



September 12, 2019

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

Work Order No.: 19I0685

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 2 sample(s) on 9/12/2019 10:00:00AM for the analyses presented in the following report as Work Order 19I0685.

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](mailto:ron.misiunas@microbac.com).

Sincerely,  
Microbac Laboratories, Inc.

A handwritten signature in black ink that reads "Carey Gadzala". The signature is written in a cursive, flowing style.

Carey Gadzala  
Project Manager

[Microbac Laboratories, Inc.](http://www.microbac.com)

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](http://www.microbac.com)



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**WORK ORDER SAMPLE SUMMARY****Date:** *Thursday, September 12, 2019*

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**Client:** Arcelor Mittal USA, Inc.  
**Project:** Daily  
**Lab Order:** 19I0685

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<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Collection Date</b>	<b>Date Received</b>
19I0685-01	002-Composite	002	09/11/2019 00:00	9/12/2019 10:00:00AM
19I0685-02	002-Grab	002	09/11/2019 00:00	9/12/2019 10:00:00AM

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## Analytical Results

Date: *Thursday, September 12, 2019*

<b>Client:</b>	Arcelor Mittal USA, Inc.	<b>Work Order/ID:</b>	19I0685-01
<b>Client Project:</b>	Daily	<b>Sampled:</b>	09/11/2019 0:00
<b>Client Sample ID:</b>	002-Composite	<b>Received:</b>	09/12/2019 10:00
<b>Sample Description:</b>	002		
<b>Matrix:</b>	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: <b>SM 4500-CN C/E-1999</b>			Analyst: <b>ABG</b>			
			Prep Date/Time: <b>09/12/2019 11:36</b>						
<b>Total Cyanide</b>									
Cyanide, Total	ejj	A	<b>0.0042</b>	0.0020	0.0050		mg/L	1	09/12/2019 13:58

## Analytical Results

Date: *Thursday, September 12, 2019*

<b>Client:</b>	Arcelor Mittal USA, Inc.	<b>Work Order/ID:</b>	19I0685-02
<b>Client Project:</b>	Daily	<b>Sampled:</b>	09/11/2019 0:00
<b>Client Sample ID:</b>	002-Grab	<b>Received:</b>	09/12/2019 10:00
<b>Sample Description:</b>	002		
<b>Matrix:</b>	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: EPA 1664B				Analyst: KMT			
<b>Oil &amp; Grease (HEM) by SPE</b>										
Prep Date/Time: 09/12/2019 07:27										
Oil & Grease (HEM)	ejj	A	ND	1.4	5.0	U	mg/L	1	09/12/2019 14:32	

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**ANALYTE TYPES: (AT)**

A, B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



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**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 &amp; Env. NELAP (#E-10397)

j Kentucky Wastewater Laboratory Certification Program (#108202)

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**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

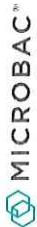


### Cooler Inspection Checklist

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

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CHAIN

Number  
Instruction

TO BE COM-

Temperature

Therm ID

Holding Time

Samples Received o

Custody Seals Intact?

Level 1  Level 2  Level 3  Level 4

Compliance Monitoring?  Yes  No

Agency/Program

PO No.:

Sampler Phone No.:

Sampler Signature:

\* 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

REQUESTED ANALYSIS

Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	American	TSS	Fluoride	Zn	Cd	Pb	Si:Luc	Copper	PCB	RAI	Additional Notes
001	9/11/19		1		G		X	X	X	X	X	X	X	X	X	X	1910685
001	9/11/19		3		G		X	X	X	X	X	X	X	X	X	X	1910685
011	9/11/19		1		G		X	X	X	X	X	X	X	X	X	X	1910685
011	9/11/19		3		G		X	X	X	X	X	X	X	X	X	X	1910685
002	9/11/19		1		G		X	X	X	X	X	X	X	X	X	X	1910685
002	9/11/19		2		G		X	X	X	X	X	X	X	X	X	X	1910685
Lagoon Channel Inlet	9/12/19	0750	1		G												1910685
South Lagoon Inlet	9/12/19	0815	1		G												1910685
011	9/12/19	0800	1		G												1910685

Hazard Identification  Hazardous  Non-Hazardous  Radioactive

Sample Disposition  Dispose as appropriate  Return  Archive

Relinquished By (signature)	Date/Time	Relinquished By (signature)	Date/Time	Relinquished By (signature)	Date/Time
<i>[Signature]</i>	9/12/19 0830	<i>[Signature]</i>	9/12/19 0830	<i>[Signature]</i>	9/12/19 0830
<i>[Signature]</i>	9/12/19 1000	<i>[Signature]</i>	9/12/19 1000	<i>[Signature]</i>	9/12/19 1000

1910685 Carey Gadzala  
ArcelorMittal - Burns Harbor, IN  
Daily  
09/12/2019

