

Work Order No.: 19H1595

August 26, 2019

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

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 6 sample(s) on 8/26/2019 9:50:00AM for the analyses presented in the following report as Work Order 19H1595.

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



Date:

## WORK ORDER SAMPLE SUMMARY

Client: Arcelor Mittal USA, Inc.

Project: Daily Lab Order: 19H1595

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received	
19H1595-01	001-Composite	001	08/25/2019 00:00	8/26/2019 9:50:00AM	
19H1595-02	001-Grab	001	08/26/2019 00:00	8/26/2019 9:50:00AM	
19H1595-03	011-Composite	011	08/25/2019 00:00	8/26/2019 9:50:00AM	
19H1595-05	002-Composite	002	08/26/2019 00:00	8/26/2019 9:50:00AM	
19H1595-06	002-Grab	002	08/26/2019 00:00	8/26/2019 9:50:00AM	

Monday, August 26, 2019



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 001-Composite
 Work Order/ID:
 19H1595-01

 Sample Description:
 001
 Sampled:
 08/25/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/26/2019
 9:50

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
		Method: EPA 420.4 Rev 1.0 Analyst: ABG							
Total Phenolics				Prep Date/Time: 08/26/2019 14:00					
Phenolics, Total Recoverable	eij	Α	ND	0.0060	0.010	U	mg/L	1	08/26/2019 16:32
		Method: SM 2540 D-1997				Analyst: <b>KMT</b>			
Total Suspended Solids Prep Date/Time: 08/26/2019 11:07						Time: 08/26/2019 11:07			
Total Suspended Solids	eij	Α	1.0	1.0	1.0		mg/L	1	08/26/2019 12:27



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 001-Grab
 Work Order/ID:
 19H1595-02

 Sample Description:
 001
 Sampled:
 08/26/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/26/2019
 9:50

ΑT Result MDL RL Units DF **Analyses** Certs Qual Analyzed Method: EPA 1664B Analyst: KMT Oil & Grease (HEM) by SPE Prep Date/Time: 08/26/2019 07:40 08/26/2019 14:31 Α ND 1.4 5.0 mg/L Oil & Grease (HEM) eij



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 011-Composite
 Work Order/ID:
 19H1595-03

 Sample Description:
 011
 Sampled:
 08/25/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/26/2019
 9:50

ΑT MDL RL Units DF **Analyses** Certs Result Qual **Analyzed** Method: EPA 420.4 Rev 1.0 Analyst: ABG **Total Phenolics** Prep Date/Time: 08/26/2019 14:00 Α 0.0060 0.010 mg/L 08/26/2019 16:33 Phenolics, Total Recoverable eij ND U



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 002-Composite
 Work Order/ID:
 19H1595-05

 Sample Description:
 002
 Sampled:
 08/26/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/26/2019
 9:50

ΑT Result MDL RL Units DF **Analyses** Certs Qual Analyzed Method: SM 4500-CN C/E-1999 Analyst: AJR Prep Date/Time: 08/26/2019 12:00 **Total Cyanide** 08/26/2019 15:27 Α 0.0020 0.0050 mg/L Cyanide, Total eij ND



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 002-Grab
 Work Order/ID:
 19H1595-06

 Sample Description:
 002
 Sampled:
 08/26/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/26/2019
 9:50

ΑT Result MDL RL Units DF **Analyses** Certs Qual **Analyzed** Method: EPA 1664B Analyst: KMT Oil & Grease (HEM) by SPE Prep Date/Time: 08/26/2019 07:40 Α ND 1.4 5.0 mg/L 08/26/2019 14:31 Oil & Grease (HEM) eij

### **ANALYTE TYPES: (AT)**

A,B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

## MICROBAC<sup>®</sup>

### **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)
- J Kentucky Wastewater Laboratory Certification Program (#108202)

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

MDL: Minimum Detection Limit

RL: Reporting Limit

RPD: Relative Percent Difference

U: The analyte was analyzed for but was not detected above the reported quantitation limit. The quantitation limit has

been adjusted for any dilution or concentration of the sample.

### **Cooler Receipt Log**

Cooler ID: Default Cooler



## **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

8/26/19 Date/Time / 8/24/19 0845
Date/Time Samples Received on Ice? 🗀 Yes 📋 No 📋 N/A 02 04 05 05 08 Custody Seals Intact? Tes No N/A 19H15 Number 152308
Instructions on back
TO BE COMPLETED BY MICROBAC
Temperature Upon Receipt (°C)
Therm ID Results Only Level 1 Level 2 Level 3 Level 4 EDD \$/26/19 Page 0 ☐ Archive \* 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) HCI, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved
REQUESTED ANALYSIS Holding Time Received By (signature) Received By (signature) Send Invoice via: Mail Fax e-mail (address) Turnaround Time
Routine (5 to 7 business days) FOG Spuide 25 Dispose Sampler Phone No.: × 200 Date/Find 22/19 084 0 950 (needed by) Report Type (anout) 551 Date/Time, 8/26/, 9 Date/Time PO No. ゆうのでし Grab / Comp 己の Relinquished By (signature)
Relinquished By (signature)
Relinquished By (signature) Matrix Sampler Signature: No. of Containers Invoice Address Client Name: City, State, Zip: Telephone No.: Address: Location: SAS 19 8/25/19 8/25/19 8/25/19 8/25/19 8/26/19 8/26/19 100 H ☐ Fax ☐ e-mail (address) uttal ガダ Client Sample ID Louth Leacen П Май 102 262 80 South ♠ MICROBAC¹ Sampled by (PRINT): Send Report via: City, State, Zip: Telephone No.: 19H1595 Carey Gadzala ArcelorMittal - Burns Harbor, IN Daily 08/26/2019 

CHAIN OF CUSTODY RECORD

0820

rev.12/26/2017