NONCOMPLIANCE 24-HOUR NOTIFICATION FAX REPORT

State Form 52415 (10-05) Indiana Department of Environmental Management Office of Water Quality

INSTRUCTIONS:

Complete all parts of this form and fax it to <u>Office of Water Quality</u>, <u>Compliance Evaluation Section</u> at (317) 232-8637 or 232-8406. Thorough completion of this report will satisfy the Office of Water Quality (OWQ) telephone and 5-day written noncompliance notification reporting requirements of your NPDES permit. To speak with someone in OWQ, call (317) 232-8670.

Any noncompliance which may pose a significant danger to human health or the environment must be immediately reported to the Emergency Response Section spill response line at: (317) 233-7745 or toll free within Indiana at (888) 233-7745.

| Facility Name | e: | | County: | NPDES Pe | ermit Number: | | | |
|---------------|----------------------|--------------|-------------------------------------|---|------------------|--|--|--|
| Gibson Co | ounty Coal, | LLC | Gibson | Gibson IN006415 | | | | |
| Individual Re | ndividual Reporting: | | Phone Number: | Reporting I | Date: | | | |
| Blake Cutrell | | 812-706-6630 | 812-706-6630 4/9/2020 | | | | | |
| | | | NONCOMPLIANCE INFORMATION | | | | | |
| Date: | Outfall: | Parameter: | Permit Limit: (Units/Daily/Weekly// | Ave/Max/Min) | Monitored Value: | | | |
| 03/24/20 | 005 | Ammonia | Limits: 1.6 mg/L (Avg) and | Limits: 1.6 mg/L (Avg) and 2.4 mg/L (Daily) | | | | |
| 03/31/20 | 005 | Ammonia | Limits: 1.6 mg/L (Avg) and | Limits: 1.6 mg/L (Avg) and 2.4 mg/L (Daily) | | | | |

Description of the Noncompliance and its Cause:

Nitrogen Ammonia continues to be elevated as noted above. As reported previously, we believe this is directly related to the Caronavirus (COVID-19) Pandemic. The Pandemic has caused two major changes to operations at Gibson County Coal, LLC. First, 275 employees have been temporarily furloughed. This has reduced WWTP flows by ~88%; flows are now only ~500 gallons per day. Secondly, a 3rd party cleaning company was asked to increase cleaning chemicals used in order to stop the potential spread of the virus. This was to provide a cleaner work place for the safety of the remaining employees. Primarily, larger amounts of bleach are being used during mopping and other cleaning practices. Therefore, the concentration of cleaning chemicals has increased significantly.

These chemicals have harmed or killed the bugs, or biologic activity in the mixed liqueur. This has yielded in poor settleability in the clarifier and an increase in ammonia.

Description of the Period of Noncompliance, Including Exact Dates and Time, and if the Noncompliance has not been Corrected, the Anticipated Time it is Expected to Continue:

Unfortunately, due to COVID-19 and the health crisis we are facing, additional cleaning practices with bleach continue. The period of noncompliance is expected to continue while the health crisis continues. The color of the mixed liquour looks good, but the settleablility in the clarifier has decreased.

Steps Taken or Planned to Reduce, Eliminate, and Prevent Reoccurrence of the Noncompliance:

While additional cleaning continues during this health crisis (COVID-19) we expect to see increase TSS and Ammonia. There is little we can do at this time to improve performance of the Plant while the concentration of cleaning chemicals is high.

As soon as the health crisis is over, the chemical concentration will be decreased. At that time, the conditions of the plant will improve.

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

SIGNATURE: Black R. Celle

DATE: 4-9-2020



CERTIFICATE OF ANALYSIS

L0C1297

Gibson County Coal - Alliance

Project Name: GCC - IP IN0064157 South

Jason Heck 1146 Monarch Street, Suite 350 Lexington, KY 40513 Project / PO Number: N/A Received: 03/24/2020 Reported: 03/30/2020

Project Special Information

SW

IN0064157

Analytical Testing Parameters

Client Sample ID: Outfalls 003D, 003A, 003B

Sample Matrix: Lab Sample ID: Aqueous

L0C1297-01

Collected By:

Seth Backes

Collection Date:

03/24/2020 9:14

| Inorganics Total | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analys |
|--------------------------|--------|----------|-------|-------|------|---------------|---------------|--------|
| Method: USGS I-3765-85 | | | | | | | | |
| Solids, Total Suspended | 6 | 35 | 5 | mg/L | | 03/26/20 0817 | 03/26/20 1430 | RXG |
| Metals Total by ICP | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analys |
| Method: EPA 200.7 | | | | | | | | |
| Calcium | 92 | | 0.50 | mg/L | | 03/27/20 0859 | 03/27/20 2309 | JSW |
| Iron | 0.41 | 2.4 | 0.020 | mg/L | | 03/27/20 0859 | 03/27/20 2309 | JSW |
| Magnesium | 33 | | 0.50 | mg/L | | 03/27/20 0859 | 03/27/20 2309 | JSW |
| Method: SM 2340B | | | | | | | | |
| Hardness, Total as CaCO3 | 370 | | 2.1 | mg/L | | 03/27/20 0859 | 03/27/20 2309 | JSW |
| Anions by IC | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analys |
| Method: EPA 300.0 | | | | | | | | |
| Chloride | 860 | | 2.5 | mg/L | | 03/25/20 1832 | 03/26/20 2212 | JGF |
| Sulfate | 76 | | 2.5 | mg/L | | 03/25/20 1832 | 03/26/20 2212 | JGF |

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|-----------------------------|--------|-----------|------|-------|------|----------|---------------|---------|
| Method: EPA 600 | | | | | | | | |
| Flow by Measurement & Calc. | 1.85 | | 0 | MGD | | | 03/24/20 0914 | SHB |
| Method: SM 2550 B 2010 | | | | | | | | |
| Temperature | 9.7 | | | °C | | | 03/24/20 0914 | SHB |
| Method: SM 4500 H+ B 2011 | | | | | | | | |
| рН | 7.35 | 6.00-9.00 | 1.00 | S.U. | | | 03/24/20 0914 | SHB |



CERTIFICATE OF ANALYSIS

L0C1297

Client Sample ID:

Outfalls 003D, 003A, 003B

Sample Matrix: Lab Sample ID:

L0C1297-01

Aqueous

Collected By:

Seth Backes

Collection Date:

03/24/2020 9:14

| Inorganics Total | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|------------------------|--------|----------|-----|---------|------|----------|---------------|---------|
| Method: SM 2540 F 2011 | | | | | | | | |
| Solids, Settleable | <0.1 | 0.5 | 0.1 | mL/L/hr | | | 03/25/20 0947 | KDS |

Client Sample ID:

Outfall 005

Sample Matrix: Lab Sample ID:

L0C1297-02

Aqueous

Collected By:

Seth Backes

Collection Date:

03/24/2020 9:05

| Inorganics Total | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|--|--------|----------|------|-------|------|---------------|---------------|---------|
| Method: SM 4500 NH3 G Nitrogen, Ammonia | 11 | 1.6 | 0.25 | mg/L | | 03/25/20 1448 | 03/27/20 1242 | AGR |
| Method: USGS I-3765-85 | | | | | | | | |
| Solids, Total Suspended | 7 | 12 | 5 | mg/L | | 03/26/20 0817 | 03/26/20 1430 | RXG |
| Metals Total by ICP | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
| Method: EPA 200.7 | | | | | | | | |
| Phosphorus, Total | 0.24 | 1.0 | 0.10 | mg/L | | 03/27/20 0859 | 03/27/20 2316 | JSW |

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|---|---------|-----------|------|-------|------|----------|---------------|---------|
| Method: EPA 600 Flow by Measurement & Calc. | 0.00317 | | 0 | MGD | | | 03/24/20 0905 | SHB |
| Method: SM 2550 B 2010 Temperature | 12.0 | | | °C | | | 03/24/20 0905 | SHB |
| Method: SM 4500 H+ B 2011 pH | 7.95 | 6.00-9.00 | 1.00 | S.U. | | | 03/24/20 0905 | SHB |
| Method: SM 4500 O G 2011 Oxygen, Dissolved | 7.12 | | 0.10 | mg/L | | | 03/24/20 0905 | SHB |



CERTIFICATE OF ANALYSIS

L0C1297

Client Sample ID:

Lab Sample ID:

Outfall 006

Sample Matrix:

Aqueous L0C1297-03 Collected By:

Seth Backes

Collection Date:

03/24/2020 10:04

| Analyses Performed by | : Microbac Laborato | ries Inc. Evansville |
|-----------------------|---------------------|----------------------|
|-----------------------|---------------------|----------------------|

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|--|---------|----------|----|-------|------|----------|---------------|---------|
| Method: EPA 600 Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/24/20 1004 | SHB |
| Method: NA Augmented Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/24/20 1004 | SHB |

Client Sample ID:

Outfall 103

Sample Matrix: Lab Sample ID: Aqueous

L0C1297-04

Collected By:

Seth Backes

Collection Date:

03/24/2020 9:01

| Anions by IC | Result Lim | nit(s) RL | Units | Note | Prepared | Analyzed | Analyst |
|-------------------|------------|-----------|-------|------|---------------|---------------|---------|
| Method: EPA 300.0 | | | | | | | |
| Chloride | 740 | 2.5 | mg/L | | 03/25/20 1832 | 03/26/20 2226 | JGF |
| Sulfate | 60 | 2.5 | mg/L | | 03/25/20 1832 | 03/26/20 2226 | JGF |

Analyses Performed by: Microbac Laboratories, Inc., Evansville

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|---------------------------------------|--------|----------|----|-------|------|----------|---------------|---------|
| Method: EPA 600 | | | | | | | | |
| Flow by Measurement & Calc. | 3.021 | | 0 | MGD | | | 03/24/20 0901 | SHB |
| Method: NA | | | | | | | | |
| Augmented Flow by Measurement & Calc. | 0.74 | | 0 | MGD | | | 03/24/20 0901 | SHB |

Client Sample ID:

Outfall 106

Sample Matrix: Lab Sample ID: Aqueous

L0C1297-05

Collected By:

Seth Backes

Collection Date:

03/24/2020 10:05

Analyses Performed by: Microbac Laboratories, Inc., Evansville

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|-----------------------------|---------|----------|----|-------|------|----------|---------------|---------|
| Method: EPA 600 | | | | | | | | |
| Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/24/20 1005 | SHB |

Results in bold have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.



CERTIFICATE OF ANALYSIS L0C1297

Definitions

°C:

Degrees Celsius

mg/L:

Milligrams per Liter

MGD:

Millions Of Gallons per Day

RL: S.U.: Reporting Limit Standard Units

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at https://www.microbac.com/standard-terms-conditions.

Reviewed and Approved By:

James Taylor Analyst

Reported: 03/30/2020 13:10

Microbac Laboratories, Inc.



Lab Manager: James Taylor

Microbac Laboratories, Inc., Louisville

TAT 4 days

Gibson County Coal - Alliance

Jason Heck

1146 Monarch Street, Suite 350

Lexington, KY 40513

Phone: (859) 685-6332

Project Name: GCC - IP IN0064157 South

Project/PO Number: N/A

Tenatively Scheduled: 3/23/2020

Route: EVV - ARLP - GCC Pond - Weekly

Client Sample ID: Outfalls 003D, 003A, 003B

Lab Sample ID:

L0C1297-01

Matrix:

Aqueous

Type:

Grab

Sampled Date & Time: 3/24/20/0914

| <u>Analysis</u> | Method | Field Results/Comment | | | Hold Time |
|---|-------------------|--|--------------|----------|-------------------|
| FLOW BY MEASUREMENT & CALC MGD | EPA 600 | Field Instrument: | Result: 1.85 | · —— | |
| PH, FIELD | SM 4500 H+ B 2011 | Field Instrument: ρ -96 Field Instrument: | Result: 7.35 | Unit: SU | |
| TEMPERATURE AT PH READING, ° C - FIELD - EVV | SM 2550 B 2010 | Field Instrument: P-96 | Result: 9.7 | Unit: °C | |
| HARDNESS PKG. By ICP - [CALC] 200.7 | varies | | | | 180.00 days |
| CHLORIDE - 300.0 | EPA 300.0 | | | | 28.00 days |
| SULFATE - 300.0 | EPA 300.0 | 1 | L _ | | 28.00 days |
| SOLIDS, SETTLEABLE - EVV | SM 2540 F 2011 | 1 | W | | 2.00 days |
| SOLIDS, TOTAL SUSPENDED | USGS I-3765-85 | | | | 7.00 days |
| IRON, TOTAL RECOVERABLE - ICP 200.7 | EPA 200.7 | | | | 180.00 days |
| | | Container(s) | | | <u>Designator</u> |
| | | A-50 ML PLASTIC DIGITUBE- | 4°C | | Α |
| | | B-250 ML PLASTIC-METALS-I | HNO3 | | В |
| | | A-1 LITER PLASTIC - GEN CH | HEM-4°C | | С |

A-1 LITER PLASTIC - GEN CHEM-4°C

Client Sample ID: Outfall 005

SOLIDS, TOTAL SUSPENDED

PHOSPHORUS - ICP 200.7

Lab Sample ID:

L0C1297-02

USGS I-3765-85

EPA 200.7

Matrix: Type:

Aqueous Grab Sampled Date & Time: $3/2^{4}/20/090$ \$

| Analysis | Method | Field Results/Comment | Hold Time | | |
|---|-------------------|---------------------------------|---------------------------|-------------|------------|
| FLOW BY MEASUREMENT & CALC MGD | EPA 600 | Field Instrument: | Result: <u>0. W 3 1 7</u> | Unit: 160 | |
| OXYGEN, DISSOLVED - FIELD - EVV | SM 4500 O G 2011 | Field Instrument: | Result: 7.12 | Unit: / g/L | |
| PH, FIELD | SM 4500 H+ B 2011 | Field Instrument: $\beta - 9/8$ | Result: 7.95 | Unit: 56 | |
| TEMPERATURE AT PH READING, ° C - FIELD - EVV | SM 2550 B 2010 | Field Instrument: ρ -96 | Result: 12.6 | Unit: 3C | |
| NITROGEN, AMMONIA | SM 4500 NH3 G | | | | 28.00 days |

Microbac Laboratories, Inc.

Page 1 of 3 Page 5 of 9

7.00 days

180.00 days

D





Microbac Laboratories, Inc., Louisville

| Gibson | County | Coal - | Alliance |
|--------|--------|--------|-----------------|

Jason Heck 1146 Monarch Street, Suite 350

Lexington, KY 40513 Phone: (859) 685-6332 Project Name: GCC - IP IN0064157 South

Project/PO Number: N/A

Tenatively Scheduled: 3/23/2020

Route: EVV - ARLP - GCC Pond - Weekly

| Container(s) | <u>Designator</u> |
|----------------------------------|-------------------|
| A-1 LITER PLASTIC - GEN CHEM-4°C | Α |
| B-250 ML PLASTIC-METALS-HNO3 | В |
| C-250 ML PLASTIC - H2SO4 | С |

| Client | Sample | ID: | Outfall | 006 |
|--------|--------|-----|---------|-----|
|--------|--------|-----|---------|-----|

Lab Sample ID:

L0C1297-03

Matrix:

Aqueous

Type: Grab

Sampled Date & Time: $\frac{3/a^{l_1}/20}{100^{l_1}}$

| <u>Analysis</u> | Method | Field Results/Commen | Field Results/Comments | | | | |
|---|-------------------|---------------------------|------------------------|-------|-------------------|--|--|
| FLOW BY MEASUREMENT & CALC MGD | EPA 600 | Field Instrument: | Result: No HOW | Unit: | | | |
| FLOW, AUGMENTED BY MEASURMENT & CALC MGD | NA | Field Instrument: | Result: | Unit: | | | |
| PH, FIELD | SM 4500 H+ B 2011 | Field Instrument: | Result: | Unit: | | | |
| TEMPERATURE AT PH READING, ° C - FIELD - EVV | SM 2550 B 2010 | Field Instrument: | Result: | Unit: | | | |
| HARDNESS PKG. By ICP - [CALC] 200.7 | varies | | | | 180.00 days | | |
| CHLORIDE - 300.0 | EPA 300.0 | | | | 28.00 days | | |
| SULFATE - 300.0 | EPA 300.0 | | | | 28.00 days | | |
| SOLIDS, TOTAL SUSPENDED | USGS I-3765-85 | | | | 7.00 days | | |
| IRON, TOTAL RECOVERABLE - ICP 200.7 | EPA 200.7 | | | | 180.00 days | | |
| | | Container(s) | | | <u>Designator</u> | | |
| | | A-1 LITER PLASTIC - GEN C | HEM-4°C | | Α | | |
| | | A-50 ML PLASTIC DIGITUBE | - | | В | | |
| | | B-250 ML PLASTIC-METALS- | HNO3 | | С | | |

Client Sample ID: Outfall 103

Lab Sample ID:

L0C1297-04

Matrix:

Aqueous

Type:

MGD

Grab

Sampled Date & Time: 3/24/20 / 090/

Analysis

Field Results/Comments

Field Instrument:

Result: 3.00 Unit: MLD

FLOW, AUGMENTED BY
MEASURMENT & CALC.
MOD

Field Instrument:

Result: 0.74 Unit: M(2)

Microbac Laboratories, Inc.

Page 2 of 3



Lab Manager: James Taylor LOC1297

Microbac Laboratories, Inc., Louisville

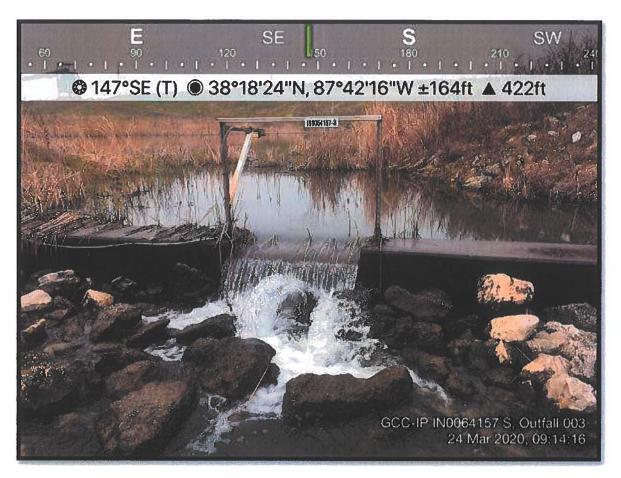
| Gibson County C | oal - Allian | ce | P | Project Name: GCC - IP IN0064157 South | | | |
|---|--------------------------------|---|--|---|---|--|--|
| Jason Heck 1146 Monarch Stre Lexington, KY 405 Phone: (859) 685-6 | 13 | 50 | Project/PO Number: N/A Tenatively Scheduled: 3/23/2020 Route: EVV - ARLP - GCC Pond - Weekly | | | | |
| CHLORIDE - 300.0 SULFATE - 300.0 | | EPA 300.0 EPA 300.0 | <u>Container(s)</u> A-50 ML PLASTIC | DIGITUBE-4°C | 28.00 days 28.00 days <u>Designator</u> A | | |
| Client Sample ID: | Outfall 10 | 6 | | | | | |
| Lab Sample ID: | L0C1297- | 05 | | | _ = = | | |
| Matrix: | Aqueous | | | Sampled Date & Time: 3/24/ | 20/ 1005 | | |
| Туре: | Grab | | | • | , | | |
| <u>Analysis</u> | | <u>Method</u> | Field Results/ | Comments | Hold Time | | |
| FLOW BY MEASURI CALC MGD SOLIDS, TOTAL SUS IRON, TOTAL RECO - ICP 200.7 | SPENDED | EPA 600 USGS I-3765-85 EPA 200.7 | <u>Container(s)</u> B-250 ML PLASTIO | Result: No How Unit: C-METALS-HNO3 IC - GEN CHEM-4°C | 7.00 days 180.00 days <u>Designator</u> A B | | |
| ampled/Relinquished b | by: 1 1/2 | Ser lan | Date/Time: | Received by: K. Jutty | | | |
| rinted Name: | Setty | Bencher) | 1355 | Printed Name: Wim Switon | | | |
| elinquished by: | 70.0 | <i>5000</i> | Date/Time: / | Received by: | | | |
| rinted Name: | | - | 7 | Printed Name: | | | |
| elinquished by: | | | Date/Time: | Received by: | · · · · · · · · · · · · · · · · · · · | | |
| rinted Name: | | | | Printed Name: | | | |
| As Received at Labor | ratory: | On Ice: (Yes) / No | Temp 1.8 | °C Total Containers: 18 | 5 8 | | |
| appropriately accred could be subcontract otes: Outfall 106 is only s | ited laborator ted and agre | ry. By signing this docume with this arrangement. en Outfall 006 has flow. | nent you are acknowled | g in which case we will subcontract the ging that you have been informed by Mi | crobac that testing | | |
| 005 - Record DO rea Home Facility: Evai | | C upon arrival and dep | parture from site. Avei | rage of two readings is entered into L | ims. | | |
| | 00[7.1 | 17@ 0905) and | (7.06@ 1011) | | | | |

Microbac Laboratories, Inc.

Page 3 of 3

Louisville, KY 40213 | 502.962.6400 p | www.microbac.co

Page 7 of 9











Microbac Laboratories, Inc., Louisville **CERTIFICATE OF ANALYSIS**

L0C1615

Gibson County Coal - Alliance

Project Name: GCC - IP IN0064157 South

Jason Heck 1146 Monarch Street, Suite 350 Lexington, KY 40513

Project / PO Number: N/A Received: 03/31/2020 Reported: 04/06/2020

Project Special Information

SW

IN0064157

Analytical Testing Parameters

Outfalls 003D, 003A, 003B Client Sample ID:

Sample Matrix: Aqueous

L0C1615-01 Lab Sample ID:

Collected By: Seth Backes Collection Date:

03/31/2020 8:54

| Inorganics Total | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analys |
|-----------------------------------|--------|----------|-------|-------|------|---------------|---------------|---------|
| Method: USGS I-3765-85 | | | | | | | | |
| Solids, Total Suspended | 12 | 35 | 5 | mg/L | | 04/01/20 1254 | 04/01/20 1335 | RXG |
| Metals Total by ICP | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
| Method: EPA 200.7, Rv. 4.4 (1994) | | | | | | | | |
| Calcium | 92 | | 0.50 | mg/L | | 04/02/20 0933 | 04/03/20 1900 | JSW |
| Iron | 0.42 | 2.4 | 0.020 | mg/L | | 04/02/20 0933 | 04/03/20 1900 | JSW |
| Magnesium | 33 | | 0.50 | mg/L | | 04/02/20 0933 | 04/03/20 1900 | JSW |
| Method: SM 2340B | | | | | | | | |
| Hardness, Total as CaCO3 | 370 | | 2.1 | mg/L | | 04/02/20 0933 | 04/03/20 1900 | JSW |
| Anions by IC | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
| Method: EPA 300.0, Rv. 2.1 (1993) | | | | | | | | |
| Chloride | 590 | | 6.5 | mg/L | | 04/01/20 2138 | 04/01/20 2138 | JGF |
| Sulfate | 88 | | 2.5 | mg/L | | 04/01/20 1853 | 04/01/20 1853 | JGF |

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|-----------------------------|--------|-----------|------|-------|------|----------|---------------|---------|
| Method: NA | | | | | | | | |
| Flow by Measurement & Calc. | 3.139 | | 0 | MGD | | | 03/31/20 0854 | SHB |
| Method: SM 2550 B-2010 | | | | | | | | |
| Temperature | 14.3 | | | °C | | | 03/31/20 0854 | SHB |
| Method: SM 4500-H+ B-2011 | | | | | | | | |
| pH | 7.90 | 6.00-9.00 | 1.00 | S.U. | | | 03/31/20 0854 | SHB |



CERTIFICATE OF ANALYSIS L0C1615

Client Sample ID: Outfalls 003D, 003A, 003B

Aqueous Sample Matrix: Lab Sample ID:

L0C1615-01

Collected By:

Seth Backes

Collection Date: 03/31/2020 8:54

| Inorganics Total | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|------------------------|--------|----------|-----|-------|------|----------|---------------|---------|
| Method: SM 2540 F-2011 | | | | | | | | |
| Solids, Settleable | <0.1 | 0.5 | 0.1 | m∐∐hr | | | 04/01/20 0900 | KDS |

Outfall 005 Client Sample ID: Sample Matrix: Aqueous **Collected By:** L0C1615-02 Lab Sample ID: **Collection Date:**

Seth Backes

03/31/2020 8:54

Inorganics Total Result Limit(s) RL Units Note **Prepared** Analyzed **Analyst** Method: SM 4500-NH3 G-2011 Nitrogen, Ammonia 1.6 0.25 03/31/20 1027 mg/L 04/01/20 1501 AGR Method: USGS I-3765-85 Solids, Total Suspended 17 12 5 mg/L 04/01/20 1254 04/01/20 1335 RXG **Metals Total by ICP** Result Limit(s) RL Units Note Prepared Analyzed **Analyst** Method: EPA 200.7, Rv. 4.4 (1994) Phosphorus, Total 0.22 1.0 0.10 mg/L 04/02/20 0933 04/03/20 1907 JSW

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|---|---------|-----------|------|-------|------|----------|---------------|---------|
| Method: NA | | | | | | | | |
| Flow by Measurement & Calc. | 0.00068 | | 0 | MGD | | | 03/31/20 0854 | SHB |
| Method: SM 2550 B-2010 | | | | | | | | |
| Temperature | 13.8 | | | °C | | | 03/31/20 0854 | SHB |
| | | | | - | | | 00/01/20 0004 | SHE |
| Method: SM 4500-H+ B-2011 | | | | | | | | |
| рН | 8.11 | 6.00-9.00 | 1.00 | S.U. | | | 03/31/20 0854 | SHB |
| Method: SM 4500-O G-2011 | | | | | | | | |
| Oxygen, Dissolved | 6.08 | | 0.10 | mg/L | | | 03/31/20 0854 | SHB |
| , | **** | | | | | | | 0.10 |



CERTIFICATE OF ANALYSIS

L0C1615

Client Sample ID:

Sample Matrix:

Lab Sample ID:

Outfall 006

Aqueous L0C1615-03 Collected By:

Seth Backes

Collection Date:

03/31/2020 9:19

Analyses Performed by: Microbac Laboratories, Inc., Evansville

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|---------------------------------------|---------|----------|----|-------|------|----------|---------------|---------|
| Method: NA | | | | | | | | |
| Augmented Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/31/20 0919 | SHB |
| Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/31/20 0919 | SHB |

Client Sample ID:

Outfall 103

Sample Matrix: Lab Sample ID: Aqueous

L0C1615-04

Collected By:

Seth Backes

Collection Date:

03/31/2020 8:41

| Anions by IC | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|-----------------------------------|--------|----------|-----|-------|------|---------------|---------------|---------|
| Method: EPA 300.0, Rv. 2.1 (1993) | | | | | | | | |
| Chloride | 800 | | 9.0 | mg/L | | 04/01/20 2151 | 04/01/20 2151 | JGF |
| Sulfate | 51 | | 2.5 | mg/L | | 04/01/20 1907 | 04/01/20 1907 | JGF |

Analyses Performed by: Microbac Laboratories, Inc., Evansville

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|---------------------------------------|--------|----------|----|-------|------|----------|---------------|---------|
| Method: NA | | | | | | | | |
| Augmented Flow by Measurement & Calc. | 0.74 | | 0 | MGD | | | 03/31/20 0841 | SHB |
| Flow by Measurement & Calc. | 3.243 | | 0 | MGD | | | 03/31/20 0841 | SHB |

Client Sample ID:

Outfall 106

Sample Matrix: Lab Sample ID: Aqueous

L0C1615-05

Collected By:

Seth Backes

Collection Date:

03/31/2020 9:20

Analyses Performed by: Microbac Laboratories, Inc., Evansville

| Field Parameters | Result | Limit(s) | RL | Units | Note | Prepared | Analyzed | Analyst |
|-----------------------------|---------|----------|----|-------|------|----------|---------------|---------|
| Method: NA | | | | | | | | |
| Flow by Measurement & Calc. | No Flow | | 0 | MGD | | | 03/31/20 0920 | SHB |

Results in bold have exceeded a limit defined for this project. Limits are provided for reference but as regulatory limits change frequently, Microbac Laboratories, Inc. advises the recipient of this report to confirm such limits and units of concentration with the appropriate Federal, state or local authorities before acting on the data.



Microbac Laboratories, Inc., Louisville **CERTIFICATE OF ANALYSIS** L0C1615

Definitions

mg/L:

Degrees Celsius

MGD:

Milligrams per Liter

Millions Of Gallons per Day

RL:

Reporting Limit

S.U.:

Standard Units

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at https://www.microbac.com/standard-terms-conditions.

Reviewed and Approved By:

James Taylor Analyst

Reported: 04/06/2020 16:40



Lab Manager: James Taylor

Microbac Laboratories, Inc., Louisville

TAT 4 days

Gibson County Coal - Alliance

Project Name: GCC - IP IN0064157 South

Jason Heck

1146 Monarch Street, Suite 350

Lexington, KY 40513

Phone: (859) 685-6332

Project/PO Number: N/A

Tenatively Scheduled: 3/31/2020

Route: EVV - ARLP - GCC Pond - Weekly

Client Sample ID: Outfalls 003D, 003A, 003B

Lab Sample ID:

L0C1615-01

Matrix:

Aqueous

Type:

Grab

Sampled Date & Time: $\frac{3/31/29/0854}{}$

| <u>Analysis</u> | Method | Field Results/Comments | Hold Time |
|---|-------------------|--|-------------------|
| FLOW BY MEASUREMENT & CALC MGD | EPA 600 | Field Instrument: Result: 3. 139 Unit: MG & | |
| PH, FIELD | SM 4500 H+ B 2011 | Field Instrument: 996 Result: 990 Unit: 90 Field Instrument: 996 Result: 14.3 Unit: 90 | |
| TEMPERATURE AT PH READING, ° C - FIELD - EVV | SM 2550 B 2010 | Field Instrument: 3-96 Result: 14.3 Unit: °C | |
| HARDNESS PKG. By ICP - [CALC] 200.7 | varies | | 180.00 days |
| CHLORIDE - 300.0 | EPA 300.0 | | 28.00 days |
| SULFATE - 300.0 | EPA 300.0 | 1 1.0 | 28.00 days |
| SOLIDS, SETTLEABLE - EVV | SM 2540 F 2011 | I W | 2.00 days |
| SOLIDS, TOTAL SUSPENDED | USGS I-3765-85 | | 7.00 days |
| IRON, TOTAL RECOVERABLE - ICP 200.7 | EPA 200.7 | N N | 180.00 days |
| | | Container(s) | <u>Designator</u> |
| | | A-50 ML PLASTIC DIGITUBE-4°C | Α |
| | | B-250 ML PLASTIC-METALS-HNO3 | В |
| | | A-1 LITER PLASTIC - GEN CHEM-4°C | С |
| | | A-1 LITER PLASTIC - GEN CHEM-4°C | D |

Client Sample ID: Outfall 005

Lab Sample ID:

L0C1615-02

Matrix:

Aqueous

Type:

Grab

Sampled Date & Time: 3/31/20 / 0846

| <u>Analysis</u> | Method | Field Results/Comment | | | Hold Time |
|---|-------------------|-------------------------|------------------------|-------------|------------------|
| FLOW BY MEASUREMENT & CALC MGD | EPA 600 | Field Instrument: | Result: <u>J. W 68</u> | Unit: MLD | |
| OXYGEN, DISSOLVED - FIELD - EVV | SM 4500 O G 2011 | Field Instrument: Do M- | Result: 6.08 | Unit: phy/L | |
| PH, FIELD | SM 4500 H+ B 2011 | Field Instrument: p-96 | Result: 8.11 | Unit: 50 | |
| TEMPERATURE AT PH READING, ° C - FIELD - EVV | SM 2550 B 2010 | Field Instrument: | Result: 13-8 | Unit: oc | |
| NITROGEN, AMMONIA | SM 4500 NH3 G | | | | 28.00 days |
| SOLIDS, TOTAL SUSPENDED | USGS I-3765-85 | | | | 7.00 days |
| PHOSPHORUS - ICP 200.7 | EPA 200.7 | | | | 180.00 days |
| | Microt | oac Laboratories. Inc. | | | Page 1 of 3 |

Page 5 of 9



MGD

Chain of Custody



Microbac Laboratories, Inc., Louisville

| Gibson County Coal - Alliance | | | Project Name: GCC - IP IN0064157 South | | | | | |
|------------------------------------|---------------|-------------------|--|------------------|--|--|--|--|
| Jason Heck | | | | | | | | |
| 1146 Monarch Street, Suite 350 | | | Project/PO Number: N/A | | | | | |
| Lexington, KY 40 | 0513 | | Tenatively Scheduled: 3/31/2020 | | | | | |
| Phone: (859) 688 | 5-6332 | | Route: EVV - ARLP - GCC Pond | - Weekly | | | | |
| | | | Container(s) | Designator | | | | |
| | | | A-1 LITER PLASTIC - GEN CHEM-4°C | A A | | | | |
| | | | B-250 ML PLASTIC-METALS-HNO3 | В | | | | |
| | | | C-250 ML PLASTIC - H2SO4 | С | | | | |
| Client Sample I | D: Outfall 00 | 06 | | | | | | |
| Lab Sample ID: | L0C1615- | 03 | | 1 | | | | |
| Matrix: | Aqueous | | Sampled Date & Time: 3/3 | 1/20/0919 | | | | |
| Type: | Grab | | | , | | | | |
| <u>Analysis</u> | | Method | Field Results/Comments | Hold Time | | | | |
| FLOW BY MEASU CALC MGD | JREMENT & | EPA 600 | Field Instrument: Result: No FlOW Uni | t: | | | | |
| FLOW, AUGMENT & MEASURMENT & MGD | | NA | Field Instrument: Result: Uni | t: | | | | |
| PH, FIELD | | SM 4500 H+ B 2011 | Field Instrument: Result: Uni | t: | | | | |
| TEMPERATURE A | | SM 2550 B 2010 | Field Instrument: Result: Uni | t: | | | | |
| READING, ° C - FI HARDNESS PKG. | | varies | | 190 00 doug | | | | |
| [CALC] 200.7 | By ICI | van 103 | | 180.00 days | | | | |
| CHLORIDE - 300.0 |) | EPA 300.0 | | 28.00 days | | | | |
| SULFATE - 300.0 | | EPA 300.0 | | 28.00 days | | | | |
| SOLIDS, TOTAL S | | USGS I-3765-85 | | 7.00 days | | | | |
| IRON, TOTAL REC | COVERABLE | EPA 200.7 | | 180.00 days | | | | |
| | | | Container(s) | Designator | | | | |
| | | | A-1 LITER PLASTIC - GEN CHEM-4°C | A | | | | |
| | | | A-50 ML PLASTIC DIGITUBE-4°C | В | | | | |
| | | | B-250 ML PLASTIC-METALS-HNO3 | С | | | | |
| Client Sample II | D: Outfall 10 | 3 | | | | | | |
| Lab Sample ID: | L0C1615- | 04 | | / 1 | | | | |
| Matrix: | Aqueous | | Sampled Date & Time: 3/31 | 120 / 0841 | | | | |
| Туре: | Grab | | | , | | | | |
| <u>Analysis</u> | | Method | Field Results/Comments | Hold Time | | | | |
| FLOW BY MEASU CALC MGD | TREMENT & | EPA 600 | Field Instrument: Result: 3.243 Unit | | | | | |
| FLOW, AUGMENT MEASURMENT & | | NA | Field Instrument: Result: 0.74 Unit | :: <u>M60</u> | | | | |

Microbac Laboratories, Inc.

Page 2 of 3

Page 6 of 9





Microbac Laboratories, Inc., Louisville

| Gibson County Coal - Alliance | | | Project Name: GCC - IP IN0064157 South | | | | | |
|--|--------------|---------------------------------------|--|---|--|--|--|--|
| Jason Heck 1146 Monarch Street, Suite 350 Lexington, KY 40513 Phone: (859) 685-6332 | | | Project/PO Number: N/A Tenatively Scheduled: 3/31/2020 Route: EVV - ARLP - GCC Pond - Weekly | | | | | |
| CHLORIDE - 300.0 SULFATE - 300.0 | | EPA 300.0 EPA 300.0 | <u>Container(s)</u> A-50 ML PLASTIC (| DIGITUBE-4°C | 28.00 days 28.00 days <u>Designator</u> A | | | |
| Client Sample ID: | Outfall 10 |)6 | | | | | | |
| Lab Sample ID: | L0C1615- | 05 | | | | | | |
| Matrix: | Aqueous | | | Sampled Date & Time: 3/31/20/ | 0920 | | | |
| Type: | Grab | | | | | | | |
| <u>Analysis</u> | | Method | Field Results/C | <u>comments</u> | Hold Time | | | |
| FLOW BY MEASURE CALC MGD | EMENT & | EPA 600 | | Result: No flow Unit: | | | | |
| SOLIDS, TOTAL SUS IRON, TOTAL RECOV - ICP 200.7 | | USGS I-3765-85 EPA 200.7 | | | 7.00 days 180.00 days | | | |
| 201 2007/ | | | Container(s) B-250 ML PLASTIC A-1 LITER PLASTIC | | <u>Designator</u> A B | | | |
| Sampled/Relinquished b | y: X + 1/2 | Sulus | Date/Time: | Received by: 1/2 / July | | | | |
| Printed Name: | Setu | Baches | 1210 | Printed Name: him Sulton | | | | |
| Relinquished by: | | | Date/Time: | Received by: | | | | |
| Printed Name: | | · · · · · · · · · · · · · · · · · · · | | Printed Name: | | | | |
| Relinquished by: | | | Date/Time: | Received by: | | | | |
| Printed Name: | | Ø <u>−</u> − | | Printed Name: | | | | |
| As Received at Labor | atory: | On Ice: (Yes)/ No | Temp 2.8 | °C Total Containers: 18 8 | | | | |
| appropriately accredi | ted laborato | | | in which case we will subcontract the analing that you have been informed by Microb | | | | |
| Notes: | | | | | | | | |
| Outfall 106 is only s | ampled wh | en Outfail 006 has flow. | | | | | | |
| 005 - Record DO rea Home Facility: Evan | evilla | | | age of two readings is entered into LIMS | | | | |
| | D0 (6 | os@0896) and (| (6.11 @ 0926) | | | | | |
| | _ | | | | | | | |

