

Work Order No.: 19H2019

August 31, 2019

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

Re: Ammonia-

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 2 sample(s) on 8/31/2019 10:35:00AM for the analyses presented in the following report as Work Order 19H2019.

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 Hadgala

Carey Gadzala Project Manager



WORK ORDER SAMPLE SUMMARY

Client: Arcelor Mittal USA, Inc.

Project: Ammonia-**Lab Order:** 19H2019

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received		
19H2019-01	001		08/09/2019 00:00	8/31/2019 10:35:00AM		
19H2019-02	001		08/10/2019 00:00	8/31/2019 10:35:00AM		

Saturday, August 31, 2019

Date:



Analytical Results Date: Saturday, August 31, 2019

Client: Arcelor Mittal USA, Inc.

 Client Project:
 Ammonia Work Order/ID:
 19H2019-01

 Client Sample ID:
 001
 Sampled:
 08/09/2019 0:00

 Sample Description:
 Received:
 08/31/2019 10:35

Matrix: Aqueous

Certs AT Result RLUnits **Analyses** Qual DF Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/31/2019 11:38 Nitrogen, Ammonia as N mg/L 0.37 0.10 08/31/2019 15:20 Nitrogen, Ammonia (As N) di Α



Analytical Results Date: Saturday, August 31, 2019

Client: Arcelor Mittal USA, Inc.

 Client Project:
 Ammonia Work Order/ID:
 19H2019-02

 Client Sample ID:
 001
 Sampled:
 08/10/2019 0:00

 Sample Description:
 Received:
 08/31/2019 10:35

Matrix: Aqueous

Certs AT Result RLUnits **Analyses** Qual DF Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/31/2019 11:38 Nitrogen, Ammonia as N mg/L 0.46 0.10 08/31/2019 15:22 Nitrogen, Ammonia (As N) di Α

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

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

QCS = Quality Control Standard 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.



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?	No
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	No
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

Lab Report Address

Invoice Address

Client Name:

Client Name: Arccle -

Address:

Tem Rix

Contact: City, State, Zip: Address:

Telephone No.:

Instructions	Number
on back	70

uctions	ber
s on	
back	5
	2
	2
	93

Temperature Upon Receipt (°C) L/JJH

73-60

☐ Routine (5 to 7 business days)
☐ RUSH* (notify lab)

Turnaround Time

Samples Received on Ice? Yes □ No □ N/A **Holding Time**

Report Type (needed by)

Results Only ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD Custody Seals Intact? ☐ Yes ☐ No 図N/A

Send Invoice via: ☐ Mail ☐ Fax ☐ e-mail (address) ☐ Yes □ No

PO No.: ☐ Agency/Program Compliance Monitoring?

Sampler Phone No.:

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCI, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved * Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) Sampled by (PRINT):

Project:

Send Report via: Telephone No.: Contact: City, State, Zip:

☐ Mail ☐ Fax ☐ e-mail (address)

Location:

Sampler Signature:

	comments	Possible Haza	2019 Carey Gadzala elorMittal - Burns Harbor, IN nonia- 31/2019							ΠA		
		Possible Hazard Identification							001	8	Client Sample ID	
		☐ Hazardous ☐ Non-Hazardous							8/10/19	6116/3	Saste Date Date Date	
Relinquished By (signature)	Relinquished By (signature)	zardous Radioactive									Collected. No. of Containers Matrix	
e) Daté/Time	e) Date/Time	San							0	<u></u>	Grab / Comp Preservative Types **	
•	/A 1000	Sample Disposition Di							*	ア 一	Amonta	REC
Received By (signature)	Received By (signature)	Dispose as appropriate Return										REQUESTED ANALYSIS
Date/Time	Date/Time S/7///9 0848	Archive							60	>	19719619	

rev.12/26/2017

Date/Time

1035