

August 21, 2019

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

Work Order No.: 19H1264

**Re: NPDES Excusrion Sampling** 

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 1 sample(s) on 8/20/2019 2:55:00PM for the analyses presented in the following report as Work Order 19H1264.

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.

Carup Macizala

Carey Gadzala Project Manager

Microbac Laboratories, Inc. 250 West 84<sup>th</sup> Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



WORK OF	RDER	SAMPLE SUMMARY	Date:	Wednesday, August 21, 2019	
Client: Project: Lab Order:	NPDE	or Mittal USA, Inc. S Excusrion Sampling 264			
Lab Sample 19H1264-01		Client Sample ID 002	Tag Number	Collection Date 08/20/2019 14:10	Date Received 8/20/2019 2:55:00PM

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# **Analytical Results**

Date: Wednesday, August 21, 2019

Client: Client Project:	Arcelor Mittal USA, Ir NPDES Excusrion Sa									
Client Sample ID:	002							Work O	rder/ID:	19H1264-01
Sample Description:								Sample	d:	08/20/2019 14:10
Matrix:	Aqueous							Receive	d:	08/20/2019 14:55
Analyses		Certs	AT	Result		RL	Qual	Units	DF	Analyzed
				Method: SM	4500-CN	C/E-1999			An	alyst: ABG
Total Cyanide	Prep Method: NA Prep Date/Time: 08/21/2019 10:4				Time:08/21/2019 10:45					
Cyanide, Total		dij	Α		ND	0.0050		mg/L	1	08/21/2019 14:05
				Method: SW	-846 9014	Ļ			An	alyst: lachat4
Free Cyanide			F	Prep Method: SW	-846 9014	1		I	Prep Date/	Time:08/21/2019 15:22
Free Cyanide			Α		ND	0.0062		mg/L	1	08/21/2019 15:51

### 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)
- <sup>i</sup> Kansas Dept Health & Env. NELAP (#E-10397)
- j Kentucky Wastewater Laboratory Certification Program (#108202)

#### FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

RL:	Reporting Limit
RPD:	Relative Percent Difference

# **Cooler Receipt Log**

Cooler ID: Default Cooler

#### Comments



No time on sample container. Sample preserved at lab

# **Cooler Inspection Checklist**

Ice Present or not required? Shipping containers sealed or not required? Custody seals intact or not required? Chain of Custody (COC) Present? COC includes customer information? Relinquished and received signature on COC? Sample collector identified on COC? Sample type identified on COC? Correct type of Containers Received Correct number of containers listed on COC? Containers Intact?	No Yes Yes No Yes Yes Yes Yes Yes
COC includes requested analyses? Enough sample volume for indicated tests received?	Yes Yes
Sample labels match COC (Name, Date & Time?) Samples arrived within hold time? Correct preservatives on COC or not required? Chemical preservations checked or not required? Preservation checks meet method requirements? VOA vials have zero headspace, or not recd.?	No Yes Yes Yes Yes

CHAIN OF CUSTODY RECORD Number $152322$ Instructions on back To BE COMPLETED BY MICROBAC To DE COMPLETED BY MICROBAC Therm ID Therm ID Th	17 Types INo	Beturn Archive   Date/Time Date/Time   Date/Time S.J.O.IQ/1.45   Page Bagg 6.0f.6
CH Turmaround Time I urmaround Time Routine (5 to 7 business days) Ten To To Ten To To To To To To To To To To	V (PBINT): Location: Compliance Montcomp? Tve   V (PBINT): Junc, function Sampler Signature: Junc, function Compliance Montcomp? Tve   * Match Types: Soll Junc, Soll Mater Sampler Phone No.: Compliance Montcomp? Tve   * Match Types: Soll Junc, Soll Mater Soll Mater Soll Mater Soll Mater Soll Mater   * Persentie Types: Amont (S) Zinc Acetate, (G) No. Sampler Phone No.: Exerciting Vater Soll Mater   * Presente Collected	Sample Disposition Dispose as appropriate   Date/Time Received By (signature)   AZZ/19 KS   Date/Time Received By (signature)   Date/Time Received By (signature)
Child By Invoice Address Client Name: Address: City, State, Zip: Contact: Telephone No.:	Location: Location: Thurn Sampler Signature: All (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwate V03, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Me Collected Collected Collected (6) Me Collected Collected (7) Comp	Hazardous Non-Hazardous Radioactive Relinquished By (sighature) Relinquished By (signature) Relinquished By (signature)
MICROBAC Lab Report Address Client Name: Acclur Address: City, State, Zip: Contact: Co. W. K Contact: Co. Will	Poject: Sampled by (PRINT): * Matrix Types: Soil/So * Matrix Types: Soil/So * Matrix Types: Soil/So * Matrix Types: Soil/So * Prove Type: Soil/So * Prov	Possible Hazard Identification Comments rev.12/26/2017