NA	NA

#### NPDES EFFLUENT LIMITATIONS

	BOD mg/l	TSS mg/l	рН	Fecal Coliform Colonies/100 ml
Monthly Average Weekly Average	30 45	30 45	6-9	400 col/100 ml

#### PLANT HYDRAULIC AND ORGANIC LOADING

The average daily influent flow for the month was 1.613 MGD or 54% of Permitted flow with Lake Ozark contributing 17% of the total flow and Osage Beach contributing 83%. 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 94133 pounds of BOD.

#### BIOSOLIDS APPLICATION AND INVENTORY

Plant personnel land applied 54 tanker loads of bio-solids during the month equivalent to a total of 199,800 gallons and 62,210 pounds dry weight solids.

255,443 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 461,250 gallons with a level of 6.0 feet in Tank 1 and 3.0 feet in Tank 2.

#### **WASTEHAULERS**

The plant received 47 loads of septage during the month totaling 117,500 gallons.

#### WWTP OPERATIONS

- Decanting digesters and wasting weekly.
- Normal operations.
- We were able to leave one aerator in each ditch off again this month, including weekends.

#### **WWTP MAINTENANCE AND REPAIR**

- Performed routine maintenance throughout the month as per Antero Maintenance Data Management schedule. (New version of Operator 10 Software)
- We came in on the 3<sup>rd</sup> of June and noticed that the UV system was showing that we had 9.0 MGD going out our outfall, so we troubleshot it and found that it had taken some type of power surge through the signal side of the controls. We called Wedeco and ruled out that it was our flow meter, so we called our statewide rep., which is Vandevanter and they came out on the 13<sup>th</sup> of June and had to replace an I/O board. They also found an isolator relay switch was bad and had to have it overnighted in and we installed it on the 14<sup>th</sup> and everything seems to be working fine now.
- The AC unit in the UV room quit cooling on the 10<sup>th</sup> of June. I called Sears and they said it was
  no longer under warranty and the soonest that they could get a tech out was June 24<sup>th</sup> so we
  went to Home Depot and purchased a replacement that same day. We purchased the 3 year
  extended repair or replacement warranty, which will cover it through June 10, 2017.
- We had to replace the sump pump in the RAS basement on the 11<sup>th</sup> and it lasted until the 18<sup>th</sup> so we took it back and got a refund and went to another vendor and purchased another brand that same day and it seems to be working fine now.
- The air conditioner on the GMC sludge truck locked up on the way to a field to spread sludge on the 27<sup>th</sup>, so we took it to Roemers Truck repair on the 28<sup>th</sup> to have him check out what went wrong, and he said that it needed replaced and it would be around \$1,000.00 for a new compressor, dryer, freon and labor.

#### SAFETY

• We conducted our monthly routine Safety Meeting on Confined Space Entry on the 6th of June.

#### REGULATORY AGENCY, INSPECTION AND REPORTS

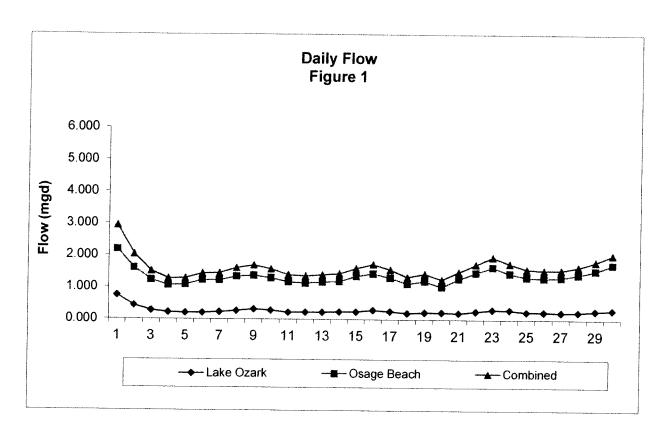
- Mailed DMR to MDNR on the 8<sup>th</sup> of July.
- We received our annual WET Test Lab results on the 24<sup>th</sup> of June and everything passed, which is excellent (see attachment)

#### MISCELLANEOUS AND RECOMMENDATIONS

# TABLE A LAKE OZARK/OSAGE BEACH WWTP

MONTH OF June 2013

DATE			F	LOW			В	OD 5 M	G/L	,	TSS MG	/L
	RAIN FALL IN.	LO mgd	OB mgd	COMB mgd	% LO	% ОВ	LO mg/l	OB mg/l	COMB mg/l	LO mg/l	OB mg/l	COMB mg/l
1-Jun	2.75	0.749	2.184	2.933	25.5	74.5						
2-Jun		0.433	1.605	2.038	21.2	78.8						
3-Jun		0.276	1.229	1.505	18.3	81.7						
4-Jun		0.218	1.059	1.277	17.1	82.9						
5-Jun		0.202	1.083	1.285	15.7	84.3						···
6-Jun	0.2	0.205	1.228	1.433	14.3	85.7						
7-Jun		0.228	1.219	1.447	15.8	84.2	145	213	225	100	238	24
8-Jun		0.268	1.338	1.606	16.7	83.3						
9-Jun		0.318	1.369	1.687	18.9	81.1					j	
10-Jun	0.2	0.281	1.292	1.573	17.9	82.1						
11-Jun		0.223	1.171	1.394	16.0	84.0						
12-Jun		0.221	1.135	1.356	16.3	83.7						
13-Jun		0.226	1.172	1.398	16.2	83.8						
14-Jun		0.243	1.191	1.434	16.9	83.1	248	263	273	244	308	32
15-Jun		0.245	1.352	1.597	15.3	84.7						
16-Jun	0.2	0.294	1.435	1.729	17.0	83.0						
17-Jun	0.25	0.255	1.307	1.562	16.3	83.7						
18-Jun		0.206	1.124	1.330	15.5	84.5						
19-Jun	0.2	0.230	1.206	1.436	16.0	84.0						
20-Jun		0.227	1.028	1.255	18.1	81.9						
21-Jun		0.213	1.283	1.496	14.2	85.8	180	223	230	128	220	22
22-Jun		0.261	1.469	1.730	15.1	84.9						
23-Jun		0.315	1.643	1.958	16.1	83.9						
24-Jun		0.305	1.448	1.753	17.4	82.6						
25-Jun		0.249	1.331	1.580	15.8	84.2						
26-Jun		0.245	1.302	1.547	15.8	84.2						
27-Jun		0.229	1.322	1.551	14.8	85.2						
28-Jun	0.75	0.239	1.416	1.655	14.4	85.6	170	203	205	122	228	23
29-Jun		0.278	1.539	1.817	15.3	84.7						
30-Jun		0.303	1.725	2.028	14.9	85.1						
SUM	4.6	8.185	40.205	48.390								
AVG		0.273	1.340	1.613	17	83	186	226	233	149	249	259



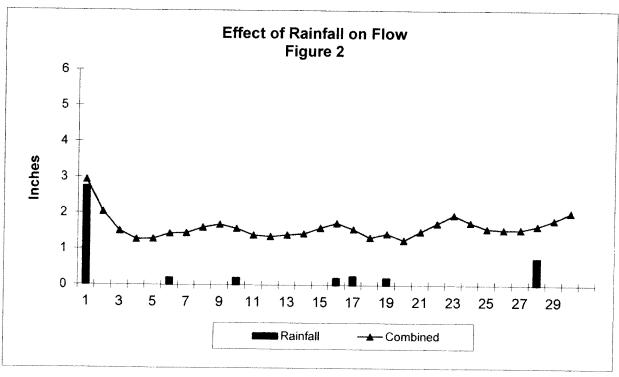
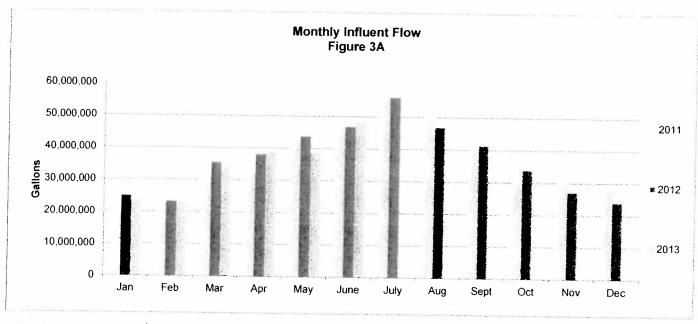
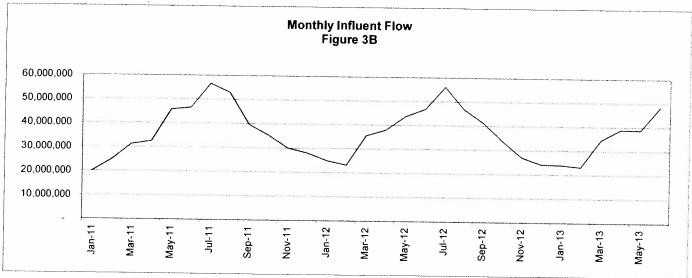
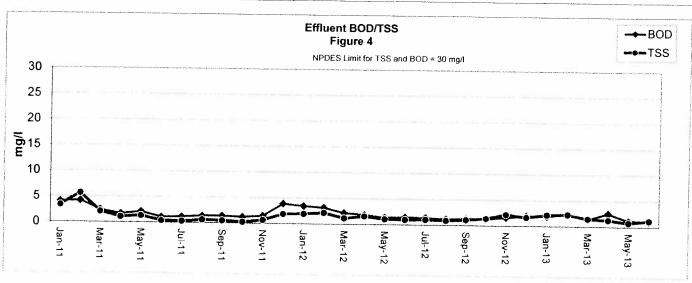


TABLE B
JOINT SEWER BOARD
Monthly Flows

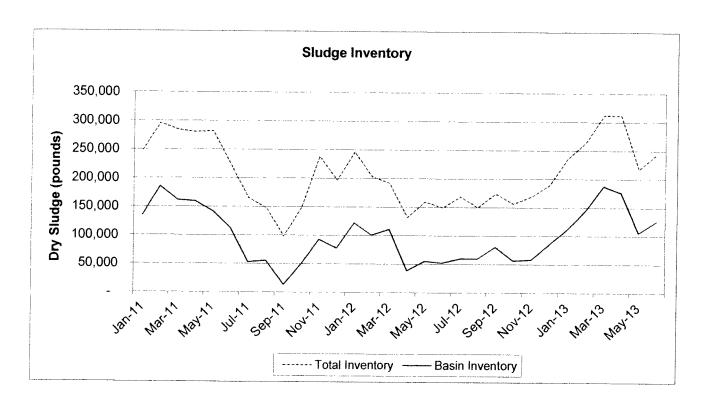
2011	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
2011	0.8	15,566,000	78%	4,395,000	22%	19,961,000	100%
January February	4.8	19,737,000	80%	5,030,000	20%	24,767,000	100%
March	4.7	25,055,000	80%	6,183,000	20%	31,238,000	100%
	4.7	26,299,000	81%	6,158,000	19%	32,457,000	100%
April	11.8	37,286,000	81%	8,523,000	19%	45,809,000	100%
May	4.4	38,748,000	83%	7,821,000	17%	46,569,000	100%
June	0.3	47,316,000	84%	9,297,000	16%	56,613,000	100%
July	6.5	44,175,000	84%	8,704,000	16%	52,879,000	100%
August	0.3 2.7	32,672,000	82%	6,999,000	18%	39,671,000	100%
September		28,932,000	82%	6,388,000	18%	35,320,000	100%
October	2.3 5.6	24,495,000	81%	5,589,000	19%	30,084,000	100%
November			81%	5,298,000	19%	28,087,000	100%
December	3.5	22,789,000	8176	3,296,000	17/0	28,087,000	10070
	52.1	363,070,000	81%	75,087,000	19%	443,455,000	100%
						PROJECT A T	0/
2012	<u>RAINFALL</u>	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	0.7	20,401,000	82%	4,577,000	18%	24,978,000	100%
February	2.4	18,682,000	80%	4,563,000	20%	23,245,000	100%
March	6.3	28,720,000	81%	6,779,000	19%	35,499,000	100%
April	8.0	30,919,000	81%	7,049,000	19%	37,968,000	100%
May	1.6	35,910,000	82%	7,801,000	18%	43,711,000	100%
June	1.4	39,021,000	83%	7,841,000	17%	46,862,000	100%
July	1.4	46,676,000	83%	9,443,000	17%	56,119,000	100%
August	1.0	39,227,000	84%	7,571,000	16%	46,798,000	100%
September	6.5	34,629,000	84%	6,696,000	16%	41,325,000	100%
October	3.6	28,634,000	85%	5,240,000	15%	33,874,000	100%
November	1.1	22,996,000	85%	4,113,000	15%	27,109,000	100%
December	1.4	20,460,000	84%	3,832,000	16%	24,292,000	100%
			- AAA/	# # # # # A A A A A	1707	441 700 000	100%
	35.2	366,275,000	83%	75,505,000	17%	441,780,000	10076
2013	RAINFALL	OSAGE BEACH		LAKE OZARK		TOTAL	%
January	2.8	19,923,000	83%	4,104,000	17%	24,027,000	100%
February	4.2	19,290,000	83%	3,979,000	17%	23,269,000	100%
March	5.3	28,232,000	82%	6,308,000	18%	34,540,000	100%
April	<b>8</b> .7	31,410,000	81%	7,507,000	19%	38,917,000	100%
May	2.9	32,247,000	83%	6,560,000	17%	38,807,000	100%
June	4.6	40,205,000	83%	8,185,000	17%	48,390,000	100%
July	7.0	10,203,000	0570	•,,,,,,,,		,	
-							
August							
September							
October							
November							
December							
	28.5	171,307,000	82%	36,643,000	18%	207,950,000	100%

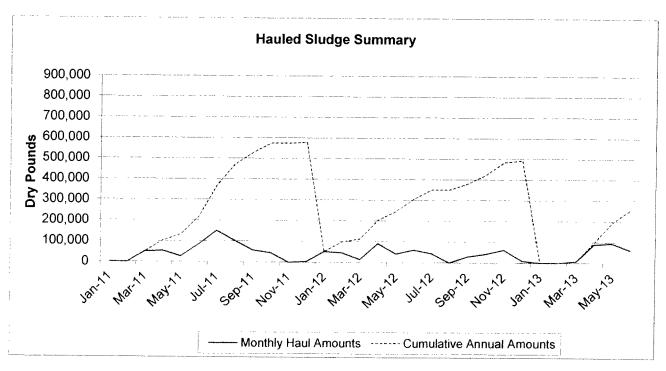






Accepted Septage	Gallons	45,000	15,000		70,300	101,500	96,000	127,500		3 175,000	42.500	3 45,500	37,500	3 43,500	7 42,500	103,500	7 86,500	3 65,000	5 138,000	90,000	3 80,000	7 91,500	3 76,500	2 66,500	3 120,000	9 65,000	3 110,000	1 52,500	60,000	5 85,500	7 117,500
Accepte	Loads	19	φ	25	27	39	36	51	47	99	11	#	15	¥	47	8	37	32	55	*	8	3	8	38	4	×	ቖ	7	7.	ř	4
Total Dry	% Solids Sludge Inventory	248,603	295,646	284,608	280,385	282,108	223,869	166,047	148,212	98,447	149,678	238,051	197,279	246,114	203,411	192,201	132,264	159,543	149,378	168,725	150.030	174,126	156,503	169,616	189,459	235,807	263,805	311,663	311,576	217,698	244,095
MLSS	% Solids S	0.00373	0.00358	0.00402	0.00384	0.00444	0.00353	0.00365	0.00298	0.00272	0.00321	0.00461	0 00385	0.00406	0.00338	0.0026	0.00297	0.00333	0.00313	0.00353	0.00292	0.003	0.00324	0.00353	0.00338	0.00407	0.00387	0.004	0.0043	0.0035	0.0037
SS Inventor	# Dry	113,495	109,872	122,615	120,761	139,958	111,156	112,917	92,700	85,001	99,524	145,165	119,585	124,002	102,483	81,016	93,682	104,365	608,96	109,093	90,399	93,521	99,758	111,156	104,081	124,155	119,314	123,915	135,084	111,767	117,994
Blanket and MLSS inventor	Gallons	3,653,286	3,679,929	3,657,238	3,775,666	3,779,618	3,775,666	3,714,476	3,736,190	3,753,952	3,723,357	3,775,666	3,724,334	3,662,167	3,635,524	3,736,190	3,788,499	3,757,904	3,714,476	3,705,595	3,718,428	3,744,094	3,691,785	3,775,666	3,697,691	3,662,167	3,696,714	3,714,476	3,766,785	3,828,952	3.828.952
	SS AB #2	3,930	3,580	3,940	4,540	3,920	3,560	3,550	3,110	2,900	2,940					2,310	3,060	3,590	2,690	3,410	2,390	2,910	3,320	3,090	2,720	4,010	3,740	4,050	4,130	3,040	3,540
MLSS Inventory	SS AB #1 MLSS AB #2	3,520	3,580	4,100	3,130	4,960	3,500	3,740	2,840	2,530	3,470	4,610	3,850	4,060	3,380	2,890	2,870	3,070	3,560	3,650	3,440	3,080	3,160	3,970	4,030	4,120	4,000	4,030	4,620	3,970	3,850
***************************************	Clarf #3 MLS	0.0	0.0	0.5	2.0	2.5	20	1.0	1,5	1,5	1.0	2.0	0.0	0.0	0.0	5.	2.5	2.0	1.0	<b>0</b> ∵	5.	2.5	1.5	2.0	0.0	0.0	1.0	1.0	2.0	2.0	2.0
Blanket Depths	Clarf #2 Cl	2.0	2.0	1,0	3.0	2.0	2.0	25	5.0	2.5	2.5	3.0	4.0	1.5	1.0	2.0	2.5	2.0	3.0	1.5	2.0	0.0	0.0	5.0	1.5	2.0	2.0	2.0	2.0	5.0	7.0
Blanke	Clarf #1 C	1.0	2.5	1.0	2.0	2.0	3.0	1,5	2.0	2.5	2.0	2.0	3.0	2.0	1.0	2.0	2.0	2.0	1.0	2.0	1,0	2.0	1.5	0.0	4.0	4.5	1.0	2.0	2.5	3.0	1,0
	# Dry	135,108	185,774	161,993	159,625	142,150	112,713	53,130	55,511	13,446	50,153	92,887	77,694	122,112	100,929	111,185	38,582	55,177	52,569	59,631	59,631	80,605	56,745	58,460	85,378	111,652	144,491	187,748	176,492	105,931	126,101
-	n Gallons	360,000	495,000	517,500	495,000	450,000	382,500	180,000	180,000	45,000	135,000	247,500	405,000	405,000	337,500	337,500	135,000	225,000	180,000	225,000	225,000	337,500	202,500	180,000	292,500	382,500	495,000	652,500	540,000	337,500	405,000
	AB #1 Basin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Basin Depths		2.5	5.0	4.0	4.0	4.5	5.0	0.0	2.0	1.0	3.0	2.5	3.0	3.5	3.0	2.0	1.0	2.0	3.0	0.0	2.5	3.0	0.0	2.0	1.5	2.5	5.0	6.5	6.0	4.0	3.0
Basi	Tank #1 Tank #2	5.5	6.0	7.5	7.0	5.5	3.5	4.0	2.0	0.0	0.0	3.0	9	5.5	4.5	5.5	2.0	3.0	1.0	5.0	2.5	4,5	4.5	2.0			9.0	8.0	6.0	3.5	6.0
The state of the s	% Solids Innual Cumulative # Dry	**************************************	í	49,803	103,495	131,546	216,589	367,301	471,138	528,626	573,987	573,987	577,536	51,317	97,789	112,416	203,355	246,001	306,514	350,641	350,641	379,802	421.275	483,762	493,482	•	,	8,517	98,005	193,233	255,443
qde	Solids unrual	4 5%	4.5%	3.8%	3.9%	3.8%	3.5%	3.5%	3.7%	3.6%	4.5%	4 5%	2.3%	3.6%	3.6%	4 0%	3.4%	2.9%	3.5%	3.2%	%0.0	2.9%	3.4%	3.9%	3.5%	3 5%	3.5%	3.5%	3.9%	3.8%	37%
Hauled Sludge	% ^vQ#	0	0	49.803	53,692	28,051	85,043	150,712	103,837	57,488	45,361	0	3,549	51,317	46,472	14,627	90,939	42,646	60.513	44,127	0	29,161	41,473	62,487	9,720	0	0	8,517	89,488	95,228	62,210
American in the second	Galtons	_	,	159,100	166,500	88,800	288,600	510,600	336,700	192,400	122,100	ı	18,500	170,200	155,400	44,400	318,200	173,900	207,200	166,500		122,100	148,000	192,400	33,300	ç	ı	29,600	273,800	303,400	199,800
	Loads G	0	0	43	45	24	78	138	91	52	33	0	κΩ	46	42	12	88	47	26	45	0	33	40	52	ආ	0	0	80	74	82	8
	<u></u>	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13





Electric Cost Kilowatts Used

10000 0006

8000 7000 6000 5000 4000 3000 1000

	L.																1				l						-				
Allowaits Used	65,206	72,752	84,045	101,440	103,396	108,021	114,906	103,698	75,430	73,005	64,695	61,670	53,291	57,492	83,720	76,650	84,700	106,650	100,910	99,190	87,730	67,820	58,850	68,170	066'99		7,5	m		107,780	
Electric Cost All	3547	3757	4309	5092	7876	8505	8983	8382	3848	3697	3345	3064	2784	2962	4200	3943	7120	8431	8404	8121	4653	3588	3050	3472	4240	4069	Ñ	13	9135	33	
1	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	

May-13

Et-16M

St-net

Nov-12

Sep-12

21-Inc

May-12

Mar-12

Jan-12

ft-voM

Sep-11

LL-INC

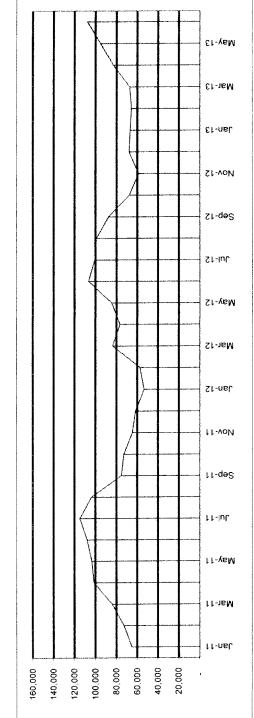
May-11

ff-16M

ff-net

Kilowatts Used

# Electric Cost





# MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF ENVIRONMENTAL QUALITY

Discharge Monitoring Report For Municipal Wastewater Treatment Plants

		NAME OF	FACILIT	Y				LOCAT	ION ADDRE	SS & CIT	Y		COUNT	Y/REGIOI
	Lake of th	ne Ozarks	Regiona	I WWTP #	1			#3	Anderson I	Road			Mille	r/SWRO
MONTH			PERMI	T NUMBE	R	OUTFAL	L NUMBER	२		TYPE TR	EATMENT	FACILITY	•	
Jun		NFLUENT		0103241	T	#	001	Ox	idation Ditc	h/UV/Sluc	dge Holding	g-sludge		
		T	T	T	<b>†</b>	1	1		LUENT Ammonia	<u> </u>	E. coli	T .	% R	emoval
DATE	pH UNITS	BOD mg/L	TSS mg/L	TEMP °C	FLOW MGD	pH UNITS	BOD mg/L	mg/L	as N mg/l	DO mg/L	#/100 ML	TEMP °C	BOD mg/L	TSS mg/L
1	7.3			19.7	3.186	7.9	<u> </u>			5.1		20.7		
2	7.5			18.7	2.291	7.8		ļ		4.5		20.2		
3	7.1	ļ		19.9	1.505	7.9				5.9	<20	20.5		
4	7.2			19.5	1.555	7.9				5.4		20.1		
5	7.3			18.5	1.471	7.9				5.7		19.8		
6	7.2		<u> </u>	19.7	1.793	7.9			0.19	5.2		19.9		
7	7.3	225	248	19.6	1.730	7.7	1.0	1.4		6.8		20	99.6	99.4
8	7.2			19.6	1.803	7.9				5.3		19.6		
9	7.3			19.4	1.957	7.8				5.0		20.1		
10	7.3			20	1.817	7.9				5.1	<20	20.6		
11	7.3			20.4	1.624	7.9				6.5		21.3		
12	7.4			21.1	1.514	7.8				6.3		22.8		
13	7.3			20.7	1.581	8.0			0.13	6.1		22.8		
14	7.4	273	326	20.6	1.556	7.8	1.3	1.2		5.0		22.9	99.5	99.6
15	7.4			20.3	1.685	7.9				4.8		22.3		
16	7.5			20.9	1.993	7.9				5.0		22.4		<b></b>
17	7.4			21.3	1.742	7.9				6.5	<20	22.8		
18	7.4			21.1	1.607	7.9				5.4		22.4		
19	7.3			21.2	1.576	8.0				5.5		22.7		
20	7.3			21.3	1.441	7.9			0.2	5.5		23		
21	7.3	230	224	22.2	1.647	7.9	1.3	0.8		5.0		23.8	99.4	99.6
22	7.3			22.1	1.766	7.9				5.1		24.1		33.0
23	7.2			22.6	2.076	7.9				4.8		24.6		
24	7.3			22.5	1.893	8.0				5.0	<20	24.5		
25	7.3			23	1.692	7.9				5.0		25		
26	7.3			23	1.583	8.0				5.2		24.9		
27	7.3			22.8	1.662	8.0			0.24	4.8		25.2		
28	7.4	205	236	22.6	1.816	8.0	0.9	1.4		5.2		25	99.6	99.4
29	7.4			22.9	1.817	8.0				5.3		24.1		
30	7.4			22.8	2.137	7.9				5.6		23.2		
otal					52 F46									
rg		233	250	7,1	53.516							- I		
n l	7.1	233	259	21	1.784		1.1	1.2	0.2	5.4	<20	22.4	99.5	99.5
ax	7.1 7.5	205 273	224 326	19 23	1.441 3.186	7.7 8.0	0.9	0.8 1.4	0.1	4.5 6.8	<20 <20	19.6 25.2	99.4 99.6	99.4 99.6

MONTH	LY EFFLUENT MONITORING	QUARTERLY EFFLUE	NT MONITORING
DATE	Oil & Grease mg/L	Selenium μg/L	<b>Zinc</b> μg/L
1			
2			
3			
4	<5.0		
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28	2		
29			
30			
Total			
Avg	< 5.0	0.00	0.00
Min	< 5.0	0.00	0.00
Max	< 5.0	0.00	0.00

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

	SLUDGE		eration Ba				eration Ba			*Weath		
	DISP.		MIXED			†		LIQUOR		Outside	1	didons
	LBS. DRY	* DO	** MLSS	*Settle	ability	* DO				* Ambient	*RAIN	Time
DATE	WEIGHT			*30 min	Temp			*30 min	Temp	Temp		
		mg/l	mg/l	ml	°C	mg/l	mg/l	ml	°C	٥F	inches	
1		1.7	4,140	800	20.6	1.6	3,710	730	20.4	66	2.75	7:30
2		1.4	4,430	800	20	2.2	4,140	800	19.9	62		7:30
3		2.4	4,510	800	20.3	2.5	4,480	780	20.2	60		7:30
4		2.5	4,620	790	19.8	2.1	4,430	770	19.9	62		7:30
5	5,709	3.8	3,930	670	19.7	2.7	4,620	790	19.7	62		7:30
6	5,554	3.5	3,930	560	19.7	1.5	4,800	800	19.7	62	0.2	7:30
7	3,518	2.0	4,310	710	19.9	1.7	4,200	720	19.8	59		7:30
8		2.6	4,830	810	19.4	2.2	3,930	660	19.5	56		7:30
9		1.4	4,850	790	20.1	1.7	3,620	600	20.1	66		7:30
10		1.1	4,830	790	20.9	1.3	4,010	680	20.6	62	0.2	7:30
11	7,036	1.7	4,120	680	21.4	1.4	4,870	840	21.2	66		7:30
12	6,172	1.7	4,300	<b>66</b> 0	22.6	1.7	4,500	760	22.3	78		7:30
13		1.7	4,340	650	22.8	1.4	4,390	720	22.4	71		7:30
14		1.7	4,150	610	22.5	1.1	4,960	800	22.3	66		7:30
15		2.8	3,460	570	22.2	1.6	4,510	820	22.3	69		7:30
16		1.7	3,400	490	22.3	1.6	3,810	650	22.3	69	0.2	7:30
17		1.7	4,170	660	22.9	1.6	4,470	830	22.8	69	0.25	7:30
18		1.7	4,380	750	22.2	2.5	3,990	740	22.2	64		7:30
19	5,184	2.5	4,490	690	22.4	3.2	3,790	660	22.2	64	0.2	7:30
20	6,172	1.5	4,120	600	23	2.3	4,290	680	22.9	69		7:30
21		1.5	4,810	700	23.6	1.7	4,410	660	23.5	73		7:30
22		1.8	4,320	610	24	1.7	4,030	610	23.8	74		7:30
23		1.3	4,070	560	24.5	1.6	3,380	430	24.2	71		7:30
24	5,092	1.0	5,390	830	24.2	1.5	3,150	430	23.9	72		7:30
25	6,665	1.3	4,010	570	24.9	1.3	3,350	470	24.5	79		7:30
26	5,554	1.6	3,830	460	24.8	1.3	4,240	590	24.7	80		7:30
27	5,555	1.3	4,690	680	25	1.4	3,600	500	24.6	72		7:30
28		1.6	3,950	510	24.7	1.3	4,390	650	24.7	72	0.75	7:30
29		1.9	4,100	570	24	1.8	3,410	490	24	70		7:30
30		2.2	3,850	550	23.1	1.6	3,540	600	23.1	66	-	7:30
COMMENTS					<u>-</u>		<del></del>	<del></del>	L			

COMMENTS:

TESTS PERFORMED BY (PRINT)	SIGNATURE	PHONE #	DATE
John Hornback	John Hopenbach	(573)365-0455	7/3/2013
REPORT APPROVED BY (PRINT)	SIGNATURE	PHONE #	DATE
Gary Hutchcraft	Lay Kitcherol	(573)365-0455	7/3/2013

\*Required Daily (Monday - Friday)

\*\*Required 1/week

FOX JUNE 2013

Column   C		ser1	T	Τ	Γ	8.872		I	7.87		T	Ī	9,142	<u> </u>	Γ	6.830			<u> </u>	6.849			7,341		<u> </u>		6.050	_		3,367	T	Τ	Γ	56,212	3		7,027
Column   C	UFTE SLLFFICH	ANI ONLEVA	-	-	-	_	1_	-	1	1	-	ļ	L	<u> </u>	-	1		-	-	<u> </u>	1	-	86	-	_	-	Ĺ	1		<u> </u>	1_	-	-	−		ــ	1
Column   C	3"	ļ	1 20	S	2	8		\$	_	1	9	51		L	52	8		98	98	L.,	L	58	L.		\$	56			- ×		L	2 8		673	8	-	0 84,375
Column   C	EPE SELTECE.	#311Y3S			_ ~	=	2	L.	↓	1	_	L	12			<u> </u>	Ĺ	<u> </u>		6	ğ	L.	_	ļ.,	_			_	L	L	L		<u> </u>	583	7.		
Column   C	VERT		1 24	- 5	0.63	0.50	0.59	0.84	80	·1 ~		90	9.5	-	1.27	0.87	0.47	0.53	0.83	0.78	0.35	\$	0.93	0.61	0.73	101		0.50	8		37.1			23		0 0 35	0.860
Column   C		.9472	-	-	-	_			-	-	-					-	-	_			ļ	-						_		_	-	-				0	00 00
Column   C		MITTHE THE	-	-	_	0.5			-	-	-	-			_																-	-		0.8	5.0	< 5.0	0 < >
Column   C		ļ	T	-	<20			-	-	-		047			-		-		<20							Q₹ \$						<del> </del>				200	\$ 020 \$
Column   C	(42)		20.7	20.2	20.5	20.1	19.8	5	20	961	8	20.6	21.3	22.8	L	22.9	22.3	22.4	22.8	22.4	22.7		23.8	24.1	24.6	24.5	25.0	24.9		250	24.1	23.2		671.	2	961	22.4
The control of the	PLANT EFF	N SE ASSESSED	-	~	6.	-4	1	2 0.	30	-		-	5		9	\$	90	5	٠,	÷	8	0	5		ec	ý	N.	.2	0	7		9		0	o ec	.5 0.13	5.4 0.19
The control of the		(pha) sarros	1,	-	~	5	3	-	4 6	2		-	9	9	-9	17	- 7		9	-	-		0.8	ş	7	-			4	5 4.1		S		orc.		8.0	1.2
Column   C		TV-LOS	<del> </del>	_					0							-	-						1.3							60		-		4.5	13	60	=
Column   C		ч	7.91	7.82	7.93	7 88	7.9	7.85	7.71	7 86	7.82	7.91	1~	7.75	86 L	7.8	7.91	7 93	7.91	7.91	7.99	7 93	7 94	7.89	7.94	7.8	-	7.97	7.98			7		237	7.99	7.71	8
Third Collins				2 291	1 505	1.555	1.471	1 793	1.73	1 803	1 957		1.624	1.514	1.88.1	1 556	1 685	1,993	1742	1 607	1.576	1 44 1	1 647	1 766	2.076	1.893	1.692	1.583	1.662	1816	1.817	2.138		53.517		1.44	1.784
Column	NOJ	SCUODE	23	1.5	2	2	71	2	2	2	72	т.	3	2	1.5	1,	Ē	1.5		2		2.5	-	1.5	1.5	1.5	~		2	1.5		2		56.5	~		6.1
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Use following abbreviations R-rain. S-sixiv; C-overcast, C-olear, PC-parily cleady

Date GH Prepared by OH, FII, JH

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6/27/13

REPORT OF ACUTE TOXICITY TESTING
Alliance-Lake of the Ozarks
Outfall 001, 24 hr composite, AEC=100%
MO-0103241
EAS LOG# 1604108
June 12, 2013 through June 14, 2013

Tests performed by:

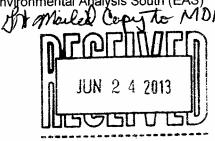
John P. Clippard / Chemical Analyst at Environmental Analysis South (EAS)

Kelly J. Ray / Biologist at Environmental Analysis South (EAS)

Sara C. Shields / Lab Supervisor - Chemist at Environmental Analysis South (EAS)

David F. Warren / Lab Director - Chemist at Environmental Analysis South (EAS)

- 1. Report Summation
  - 1.1. Data Summation
  - 1.2. Conclusion
- 2. Method Summation
  - 2.1. Test Conditions and Methods
  - 2.2. Potassium chloride Reference Salt Test
    - 2.2.1. Pimephales promelas data
    - 2.2.2. Ceriodaphnia dubia data
  - 2.3. Literature Cited
- 3. Raw Data Bench Sheets
  - 3.1. Initial observations (page 1)
  - 3.2. Zero hour Observations (page 1)
  - 3.3. Twenty-four (24) hour Observations (page 1)
  - 3.4. Forty-eight (48) hour Observations (page 1)
  - 3.5. Survival Data Table (page 2)
  - 3.6. Test Comments (page 3)
- 4. Chain of Custody
- 5. MO DNR "Whole Effluent Toxicity (WET) Test Report (Form 780-1899)



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REPORT OF ACUTE TOXICITY TESTING
Alliance-Lake of the Ozarks
Outfall 001, 24 hr composite, AEC=100%
MO-0103241
EAS LOG# 1604108
June 12, 2013 through June 14, 2013

#### 1. REPORT SUMMATION:

#### 1.1. Multiple Dilution Data Summation

Test Solution	Pimephales promelas Acute Toxicity Test 48 Hour Survival	Ceriodaphnia dubia Acute Toxicity Test 48 Hour Survival
Reconstituted Control (RC)	100%	100%
Upstream Control (UC)	100%	100%
6.25% Effluent	100%	100%
12.5% Effluent	100%	100%
25% Effluent	100%	100%
50% Effluent	95%	100%
100% Effluent	100%	100%
Estimated 48 Hour LC <sub>50</sub> Value	>100% Effluent	>100% Effluent
To Pass:  1. Effluent - LC50 must be >100% and  2. All concentrations = or < AEC must not have significant difference to control in survival.	1. Yes 2. Yes	1.Yes 2.Yes
Result of Toxicity Test	PASS	PASS

<sup>\*</sup> Indicates a significant difference at alpha = 0.5 between effluent and control survival data.

Conclusion:
-------------

Pimephales promelas 48 hour WET results:

Ceriodaphnia dubia 48 hour WET results:

LC 50 >100% by Trimmed Spearman-Karber

NOAEC = 100% using Steel's Many-One Rank Test

LC 50 > 100% by the Graphical Method

NOAEC = 100% using Steel's Many-One Rank Test

Based on these results, the outfall passed the whole effluent toxicity test with both species.

Approved by

Sara C. Shields, Chemist

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# REPORT OF ACUTE TOXICITY TESTING Alliance-Lake of the Ozarks Outfall 001, 24 hr composite, AEC=100% MO-0103241 EAS LOG# 1604108 June 12, 2013 through June 14, 2013

#### 2. TEST METHOD SUMMARY

#### 2.1. TEST CONDITIONS AND METHODS:

	Ceriodaphnia dubla:	Pimephales promelas:
Test duration:	48 hours	48 hours
Temperature:	24 - 26 degree Celsius	24 - 26 degree Celsius
Light quality:	Ambient laboratory illumination	Ambient laboratory illumination
Photoperiod:	16 hour light, 8 hours dark	16 hour light, 8 hours dark
Control Water:	Moderately Hard Reconstituted Water	Moderately Hard Reconstituted Water
Dilution Water:	Upstream Water - If unavailable or toxic, then control water will be used.	Upstream Water - If unavailable or toxic, then control water will be used.
Size of test vessel:	30 milliliters	250 milliliters
Volume of test solution:	15 milliliters	200 milliliters
Age of test organisms:	<24 hours	1 -14 days (all same age)
Number of organisms/test vessel:	5	10
Number of replicates/concentration:	4	2
Number of organisms/concentration:		40 for a single dilution test and 20 for a multiple dilution test
Feeding regime:	None (fed prior to test)	None (fed prior to test)
Aeration:	None	None
Test acceptability criterion:	90% or greater survival in controls	90% or greater survival in controls

The methodology used for the chemistry data was taken from the *Standard Methods for the Examination* of *Water and Wastewater*, 18<sup>th</sup> edition (1992). The exception was hardness, which was determined using a Hach EDTA titration test kit. The toxicity tests follow guidelines laid out in the permittee's NPDES permit and were conducted according to EPA approved methods (USEPA 2002).

All test organisms were cultured according to EPA approved methods (USEPA 2002). The *Ceriodaphnia dubia* and the *Pimephales promelas* were obtained from C-K Associates Inc. located in Baton Rouge, Louisiana and shipped overnight for use in the whole effluent toxicity test.

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REPORT OF ACUTE TOXICITY TESTING Alliance-Lake of the Ozarks Outfall 001, 24 hr composite, AEC=100% MO-0103241 EAS LOG# 1604108 June 12, 2013 through June 14, 2013

#### 2.2. REFERENCE TOXICITY TEST:

Environmental Analysis South performs monthly reference toxicity tests. The most recent reference test was initiated on June 5, 2013 using KCL Lot #41713. Following are the results:

2.2.1. *P. promelas* - 48 hr. Acute Test - LC<sub>50</sub> = 0.892 g/l 95%Cl (0.682-1.102 g/l)

EAS %CV = 11.8%

National Warning Limits (75<sup>th</sup> percentile) = 19%CV National Control Limits (90th percentile) = 33%CV

2.2.2. *C. dubia* - 48 hr. Acute Test –  $LC_{50} = 0.516 \text{ g/l} \cdot 95\%\text{Cl} \cdot (0.414-0.618\text{g/l})$ 

EAS %CV = 9.9%

National Warning Limits (75<sup>th</sup> percentile) = 29%CV National Control Limits (90<sup>th</sup> percentile) = 34%CV

#### 2.3. LITERATURE CITED:

- 1. APHA. 1992. Standard methods for the examination of water and wastewater, 18th Ed. American Public Health Association, Washington, D.C
- 2. USEPA. 2002. Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms, 5th Ed. EPA-821-R-02-012
- 3. USEPA 2000. Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the National Pollutant Discharge Elimination System, (Table B-2). June 2000, EPA 833-R-00-003.

WHOLE EFFLUENT TEST conducted in accordance with US EPA 600/4-90/027

Fifth Edition October 2002

	Alliance -Lane	or the UZ	arks, Outrain	001, 24 hr composite									
	MO-0103241												
TYPE OF METHOD.	multiple dilution, 48 hrs, PP & CD, AEC=1009	n, 48 hrs,	PP & CD, A	EC=100%									
DATE & TIME OF COLLECTION: 06/10/13 0900 hrs - 06/11/13 0900 hrs by Gary Hutchcraft	06/10/13 0900	hrs - 06/	11/13 0900 h	rs by Gary Hutchcraft				Upstream:	Bowling Hollow Creek	ollow Creel	×		
DATE & TIME OF SUBMISSION: 06/12/13 1010 hrs by UPS	06/12/13 1010	hrs by U			- 1			Collected:	06/11/13 0905 hrs by Gary Hutchcraft	905 hrs by	Gary Hutc	chcraft	
INITIAL OBSERVATIONS DATE	1	TIME	ANALYST	QC LOT	QC EXP VALUE	INT EFFL INT UC	NT UC	INT RC					
LOG NUMBER / ID NUMBER	編				THE PARTY OF THE P	1604108	1604108A	RC4071					
ns - Hd				SB114 (8.8-9.2)	9.01	8.05	8.03	7.90					
TEMPERATURE "C RECEIVED		-1	K	EAS 106		9	9	21					
SPECIFIC CONDUCTANCE umhos		- 1	scs	ERA208-506 (465-519)	504	1390	542	288					
HARDNESS - ppm			scs	ERA P170-507(107-134)	120	340	260	8					
CHLORINE - ppm				tap water	+	<0.04	<0.04	<0.04					
DISSOLVED OXYGEN - ppm				cal@840		8.39	8.31	8.39					
TOTAL ALKALINITY - ppm				ERA P213-506(29.2-35.4)	32.4	271	271	58.6					
INITIAL AMMONIA - ppm	06/12/13 1200 hrs	$\neg$	JPC	EAS #1981 (8-12)		1.48	<0.05	<0.05					
TOTAL DISSOLVED SOLIDS -ppm													
0 HOUR OBSERVATIONS DATE	DATE TI		YST	QC LOT	QC EXP VALUE	S.	ဌ	100%	%09	25%	12.50%	6.25%	X %AEC
NS - Hd	06/12/13 1100 hrs		scs	SB114 (8.8-9.2)	8.98	7.10	7.14	7.53	7.30	7.22	7.19	7.16	
TEMPERATURE °C	06/12/13 1100 hrs		SCS	EAS 106		23.3	22.7	23.0	22.9	22.9	22.8	22.7	T
SPECIFIC CONDUCTANCE umhos				ERA208-506 (465-519)	504	255	544	1430	296	747	641	584	
DISSOLVED OXYGEN - ppm	06/12/13 1100 hrs		scs	cal@840		8.6	8.2	8.9	8.6	8.5	8.5	8.4	
24 HOUR OBSERVATIONS - PP DATE	DATE TI		ANALYST	QC LOT	QC EXP VALUE	RC	UC	100%	20%	25%	12.50%	6.25%	X %AEC
ns - Hd			scs	SB114 (8.8-9.2)	9.02	7.48	7.85	8.16	8.04	96.7	7.92	7.89	
TEMPERATURE °C		-1	SCS	EAS 106		25.0	25.0	25.0	25.0	25.0	25.0	25.0	
SPECIFIC CONDUCTANCE umhos				ERA208-506 (465-519)	504	266	543	1437	985	752	643	589	
DISSOLVED OXYGEN - ppm	3/13	$\neg$	- 1	cal@840		8,1	7.9	7.9	80	8	8	8	
48 HOUR OBSERVATIONS - PP DATE	DATE	1	YST	QC LOT	QC EXP VALUE	ည	သ	100%	%09	25%	12.50%	-	X %AEC
ns - Hd				SB114 (8.8-9.2)	90.6	7.19	7.62	7.91	7.85	7.76	7.74	7.68	
TEMPERATURE °C		$\neg$		EAS 106		25.0	25.0	25.0	25.0	25.0	25.0	25.0	
SPECIFIC CONDUCTANCE umhos				ERA208-506 (465-519)	504	283	573	1535	1027	768	664	601	
DISSOLVED OXYGEN - ppm	06/14/13 1100 hrs	$\neg$	SCS	cal@840		8.2	8.2	8.6	8.5	8.3	8.2	8.2	
FINAL AMMONIA - ppm				EAS #2375 (8-12)									
24 HOUR OBSERVATIONS - CD DATE		TIME	ANALYST	QC LOT	QC EXP VALUE	RC	၁၁	100%	20%	25%	12.50%	6.25%	X %AEC
NS - Hd	06/13/13 1100 hrs		scs	SB114 (8.8-9.2)	9.02	8.16	78.7	8.13	8.03	2.99	7.95	┼─	
TEMPERATURE °C			SOS	EAS 106		25.0	25.0	25.0	25.0	25.0	25.0	25.0	
SPECIFIC CONDUCTANCE umhos			SOS	ERA208-506 (465-519)	504	263	522	1380	957	743	641	586	
DISSOLVED OXYGEN - ppm	1 06/13/13 1100 hrs	100 hrs	SCS	cal@840		9.0	8.9	8.9	8.8	8.8	8.8	8.8	
48 HOUR OBSERVATIONS - CD DATE	DATE	TIME	YST.	QC LOT	QC EXP VALUE	RC	nc	100%	%05	72%	12.50%	6.25%	X %AEC
US - Hq		1		SB114 (8.8-9.2)	90.6	78.7	7.70	7.91	7.88	7.84	7.79	7.75	
TEMPERATURE "C				EAS 106		25.0	25.0	25.0	25.0	25.0	25.0	25.0	
SPECIFIC CONDUCTANCE umhos	$\perp$		SCS	ERA208-506 (465-519)	504	278	520	1407	954	742	638	581	
DISSOLVED OXYGEN - ppm	06/14/13 1100 hrs	- 1	SCS	cal@840		8.7	8.7	8.7	8.5	9.8	8.7	8.7	
FINAL AMMONIA - ppm				EAS #2375 (8-12)									

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P55

# WHOLE EFFLUENT TEST conducted in accordance with US EPA 600/4-90/027 Fifth Edition October 2002

EAS LOG# 1604108 Alliance -Lake of the Ozarks, Outfall 001, 24 hr composite

June 12, 2013 Time Test Began: 1100 hrs Analyst 2: KJR Analyst 2: KJR	June 14, 2013 Time Test Finished: 1100 hrs Analyst 3: SCS
Date Test Began: June 12, 201	Date Test Finished: June 14, 201

Analyst 2: KJR	Analyst 3: SCS	
	) hrs	HATCH NUMBER: 8752 c-k
Time Test Began: [ 1100 IIIS	Time Test Finished: 1100 hrs	3 days
June 12, 2013	June 14, 2013	AGE:
a Test Began: L	Fest Finished:	elas (PP)

P. promelas (PP)		AGE:		3 days	Œ E	HAICH NUMBER: 0/32 C-R	0/32 C-R	i
L.,		<u> </u>	70007	40%	25%	12.50%	6.25%	X% AEC
	Y.	3	0/001	222				
CCIBBO	AI IVE	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE
CONTRACT							,	
D HB-PP	10.10	10,10	10,10	10,10	10,10	10,10	or,or	
		40.40	10 10	10.10	10 10	10.10	10,10	
24 HR-PP	01,01	01,01	01'01	2	21.12.			
dd dn sv	10 10	10.10	10,10	10,9	10,10	10,10	10,10	
T I TANK OF								
Cariodaphnia dubia (CD)	~	AGE: <24	<24	hours	ī	HATCH NUMBER: 2698 c-k	2698 c-k	
	•							

<b>L</b>	RC	၁	100%	%09	25%	12.50%	6.25%	X% AEC
COldina	1	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE	ALIVE
renon	- 1						-	
20 000	ינ ע	5 5 5 5 5	5.5.5.5	5,5,5,5	5,5,5,5	5,5,5,5	5,5,5,5	
מט-אה ס		2121212						
24 UD CD	7. 7. 7.	5.5.5	5,5,5,5	5,5,5,5	5,5,5,5	5,5,5,5	5,5,5,5	
74 HA-02	0,0,0							
CO GD 84	7. 7. 7.	5.5.5.5	5,5,5,5	5,5,5,5	5,5,5,5	5,5,5,5	5,5,5,5	
100-KE 04	ָ ()							

Approved by: (

Date: 06/20/13

Prepared by: Allik

# Milos

# ENVIRONMENTAL ANALYSIS SOUTH, INC.

4000 East Jackson Blvd Jackson, MO 63755

Phone: (573) 204-8817 Fax: (573) 204-8818



## WHOLE EFFLUENT TOXICITY TESTING CHAIN OF CUSTODY

CHAIN OF COSTS
CLIENT: Alliance Labe Ograho
NPDES PERMIT NUMBER: MO-0103241
EFFLUENT NAME: GRAB 24 HR COMPOSITE (LEGAL NAME)
COLLECTION DATA: START DATE: 6/10/13 START TIME: 9:00 AM
FINISH DATE: $6/11/13$ FINISH TIME: $9:00$ AM
Barry (G. HOLLOW) (REEK (GRAB SAMPLE)
TIME: 4.03AM
(PRINT NAME)
Disclaimer: Environmental Analysis South, Inc. shall not be held financially liable for invalid whole effluent toxicity test (WET) or shipping charges resulting from the following reasons:  Sampling & holding time errors (Will results in a setup charge of \$100 to the client)  Commercial carrier delivery problems or errors (Will results in a setup charge of \$100 to the client)  Problems with health or delivery of test organisms by vendor (No setup charge to client)
THE CHECK LIST
SAMPLER CHECK LIST  NO HEADSPACE IN BOTTLES  SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABOR  SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABORATORY SAME DAY AS TEST SETUP  SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP  SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT  SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT  DATE: 6/11/13 TIME: 9:30 AAA
NO HEADSPACE IN BOTTLES D SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABORATORY SAME DAY AS TEST SETUP D SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP D SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT  RELINQUISHED BY:  RELINQUISHED BY:  DATE: 6/11/13 TIME: 9:30 AM
NO HEADSPACE IN BOTTLES D SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABORATORY SAME DAY AS TEST SETUP D SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP D SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT  RELINQUISHED BY:  LABORATORY USE ONLY 11 1604 108
NO HEADSPACE IN BOTTLES D SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABORATORY SAME DAY AS TEST SETUR D SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUR D SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT D  RELINQUISHED BY:  LABORATORY USE ONLY LOG NUMBER:  LOG NUMBER:  C THERMOMETER ASSIGNED NUMBER:  RECEIVED TEMPERATURE:  C C THERMOMETER ASSIGNED NUMBER:  DELIVERED SAME DAY AS TEST
NO HEADSPACE IN BOTTLES D SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABORATORY SAME DAY AS TEST SETUR D SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT D  RELINQUISHED BY:  LABORATORY USE ONLY LOG NUMBER:
NO HEADSPACE IN BOTTLES D SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP OF SAMPLES TO BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP OF SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 9 - 6° C WHEN SHIPPING OVERNIGHT DATE:    LABORATORY USE ONLY
NO HEADSPACE IN BOTTLES   SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON   SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON   SAMPLES ID BE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP   SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT    RELINQUISHED BY:
NO HEADSPACE IN BOTTLES   SHIP SAMPLES BY NEXT DAY CARRIER OR DELIVER TO LABON SAMPLES TO SE HAND DELIVERED TO LABORATORY SAME DAY AS TEST SETUP 9 SUFFICIENT ICE TO COOL SAMPLES TO A RANGE OF 0 - 6° C WHEN SHIPPING OVERNIGHT    RELINQUISHED BY: LOG NUMBER: DATE: 6/11/13 TIME: 9:30 AM  EFFLUENT LOG NUMBER: 0 C THERMOMETER ASSIGNED NUMBER:  HEADSPACE: YES OF NO SAMPLES ICED OF DELIVERED SAME DAY AS TEST  UPSTREAM LOG NUMBER: 0 C THERMOMETER ASSIGNED NUMBER:  RECEIVED TEMPERATURE: 0 ° C THERMOMETER ASSIGNED NUMBER:



MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM - P.O. BOX 176, JEFFERSON CITY MO, 65102

WHOLE EFFLUENT TOXICITY (WET) TEST REPORT
(TO BE ATTACHED TO WET TESTS FOR SUBMISSION TO THE REGULATORY AUTHORITY)

PART A - TO BE COMPLETED IN	FULL BY PERMIT	TEE			
FACILITY NAME			DATE & TIME COLLECTED		
Alliance-Lake of the Ozarks			EFFLUENT 06/10/13 0900-06/11/13 0900	UPSTRE	AM 06/11/13 0905
PERMIT NUMBER MO-0103241			PERMIT OUTFALL NUMBER Outfall # 001		
COLLECTOR'S NAME					
Gary Hutchcraft RECEIVING STREAM COLLECTION SITE AND DE	SC DIDTION				
Bowling Hollow Creek	SOMPTION				
PERMIT ALLOWABLE EFFLUENT CONCENTRATE	ON (AEC)		EFFLUENT SAMPLE TYPE (CHECK ONE)  24HR COMPOSITE GRA	в По	THER
100%			UPSTREAM SAMPLE TYPE (CHECK ONE)		111111
SAMPLE NUMBER EFFLUENT 1604108	UPSTREAM 16041	08A	☐ 24HR COMPOSITE GRA	в 🗆 о	THER:
PERMITTED EFFLUENT DAILY MAXIMUM LIMITAT	TION FOR	mg/L	PERMITTED EFFLUENT DAILY MAXIMUM LIMITA AMMONIA	TION FOR	mg/L
CHLORINE				-	
PERFORMING LABORATORY Environmental Analysis South,		WING LABOR	TEST TYPE Acute Static Non renew	al Test	Multiple Dilution
FINAL REPORT NUMBER			TEST DURATION 48 hour		
MO_1604108			TEST METHOD		
DATE OF LAST REFERENCE TOXICANT TESTING June 5, 2013	i		Methods for Measuring the Acute Toxicity of Efflue Marine Organisms		
DATE AND TIME SAMPLES RECEIVED AT LABOR 06/12/13 1010 hrs by UPS	ATORY		TEST START DATE AND TIME 06/12/13 1100 hrs		DATE AND TIME 13 1100 hrs
SAMPLE DECHLORINATED PRIOR TO ANALYSIS	7 DYES NO		TEST ORGANISM #1 AND AGE		NISM #2 AND AGE
	UPSTREAM		Pimephales promelas 3 days		phnia dubia < 24 hours
SAMPLE FILTERED¹ PRIOR TO ANALYSIS?			90% OR GREATER SURVIVAL IN SYNTHETIC CONTROL? YES NO	DILUTION WATER USED TO ACHIEVE AEC UPStream 1604108A	
FILTER MESH SIEVE SIZE <sup>2</sup> None			EFFLUENT ORGANISM #1 % MORTALITY AT AEC LC50>100% Effluent		DRGANISM #2 % MORTALITY AT AEC 00% Effluent
SAMPLE AERATED DURING TESTING?  YES	s <b>X</b> I NO	<u> </u>	UPSTREAM ORGANISM #1 % MORTALITY	UPSTREAM	ORGANISM #2 % MORTALITY
pH ADJUSTED? YES X NO			0% TEST RESULT AT AEC FOR ORGANISM#1	TEST RESU	LT AT AEC FOR ORGANISM #2
EFFLUENT UPSTREAM			🙀 PASS 🗌 FAIL	X PASS	S ☐ FAIL
MINIMUM REQUIRED ANALYTIC	AL RESULTS FOR T	HE 100% EFF	FLUENT SAMPLE		
PARAMETER	RESULT		METHOD		WHEN ANALYZED
Temperature °C	6	SM18 2550	B stored at 4 degree C until tes	setup	06/12/13 1020 hrs
pH Standard Units	8.05	SM18 4500	-H B		06/12/13 1020 hrs
Conductance µMohs	1390	SM18 2510	В		06/12/13 1020 hrs
Dissolved Oxygen mg/L	8.39	SM18 4500	-0 G		06/12/13 1020 hrs
Total Residual Chlorine mg/L	<0.04	SM18 4500	-CI G		06/12/13 1020 hrs
Unionized Ammonia mg/L	1.48x0.05=0.074	SM18 4500	-NH3 F @ 25 degree C		06/12/13 1200 hrs
*Total Alkalinity mg/L	271	SM18 2320	В		06/12/13 1500 hrs
*Total Hardness mg/L	340	SM18 2340	С		06/12/13 1020 hrs
*Recommended by USEPA guidand					
<ul> <li>Samples shall only be filtered if</li> <li>Filters shall have a sieve size of</li> </ul>			that may be confused with, or attac	k, the tes	
AO 780 1900 (12-04)		CONTINUED	ON PAGE 2		PAGE 1 OF 2

#### WHOLE EFFLUENT TOXICITY (WET) TEST REPORT

(TO BE ATTACHED TO WET TESTS FOR SUBMISSION TO THE REGULATORY AUTHORITY)

PARAMETER	RESULT	HE 100% UPSTREAM SAMPLE: METHOD	WHEN ANALYZED
Temperature °C	6	SM18 2550B stored at 4 degree C until test setup	06/12/13 1020 hrs
pH Standard Units	8.03	SM18 4500-H B	06/12/13 1020 hrs
Conductance µMohs	542	SM18 2510B	06/12/13 1020 hrs
Dissolved Oxygen mg/L	8.31	SM18 4500-O G	06/12/13 1020 hrs
Total Residual Chlorine mg/L	<0.04	SM18 4500-CI G	06/12/13 1020 hrs
Unionized Ammonia mg/L	<0.05x0.05<0.010	SM18 4500-NH3 F @ 25 degree C	06/12/13 1200 hrs
*Total Alkalinity mg/L	271	SM18 2320B	06/12/13 1500 hrs
*Total Hardness mg/L	260	SM18 2340 C	06/12/13 1020 hrs

#### PRELIMINARY TEST ACCEPTABILITY MATRIX (FOR USE BY PERMITTEE IN DETERMINING TEST VALIDITY)

PERMIT ALLOWABLE EFFLUENT CONCENTRATION (AEC): As indicated on permit. Test is invalid otherwise.

EFFLUENT SAMPLE TYPE: As indicated on permit. Test is invalid otherwise.

TEST TYPE: Acute Static Non-Renewal Test or other as indicated on permit. Test is invalid otherwise.

TEST DURATION: Forty-eight (48) hours or as indicated on permit. Test is invalid otherwise.

TEST ORGANISMS: As indicated on permit. Test is invalid otherwise.

DILUTION WATER USED TO ACHIEVE AEC: Upstream receiving water required if available.

**TEST METHOD:** The only acceptable method is the **most current edition** of <u>Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms</u>, or other as specifically assigned by EPA for determining NPDES compliance. Test is invalid otherwise.

TEST START DATE & TIME: Unless otherwise specified in writing by EPA, if >36 hours lapse between collection and initiation, test is invalid.

FILTER MESH SIEVE SIZE: Unless otherwise specified in writing by EPA, if sieve size is smaller than 60 microns, test is invalid.

90% OR GREATER SURVIVAL IN LABORATORY CONTROL(S) (Y/N): If NO, test is invalid.

PARAMETER	RESULT	NOTES	WHEN ANALYZED
Temperature °C	0 - 6	Unless received by the laboratory on the same day as collected, values outside this range invalidate the test.	Upon receipt

Where no upstream control is available, enter results from laboratory or synthetic control.