ADEQ

A R K A N S A S
Department of Environmental Quality

March 15, 2016

Kent Latch, General Manager
Heber Springs Water and Sewer Commission
1108 West Front Street
Heber Springs, AR 72543

RE: Heber Springs Wastewater Plant Inspections (Cleburne Co)
AFIN: 12-00029 Permit No.: AR0022381
ARR000283
12-00250 4731-WR-2

Dear Mr. Latch:

On February 17, 2016, I performed a Compliance Evaluation Inspection, a Collection System Inspection, a No-Exposure Stormwater Inspection, and a Bio-solids Land Application inspection of the above-referenced 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. Copies of the inspection reports are enclosed for your records.

No violations were noted at the time of the inspection. Please refer to each of the attached inspection reports for any comments.

If I can be of any assistance, please contact me at mccabe@adeq.state.ar.us or (501) 682-0642.

Sincerely,

Kerri McCabe
Inspector Supervisor
Water Division

cc: Kent Latch, General Manager, Heber Springs Water and Sewer Commission, kent@hebersprings water.com

ADEQ
ARKANSAS
Department of Environmental Quality

WATER DIVISION INSPECTION REPORT

AFIN: **12-00029** | PERMIT #: **AR0022381** | DATE: **2/17/2016**

COUNTY: **12 Cleburne** | PDS #: **089662** | MEDIA: **WN**

GPS LAT: **35.486416** LONG: **-92.000048** LOCATION: **Entrance**

FACILITY INFORMATION

NAME:
Heber Springs Wastewater Plant
LOCATION:
1174 Bypass Rd
CITY:
Heber Springs, AR

RESPONSIBLE OFFICIAL

NAME: / TITLE
Kent Latch / General Manager
COMPANY:
Heber Springs Water and Sewer Commission
MAILING ADDRESS:
1108 West Front Street
CITY, STATE, ZIP:
Heber Springs AR 72543
PHONE & EXT: / FAX:
501-362-3422 /
EMAIL:
kent@heberspringswater.com
CONTACTED DURING INSPECTION: **Yes**

INSPECTION INFORMATION

FACILITY TYPE: **1 - Municipal**
INSPECTOR ID#: **84022 S - State**
FACILITY EVALUATION RATING: **3 - Satisfactory**
INSPECTION TYPE: **Compliance Evaluation**
DATE(S): **2/17/2016**
ENTRY TIME: **08:30**
EXIT TIME: **14:30**
PERMIT EFFECTIVE DATE: **3/1/2013**
PERMIT EXPIRATION DATE: **2/28/2018**

FAYETTEVILLE SHALE RELATED: **N**

FAYETTEVILLE SHALE VIOLATIONS: **N**

INSPECTION PARTICIPANTS

NAME/TITLE/PHONE/FAX/EMAIL/ETC.:
Sam Querry/Wastewater Superintendent (Lic# 001663)
Joey Massey/Chief Operator (Lic# 008421)
Kent Latch/General Manager (Lic# 002123)
District 2 Water Inspector Cody Wallace

AREA EVALUATIONS

(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)

S	PERMIT	**S**	FLOW MEASUREMENT	**S**	STORMWATER
S	RECORDS/REPORTS	**S**	LABORATORY	**S**	FACILITY SITE REVIEW
S	OPERATION & MAINTENANCE	**S**	EFFLUENT/RECEIVING WATER	**S**	SELF-MONITORING PROGRAM
S	SAMPLING	**S**	SLUDGE HANDLING/DISPOSAL	**N**	PRETREATMENT
****	OTHER:				

SUMMARY OF FINDINGS

No violations were noted during the inspection.

Please be advised that Part II, Condition #9, 1.a. of the permit requires an effluent dilution series of 3%, 5%, 6%, 8%, and 10%. The contract lab is using 11% instead of 10% for the WET Testing. Please contact Mary Barnett with the Planning Branch for additional information.

Please be advised of the requirements for composite sampling (see Part IV of the permit). The contract lab is noting a start/stop time on the Chain of Custody (COC) form; however, the number and sampling frequency for the aliquots should be noted on the COC.

GENERAL COMMENTS

On Wednesday, Feb 17, 2016 an inspection was conducted with the above-mentioned inspection participants. The inspection consisted of a site assessment and a records review.

Site assessment:

Treatment for May – Oct consists of preliminary (comminutors/bar screens), influent flow measurement, three-cell aerated facultative lagoon, rapid sand filter, UV disinfection, and discharge to Outfall 002. During wet weather during these months, wastewater can be routed to the EQ basin until flows fall below the design volume and then routed back to the third cell of the lagoon.

Treatment for Nov – April consists of preliminary (comminutors/bar screens), influent flow measurement, three-cell aerated facultative lagoon, rapid sand filter, UV disinfection, and discharge to Outfall 002. During wet weather during these months, wastewater can be routed to the EQ basin. The wastewater is then disinfected via UV and discharged from Outfall 003. Outfall 003 is an emergency discharge point permitted only during wet weather flows during Nov – April.

The City completed some plant upgrades in 2014: comminutors, Parshall flume at the influent, rotor brush aerators in the three-cell lagoon, and UV and primary flow measuring device for Outfall 003.

Access road around lagoon levees was maintained and rip-rap was protecting the interior of the lagoon levees. The City has twelve rotor aerators, but they only run six at a time (maintain about 5 mg/l DO). The existing diffuse air system is in place and can be used during low DO conditions. Most of the settling occurs in Cell #1 with about 90% removal occurring in Cell #1. Cell #2 is for holding and Cell #3 has a lower DO for nutrient removal. The whole system has about a 30-day retention time. Wastewater from Cell #3 is then routed to the four-cell rapid sand filter. Wastewater is disinfected via UV prior to discharging to Outfall 002 at Sulphur Creek. Flow is calculated using flow from two separate totalizing turbine meters at the rapid sand filter (flow to sand filter minus flow used to backwash sand filter that is routed back to lagoon). Samples are collected at a manhole after UV disinfection. The City can also utilize an EQ basin during wet weather, but they are only allowed to discharge from Outfall 003 during emergencies specified above.

Sludge generated in the plant can be stored in an offsite sludge lagoon, and this lagoon has only been used once in ~30 years to store sludge. Otherwise, the City has three sites dedicated to the land application of bio-solids. The City has not land applied bio-solids since 2006/2007.

Records review:

The plant has an in-house lab; however, all sample collecting/analyzing with the exception of flow measurement is contracted. Chain of Custody (COC) forms, lab analyses sheets, and DMRs are filled out completely. Daily Logs kept by the operators should contain all information noted in Part III, Section C, 8. A-F of the permit (i.e., time for flow measurement). Additionally, the City utilizes NetDMR and maintains hardcopies, and the contract lab's complete name/address should be included with the monthly DMRs. This information can be added to the "Comments" section on the DMR (see Part III, Section C, 5.).

INSPECTOR'S SIGNATURE: Kerri McCabe	**Kerri McCabe**	DATE: **3/14/2016**
SUPERVISOR'S SIGNATURE:	**Jason Bolenbaugh**	DATE: **3/15/2016**

SECTION A: PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	☑S ☐M ☐U ☐NA ☐NE
DETAILS:	
1. 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 ☑NA ☐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:	☑Y ☐N ☐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:	☑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:	☑S ☐M ☐U ☐NA ☐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 ☐M ☐U ☐NA ☐NE
2. TREATMENT UNITS PROPERLY MAINTAINED:	☑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:	☐S ☐M ☐U ☐NA ☑NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	☑S ☐M ☐U ☐NA ☐NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED: **One (1) Class IV and sixteen (16) Class III.**	☑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: **EQ basin for emergency storage; additional UV at 003.**	☑Y ☐N ☐NA ☐NE
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:	☐Y ☑N ☐NA ☐NE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	☐Y ☐N ☑NA ☐NE

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	☑S ☐M ☐U ☐NA ☐NE
DETAILS: **Contract lab collects/analyzes all parameters.**	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	☑Y ☐N ☐NA ☐NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	☑Y ☐N ☐NA ☐NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	☑Y ☐N ☐NA ☐NE
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:	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED:__ TYPE OF DEVICE: **Closed pipe.**	☐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: **Two (2) totalized turbine meters; one meter reads flow to rapid sand filters and one meter reads flow used for backwash (calculated).**	☑Y ☐N ☐NA ☐NE
4. CALIBRATION FREQUENCY ADEQUATE:	☐Y ☐N ☐NA ☑NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	☐Y ☐N ☐NA ☑NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	☐Y ☐N ☑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: **Contract lab collects/analyzes all parameters.**	
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:	☑Y ☐N ☐NA ☐NE
a. LAB NAME: **Arkansas Testing Laboratories**	
b. LAB ADDRESS: **3301 Langley Drive, Searcy, AR 72143**	
c. PARAMETERS PERFORMED: **002 – BOD5, TSS, DO, FCB, TP, NO3+NO2-N, and pH; 003 – same as 002 and influent BOD5 & TSS.**	
8. BIOMONITORING PROCEDURES ADEQUATE: **American Interplex Corp, 8600 Kanis Rd, Little Rock, AR 72204-2322**	☑Y ☐N ☐NA ☐NE
a. PROPER ORGANISMS USED:	☑Y ☐N ☐NA ☐NE
b. PROPER DILUTION SERIES FOLLOWED: **Using effluent dilutions of 3%, 5%, 6%, 8% (critical), and 11%; permit requires 10%.**	☐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

BASED ON VISUAL OBSERVATIONS ONLY — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: Observed at manhole after UV; observed combined outfalls (subsurface) at receiving stream.

OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
002	NO	NO	NO	NO	NO	LIGHT TAN	N/A
003	N/A	N/A	N/A	N/A	N/A	N/A	NO DISCHARGE

SECTION H: SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Permitted under State No-Discharge permit 4731-WR-2.**

1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY: **Sludge holding lagoon and land application.** ☑S ☐M ☐U ☐NA ☐NE
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503: **2013 – 2014 Annual Reports submitted; no land application.** ☑S ☐M ☐U ☐NA ☐NE
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE): **City owned agricultural fields.**

SECTION I: SAMPLING INSPECTION PROCEDURES

SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS — ☐S ☐M ☐U ☑NA ☐NE

DETAILS:

1. SAMPLES OBTAINED THIS INSPECTION: ☐Y ☐N ☑NA ☐NE
2. TYPE OF SAMPLE: ☐GRAB:__ ☐COMPOSITE:__ METHOD:__ FREQUENCY:
3. SAMPLES PRESERVED: ☐Y ☐N ☑NA ☐NE
4. FLOW PROPORTIONED SAMPLES OBTAINED: ☐Y ☐N ☑NA ☐NE
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE: ☐Y ☐N ☑NA ☐NE
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE: ☐Y ☐N ☑NA ☐NE
7. SAMPLE SPLIT WITH PERMITTEE: ☐Y ☐N ☑NA ☐NE
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED: ☐Y ☐N ☑NA ☐NE
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT: ☐Y ☐N ☑NA ☐NE

SECTION J: STORM WATER POLLUTION PREVENTION PLAN

STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS — ☑S ☐M ☐U ☐NA ☐NE

DETAILS: **Part II, Condition #6 requires Best Management Practices (BMPs); inspected under ARR000283.**

1. SWPPP UPDATED AS NEEDED:__ DATE OF LAST UPDATE: ☐Y ☐N ☑NA ☐NE
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS: ☐Y ☐N ☑NA ☐NE
3. POLLUTION PREVENTION TEAM IDENTIFIED: ☐Y ☐N ☑NA ☐NE
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED: ☐Y ☐N ☑NA ☐NE
5. LIST OF POTENTIAL POLLUTANT SOURCES: ☐Y ☐N ☑NA ☐NE
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS: ☐Y ☐N ☑NA ☐NE
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED: ☐Y ☐N ☑NA ☐NE
8. LIST OF STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
9. LIST OF NON-STRUCTURAL BMPS: ☐Y ☐N ☑NA ☐NE
10. BMPS PROPERLY OPERATED AND MAINTAINED: ☐Y ☐N ☑NA ☐NE
11. INSPECTIONS CONDUCTED AS REQUIRED: ☐Y ☐N ☑NA ☐NE

DMR Calculation Check

Reporting Period: From 2015 (Year) 04 (Month) 01 (Day) To 2015 (Year) 04 (Month) 30 (Day)

Parameter Checked: FCB (002)

	~~Loading Mass (lbs/day) Mo. Avg.~~	Concentration (colonies/100ml) Mo. Avg.	7-day Avg.
Reported Value:	N/A	0	0
Calculated Value:	N/A	1	2
Permit Value:	N/A	200	400

If calculated value does not equal reported value, explain:
Lab reporting <1/<2 on analysis sheets. I used "1/2" and City used "0/1." See Figure 3 for calculations.

DMR Calculation Check

Reporting Period: From **2015** (Year) **04** (Month) **01** (Day) To **2015** (Year) **04** (Month) **30** (Day)

Parameter Checked: **TSS (003)**

	Loading Mass (lbs/day) Mo. Avg.	Concentration Monthly (mg/l) Mo. Avg.	Concentration Monthly (mg/l) 7-day Avg.
Reported Value:	51.42	2.25	4.00
Calculated Value:	59.5	2.2	4.0
Permit Value:	292	20	30

If calculated value does not equal reported value, explain:

Values are similar (slight rounding differences). See Figure 4 for calculations.

DMR Calculation Check

Reporting Period:	**From**	**2015** (Year)	**10** (Month)	**01** (Day)	**To**	**2015** (Year)	**10** (Month)	**31** (Day)

Parameter Checked: **BOD5 (002)**

	Loading Mass (lbs/day) Mo. Avg.	**Concentration Monthly (mg/l) Mo. Avg.**	**7-day Avg.**
Reported Value:	**27.92**	**3.72**	**6.00**
Calculated Value:	**27.2**	**3.7**	**6.0**
Permit Value:	**292**	**20**	**30**

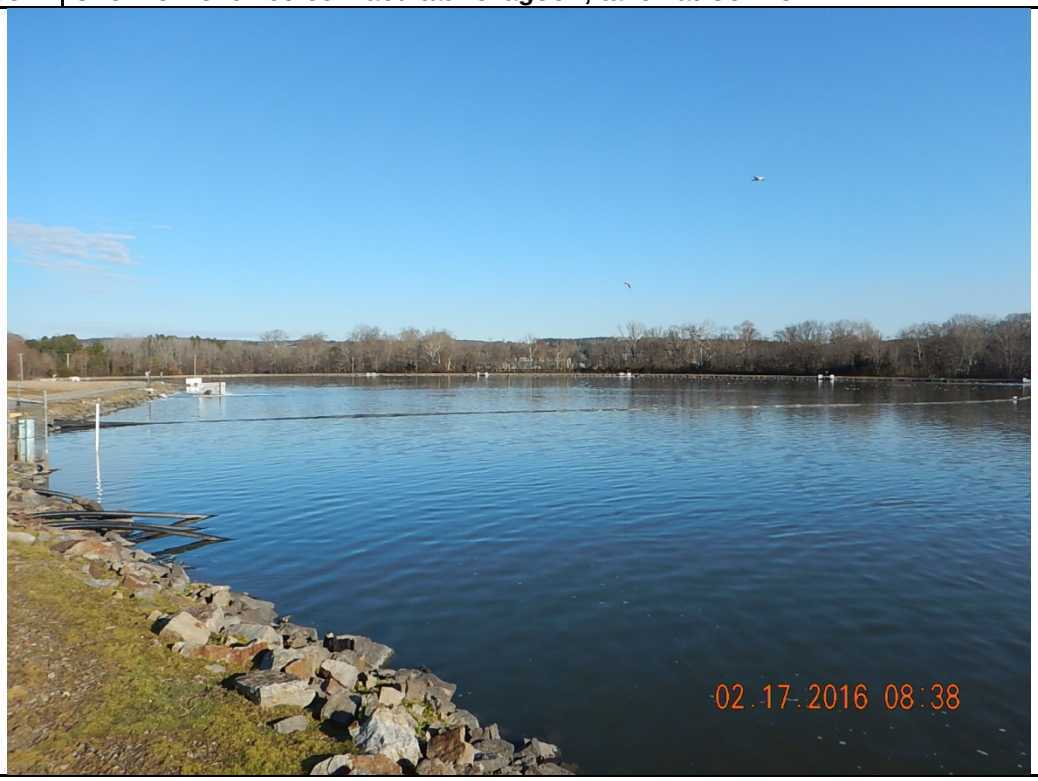
If calculated value does not equal reported value, explain:

Values are the same (slight rounding differences). See Figure 5 for calculations.

Water Division Photographic Evidence Sheet					
Location:	**Heber Springs Wastewater Plant**				
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0826**
Witness:	**Cody Wallace**			Photo #:	**1**
Description:	**21" main line with comminutor and bar screen for preliminary.**				

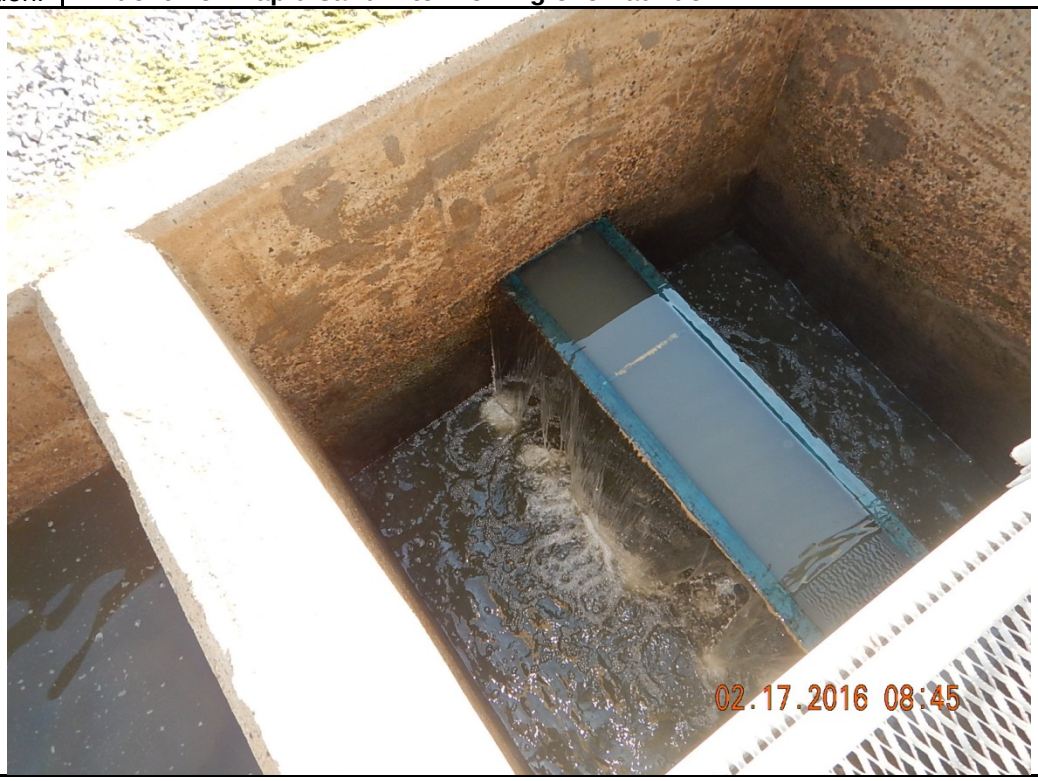
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0827**
Witness:	**Cody Wallace**			Photo #:	**2**
Description:	**24" main line with comminutor and bar screen for preliminary.**				

Water Division Photographic Evidence Sheet					
Location:	**Heber Springs Wastewater Plant**				
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0838**
Witness:	**Cody Wallace**			Photo #:	**3**
Description:	**Overview of three-cell facultative lagoon; taken at Cell #3.**				

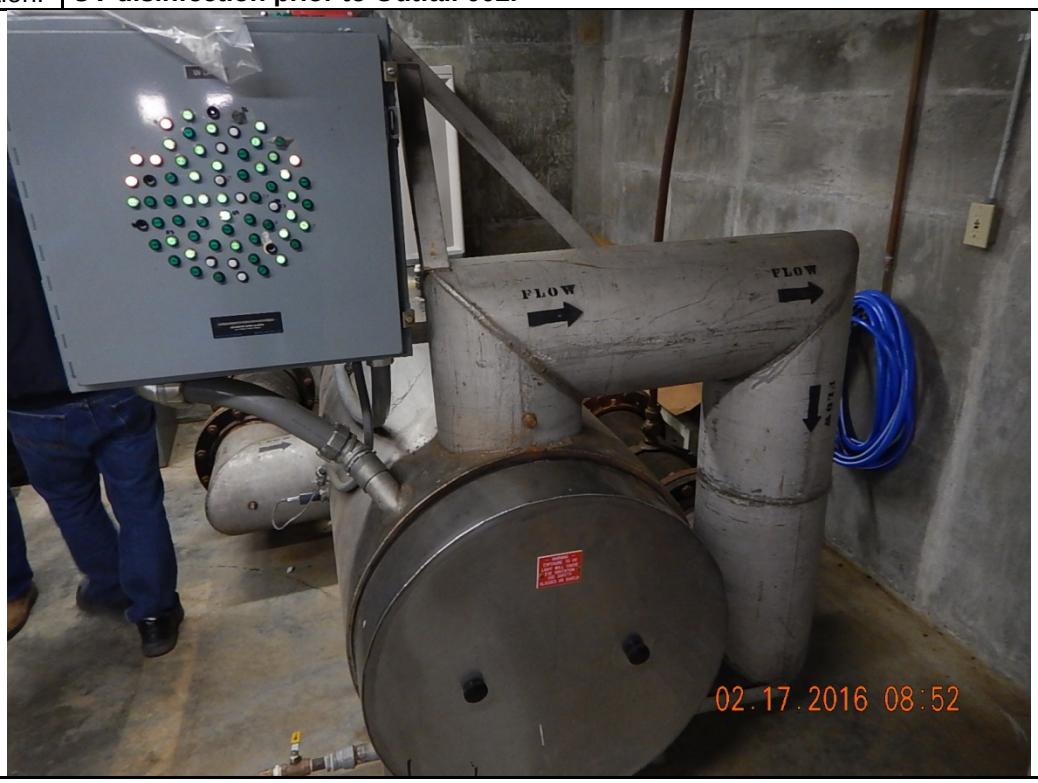


Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0842**
Witness:	**Cody Wallace**			Photo #:	**4**
Description:	**Rapid sand filter.**				

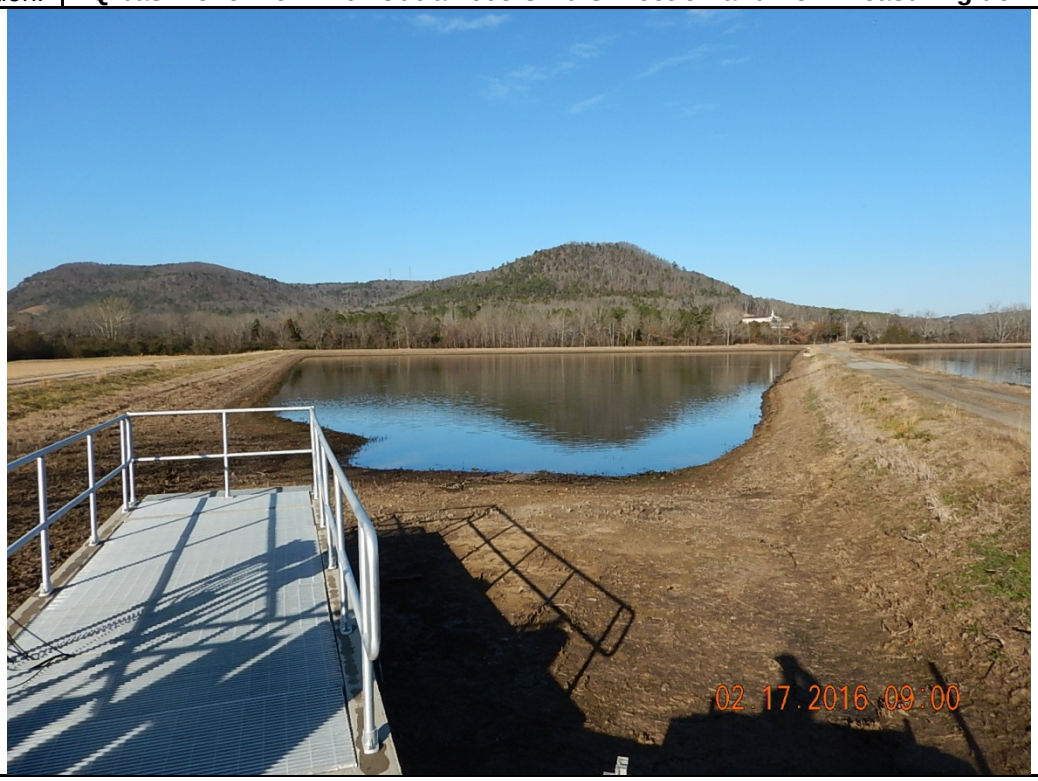
Water Division Photographic Evidence Sheet					
Location:	**Heber Springs Wastewater Plant**				
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0845**
Witness:	**Cody Wallace**			Photo #:	**5**
Description:	**Effluent from rapid sand filter flowing over launder.**				



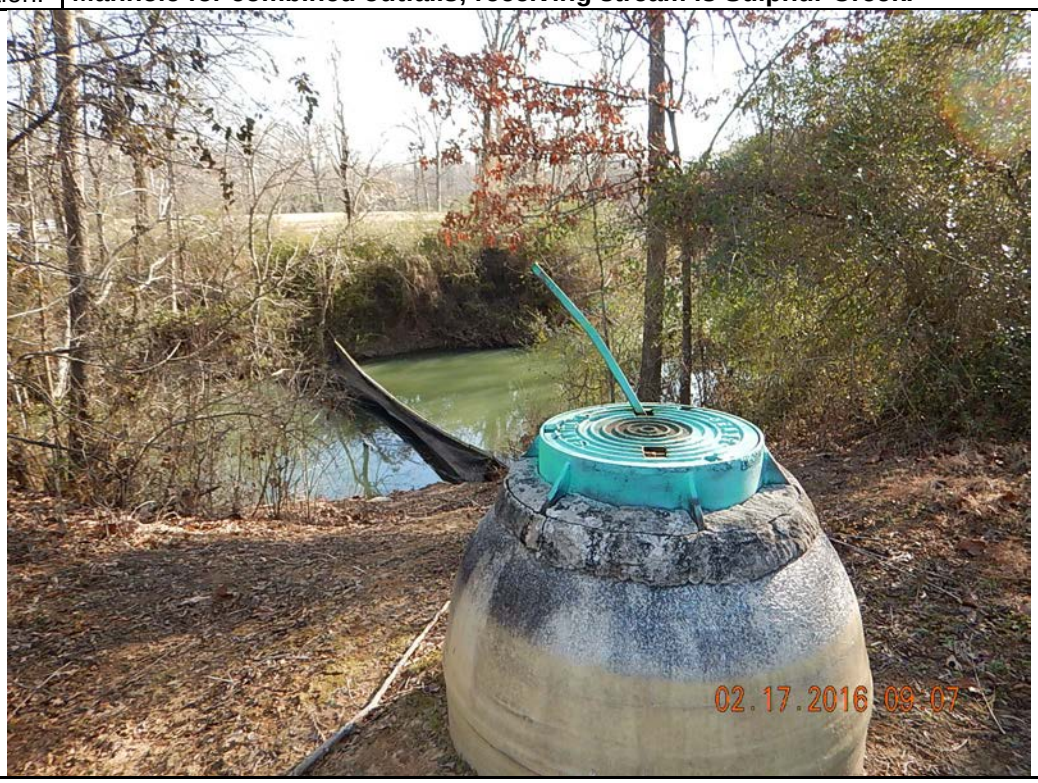
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0852**
Witness:	**Cody Wallace**			Photo #:	**6**
Description:	**UV disinfection prior to Outfall 002.**				



Water Division Photographic Evidence Sheet					
Location:	**Heber Springs Wastewater Plant**				
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0900**
Witness:	**Cody Wallace**			Photo #:	**7**
Description:	**EQ basin overview with Outfall 003 UV disinfection and flow measuring device.**				



Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0907**
Witness:	**Cody Wallace**			Photo #:	**8**
Description:	**Manhole for combined outfalls; receiving stream is Sulphur Creek.**				



Water Division Photographic Evidence Sheet					
Location:	**Heber Springs Wastewater Plant**				
Photographer:	**Kerri McCabe**	Date:	**Feb 17, 2016**	Time:	**0924**
Witness:	**Cody Wallace**			Photo #:	**9**
Description:	**Sludge storage lagoon; used once in 30 years.**				

Figure 1. Google Earth image dated Nov 16, 2012 of the overview of the City of Heber Springs POTW and associated structures.

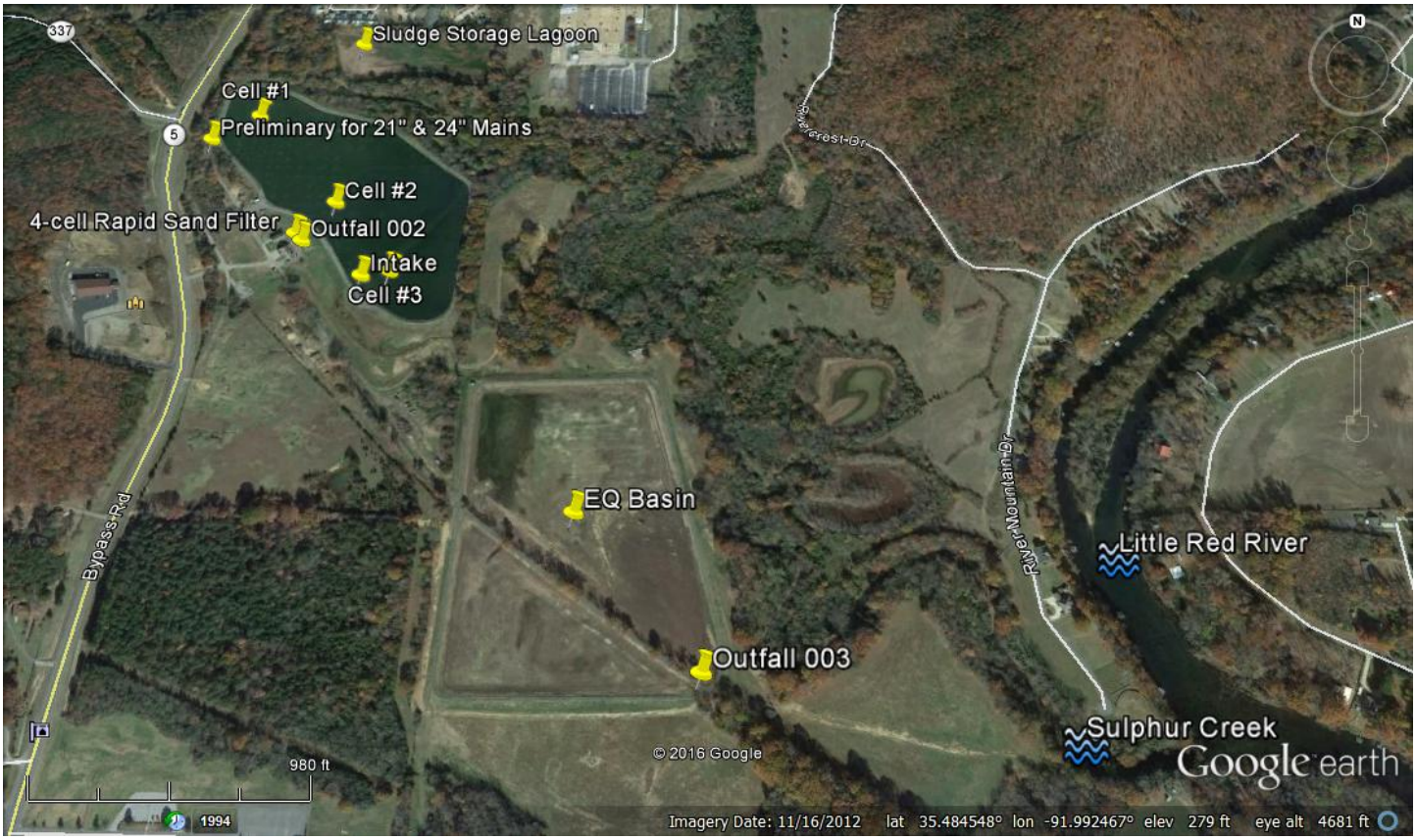


Figure 2. Google Earth image dated Nov 16, 2012 of a close-up of the City of Heber Springs POTW.

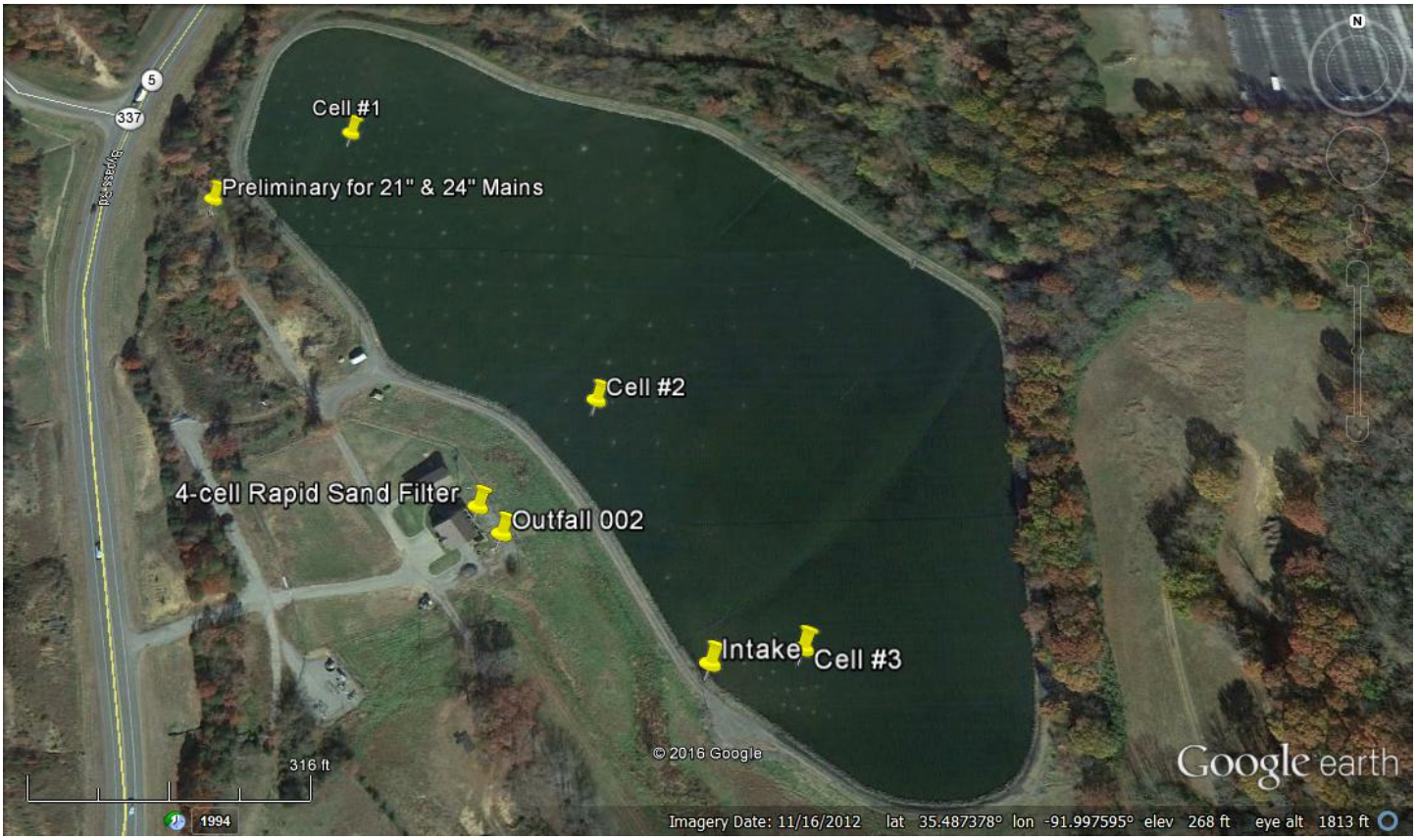


Figure 3. FCB calculations for April 2015 for Outfall 002.

Date	Count	Log	Geo Mean
2	1	0	1
9	2	0.301029996	2
16	1	0	1
23	1	0	1
29	1	0	1
Average		0.060205999	
Geo Mean		1.148698355	

Figure 4. TSS calculations for April 2015 for Outfall 003.

Date	Concentration (mg/l)	7-day Average (mg/l)	Daily Flow (MGD)	Mass (lbs/day)
8	1	1	3.15	26.271
15	3	3	4.48	112.0896
23	4	4	2.51	83.7336
29	1	1	1.89	15.7626
MAX	4		MAX	112.0896
MIN	1		MIN	15.7626
Average	2.25		Average	59.4642

Figure 5. BOD5 calculations for Oct 2015 for Outfall 002.

Date	Concentration (mg/l)	7-day Average (mg/l)	Daily Flow (MGD)	Mass (lbs/day)
1	3.1	3.1	0.95	24.5613
7	2.7	2.7	0.93	20.94174
14	3.5	3.5	0.89	25.9791
21	3.3	3.3	0.86	23.66892
29	6.0	6.0	0.82	41.0328
MAX	6.0		MAX	41.0328
MIN	2.7		MIN	20.94174
Average	3.7		Average	27.236772