

# ADEQ

ARKANSAS  
Department of Environmental Quality

June 1, 2016

Matt Yost, Senior V.P. Terminalling and Engineering  
Martin Operating Partnership LP  
484 East 6th Street  
Smackover, AR 71762

**RE: Martin Operating Partnership Inspections (Union Co)**  
**AFIN: 70-00039**                      **Permit No.: AR0000591**  
**ARR001516**  
**ARR154674**

Dear Mr. Yost:

On May 4 and 5, 2016, I performed a Compliance Evaluation Inspection, Industrial Stormwater Inspection, and Construction Stormwater 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.

**Please refer to the “Summary of Findings” section of each of the attached inspection reports and provide a written response for each violation that was noted.** This response should be mailed to the attention of the Water Division Inspection Branch at the address at the bottom of this letter or e-mailed to [Water-Inspection-Report@adeq.state.ar.us](mailto:Water-Inspection-Report@adeq.state.ar.us). This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentation (i.e., photos) is due by **June 15, 2016**.

If I can be of any assistance, please contact me at [youngm@adeq.state.ar.us](mailto:youngm@adeq.state.ar.us) or (501) 837-2073.

Sincerely,



Michael Young  
District 8 Field Inspector  
Water Division



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

## WATER DIVISION INSPECTION REPORT

AFIN: <b>70-00039</b>	PERMIT #: <b>AR0000591</b>	DATE: <b>5/4/2016</b>
COUNTY: <b>70 Union</b>	PDS #: <b>091020</b>	MEDIA: <b>WN</b>
GPS LAT: <b>33.364287</b> LONG: <b>-92.717744</b> LOCATION: <b>Entrance</b>		

FACILITY INFORMATION	INSPECTION INFORMATION
NAME: <b>Martin Operating Partnership</b> LOCATION: <b>484 East 6th Street</b> CITY: <b>Smackover, AR 71762</b>	FACILITY TYPE: <b>2 - Industrial</b> INSPECTOR ID#: <b>101531 S - State</b> FACILITY EVALUATION RATING: <b>4 - Satisfactory</b> INSPECTION TYPE: <b>Compliance Evaluation</b>
<b>RESPONSIBLE OFFICIAL</b>	DATE(S): <b>5/4/2016</b> ENTRY TIME: <b>09:30</b> EXIT TIME: <b>16:30</b> PERMIT EFFECTIVE DATE: <b>2/1/2013</b> <b>5/5/2016</b> <b>09:00</b> <b>16:45</b> PERMIT EXPIRATION DATE: <b>1/31/2018</b>
NAME / TITLE: <b>Matt Yost / Senior V.P. Terminalling and Engineering</b> COMPANY: <b>Martin Operating Partnership LP</b> MAILING ADDRESS: <b>484 East 6th Street</b> CITY, STATE, ZIP: <b>Smackover AR 71762</b> PHONE & EXT: / FAX: <b>870-881-8700 /</b> EMAIL:	FAYETTEVILLE SHALE RELATED: <b>N</b> FAYETTEVILLE SHALE VIOLATIONS: <b>N</b> NAME/TITLE/PHONE/FAX/EMAIL/ETC.: <b>Jim Dodson/Senior Environmental Coordinator/870-864-7550/jim.dodson@martinmlp.com</b>
CONTACTED DURING INSPECTION: <b>No</b>	

AREA EVALUATIONS					
(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)					
<b>S</b>	PERMIT	<b>S</b>	FLOW MEASUREMENT	<b>N</b>	STORMWATER
<b>S</b>	RECORDS/REPORTS	<b>S</b>	LABORATORY	<b>S</b>	FACILITY SITE REVIEW
<b>M</b>	OPERATION & MAINTENANCE	<b>U</b>	EFFLUENT/RECEIVING WATER	<b>S</b>	SELF-MONITORING PROGRAM
<b>M</b>	SAMPLING	<b>S</b>	SLUDGE HANDLING/DISPOSAL	<b>N</b>	PRETREATMENT
<b>**</b>	OTHER:				

SUMMARY OF FINDINGS
<p><b>1.) There was a discharge of visible sheen at Outfall 003 during the inspection. This is a violation of permit condition Part IA.</b></p>
<p><b>2.) Samples analyzed for pH and Dissolved Oxygen have violated hold times of 15 minutes. This is a violation of permit condition Part III. (C.) (3.).</b></p>
<p><b>3.) The thermometer in the composite sampler had no indication of last calibration date. This is a violation of permit condition Part III. (C.) (3.).</b></p>


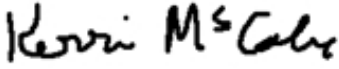
**GENERAL COMMENTS**

On May 4, 2016 I performed a Compliance Evaluation Inspection at Martin Operating Partnership LP in Smackover, AR. I returned on May 5, 2016 and performed an inspection on the laboratory. During the inspection I observed sheen at Outfall 003 (see Photos 1-2). I also observed that the composite sampler thermometer had no indication of the last calibration date (see Photo 3). All treatment units were in operation at the time of inspection, and I did not observe any violations other than those noted.

The facility has a very high Ammonia-Nitrogen concentration monthly average limit, which have caused numerous effluent violations. A CAO has been issued for violations related to unpermitted discharges caused by high rain events and the CAO may be modified to take into account the ammonia violations. The facility has researched Moving Bed Biofilm Reactors (MBBRs) as a new treatment option and is proposing an install of three (3) units.

The laboratory only had an issue with collecting a sample and analyzing it for pH and Dissolved Oxygen (DO) within the 15-minute holding time (see Photo 4). Calibration is being performed on all devices, but it is recommended to calibrate the DO and pH meters for temperature according to the manufacturer's instructions (using a NIST thermometer). Also, pH buffers used to calibrate need to be within the "expected range" of the wastewater analyzed by the facility. Currently, the facility uses a 7 and 10 pH buffer standard. The manufacturer's instructions did not indicate the preferred buffer type so SM-4500 H+ states that buffers of at least 2 s.u. difference are to be used to calibrate and third buffer that is 2 s.u. away from the second buffer but less than 10 s.u. is used to "check" the calibration (see Figure 1). I have attached a DO and pH calibration spreadsheet for reference or use by the facility. I have also supplied a DO table to use as verification that the DO meter is reading the correct mg/L for the correct temperature.

I have included two attachments with the report. I discussed with the laboratory that I would provide an example calibration sheet that I use when conducting field measurements. The information on the attached calibration sheet is slightly more detailed than what the facility keeps in their record book. The current method of keeping them in a notebook is compliant and does not need to change if the lab manager does not feel the need. The other document provided is a chart of true DO measurements for a specific temperature at an elevation of 100 feet. The current method of calibrating the DO meter using slope is compliant and does not need to change. The information provided is specifically for educational or optional use. I encourage the lab manager to contact me with any questions about the information.

INSPECTOR'S SIGNATURE:  Michael Young	DATE: 5/20/2016
SUPERVISOR'S SIGNATURE:  Kerri McCabe	DATE: 5/31/2016

<b>SECTION A: PERMIT VERIFICATION</b>	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ALL DISCHARGES ARE PERMITTED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION B: RECORDKEEPING AND REPORTING EVALUATION</b>	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
a. DATES AND TIME(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. EXACT LOCATION(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. ANALYTICAL METHODS AND TECHNIQUES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
e. RESULTS OF CALIBRATIONS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
f. RESULTS OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
g. DATES AND TIMES OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION C: OPERATIONS AND MAINTENANCE</b>	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. TREATMENT UNITS PROPERLY OPERATED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
2. TREATMENT UNITS PROPERLY MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: <u>March 2016</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

<b>SECTION D: SAMPLING</b>	
<b>PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS</b>	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>DETAILS:</b>	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER PRESERVATION TECHNIQUES USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136: <u>pH and D.O.</u>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION E: FLOW MEASUREMENT</b>	
<b>PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS</b>	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>DETAILS:</b>	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: __ TYPE OF DEVICE: <u>Weir</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED: <u>Flow estimated at 002 and 003</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. CALIBRATION FREQUENCY ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. HEAD MEASURED AT PROPER LOCATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION F: LABORATORY</b>	
<b>PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS</b>	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>DETAILS:</b>	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. DUPLICATE SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SPIKED SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. COMMERCIAL LABORATORY USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. LAB NAME: <u>Ana-Lab WET Testing; Bio-Analytic for metals</u>	
b. LAB ADDRESS: <u>Kilgore, TX ; Doyline, LA</u>	
c. PARAMETERS PERFORMED: <u>Wet Test; metals and TOC</u>	
8. BIOMONITORING PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. PROPER ORGANISMS USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER DILUTION SERIES FOLLOWED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. PROPER TEST METHODS AND DURATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

<b>SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS</b>							
BASED ON VISUAL OBSERVATIONS ONLY						<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	N	N	N	N	N	Colorless	--
002	N	N	N	N	N	Colorless	Sheen on receiving surface
003	Y	N	N	N	N	Colorless	Oil Sheen
<b>SECTION H: SLUDGE DISPOSAL</b>							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE):							
<b>SECTION I: SAMPLING INSPECTION PROCEDURES</b>							
SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SAMPLES OBTAINED THIS INSPECTION:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
2. TYPE OF SAMPLE: <input type="checkbox"/> GRAB:___ <input type="checkbox"/> COMPOSITE:___ METHOD:___ FREQUENCY:___							
3. SAMPLES PRESERVED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
4. FLOW PROPORTIONED SAMPLES OBTAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
7. SAMPLE SPLIT WITH PERMITTEE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
<b>SECTION J: STORM WATER POLLUTION PREVENTION PLAN</b>							
STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SWPPP UPDATED AS NEEDED:___ DATE OF LAST UPDATE:___						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
3. POLLUTION PREVENTION TEAM IDENTIFIED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
5. LIST OF POTENTIAL POLLUTANT SOURCES:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
8. LIST OF STRUCTURAL BMPS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
9. LIST OF NON-STRUCTURAL BMPS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
10. BMPS PROPERLY OPERATED AND MAINTAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
11. INSPECTIONS CONDUCTED AS REQUIRED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	

**FLOW CALCULATION SHEET**

Date: **05/05/2016** Time: **14:51**

Head in Inches: **5.8** Feet: **0.483**

Type & Size of Primary Flow Measurement Device: **90° V Notch Weir**

Name & Model of Secondary Flow Measurement Device: **Totalizer**

Date of last Calibration of Secondary Flow Device: **Yearly**

Recorded Flow at Date & Time Listed Above: **171.5 GPM** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **179.1 GPM**

(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5<sup>th</sup> Edition)

% Error =	Recorded Value	-	Calculated Value	X 100
	Calculated Value			

% Error =	171.5	-	179.1	X 100
	179.1			

% Error =	-7.6	X 100
	179.1	

% Error =	-0.04	X 100
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% Error =	<b>4</b>	%
-----------	----------	---

Comments:

**DMR Calculation Check**

Reporting Period: From 2015 05 01 To 2015 05 31  
 Year Month Day Year Month Day

Parameter Checked: NH3-N

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	<u>52.88</u>	<u>26.7</u>	<u>32.0</u>
Calculated Value:	<u>52.88</u>	<u>26.7</u>	<u>32.0</u>
Permit Value:	<u>8.4*</u>	<u>15</u>	<u>8.4*</u>

If calculated value does not equal reported value, explain:

\*Ammonia-Nitrogen limit for the Tier 1 production is an interim limit of 8.4 mg/L

Values were equal, but levels exceeded limits across all limitations.



**DMR Calculation Check**

Reporting Period: From 2015 05 01 To 2015 05 30  
 Year Month Day Year Month Day

Parameter Checked: TSS

	<b>Loading Mass Mo. Avg. - lbs/day</b>	<b>Concentration Monthly Mo. Avg. - mg/l</b>	<b>7-day Avg. - mg/l</b>
Reported Value:	<u>66.51</u>	<u>33.5</u>	<u>75</u>
Calculated Value:	<u>66.51</u>	<u>33.5</u>	<u>75</u>
Permit Value:	<u>112.2</u>	<u>Report</u>	<u>Report</u>

If calculated value does not equal reported value, explain:

Equal

**Water Division Photographic Evidence Sheet**

Location:	<b>Martin Operating Partnership</b>				
Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>	Time:	<b>14:18</b>
Witness:	<b>Jim Dodson</b>	Photo #:	<b>1</b>		
Description:	<b>Oil sheen at Outfall 003.</b>				



Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>	Time:	<b>14:20</b>
Witness:	<b>Jim Dodson</b>	Photo #:	<b>2</b>		
Description:	<b>Photo showing iron oxide bacteria and oil sheen in same frame.</b>				

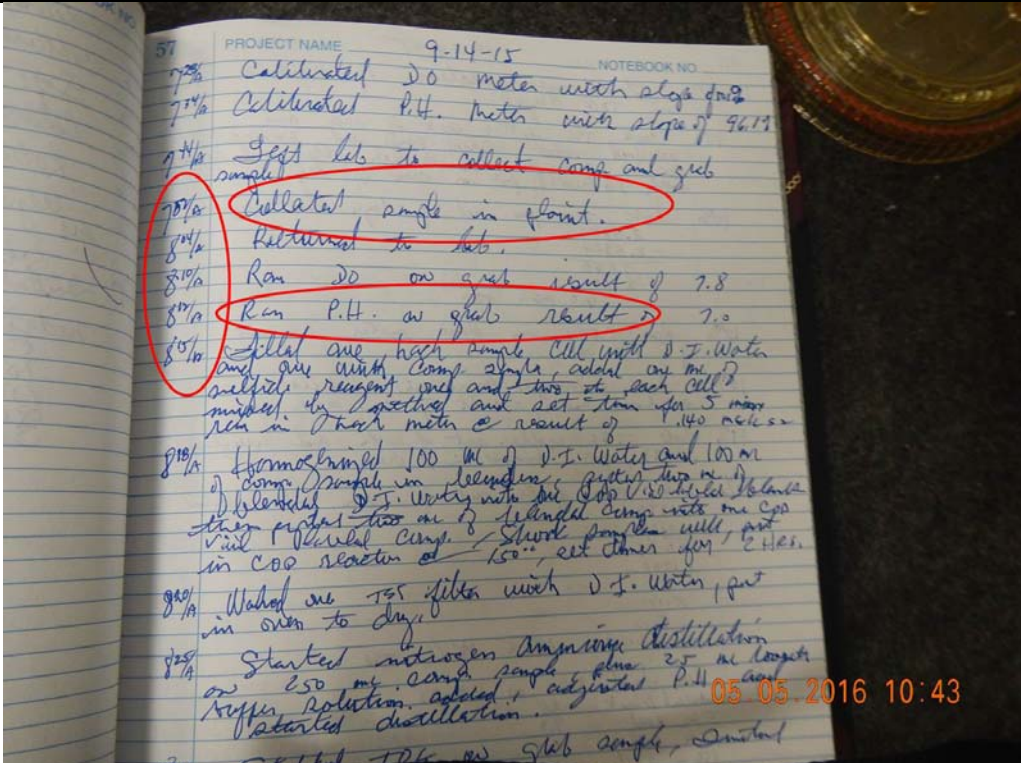


**Water Division Photographic Evidence Sheet**

Location:	<b>Martin Operating Partnership</b>		
Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>
Witness:	<b>Jim Dodson</b>	Time:	<b>15:15</b>
		Photo #:	<b>3</b>
Description:	<b>Thermometer in composite sampler had no information on last calibration date.</b>		



Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>
Witness:	<b>Jim Dodson</b>	Time:	<b>10:43</b>
		Photo #:	<b>4</b>
Description:	<b>Sample of lab record indicating 15 minute hold time on pH analysis was violated.</b>		



**Figure 1. SM-4500 H+ calibration method for pH meters is outlined in blue.**

*b. Saturated potassium hydrogen tartrate solution:* Shake vigorously an excess (5 to 10 g) of finely crystalline KHC<sub>4</sub>H<sub>4</sub>O<sub>6</sub> with 100 to 300 mL distilled water at 25°C in a glass-stoppered bottle. Separate clear solution from undissolved material by decantation or filtration. Preserve for 2 months or more by adding one thymol crystal (8 mm diam) per 200 mL solution.

*c. Saturated calcium hydroxide solution:* Calcine a well-washed, low-alkali grade CaCO<sub>3</sub> in a platinum dish by igniting for 1 h at 1000°C. Cool, hydrate by slowly adding distilled water with stirring, and heat to boiling. Cool, filter, and collect solid Ca(OH)<sub>2</sub> on a fritted glass filter of medium porosity. Dry at 110°C, cool, and pulverize to uniformly fine granules. Vigorously shake an excess of fine granules with distilled water in a stoppered polyethylene bottle. Let temperature come to 25°C after mixing. Filter supernatant under suction through a sintered glass filter of medium porosity and use filtrate as the buffer solution. Discard buffer solution when atmospheric CO<sub>2</sub> causes turbidity to appear.

*d. Auxiliary solutions:* 0.1N NaOH, 0.1N HCl, 5N HCl (dilute five volumes 6N HCl with one volume distilled water), and acid potassium fluoride solution (dissolve 2 g KF in 2 mL conc H<sub>2</sub>SO<sub>4</sub> and dilute to 100 mL with distilled water).

**4. Procedure**

*a. Instrument calibration:* In each case follow manufacturer's instructions for pH meter and for storage and preparation of electrodes for use. Recommended solutions for short-term storage of electrodes vary with type of electrode and manufacturer, but generally have a conductivity greater than 4000 μmhos/cm. Tap water is a better substitute than distilled water, but pH 4

buffer is best for the single glass electrode and saturated KCl is preferred for a calomel and Ag/AgCl reference electrode. Saturated KCl is the preferred solution for a combination electrode. Keep electrodes wet by returning them to storage solution whenever pH meter is not in use.

Before use, remove electrodes from storage solution, rinse, blot dry with a soft tissue, place in initial buffer solution, and set the isopotential point (§ 2a above). Select a second buffer within 2 pH units of sample pH and bring sample and buffer to same temperature, which may be the room temperature, a fixed temperature such as 25°C, or the temperature of a fresh sample. Remove electrodes from first buffer, rinse thoroughly with distilled water, blot dry, and immerse in second buffer. Record temperature of measurement and adjust temperature dial on meter so that meter indicates pH value of buffer at test temperature (this is a slope adjustment).

Use the pH value listed in the tables for the buffer used at the test temperature. Remove electrodes from second buffer, rinse thoroughly with distilled water and dry electrodes as indicated above. Immerse in a third buffer below pH 10, approximately 3 pH units different from the second; the reading should be within 0.1 unit for the pH of the third buffer. If the meter response shows a difference greater than 0.1 pH unit from expected value, look for trouble with the electrodes or potentiometer (see §s 5a and b below).

The purpose of standardization is to adjust the response of the glass electrode to the instrument. When only occasional pH measurements are made standardize instrument before each measurement. When frequent measurements are made and the instrument is stable, standardize less frequently. If sample pH

TABLE 4500-H<sup>+</sup>:II. STANDARD PH VALUES<sup>3</sup>

Primary Standards

Secondary Standards

**From:** [Jim Dodson](#)  
**To:** [Water-Inspection-Report](#)  
**Cc:** [Randall Whitmore](#); [Jay Green](#); [Matt Yost](#); [Chris Crawford](#)  
**Subject:** MOP Smackover Water Inspection May 5-6 Response & Documentation  
**Date:** Wednesday, June 15, 2016 10:42:33 AM  
**Attachments:** [SWPPP NOCs posted at Guard Shack.JPG](#)  
[SMREF Final SWPPP Wse 16 06.pdf](#)  
[AR0000591\\_insp\\_20160504.docx](#)  
[ARR154674\\_inspW\\_20150505.pdf](#)

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Please find attached subject documents. If you have any questions or concerns please don't hesitate to contact me.

Thanks!

Jim Dodson  
Sr. Environmental Specialist  
Martin Resource Management  
484 East Sixth Street  
Smackover, AR 71762  
(870)864-7550 (ofc)  
(713)294-7147 (cell)  
Fax: 903-988-3803  
Email: [jim.dodson@martinmlp.com](mailto:jim.dodson@martinmlp.com)



**MARTIN**

**OPERATING PARTNERSHIP**  
**Smackover Operations**  
**Environmental Department**  
**484 E Sixth Street**  
**Smackover, AR 71762**

June 15,, 2016

Arkansas Department of Environmental Quality  
Water Division  
5301 Northshore Drive  
North Little Rock, AR 72118

Re: Martin Resource Management, Inc.  
AFIN 70-00039,  
Permit No.: AR0000591, ARR001516, ARR154674

To Whom It May Concern,

In response to your "Summary of Findings" (attached) resulting from DEQs May 4 and 5 Compliance Evaluation Inspection, find the attached response with documentation.

If you have any questions or require additional information you may contact Jim Dodson at (713) 294-7147 or [jim.dodson@martinmlp.com](mailto:jim.dodson@martinmlp.com).

Sincerely,

Jay Green  
Manager - EHS

Attachments

cc: Randall Whitmore, Director - Corporate Environmental  
Jim Dodson - Sr. Environmental Coordinator  
Chris Crawford - Environmental Coordinator  
Martin Files

# ADEQ

ARKANSAS  
Department of Environmental Quality

June 1, 2016

Matt Yost, Senior V.P. Terminalling and Engineering  
Martin Operating Partnership LP  
484 East 6th Street  
Smackover, AR 71762

**RE: Martin Operating Partnership Inspections (Union Co)**  
**AFIN: 70-00039**                      **Permit No.: AR0000591**  
**ARR001516**  
**ARR154674**

Dear Mr. Yost:

On May 4 and 5, 2016, I performed a Compliance Evaluation Inspection, Industrial Stormwater Inspection, and Construction Stormwater 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.


**Please refer to the “Summary of Findings” section of each of the attached inspection reports and provide a written response for each violation that was noted.** This response should be mailed to the attention of the Water Division Inspection Branch at the address at the bottom of this letter or e-mailed to [Water-Inspection-Report@adeq.state.ar.us](mailto:Water-Inspection-Report@adeq.state.ar.us). This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentation (i.e., photos) is due by **June 15, 2016**.

If I can be of any assistance, please contact me at [youngm@adeq.state.ar.us](mailto:youngm@adeq.state.ar.us) or (501) 837-2073.

Sincerely,



Michael Young  
District 8 Field Inspector  
Water Division

 <b>A R K A N S A S</b> Department of Environmental Quality		<b>WATER DIVISION INSPECTION REPORT</b>					
		AFIN: <b>70-00039</b>		PERMIT #: <b>AR0000591</b>		DATE: <b>5/4/2016</b>	
		COUNTY: <b>70 Union</b>			PDS #: <b>091020</b>		MEDIA: <b>WN</b>
GPS LAT: <b>33.364287</b> LONG: <b>-92.717744</b> LOCATION: <b>Entrance</b>							
<b>FACILITY INFORMATION</b>				<b>INSPECTION INFORMATION</b>			
NAME: <b>Martin Operating Partnership</b> LOCATION: <b>484 East 6th Street</b> CITY: <b>Smackover, AR 71762</b>				FACILITY TYPE: <b>2 - Industrial</b>		INSPECTOR ID#: <b>101531 S - State</b>	
<b>RESPONSIBLE OFFICIAL</b> NAME / TITLE: <b>Matt Yost / Senior V.P. Terminalling and Engineering</b> COMPANY: <b>Martin Operating Partnership LP</b> MAILING ADDRESS: <b>484 East 6th Street</b> CITY, STATE, ZIP: <b>Smackover AR 71762</b> PHONE & EXT. / FAX: <b>870-881-8700 /</b> EMAIL:				FACILITY EVALUATION RATING: <b>4 - Satisfactory</b>		INSPECTION TYPE: <b>Compliance Evaluation</b>	
				DATE(S): <b>5/4/2016</b> <b>5/5/2016</b>	ENTRY TIME: <b>09:30</b> <b>09:00</b>	EXIT TIME: <b>16:30</b> <b>16:45</b>	PERMIT EFFECTIVE DATE: <b>2/1/2013</b> PERMIT EXPIRATION DATE: <b>1/31/2018</b>
CONTACTED DURING INSPECTION: <b>No</b>				FAYETTEVILLE SHALE RELATED: <b>N</b>			
				FAYETTEVILLE SHALE VIOLATIONS: <b>N</b>			
				<b>INSPECTION PARTICIPANTS</b>			
				NAME/TITLE/PHONE/FAX/EMAIL/ETC.: <b>Jim Dodson/Senior Environmental Coordinator/870-864-7550/jim.dodson@martinmlp.com</b>			
<b>AREA EVALUATIONS</b>							
(S=Satisfactory, M=Marginal, U=Unsatisfactory, N=Not Applicable/Evaluated)							
<b>S</b>	PERMIT	<b>S</b>	FLOW MEASUREMENT	<b>N</b>	STORMWATER		
<b>S</b>	RECORDS/REPORTS	<b>S</b>	LABORATORY	<b>S</b>	FACILITY SITE REVIEW		
<b>M</b>	OPERATION & MAINTENANCE	<b>U</b>	EFFLUENT/RECEIVING WATER	<b>S</b>	SELF-MONITORING PROGRAM		
<b>M</b>	SAMPLING	<b>S</b>	SLUDGE HANDLING/DISPOSAL	<b>N</b>	PRETREATMENT		
<b>**</b>	OTHER:						
<b>SUMMARY OF FINDINGS</b>							
1.) There was a discharge of visible sheen at Outfall 003 during the inspection. This is a violation of permit condition Part IA. <b>See pic – boom at the area of concern. No sheen ever noted there before or since.</b>							
2.) Samples analyzed for pH and Dissolved Oxygen have violated hold times of 15 minutes. This is a violation of permit condition Part III. (C.) (3.). <b>Lab personnel know to begin DO analysis as soon as they get into the lab in order to meet the hold time. See attached pic.</b>							
3.) The thermometer in the composite sampler had no indication of last calibration date. This is a violation of permit condition Part III. (C.) (3.). <b>See attached pic.</b>							




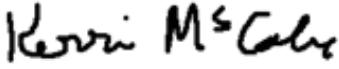
**GENERAL COMMENTS**

On May 4, 2016 I performed a Compliance Evaluation Inspection at Martin Operating Partnership LP in Smackover, AR. I returned on May 5, 2016 and performed an inspection on the laboratory. During the inspection I observed sheen at Outfall 003 (see Photos 1-2). I also observed that the composite sampler thermometer had no indication of the last calibration date (see Photo 3). All treatment units were in operation at the time of inspection, and I did not observe any violations other than those noted.

The facility has a very high Ammonia-Nitrogen concentration monthly average limit, which have caused numerous effluent violations. A CAO has been issued for violations related to unpermitted discharges caused by high rain events and the CAO may be modified to take into account the ammonia violations. The facility has researched Moving Bed Biofilm Reactors (MBBRs) as a new treatment option and is proposing an install of three (3) units.

The laboratory only had an issue with collecting a sample and analyzing it for pH and Dissolved Oxygen (DO) within the 15-minute holding time (see Photo 4). Calibration is being performed on all devices, but it is recommended to calibrate the DO and pH meters for temperature according to the manufacturer's instructions (using a NIST thermometer). Also, pH buffers used to calibrate need to be within the "expected range" of the wastewater analyzed by the facility. Currently, the facility uses a 7 and 10 pH buffer standard. The manufacturer's instructions did not indicate the preferred buffer type so SM-4500 H+ states that buffers of at least 2 s.u. difference are to be used to calibrate and third buffer that is 2 s.u. away from the second buffer but less than 10 s.u. is used to "check" the calibration (see Figure 1). I have attached a DO and pH calibration spreadsheet for reference or use by the facility. I have also supplied a DO table to use as verification that the DO meter is reading the correct mg/L for the correct temperature. **The lab is aware DO and pH samples must be run within required hold time.**

I have included two attachments with the report. I discussed with the laboratory that I would provide an example calibration sheet that I use when conducting field measurements. The information on the attached calibration sheet is slightly more detailed than what the facility keeps in their record book. The current method of keeping them in a notebook is compliant and does not need to change if the lab manager does not feel the need. The other document provided is a chart of true DO measurements for a specific temperature at an elevation of 100 feet. The current method of calibrating the DO meter using slope is compliant and does not need to change. The information provided is specifically for educational or optional use. I encourage the lab manager to contact me with any questions about the information.

INSPECTOR'S SIGNATURE:  Michael Young	DATE: 5/20/2016
SUPERVISOR'S SIGNATURE:  Kerri McCabe	DATE: 5/31/2016

<b>SECTION A: PERMIT VERIFICATION</b>	
PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ALL DISCHARGES ARE PERMITTED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION B: RECORDKEEPING AND REPORTING EVALUATION</b>	
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
a. DATES AND TIME(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. EXACT LOCATION(S) OF SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. NAME OF INDIVIDUAL PERFORMING SAMPLING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. ANALYTICAL METHODS AND TECHNIQUES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
e. RESULTS OF CALIBRATIONS:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
f. RESULTS OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
g. DATES AND TIMES OF ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
h. NAME OF PERSON(S) PERFORMING ANALYSES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
<b>SECTION C: OPERATIONS AND MAINTENANCE</b>	
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. TREATMENT UNITS PROPERLY OPERATED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
2. TREATMENT UNITS PROPERLY MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
5. ALL NEEDED TREATMENT UNITS IN SERVICE:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED:	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
8. OPERATION AND MAINTENANCE MANUAL AVAILABLE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
10. PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
11. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
12. IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
13. HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
14. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT: <u>March 2016</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
15. IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT:	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

SECTION D: SAMPLING	
PERMITTEE SAMPLING MEETS PERMIT REQUIREMENTS	<input type="checkbox"/> S <input checked="" type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SAMPLE COLLECTION PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. SAMPLES REFRIGERATED DURING COMPOSITING:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER PRESERVATION TECHNIQUES USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136: <u>pH and D.O.</u>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. IF MONITORING IS PERFORMED MORE OFTEN THAN REQUIRED ARE RESULTS REPORTED ON THE DMR:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
SECTION E: FLOW MEASUREMENT	
PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED: TYPE OF DEVICE: <u>Weir</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED: <u>Flow estimated at 002 and 003</u>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. CALIBRATION FREQUENCY ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. RECORDS MAINTAINED OF CALIBRATION PROCEDURES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
8. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
9. HEAD MEASURED AT PROPER LOCATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
SECTION F: LABORATORY	
PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS	<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE
DETAILS:	
1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(B) FOR SLUDGES) :	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED:	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
4. QUALITY CONTROL PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
5. DUPLICATE SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
6. SPIKED SAMPLES ARE ANALYZED $\geq$ 10% OF THE TIME:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
7. COMMERCIAL LABORATORY USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. LAB NAME: <u>Ana-Lab WET Testing; Bio-Analytic for metals</u>	
b. LAB ADDRESS: <u>Kilgore, TX ; Doyline, LA</u>	
c. PARAMETERS PERFORMED: <u>Wet Test; metals and TOC</u>	
8. BIOMONITORING PROCEDURES ADEQUATE:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
a. PROPER ORGANISMS USED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
b. PROPER DILUTION SERIES FOLLOWED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
c. PROPER TEST METHODS AND DURATION:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE
d. RETESTS AND/OR TRE PERFORMED AS REQUIRED:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/> NE

<b>SECTION G: EFFLUENT/RECEIVING WATERS OBSERVATIONS</b>							
BASED ON VISUAL OBSERVATIONS ONLY						<input type="checkbox"/> S <input type="checkbox"/> M <input checked="" type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
OUTFALL #:	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOATING SOLIDS	COLOR	OTHER
001	N	N	N	N	N	Colorless	--
002	N	N	N	N	N	Colorless	Sheen on receiving surface
003	Y	N	N	N	N	Colorless	Oil Sheen
<b>SECTION H: SLUDGE DISPOSAL</b>							
SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503:						<input checked="" type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input type="checkbox"/> NA <input type="checkbox"/> NE	
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (E.G., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE):							
<b>SECTION I: SAMPLING INSPECTION PROCEDURES</b>							
SAMPLE RESULTS WITHIN PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SAMPLES OBTAINED THIS INSPECTION:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
2. TYPE OF SAMPLE: <input type="checkbox"/> GRAB: <input type="checkbox"/> COMPOSITE: METHOD: FREQUENCY:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
3. SAMPLES PRESERVED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
4. FLOW PROPORTIONED SAMPLES OBTAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
7. SAMPLE SPLIT WITH PERMITTEE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
<b>SECTION J: STORM WATER POLLUTION PREVENTION PLAN</b>							
STORM WATER MANAGEMENT MEETS PERMIT REQUIREMENTS						<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> U <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
DETAILS:							
1. SWPPP UPDATED AS NEEDED: DATE OF LAST UPDATE:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
2. SITE MAP INCLUDING ALL DISCHARGES AND SURFACE WATERS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
3. POLLUTION PREVENTION TEAM IDENTIFIED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
4. POLLUTION PREVENTION TEAM PROPERLY TRAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
5. LIST OF POTENTIAL POLLUTANT SOURCES:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
6. LIST OF POTENTIAL SOURCES AND PAST SPILLS AND LEAKS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
7. ALL NON-STORM WATER DISCHARGES ARE AUTHORIZED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
8. LIST OF STRUCTURAL BMPS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
9. LIST OF NON-STRUCTURAL BMPS:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
10. BMPS PROPERLY OPERATED AND MAINTAINED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	
11. INSPECTIONS CONDUCTED AS REQUIRED:						<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> NA <input type="checkbox"/> NE	

## FLOW CALCULATION SHEET

Date: **05/05/2016**      Time: **14:51**

Head in Inches: **5.8**      Feet: **0.483**

Type & Size of Primary Flow Measurement Device: **90° V Notch Weir**

Name & Model of Secondary Flow Measurement Device: **Totalizer**

Date of last Calibration of Secondary Flow Device: **Yearly**

Recorded Flow at Date & Time Listed Above: **171.5 GPM** (Facility Flow Meter)

Calculated Flow at Date & Time Listed Above: **179.1 GPM**

(Flow is calculated using flow charts in: ISCO Open Channel Flow Measurement Handbook-5<sup>th</sup> Edition)

<b>% Error =</b>	Recorded Value	-	Calculated Value	X 100	
	Calculated Value				

<b>% Error =</b>	171.5	-	179.1	X 100	
	179.1				

<b>% Error =</b>	-7.6			X 100	
	179.1				

<b>% Error =</b>	-0.04			X 100	
------------------	-------	--	--	-------	--

<b>% Error =</b>	<b>4</b>			%	
------------------	----------	--	--	---	--

Comments:

**DMR Calculation Check**

Reporting Period: From 2015 05 01 To 2015 05 31  
 Year Month Day Year Month Day

Parameter Checked: NH3-N

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	<u>52.88</u>	<u>26.7</u>	<u>32.0</u>
Calculated Value:	<u>52.88</u>	<u>26.7</u>	<u>32.0</u>
Permit Value:	<u>8.4*</u>	<u>15</u>	<u>8.4*</u>

If calculated value does not equal reported value, explain:

\*Ammonia-Nitrogen limit for the Tier 1 production is an interim limit of 8.4 mg/L

Values were equal, but levels exceeded limits across all limitations.

**DMR Calculation Check**

Reporting Period: From 2015 05 01 To 2015 05 30  
 Year Month Day Year Month Day

Parameter Checked: TSS

	Loading Mass Mo. Avg. - lbs/day	Concentration Monthly Mo. Avg. - mg/l	7-day Avg. - mg/l
Reported Value:	<u>66.51</u>	<u>33.5</u>	<u>75</u>
Calculated Value:	<u>66.51</u>	<u>33.5</u>	<u>75</u>
Permit Value:	<u>112.2</u>	<u>Report</u>	<u>Report</u>

If calculated value does not equal reported value, explain:

Equal

Water Division Photographic Evidence Sheet			
Location:	<b>Martin Operating Partnership</b>		
Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>
Witness:	<b>Jim Dodson</b>	Time:	
Description:	<b>Oil sheen at Outfall 003.</b>		



Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>	Time:	
Witness:	<b>Jim Dodson</b>	Photo #:			
Description:	<b>Photo showing iron oxide bacteria and oil sheen in same frame.</b>				







Sock initially installed day of inspection after removing oil sheen

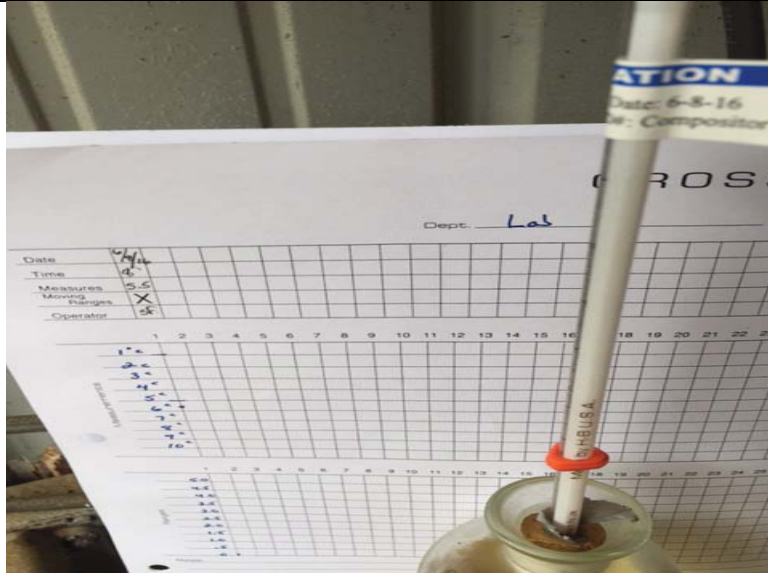


Replaced and maintained on as needed

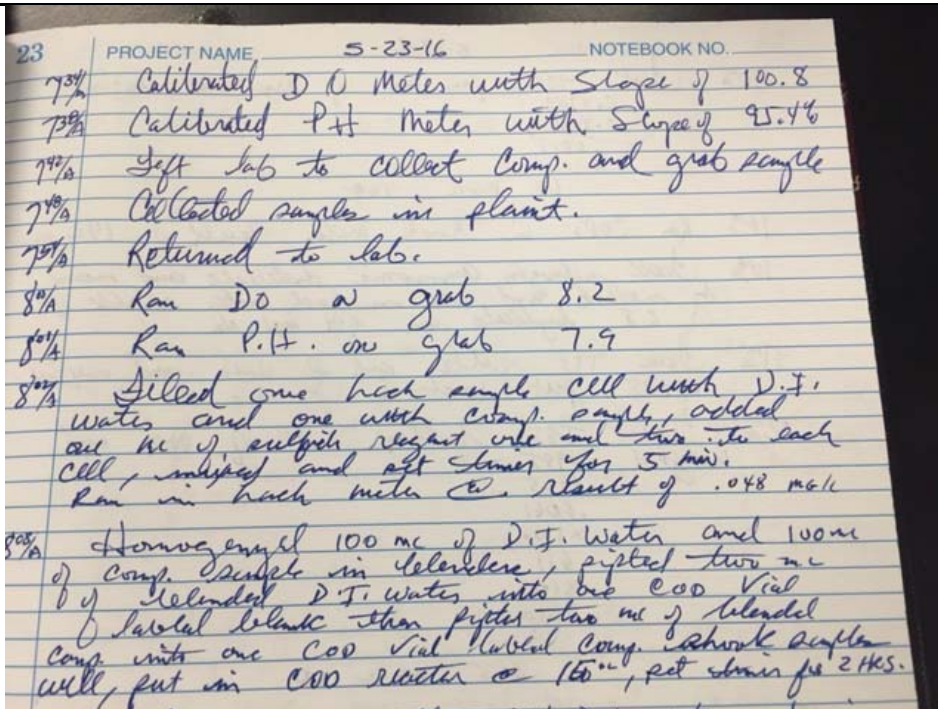
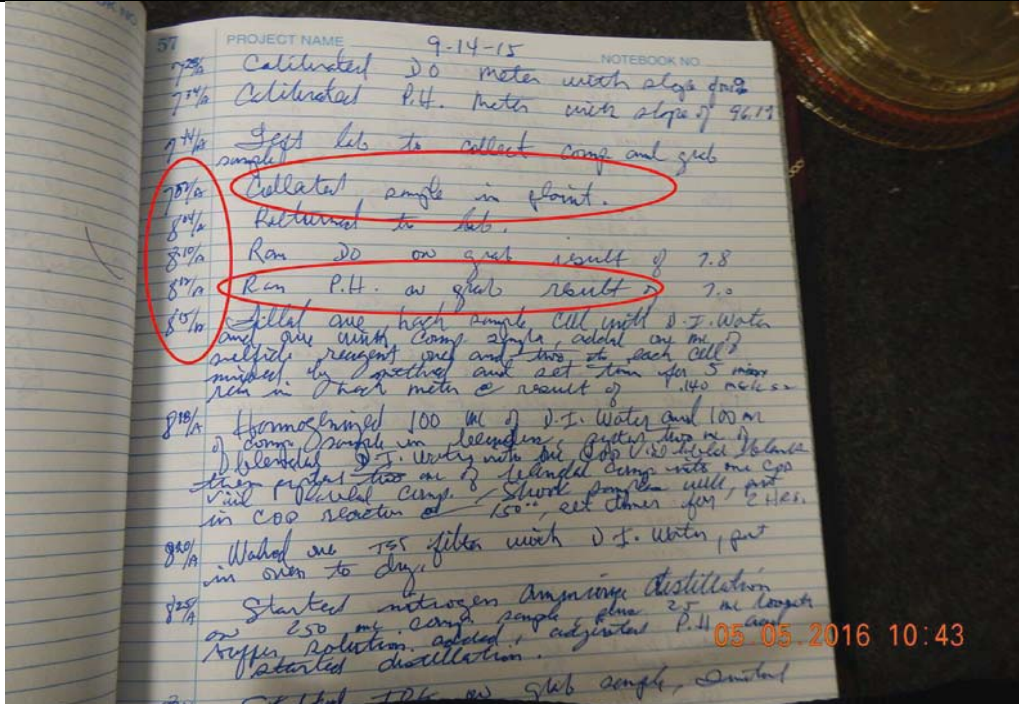


**Water Division Photographic Evidence Sheet**

Location:	<b>Martin Operating Partnership</b>				
Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>	Time:	<b>15:1</b>
Witness:	<b>Jim Dodson</b>	Photo #:	<b>3</b>		
Description:	<b>Thermometer in composite sampler had no information on last calibration date.</b>				



Photographer:	<b>Michael Young</b>	Date:	<b>05/04/2016</b>	Time:	<b>10:4</b>
Witness:	<b>Jim Dodson</b>	Photo #:	<b>4</b>		
Description:	<b>Sample of lab record indicating 15 minute hold time on pH analysis was violated.</b>				



**Figure 1. SM-4500 H+ calibration method for pH meters is outlined in blue.**

pHVALUE (4500-H+)/Electrometric Method

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*b. Saturated potassium hydrogen tartrate solution:* Shake vigorously an excess (5 to 10 g) of finely crystalline KHC<sub>8</sub>H<sub>4</sub>O<sub>6</sub> with 100 to 300 ml distilled water at 25°C in a glass-stoppered bottle. Separate clear solution from undissolved material by decantation or filtration. Preserve for 2 months or more by adding one thymol crystal (8 mm diam) per 200 mL solution.

*c. Saturated calcium hydroxide solution:* Calcine a well washed, analytical grade CaCO<sub>3</sub> in a platinum dish by igniting for 1 h at 600°C. Cool, hydrate by slowly adding distilled water with stirring, and heat to boiling. Cool, filter, and collect solid Ca(OH)<sub>2</sub> on a fused glass filter of medium porosity. Dry at 110°C, cool, and pulverize to uniformly fine granules. Vigorously shake an excess of fine granules with distilled water in a stoppered polyethylene bottle. Let temperature come to 25°C after mixing. Filter supernatant under suction through a sintered glass filter of medium porosity and use filtrate as the buffer solution. Occasionally buffer solution when atmospheric CO<sub>2</sub> causes turbidity to appear.

*d. Ammonium chloride solution:* 0.1N NaOH, 0.1N HCl, 5% HCl (dilute from 6N HCl in one volume distilled water), and acid potassium hydrogen tartrate solution (dissolve 2 g K<sub>2</sub>HT in 2 ml concentrated H<sub>2</sub>O<sub>4</sub> and dilute to 100 ml with distilled water).

4. Procedure

*a. Buffer solutions:* In each case follow manufacturer's instructions for pH meter and for storage and preparation of electrodes for use. Recommended solutions for short term storage of electrodes vary with type of electrode and manufacturer, but generally have a conductivity greater than 1000 µmhos/cm. Tap water is a better substitute than distilled water, but pH-

buffer is best for the single glass electrode and saturated KCl is preferred for a calomel and Ag/AgCl reference electrode. Saturated KCl is the preferred solution for a combination electrode. Keep electrodes wet by rinsing them to storage solution whenever pH meter is not in use.

Before use, remove electrodes from storage solution, rinse with distilled water, blot dry, and immerse in buffer solution. Select the isopotential point (above) electrode a second buffer. Immerse 2 pH units of sample pH and buffer to same temperature. Which may be the room temperature, a fixed temperature such as 25°C, or the temperature of a fresh sample. Remove electrodes from first buffer, rinse with distilled water, blot dry, and immerse in second buffer. Record temperature of measurement and adjust rate dial on meter so indicator indicates 3.00 of buffer at test temperature. (This is a slope adjustment)

NOTE: The pH values from the electrodes or the buffer used at measurement temperature. Immerse electrodes from second buffer, measure thoroughly with distilled water and distilled electrodes as indicated above. Immerse in a third buffer below. pH 1.0 approximately pH units different from the second, the reading should be within 0.1 unit for the pH of the third buffer. If the meter responds, shows a difference greater than 0.1 pH unit from expected value look for trouble. Check the electrodes or potentiometer (see -50 and below).

The purpose of standardization is to adjust the response of the glass electrode to the instrument. When only occasional pH measurements are made standardize instrument before each measurement. When frequent measurements are made and the instrument is stable, standardize less frequently. If sample pH

TABLE 4500-H+II. STANDARD pH VALUES<sup>3</sup>

Pm - tundurds

• cco

Standards

# ADEQ

ARKANSAS  
Department of Environmental Quality

July 20, 2016

Matt Yost, Senior V.P. Terminalling and Engineering  
Martin Operating Partnership LP  
484 East 6th Street  
Smackover, AR 71762

**RE: Response to Inspections (Union Co)**

**AFIN: 70-00039**

**NPDEA Permit No. AR0000591**

**ARR001516**

**ARR154674**

Dear Mr. Yost:

I have reviewed the response pertaining to my May 4 and 5, 2016 inspections of the Martin Operating Partnership, LP facility. The information provided sufficiently addresses the violations referenced in my inspection report. At this time the Department has no further comment concerning this particular inspection. Acceptance of this response by the Department does not preclude any future enforcement action deemed necessary at this site or any other site.

If we need further information concerning this matter, we will contact you. Thank you for your attention to this matter. Should you have any questions, feel free to contact me at (501) 837-2073 or you may e-mail me at [youngm@adeq.state.ar.us](mailto:youngm@adeq.state.ar.us).

Sincerely,



Michael Young  
District 8 Field Inspector  
Water Division