

September 6, 2019

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

Work Order No.: 19I0304

Re: Ammonia-Storm Ditch

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 8 sample(s) on 9/6/2019 9:55:00AM for the analyses presented in the following report as Work Order 1910304.

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.

Carry Macizala

Carey Gadzala Project Manager

Microbac Laboratories, Inc.



WORK OR	DER SAMPLE SUMMARY		Date:	Friday, September 6, 2019
Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch 19I0304			
Lab Sample	ID Client Sample ID	Tag Number	Collection Date	Date Received
1910304-01	Plate Mill Storm Ditch	-	09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-02	Main Storm Ditch		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-03	Cannon Storm Ditch		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-04	NW Storm Ditch		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-05	SWTP Effluent/Clarifiers		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-06	031		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-07	999		09/06/2019 00:00	9/6/2019 9:55:00AM
1910304-08	001		09/06/2019 00:00	9/6/2019 9:55:00AM

Analytical Re	esults					Date:	Fi	riday, S	September 6, 2	2019
Client: Client Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch					14/	ork Order/	ID.	191030	4 01
Client Sample ID:	Plate Mill Storm Ditch						mpled:	ID.	09/06/2019	
Sample Description:						Re	ceived:		09/06/2019	9:55
Matrix:	Aqueous									
Analyses		Certs	AT	Result	RL	Qual	Units	DF	Analyzed	ł
				Metho	od: EPA 350.1 Rev	2.0		Analy	st: ABG	
Nitrogen, Ammonia	as N	-		Prep Metho	od: EPA 350.1 Rev	2.0	Prep [Date/Tim	e:09/06/2019 11:3	32

ND

0.10

А

di

Nitrogen, Ammonia (As N)

mg/L

1

Analytical Re	esults						Date:	F	Friday, S	September 6	2019
Client: Client Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch						Wa	ork Ordei	/ID:	19103	304-02
Client Sample ID: Sample Description:	Main Storm Ditch							mpled: ceived:		09/06/2019 09/06/2019	
Matrix:	Aqueous										
Analyses		Certs	AT	Result		RL	Qual	Units	DF	Analyz	ed
				Meth	nod: EPA 350.1	Rev	2.0		Analy	st: ABG	
Nitrogen, Ammonia	as N			Prep Met	nod: EPA 350.1	Rev	2.0	Prep	Date/Tim	ne:09/06/2019 1	1:32

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0.10

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Nitrogen, Ammonia (As N)

mg/L

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Analytical Re	esults					Date:	F	riday, S	September 6,	2019
Client: Client Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch					w	ork Order/	/ID:	19103	04-03
Client Sample ID: Sample Description:	Cannon Storm Ditch						ampled: eceived:		09/06/2019 09/06/2019	
Matrix:	Aqueous									
Analyses		Certs	AT	Result	RI	Qual	Units	DF	Analyze	d
				Meth	od: EPA 350.1 R	ev 2.0		Analy	st: ABG	
Nitrogen, Ammonia	as N			Prep Meth	od: EPA 350.1 R	ev 2.0	Prep	Date/Tim	ne:09/06/2019 13	3:03

ND

0.10

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Nitrogen, Ammonia (As N)

mg/L

1

Analytical Re	esults						Date:	F	riday, S	September 6	2019
Client: Client Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch						Wa	ork Order	/ID:	19103	804-04
Client Sample ID: Sample Description:	NW Storm Ditch							mpled: ceived:		09/06/2019 09/06/2019	
Matrix:	Aqueous							cerveu.		00/00/2010	0.00
Analyses		Certs	AT	Result		RL	Qual	Units	DF	Analyz	ed
				Met	nod: EPA 350.4	1 Rev	2.0		Analy	st: ABG	
Nitrogen, Ammonia	as N			Prep Met	nod: EPA 350.4	l Rev	2.0	Prep	Date/Tim	ne:09/06/2019 1	3:03

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0.10

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Nitrogen, Ammonia (As N)

mg/L

1

Analytical Re	esults					Date:	Frid	ay, S	September 6, 2019
Client: Client Project:	Arcelor Mittal USA, Inc. Ammonia-Storm Ditch					W	ork Order/ID	:	1910304-05
Client Sample ID:	SWTP Effluent/Clarifiers					Sa	mpled:		09/06/2019 0:00
Sample Description:						Re	eceived:		09/06/2019 9:55
Matrix:	Aqueous								
Analyses		Certs	AT	Result	RL	Qual	Units	DF	Analyzed
				Met	nod: EPA 350.1 Rev	2.0	/	Analy	st: ABG
Nitrogen, Ammonia	as N			Prep Met	nod: EPA 350.1 Rev	2.0	Prep Dat	e/Tim	ne:09/06/2019 13:03

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di

Nitrogen, Ammonia (As N)

mg/L

0.10

Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client:** Ammonia-Storm Ditch **Client Project:** Work Order/ID: 1910304-06 031 09/06/2019 0:00 **Client Sample ID:** Sampled: 09/06/2019 9:55 Sample Description: Received: Matrix: Aqueous Certs AT Result RL Units Analyses Qual DF Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 09/06/2019 13:03 Nitrogen, Ammonia as N

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Nitrogen, Ammonia (As N)

ND

0.10

mg/L

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Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Ammonia-Storm Ditch Work Order/ID: 1910304-07 999 09/06/2019 0:00 **Client Sample ID:** Sampled: 09/06/2019 9:55 Sample Description: Received: Matrix: Aqueous Certs AT Result RL Units Analyses Qual DF Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 09/06/2019 13:03 Nitrogen, Ammonia as N

0.13

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di

Nitrogen, Ammonia (As N)

0.10

mg/L

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Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client:** Ammonia-Storm Ditch **Client Project:** Work Order/ID: 1910304-08 001 09/06/2019 0:00 **Client Sample ID:** Sampled: 09/06/2019 9:55 Sample Description: Received: Matrix: Aqueous Certs AT Result RL Units Analyses Qual DF Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 09/06/2019 13:03 Nitrogen, Ammonia as N

0.29

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Nitrogen, Ammonia (As N)

0.10

mg/L

1

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

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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



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