

September 3, 2019

Arcelor Mittal USA, Inc.
250 W US Highway 12
Burns Harbor, IN 46304-9745

Work Order No.: 19I0021

Re: Ammonia-Storm Ditch

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 8 sample(s) on 9/2/2019 9:45:00AM for the analyses presented in the following report as Work Order 19I0021.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Ron Misiunas, Division Manager, at ron.misiunas@microbac.com.

Sincerely,
Microbac Laboratories, Inc.



Carey Gadzala
Project Manager



WORK ORDER SAMPLE SUMMARY

Date: *Tuesday, September 3, 2019*

Client: Arcelor Mittal USA, Inc.
Project: Ammonia-Storm Ditch
Lab Order: 19I0021

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---------------|--------------------------|------------|------------------|--------------------|
| 19I0021-01 | Plate Mill Storm Ditch | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-02 | Main Storm Ditch | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-03 | Cannon Storm Ditch | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-04 | NW Storm Ditch | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-05 | SWTP Effluent/Clarifiers | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-06 | 001 | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-07 | 031 | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |
| 19I0021-08 | 999 | | 09/02/2019 00:00 | 9/2/2019 9:45:00AM |

Analytical Results

Date: Tuesday, September 3, 2019

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-01 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | Plate Mill Storm Ditch | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | ND | 0.10 | | mg/L | 1 | 09/03/2019 14:21 |

Analytical Results

Date: Tuesday, September 3, 2019

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-02 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | Main Storm Ditch | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | ND | 0.10 | | mg/L | 1 | 09/03/2019 14:23 |

Analytical Results

Date: Tuesday, September 3, 2019

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-03 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | Cannon Storm Ditch | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | ND | 0.10 | | mg/L | 1 | 09/03/2019 14:25 |

Analytical Results

Date: Tuesday, September 3, 2019

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-04 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | NW Storm Ditch | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------|--------------------------------|------|----------------------------------|----|------------------|
| | | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | |
| Nitrogen, Ammonia as N | | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | |
| Nitrogen, Ammonia (As N) | di | A | ND | 0.10 | | mg/L | 1 | 09/03/2019 14:28 |



Analytical Results

Date: Tuesday, September 3, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: Ammonia-Storm Ditch
Client Sample ID: SWTP Effluent/Clarifiers
Sample Description:
Matrix: Aqueous

Work Order/ID: 19I0021-05
Sampled: 09/02/2019 0:00
Received: 09/02/2019 9:45

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | 0.28 | 0.10 | | mg/L | 1 | 09/03/2019 14:30 |

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com

Analytical Results

Date: *Tuesday, September 3, 2019*

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-06 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | 001 | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | 0.24 | 0.10 | | mg/L | 1 | 09/03/2019 14:32 |

Analytical Results

Date: *Tuesday, September 3, 2019*

Client: Arcelor Mittal USA, Inc.
Client Project: Ammonia-Storm Ditch
Client Sample ID: 031
Sample Description:
Matrix: Aqueous

Work Order/ID: 19I0021-07
Sampled: 09/02/2019 0:00
Received: 09/02/2019 9:45

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | 0.12 | 0.10 | | mg/L | 1 | 09/03/2019 14:40 |

Analytical Results

Date: Tuesday, September 3, 2019

| | | | |
|----------------------------|--------------------------|-----------------------|-----------------|
| Client: | Arcelor Mittal USA, Inc. | Work Order/ID: | 19I0021-08 |
| Client Project: | Ammonia-Storm Ditch | Sampled: | 09/02/2019 0:00 |
| Client Sample ID: | 999 | Received: | 09/02/2019 9:45 |
| Sample Description: | | | |
| Matrix: | Aqueous | | |

| Analyses | Certs | AT | Result | RL | Qual | Units | DF | Analyzed |
|-------------------------------|-------|----|--------------------------------|------|----------------------------------|-------|----|------------------|
| | | | Method: EPA 350.1 Rev 2.0 | | Analyst: ABG | | | |
| Nitrogen, Ammonia as N | | | Prep Method: EPA 350.1 Rev 2.0 | | Prep Date/Time: 09/03/2019 13:45 | | | |
| Nitrogen, Ammonia (As N) | di | A | ND | 0.10 | | mg/L | 1 | 09/03/2019 14:52 |

ANALYTE TYPES: (AT)

A, B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



QC SAMPLE IDENTIFICATIONS

BLK = Method Blank

DUP = Method Duplicate

BS = Method Blank Spike

MS = Matrix Spike

ICB = Initial Calibration Blank

CCB = Continuing Calibration Blank

CRL = Client Required Reporting Limit

PDS = Post Digestion Spike

QCS = Quality Control Standard

ICSA = Interference Check Standard "A"

ICSAB = Interference Check Standard "AB"

BSD = Method Blank Spike Duplicate

MSD = Matrix Spike Duplicate

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

OPR = Ongoing Precision and Recovery Standard

SD = Serial Dilution

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

^d Illinois EPA drinking water, wastewater and solid waste analysis (#200064)

ⁱ Kansas Dept Health & Env. NELAP (#E-10397)

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

RL: Reporting Limit

RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler



Comments

No time. Samples preserved at lab

Cooler Inspection Checklist

| | |
|--|-----|
| Ice Present or not required? | Yes |
| Shipping containers sealed or not required? | Yes |
| Custody seals intact or not required? | Yes |
| Chain of Custody (COC) Present? | Yes |
| COC includes customer information? | Yes |
| Relinquished and received signature on COC? | Yes |
| Sample collector identified on COC? | Yes |
| Sample type identified on COC? | Yes |
| Correct type of Containers Received | Yes |
| Correct number of containers listed on COC? | Yes |
| Containers Intact? | Yes |
| COC includes requested analyses? | Yes |
| Enough sample volume for indicated tests received? | Yes |
| Sample labels match COC (Name, Date & Time?) | Yes |
| Samples arrived within hold time? | Yes |
| Correct preservatives on COC or not required? | Yes |
| Chemical preservations checked or not required? | Yes |
| Preservation checks meet method requirements? | Yes |
| VOA vials have zero headspace, or not recd.? | Yes |

Microbac Laboratories, Inc.

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Lab Report Address
 Client Name: Arcelor Mittal
 Address: Ammonia-Storm Ditch
 City, State, Zip: Carey Gadzala, IN
 Contact: Tomi Kirk
 Telephone No.:
 Turnaround Time: Routine (5 to 7 business days) or RUSH* (notify lab)
 Report Type: (needed by)
 Samples Received on: Custody Seals Intact?

RUSH!

Chain of Custody
 TO BE
 Temperature
 Term ID
 Holding Time
 Samples Received on
 Custody Seals Intact?

Invoice Address
 Client Name: Arcelor Mittal
 Address: Ammonia-Storm Ditch
 City, State, Zip: Carey Gadzala, IN
 Contact: Tomi Kirk
 Telephone No.:
 Turnaround Time: Routine (5 to 7 business days) or RUSH* (notify lab)
 Report Type: (needed by)
 Samples Received on: Custody Seals Intact?

| Lab ID | Client Sample ID | Date Collected | Time Collected | No. of Containers | Matrix | Grab / Comp | Preservative Types ** | Analysis | Additional Notes |
|--------|--------------------|----------------|----------------|-------------------|--------|-------------|-----------------------|----------|------------------|
| | Storm Ditch | 9/2/19 | | 1 | | G | | Ammonia | 1910021 |
| | Storm Ditch main | | | 1 | | | | | -01 |
| | Storm Ditch Cannon | | | 1 | | | | | -02 |
| | Storm Ditch x142 | | | 1 | | | | | -03 |
| | SWTP Clarifiers | | | 1 | | | | | -04 |
| | 001 Flume | | | 1 | | | | | -05 |
| | 031 | | | 1 | | | | | -06 |
| | 999 | | | 1 | | | | | -07 |
| | | | | | | | | | -08 |

Requested Analysis
 Location: PO No.:
 Compliance Monitoring? Yes No
 Agency/Program:
 Sampler Signature: W Howard
 Sampler Phone No.: 215 787 4863
 * Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)
 * Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved
 Possible Hazard Identification: Hazardous Non-Hazardous Radioactive
 Sample Disposition: Dispose as appropriate Return Archive
 Relinquished By (signature): W Howard
 Relinquished By (signature): M. P...
 Relinquished By (signature): W Howard
 Date/Time: 9/2/19 0800
 Date/Time: 9/2/19 0945
 Date/Time: 9/2/19 0800
 Date/Time: 9/2/19 0800
 Date/Time: 9/3/19 0820
 Received By (signature): M. P...
 Received By (signature): W Howard
 Received By (signature): W Howard
 Page ___ of ___