

May 31, 2007

Jay Wilson / Public Works Director City of Eureka Springs 3174 E. Van Buren Street Eureka Springs, Arkansas 71632

AFIN No.: 08-00036 NPDES Permit No.: AR0021865

Dear Mr. Wilson:

On April 24, 2007, I performed a routine compliance inspection of the waste water treatment facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. This inspection revealed the following violations:

- 1. Samples collected of the plant effluent during the inspections, revealed that the effluent dissolved oxygen was below the permit requirement of 6.5mg/l instantaneous minimum. The grab sample collected at 10:01 was 4.07 mg/l, sample collected at 11:01 was 4.18 mg/l, and the sample collected at 12:01 was 4.20 mg/l. This is a violation of Part I, Section A, of the permit.
- 2. Foam of a persistent nature was noted in the receiving stream which is a violation of Part I, Section A of the permit.
- 3. Evidence of bottom deposits of solids or sludge was noted in the receiving stream down stream of the outfall point. This is a violation of Part I, Section A of the permit.
- 4. At the time of the inspection the operations and maintenance was found to be unsatisfactory. This is a violation of Part II, Section B, 1a of the permit. The Lakeside pretreatment unit which contains the new bar screen, grit unit, secondary screening and pre-aeration was down for repairs. A major leak at the center well of the bio tower was noted. The final filter was not in operation, along with the post aeration unit. The UV unit which was designed for 8 banks only had 4 banks of lights in operation. The secondary clarifier was in poor operating condition and was having settling problems which according to the plant superintendent, was due to the upset the plant experience in March of this year.
- 5. Calibration checks are not being conducted and recorded on the effluent flow device to insure that the meter is reading within +/- 10% accuracy. This is a violation of Part II, Section C, 2 of the permit.
- 6. The time of sampling for pH and dissolved oxygen was not being documented. This is a violation of Part II, Section C, 8 a.
- 7. The time of calibration of pH and dissolved oxygen meters need to be recorded as part of the calibration records of these units. This is a violation of Part II, Section C, 3 of the permit.
- 8. Evidence that inflow/ infiltration (I&I) in the collection system has resulted in overflows and upset condition of the treatment plant.

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The above items require your immediate attention. Please submit a written response to these findings to the Water Division Enforcement Section of this Department. This response should contain documentation describing the course of action taken to correct the items noted. This corrective action should be completed as soon as possible, and the written response is due by June 22, 2007.

If I can be any assistance, please contact me at washam@adeq.state.ar.us or 870-625-7477.

Sincerely,

Dale D. Washam

Dale Washam Inspector Supervisor Water Division

cc: Water Division Enforcement Branch

Water Division Permits Branch

<b>⇒</b> EPA							Form Approved OMB No. 2040-0003 Approval Expires 7-31-85		
	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Workington D.C. 20060								
	NPDES Compliance Inspection Report								
			S	Section A: Nation	nal Da	ta Sy	ystem Coding		
Transaction Code								pec. Type Inspector Fac. Type  19 S 20 1	
A   F   I   N   -   0   8   -0   0   0   3   6							<u> </u> 	Reserved	
				71		:1:4			
Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number)  City of Eureka Springs Wastewater Treatment Plant  Section B: Facility Data  Entry Time/Date 0800 / April 24, 2007							Permit Effective Date December 1, 2002		
	Hwy 23N eka Springs, AR 72632		Carroll County				Exit Time/Date 1330 / April 24, 2007		Permit Expiration Date November 30, 2007
	ne(s) of On-Site Representative(s)/Ti Fox / Plant Superintendent/ 479-			aber(s)				Oth	ner Facility Data
Name, Address of Responsible Official/Title/Phone and Fax Number  Jay Wilson /Public Works Director / 479-253-9600 City of Eureka Springs 3174 E. Van Buren Street Eureka Springs, Arkansas 71632 Contacted Yes No									
				tion C: Areas Ev y, M = Marginal,			uring Inspection sfactory, N = Not Evaluated)		
S	Permit	M	Flow Measuremen	nt	U	Op	erations & Maintenance	S	Sampling
M	Records/Reports	M	Self-Monitoring P		S	Slu	dge Handling/Disposal	N	<b>Pollution Prevention</b>
U	Facility Site Review	N S	Compliance Scheo	dules	N N		etreatment orm Water	N	Multimedia Other:
	Effluent/Receiving Waters		Laboratory ction D: Summary o	of Findings/Com			rm water tach additional sheets if necessar	y)	Other:
During the course of the inspection Discharge Monitoring Reports (DMR's) for the months of December 2006 along with January and February 2007 were reviewed. The review reveled that the plant effluent was within permit limits. At the time of the inspection according to Plant superintendent, D.J. Fox, the plant was recovering from an upset condition due to the drive shaft of the primary clarifier becoming inoperable along with heavy rains. As part of the inspection, samples were collected of the effluent and the effluent was within permit limits except for dissolved oxygen. Three grab samples were taken of the discharge and all three results were below the permit limit of 6.5 mg/l instantaneous minimum. The grab sample collected at 10:01 was 4.07 mg/l, sample collected at 11:01 was 4.18 mg/l, and the sample collected at 12:01 was 4.20 mg/l.									
Name(s) and Signature(s) of Inspector(s)  Agency/Office/Telephone  AR Dept. of Environmen  (870) 935-7477/ (870)-62					tal Quality/ Mammoth Spring		Date <b>May 31, 2007</b>		
Duit Washani					ntal Quality/ Little Rock /501-683	3-			
Sign	Signature of Reviewer Agency/Office/Phone and Fax Numbers Date								

SECTION A: PERMIT VERIFICATION		
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	Øs	□M □U □NA □NE
DETAILS:		
CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:		☑y □n □na □ne
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:		□y □n Øna □ne
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:		☑Y □N □NA □NE
4. ALL DISCHARGES ARE PERMITTED:		☑Y □N □NA □NE
SECTION B: RECORDKEEPING AND REPORTING EVALUATION		
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	□s	☑M □U □NA □NE
DETAILS:		
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:		☑Y □N □NA □NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:		☑S ☐M ☐U ☐NA ☐NE
a. DATES AND TIME(S) OF SAMPLING: (Time for ph and DO sampling were not being documented)		□y Øn □na □ne
b. EXACT LOCATION(S) OF SAMPLING:		☑Y □N □NA □NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:		☑Y □N □NA □NE
d. ANALYTICAL METHODS AND TECHNIQUES:		☑Y □N □NA □NE
e. RESULTS OF CALIBRATIONS: <u>(recommended that they keep records of temp. at the time of calibration for pH and DO)</u>		☑Y □N □NA □NE
f. RESULTS OF ANALYSES:		☑Y □N □NA □NE
g. DATES AND TIMES OF ANALYSES:		☑Y □N □NA □NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:		☑Y □N □NA □NE
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE: (The time ph and Do meter is calibrated is not documented)		$\square$ s $\bowtie$ m $\square$ u $\square$ na $\square$ ne
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:		☑S ☐M ☐U ☐NA ☐NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:		☑Y □N □NA □NE
SECTION C: OPERATIONS AND MAINTENANCE		
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	□s	□M ☑U □NA □NE
DETAILS:		
1. TREATMENT UNITS PROPERLY OPERATED:		□S ØM □U □NA □NE
2. TREATMENT UNITS PROPERLY MAINTAINED: (major leak at the center well of the bio tower)		□S □M ☑U □NA □NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED:		☑S ☐M ☐U ☐NA ☐NE
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE: (Telephone alarm system)		☑S ☐M ☐U ☐NA ☐NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE: (Lakeside pretreatment system down for repairs, final filter off, post aeration and only 4 of the 8 banks in the UV unit was operating.)	off	□S □M ☑U □NA □NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: 1class III, 1 class I		☑S □M □U □NA □NE
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:		☑S □M □U □NA □NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:		☑Y □N □NA □NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:		☑Y □N □NA □NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:		□Y □N □NA ØNE
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:		⊠y □n □na □ne
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:		☑Y □N □NA □NE
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:		☑Y □N □NA □NE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: (Due to heavy rains in Mid January 07)		Øy □n □na □ne
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:		Øy □n □na □ne

SECTION D: SAMPLING					
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	☑S □M □U □NA □NE				
DETAILS:					
SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	Øy □n □na □ne				
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	MY ON ONA ONE				
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	MY ON ONA ONE				
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	MY ON ONA ONE				
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	☑Y □N □NA □NE				
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	☑Y □N □NA □NE				
a. SAMPLES REFRIGERATED DURING COMPOSITING:	☑Y □N □NA □NE				
b. PROPER PRESERVATION TECHNIQUES USED:	☑Y □N □NA □NE				
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136:	☑Y □N □NA □NE				
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	☑Y □N □NA □NE				
SECTION E: FLOW MEASUREMENT					
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS	☐S ☑M ☐U ☐NA ☐NE				
DETAILS:					
PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: TYPE OF DEVICE: Mag meter	☑Y □N □NA □NE				
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED:	☑Y □N □NA □NE				
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	☑Y □N □NA □NE				
4. CALIBRATION FREQUENCY ADEQUATE: (August 2, 2006)	☑Y □N □NA □NE				
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	☑Y □N □NA □NE				
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	□y Øn □na □ne				
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	□Y □N □NA ☑NE				
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	☑Y □N □NA □NE				
9. HEAD MEASURED AT PROPER LOCATION:	□Y □N □NA ☑NE				
SECTION F: LABORATORY					
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	☑S □M □U □NA □NE				
DETAILS:					
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	☑Y □N □NA □NE				
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	□Y □N □NA ☑NE				
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	☑Y □N □NA □NE				
4. QUALITY CONTROL PROCEDURES ADEQUATE:	☑Y □N □NA □NE				
5. DUPLICATE SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y □N □NA □NE				
6. SPIKED SAMPLES ARE ANALYZED ≥10% OF THE TIME:	☑Y □N □NA □NE				
7. COMMERCIAL LABORATORY USED: (State certified)	☑Y □N □NA □NE				
a. LAB NAME: Environmental Services					
b. LAB ADDRESS: 1107 Century, Springdale ,AR 72764					
c. PARAMETERS PERFORMED: CBOD, TSS, NH3-N, Fecal coliform, Nitrate-nitrite nitrogen					
8. BIOMONITORING PROCEDURES ADEQUATE:	□Y □N □NA ☑NE				
a. PROPER ORGANISMS USED:	□Y □N □NA ☑NE				
b. PROPER DILUTION SERIES FOLLOWED:	□Y □N □NA ☑NE				
c. PROPER TEST METHODS AND DURATION:	□y □n □na ☑ne				
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	□y □n □na ☑ne				

SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS							
							U DNA DNE
DETAILS:							
OUTFALL #:							OTHER
001	None	None	Moderate	Moderate	None	Light gray	
Visible foam wa	s noted 200 feet down	from outfall in the red	ceiving stream also so	olids were noted on th	e bottom of the receiving	stream below the o	utfall.
SECTION	H: SLUDGE	DISPOSAL					
SLUDGE D	DISPOSAL MEI	ETS PERMIT F	REQUIREMEN	ΓS		Øs □m □	U □NA □NE
DETAILS:	312.5 dry tons	were composte	d in FY 06		1		
1. SLUDGE M	IANAGEMENT ADEQU	JATE TO MAINTAIN EF	FLUENT QUALITY:			⊠s □m	□U □NA □NE
2. SLUDGE R	ECORDS MAINTAINEI	D AS REQUIRED BY 40	) CFR 503:			□s □м	□u □na ☑ne
3. FOR LAND	APPLIED SLUDGE, T	YPE OF LAND APPLIE	TO: (E.G., FOREST,	AGRICULTURAL, PU	BLIC CONTACT SITE):		
SECTION	I: SAMPLIN	G INSPECTION	N PROCEDI	JRES			
SAMPLE F	RESULTS WITH	HIN PERMIT R	EQUIREMENT	S		⊠s □m □	U □NA □NE
DETAILS:							
1. SAMPLES	OBTAINED THIS INSP	ECTION:				ØY	□N □NA □NE
2. TYPE OF S	SAMPLE: GRAB:	☑COMPOSITE: 3-hr	_ METHOD: FREG	QUENCY:			
3. SAMPLES	ØY	□N □NA □NE					
4. FLOW PRO	✓Y	□N □NA □NE					
5. SAMPLE O	BTAINED FROM FACI	LITY'S SAMPLING DE\	/ICE:			□Y	☑N □NA □NE
6. SAMPLE R	EPRESENTATIVE OF	VOLUME AND NATUR	E OF DISCHARGE:			✓Y	□N □NA □NE
7. SAMPLE S	PLIT WITH PERMITTE	E:				□Y	⊠n □na □ne
8. CHAIN-OF-	CUSTODY PROCEDU	RES EMPLOYED:				✓Y	□N □NA □NE
9. SAMPLES	COLLECTED IN ACCO	RDANCE WITH PERM	IT:			✓Y	□N □NA □NE
		WATER POLL					
<b>-</b>	ATER MANAG	SEMENT MEET	S PERMIT RE	QUIREMENTS			U ⊠NA □NE
DETAILS:							
		DATE OF LAST UP					□N □NA ☑NE
2. SITE MAP	INCLUDING ALL DISC	HARGES AND SURFA	CE WATERS:				□N □NA ☑NE
	N PREVENTION TEAM						□N □NA ☑NE
	_	I PROPERLY TRAINED	): 				□N □NA ☑NE
LIST OF POTENTIAL POLLUTANT SOURCES:     LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS:							□N □NA ☑NE
		□N □NA ☑NE					
7. ALL NON-S		□N □NA ☑NE					
8. LIST OF STRUCTURAL BMPS:							□N □NA ☑NE
	ON-STRUCTURAL BMI						□N □NA ☑NE
10. BMPS PROPERLY OPERATED AND MAINTAINED:							□N □NA ☑NE
11. INSPECTIO	ONS CONDUCTED AS	REQUIRED:				L⊔Y	□n □na ☑ne

### FLOW CALCULATION SHEET

Date: <b>April 24, 2007</b> Ti	me:					
Head in Inches:	Feet:					
Type & Size of Primary Flow Measurement Device:  No device						
Name & Model of Secondary Flow Measurement Device:  Marsh-McBirney Flow –System Model 253						
Recorded Flow at Date & Time	e Listed Above: See b	elow * (Facility Flow Meter)				
Calculated Flow at Date & Time Listed Above:  (Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5 <sup>th</sup> Edition)						
% FII()  =	- Calculated Value ated Value	X 100				
% Error =	-	X 100				
% Error =	· X 100	* 10:01 AM Flow =0.33 MGD 11:01 AM Flow= 0.296 MGD 12:01 PM Flow= 0.3098 MGD				
% Error =	X 100	12.01 FINI FIOW= 0.3096 NIGD				
% Error =	%					

AFIN: 08-00036

Permit #: AR0021865

#### **DMR Calculation Check**

Reporting Period: From 07 01 01 To 07 01 31 Year Month Day Year Month Day

Parameter Checked: Fecal coliform

	Loading Mass	Concentration Monthly			
	Mo. Avg lbs/day	Mo. Avg mg/l	7-day Avg mg/l		
Reported Value:	N/A	7	105		
Calculated Value:	N/A	7	105		
Permit Value:	N/A	200	400		

If calculated value does not equal reported value, explain: **Equal-OK** 

#### **DMR Calculation Check**

Reporting Period: From 07 01 01 To 07 01 31

Year Month Day Year Month Day

Parameter Checked: TSS

	Loading Mass	Concentration Monthly			
	Mo. Avg lbs/day	Mo. Avg mg/l	7-day Avg mg/l		
Reported Value:	21.6	9.9	14		
Calculated Value:	21.6	9.9	14		
Permit Value:	87.6	15	23		

If calculated value does not equal reported value, explain: Equal-- OK

#### **NPDES Compliance Inspection Report**

#### - CERTIFICATE OF ANALYSIS -

Attn: Phone: Ext: FAX:

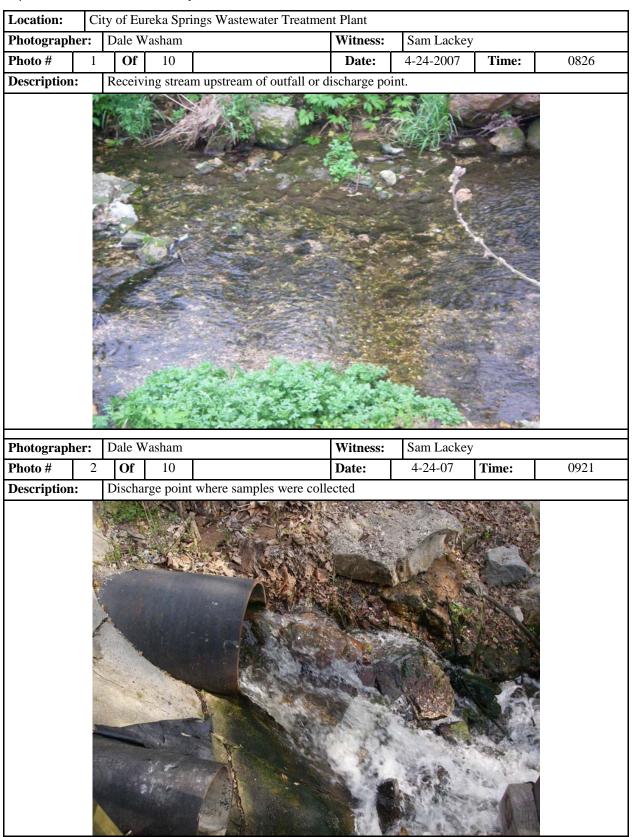
Our Lab#: 2007-1340

Your Sample ID: City of Eureka Spr #1 Eff

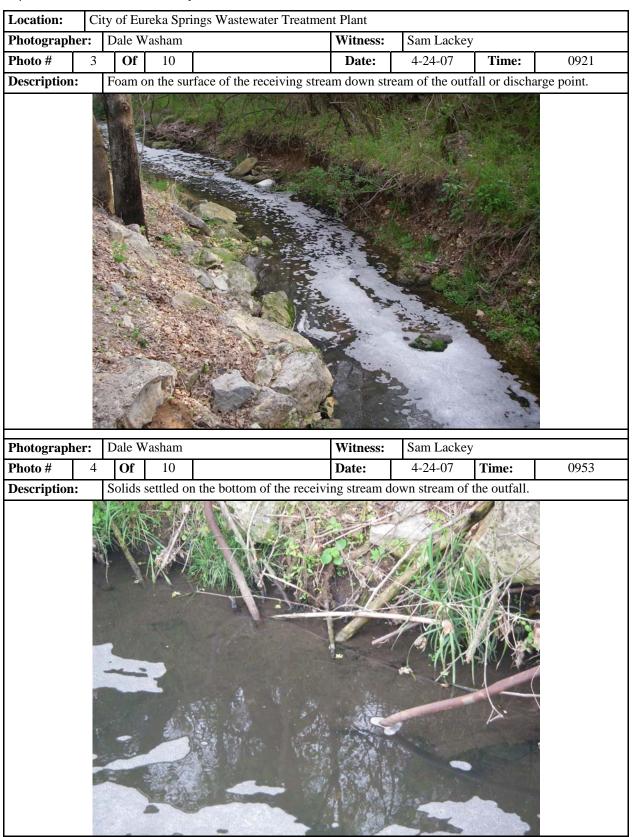
Sample Type: Report Date: 21-May-07

CBOD5 5-day carbonaceous BOD 6.16 mg/L 4/25/2007 **FIELD** Dissolved oxygen 4.20 mg/L 4/24/2007 Field pH 6.91 SU 4/24/2007 NH3/PO4/NO3 3.79 mg/L 4/25/2007 Ammonia as nitrogen Orthophosphate as phosphorus 4.82 mg/L 4/25/2007 Nitrite+Nitrate-N 9.30 mg/L 4/25/2007 NH3-N-ISE 4.20 Ammonia as nitrogen mg/L 4/30/2007 FC-MF Fecal coliform by membrane filter <3 cfu/100 ml 4/24/2007 TSS Total suspended solids 20.8 mg/L 4/25/2007

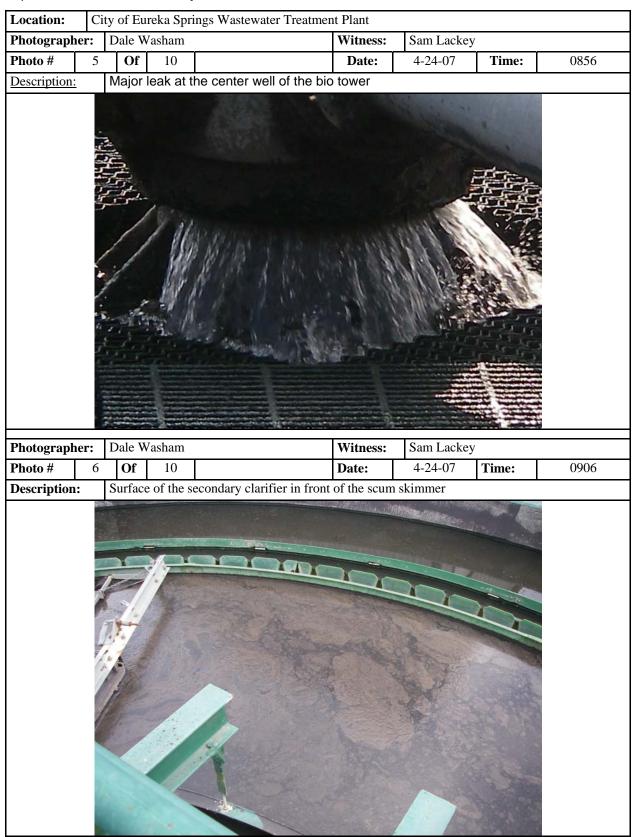




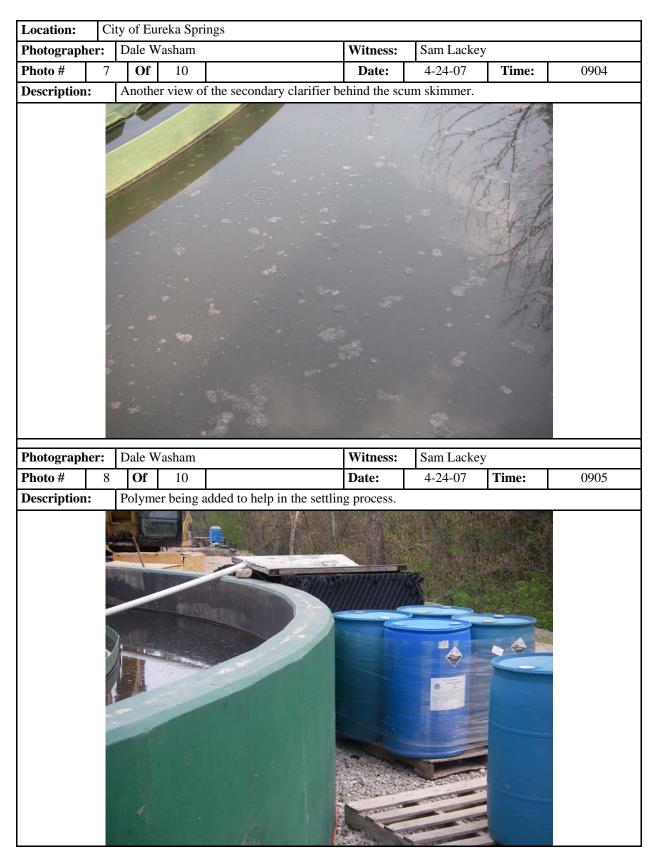




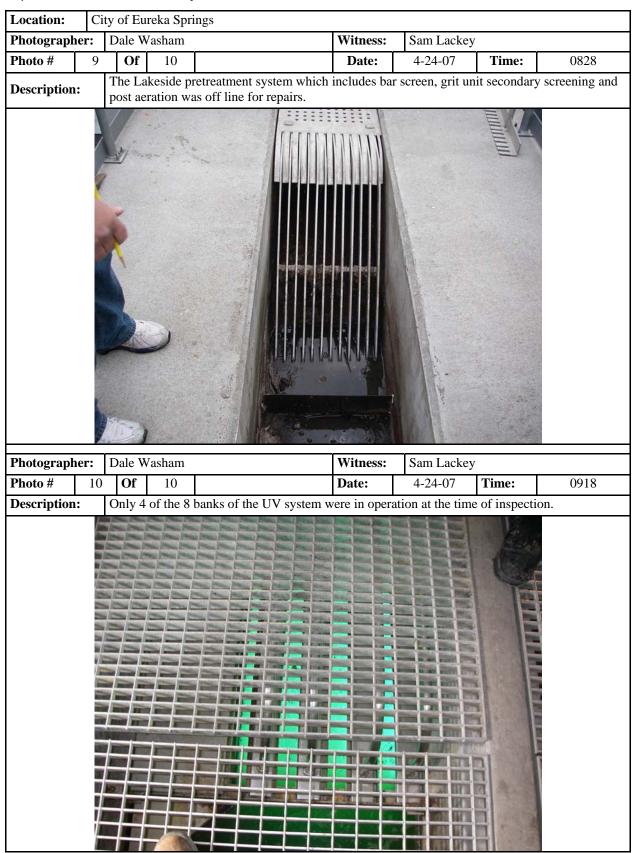














### **Water Division Complaint Report**