

August 30, 2019

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

Work Order No.: 19H1944

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 20 sample(s) on 8/30/2019 10:50:00AM for the analyses presented in the following report as Work Order 19H1944.

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.



Carey Gadzala
Project Manager

WORK ORDER SAMPLE SUMMARY

Date: *Friday, August 30, 2019*

Client: Arcelor Mittal USA, Inc.
Project: Daily
Lab Order: 19H1944

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
19H1944-01	011-Composite	011	08/29/2019 05:40	8/30/2019 10:50:00AM
19H1944-02	011-Grab	011	08/29/2019 05:40	8/30/2019 10:50:00AM
19H1944-03	001-Composite	001	08/29/2019 06:00	8/30/2019 10:50:00AM
19H1944-04	001-Grab	001	08/29/2019 06:00	8/30/2019 10:50:00AM
19H1944-05	031-Grab	031	08/30/2019 06:23	8/30/2019 10:50:00AM
19H1944-06	Mixed Liquor-Grab	Mixed Liquor	08/30/2019 06:25	8/30/2019 10:50:00AM
19H1944-07	J-Box-Grab	J-Box	08/30/2019 06:21	8/30/2019 10:50:00AM
19H1944-08	WWII-Grab	WWII	08/30/2019 06:58	8/30/2019 10:50:00AM
19H1944-09	Coldwell-Grab	Coldwell	08/30/2019 07:15	8/30/2019 10:50:00AM
19H1944-10	RSB FT Overflow-Grab	RSB FT Overflow	08/30/2019 07:19	8/30/2019 10:50:00AM
19H1944-11	RSB FT Influent-Grab	RSB FT Influent	08/30/2019 07:20	8/30/2019 10:50:00AM
19H1944-12	999-Grab	999	08/30/2019 07:29	8/30/2019 10:50:00AM
19H1944-13	BFTC-Grab	BFTC	08/30/2019 07:45	8/30/2019 10:50:00AM
19H1944-15	WAL-Grab	WAL	08/29/2019 08:01	8/30/2019 10:50:00AM
19H1944-16	CM1-Grab	CM1	08/30/2019 00:00	8/30/2019 10:50:00AM
19H1944-17	CM2-Grab	CM2	08/30/2019 00:00	8/30/2019 10:50:00AM
19H1944-18	CM6-Grab	CM6	08/30/2019 00:00	8/30/2019 10:50:00AM
19H1944-19	HM2-Grab	HM2	08/30/2019 00:00	8/30/2019 10:50:00AM
19H1944-20	HM3-Grab	HM3	08/30/2019 00:00	8/30/2019 10:50:00AM

Field Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order:	19H1944
Client Project:	Daily		
Client Sample ID:	011-Grab	Work Order/ID:	19H1944-02
Sample Description:	011	Sampled:	08/29/2019 05:40
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
FLD_CL_TITR	0.00	mg/L
pH	7.9	pH Units

Client Sample ID:	001-Grab	Work Order/ID:	19H1944-04
Sample Description:	001	Sampled:	08/29/2019 06:00
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
FLD_CL_TITR	0.00	mg/L
pH	7.9	pH Units

Client Sample ID:	J-Box-Grab	Work Order/ID:	19H1944-07
Sample Description:	J-Box	Sampled:	08/30/2019 06:21
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
pH	8.5	pH Units

Client Sample ID:	RSB FT Overflow-Grab	Work Order/ID:	19H1944-10
Sample Description:	RSB FT Overflow	Sampled:	08/30/2019 07:19
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
pH	8.9	pH Units

Client Sample ID:	999-Grab	Work Order/ID:	19H1944-12
Sample Description:	999	Sampled:	08/30/2019 07:29
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
pH	8.2	pH Units

Client Sample ID:	002-Grab	Work Order/ID:	19H1944-14
Sample Description:	002	Sampled:	08/29/2019 07:50
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
pH	8.3	pH Units

Client Sample ID:	WAL-Grab	Work Order/ID:	19H1944-15
Sample Description:	WAL	Sampled:	08/29/2019 08:01
Matrix:	Aqueous	Received:	08/30/2019 10:50

Analyses	Result	Units
pH	8.9	pH Units

Field Results

Date:

Friday, August 30, 2019

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-01
Client Project:	Daily	Sampled:	08/29/2019 5:40
Client Sample ID:	011-Composite	Received:	08/30/2019 10:50
Sample Description:	011		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: EPA 200.7 Rev 4.4				Analyst: RPL			
Total Recoverable Metals by ICP										
Prep Date/Time: 08/30/2019 12:09										
Lead	ejj	A	ND	0.0033	0.0075	U	mg/L	1	08/30/2019 14:56	
Zinc	ejj	A	ND	0.0073	0.020	U	mg/L	1	08/30/2019 14:56	
			Method: SM 4500-CN C/E-1999				Analyst: ABG			
Total Cyanide										
Prep Date/Time: 08/30/2019 12:38										
Cyanide, Total	ejj	A	0.0027	0.0020	0.0050		mg/L	1	08/30/2019 14:58	
			Method: SW-846 9014				Analyst: ABG			
Free Cyanide										
Prep Date/Time: 08/30/2019 11:42										
Free Cyanide		A	ND		0.0062		mg/L	1	08/30/2019 14:33	
			Method: EPA 350.1 Rev 2.0				Analyst: ABG			
Nitrogen, Ammonia as N										
Prep Date/Time: 08/30/2019 13:16										
Nitrogen, Ammonia (As N)	ei	A	0.25	0.054	0.10		mg/L	1	08/30/2019 14:41	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	1.9	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-02
Client Project:	Daily	Sampled:	08/29/2019 5:40
Client Sample ID:	011-Grab	Received:	08/30/2019 10:50
Sample Description:	011		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: EPA 1664B				Analyst: KMT			
Oil & Grease (HEM) by SPE										
Prep Date/Time: 08/30/2019 07:54										
Oil & Grease (HEM)	ejj	A	ND	1.4	5.0	U	mg/L	1	08/30/2019 13:49	

Analytical Results

Date: Friday, August 30, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-03
Client Project:	Daily	Sampled:	08/29/2019 6:00
Client Sample ID:	001-Composite	Received:	08/30/2019 10:50
Sample Description:	001		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 200.7 Rev 4.4						
						Analyst: RPL			
Total Recoverable Metals by ICP						Prep Date/Time: 08/30/2019 12:09			
Lead	ejj	A	ND	0.0033	0.0075	U	mg/L	1	08/30/2019 15:01
Zinc	ejj	A	ND	0.0073	0.020	U	mg/L	1	08/30/2019 15:01
			Method: SM 4500-CN C/E-1999						
						Analyst: ABG			
Total Cyanide						Prep Date/Time: 08/30/2019 12:38			
Cyanide, Total	ejj	A	0.0036	0.0020	0.0050		mg/L	1	08/30/2019 15:00
			Method: SW-846 9014						
						Analyst: ABG			
Free Cyanide						Prep Date/Time: 08/30/2019 11:42			
Free Cyanide		A	ND		0.0062		mg/L	1	08/30/2019 14:34
			Method: EPA 350.1 Rev 2.0						
						Analyst: ABG			
Nitrogen, Ammonia as N						Prep Date/Time: 08/30/2019 13:16			
Nitrogen, Ammonia (As N)	ei	A	0.36	0.054	0.10		mg/L	1	08/30/2019 14:43
			Method: SM 2540 D-1997						
						Analyst: KMT			
Total Suspended Solids						Prep Date/Time: 08/30/2019 11:25			
Total Suspended Solids	ejj	A	2.2	1.0	1.0		mg/L	1	08/30/2019 13:10

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-04
Client Project:	Daily	Sampled:	08/29/2019 6:00
Client Sample ID:	001-Grab	Received:	08/30/2019 10:50
Sample Description:	001		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: EPA 1664B				Analyst: KMT			
Oil & Grease (HEM) by SPE										
Prep Date/Time: 08/30/2019 07:54										
Oil & Grease (HEM)	ejj	A	ND	1.4	5.0	U	mg/L	1	08/30/2019 13:49	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-05
Client Project:	Daily	Sampled:	08/30/2019 6:23
Client Sample ID:	031-Grab	Received:	08/30/2019 10:50
Sample Description:	031		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	4.0	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-06
Client Project:	Daily	Sampled:	08/30/2019 6:25
Client Sample ID:	Mixed Liquor-Grab	Received:	08/30/2019 10:50
Sample Description:	Mixed Liquor		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 F-1997				Analyst: DAT			
Prep Date/Time: 08/30/2019 11:25										
Settleable Solids										
Settleable Solids	i	A	210	1.0	1.0		ml/L	1	08/30/2019 11:25	
			Method: SM 2540 D-1997				Analyst: KMT			
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids										
Total Suspended Solids	ejj	A	2200	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-07
Client Project:	Daily	Sampled:	08/30/2019 6:21
Client Sample ID:	J-Box-Grab	Received:	08/30/2019 10:50
Sample Description:	J-Box		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: EPA 350.1 Rev 2.0				Analyst: ABG			
Prep Date/Time: 08/30/2019 13:16										
Nitrogen, Ammonia as N										
Nitrogen, Ammonia (As N)	ei	A	0.29	0.054	0.10		mg/L	1	08/30/2019 14:48	
			Method: SM 2540 D-1997				Analyst: KMT			
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids										
Total Suspended Solids	ejj	A	12	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-08
Client Project:	Daily	Sampled:	08/30/2019 6:58
Client Sample ID:	WWII-Grab	Received:	08/30/2019 10:50
Sample Description:	WWII		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999					Analyst: ABG				
Prep Date/Time: 08/30/2019 12:38									
Total Cyanide									
Cyanide, Total	ejj	A	0.032	0.0020	0.0050		mg/L	1	08/30/2019 15:05

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-09
Client Project:	Daily	Sampled:	08/30/2019 7:15
Client Sample ID:	Coldwell-Grab	Received:	08/30/2019 10:50
Sample Description:	Coldwell		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed		
			Method: SM 4500-CN C/E-1999				Analyst: ABG				
										Prep Date/Time: 08/30/2019 12:38	
Total Cyanide											
Cyanide, Total	ejj	A	0.16	0.0020	0.0050		mg/L	1	08/30/2019 15:06		
			Method: EPA 350.1 Rev 2.0				Analyst: ABG				
										Prep Date/Time: 08/30/2019 13:16	
Nitrogen, Ammonia as N											
Nitrogen, Ammonia (As N)	ei	A	66	0.54	1.0		mg/L	1	08/30/2019 14:46		
			Method: SM 2540 D-1997				Analyst: KMT				
										Prep Date/Time: 08/30/2019 11:25	
Total Suspended Solids											
Total Suspended Solids	ejj	A	48	1.0	1.0		mg/L	1	08/30/2019 13:10		

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-10
Client Project:	Daily	Sampled:	08/30/2019 7:19
Client Sample ID:	RSB FT Overflow-Grab	Received:	08/30/2019 10:50
Sample Description:	RSB FT Overflow		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0				Analyst: ABG		
			Prep Date/Time: 08/30/2019 13:16						
Nitrogen, Ammonia as N									
Nitrogen, Ammonia (As N)	ei	A	7.4	0.054	0.10		mg/L	1	08/30/2019 14:51
			Method: SM 2540 D-1997				Analyst: KMT		
			Prep Date/Time: 08/30/2019 11:25						
Total Suspended Solids									
Total Suspended Solids	ejj	A	12	1.0	1.0		mg/L	1	08/30/2019 13:10

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-11
Client Project:	Daily	Sampled:	08/30/2019 7:20
Client Sample ID:	RSB FT Influent-Grab	Received:	08/30/2019 10:50
Sample Description:	RSB FT Influent		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed		
			Method: SM 2540 D-1997				Analyst: KMT				
										Prep Date/Time: 08/30/2019 11:25	
Total Suspended Solids											
Total Suspended Solids	ejj	A	1700	1.0	1.0		mg/L	1	08/30/2019 13:10		

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-12
Client Project:	Daily	Sampled:	08/30/2019 7:29
Client Sample ID:	999-Grab	Received:	08/30/2019 10:50
Sample Description:	999		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
			Prep Date/Time: 08/30/2019 11:25							
Total Suspended Solids										
Total Suspended Solids	ejj	A	2.0	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-13
Client Project:	Daily	Sampled:	08/30/2019 7:45
Client Sample ID:	BFTC-Grab	Received:	08/30/2019 10:50
Sample Description:	BFTC		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed		
			Method: SM 2540 D-1997				Analyst: KMT				
										Prep Date/Time: 08/30/2019 11:25	
Total Suspended Solids											
Total Suspended Solids	ejj	A	33	1.0	1.0		mg/L	1	08/30/2019 13:10		

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-15
Client Project:	Daily	Sampled:	08/29/2019 8:01
Client Sample ID:	WAL-Grab	Received:	08/30/2019 10:50
Sample Description:	WAL		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	11	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-16
Client Project:	Daily	Sampled:	08/30/2019 0:00
Client Sample ID:	CM1-Grab	Received:	08/30/2019 10:50
Sample Description:	CM1		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	12	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-17
Client Project:	Daily	Sampled:	08/30/2019 0:00
Client Sample ID:	CM2-Grab	Received:	08/30/2019 10:50
Sample Description:	CM2		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	19	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-18
Client Project:	Daily	Sampled:	08/30/2019 0:00
Client Sample ID:	CM6-Grab	Received:	08/30/2019 10:50
Sample Description:	CM6		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
			Prep Date/Time: 08/30/2019 11:25							
Total Suspended Solids										
Total Suspended Solids	ejj	A	10	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-19
Client Project:	Daily	Sampled:	08/30/2019 0:00
Client Sample ID:	HM2-Grab	Received:	08/30/2019 10:50
Sample Description:	HM2		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	32	1.0	1.0		mg/L	1	08/30/2019 13:10	

Analytical Results

Date: *Friday, August 30, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1944-20
Client Project:	Daily	Sampled:	08/30/2019 0:00
Client Sample ID:	HM3-Grab	Received:	08/30/2019 10:50
Sample Description:	HM3		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
			Method: SM 2540 D-1997				Analyst: KMT			
Total Suspended Solids										
Prep Date/Time: 08/30/2019 11:25										
Total Suspended Solids	ejj	A	19	1.0	1.0		mg/L	1	08/30/2019 13:10	

ANALYTE TYPES: (AT)

A, B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

**Partial**
8/30/2019

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

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



Partial

8/30/2019

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

Chain of Custody

ArcelorMittal Burns Harbor/Microbac Labs

Friday

Lab Work No: 19H1944

* Date Obtained: 8-30-19

** Sample Date: 8-29-19

Location	Time	Sampler	Type	Preserved	Cooled	Containers			Parameters	Comments
						Type	Qty	Vol. (ml)		
011 **	05:40	CP	Comp	No	Yes	Glass	1	4000		01
			Grab	No	No	Plastic	1	125	pH	02
001 **	06:00		Comp	No	Yes	Glass	1	4000	NH3	03
			Grab	No	No	Plastic	1	125	pH	04
031 *	06:23		Grab	No	No	Plastic	1	1000	TSS	05
			Grab	No	No	Plastic	1	1000	BOD	↓
Mixed Liquor *	06:25		Grab	No	No	Plastic	1	2000	TSS, Settling	06
J-Box *	06:21		Grab	No	No	Glass	2	1000	NH3, Phenol, TSS, pH	07
DIW-131 *	06:21		Grab	No	No	Plastic	1	125	pH	X
WWII *	06:58		Grab	No	No	Plastic	1	1000	Cn	08
Coldwell	07:15		Grab	No	No	Plastic	2	2000	NH3, CN, Pb, Zn, TSS	09
RSB FT Overflow *	07:19		Grab	No	No	Plastic	2	1000	NH3, pH, TSS, Pb, Zn	10
RSB FT Influent *	07:20		Grab	No	No	Plastic	1	500	TSS	11
BFTD *	07:20		Grab	No	No	Plastic	1	500	TSS	X
999 *	07:29		Grab	No	No	Plastic	1	500	TSS, pH	12
BFTC *	07:45		Grab	No	No	Plastic	1	500	TSS	13
002 **	07:50		Grab	No	No	Plastic	1	125	pH	14
WAL 1 **	08:01		Grab	No	No	Glass	1	1000	TSS, pH	15
WAL 2 **	08:01		Grab	No	No	Glass	1	1000	TSS, pH	X
WAL 3 **	08:01		Grab	No	No	Glass	1	1000	TSS, pH	X
SWTP *		***	Grab	No	No	Plastic	TS	1000	TSS	16-20

*** WPL is for previous sample date

**** Sample collected by Water Process personnel

No HM 1 + CM3

3.1
-0.3

2.8 OL

Relinquished by: CP

Date: 8-30-19

Time: 08:10

Received by: M. OBO

Date: 8/30/19

Time: 0810

Env 5x Rev. 14 07/01/16 (TEK)

19H1944 Carey Gadzala
ArcelorMittal - Burns Harbor, IN
Daily
08/30/2019



Microbac Laboratories, Inc. - Chicagoland Division
Residual Chlorine - METHOD SM 4500-Cl I-2000
Arcelor Mittal /Burns Harbor NPDES

Meter ID: B17 Meter Residual Chlorine Standard: A 9074
 Iodine Reagent: _____ Acid Reagent: _____

Sample ID	Residual Chlorine	Analyst	Date/Time of Analysis
Cal Std 1	0.02 mg/L	BAO	8/30/19 0800
Cal Std 2	0.05 mg/L		
Cal Std 3	0.1 mg/L		
Slope Blank	0.00		
LCS 0.02 mg/L	0.05		
011	0.00		
011 DUP	0.00		
001	0.00		
002	0.00		
003	0.00		
DUP 003	0.00		

Meter ID: _____ Residual Chlorine Standard: _____
 Iodine Reagent: _____ Acid Reagent: _____

Sample ID	Residual Chlorine	Analyst	Date/Time of Analysis
Cal Std 1	0.02 mg/L		
Cal Std 2	0.05 mg/L		
Cal Std 3	0.1 mg/L		
Slope			
LCS 0.02 mg/L			
011			
011 DUP			
001			
002			
003			
DUP			

Meter ID: _____ Residual Chlorine Standard: _____
 Iodine Reagent: _____ Acid Reagent: _____

Sample ID	Residual Chlorine	Analyst	Date/Time of Analysis
Cal Std 1	0.02 mg/L		
Cal Std 2	0.05 mg/L		
Cal Std 3	0.1 mg/L		
Slope			
LCS 0.02 mg/L			
011			
011 DUP			
001			
002			
003			
DUP			

307260

Daily work authorization form for all visiting workers

For each job, and before starting work at the job site, a contractor representative must meet face to face with the ArcelorMittal representative responsible for the work and discuss the work to be performed and any specific safety requirements.



Section 1

The named contractor or work crew is cleared to perform the job described herein:

Company name M. carbac Labs ArcelorMittal representative Warner Howard Date 8/30/19
 Company contact/phone no Carey Gradzala 761-8378 ArcelorMittal representative department Enviro Cell _____
 Location and project/job description Enviro Bldg / water samples ArcelorMittal representative phone number 4863 Clinic pickup point _____

Section 2

HIRAC-Lite	Yes	N/A	No	10) Could someone be caught in or between anything?	Yes	N/A	No
1) Are emergency evacuation areas identified and known?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is there a current and valid isolation (LOTO) procedure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11) Could someone get hurt as a result of a fall from height?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Will everyone apply a personal safety lock?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12) Can something fall and/or strike me or someone else?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Are there adjacent work crews exposed (including ArcelorMittal employees)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13) Is everyone properly trained for this job?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Are there potential hazards or high risk job steps?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14) Are flags and derrails in place if needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6) Do we have the correct tools for the job?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15) Can we slip or trip on anything (including travel to and from the job)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7) Is additional PPE required?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	16) Have all affected people been notified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8) Is there a potential for exposure (chemical, radiation, laser, temperature)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17) Can we strain or overexert ourselves?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9) Is someone working on or near energized electrical equipment (motor control rooms, overhead power lines, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	18) Has equipment been inspected prior to use? (tools, PPE, mobile equipment, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other Hazards and Considerations for Discussion

	Yes	N/A	No	29) Scaffold work	Yes	N/A	No	37) Confined space	Yes	N/A	No
19) Pneumatic air tools & lines	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20) Vehicle / mob equip traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21) Gas hazards-CO, CO2, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22) Hot process, metal, temp.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23) Pressurized / steam pipe	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24) Housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25) Production hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26) Material handling	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27) Crane and rigging	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28) Overhead work	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30) Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31) Barricades	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
32) Radiation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33) Asbestos	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34) Noise	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
35) Lasers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
36) Sewers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section 3

Visiting worker name (print) B. Otto Badge # 164042 Responsible Person _____

Hierarchy of Controls: 1. Elimination 2. Substitution 3. Engineering 4. Administrative 5. PPE

Hazard # _____ Responsible Person B. Otto Hazard # _____ Controls _____

15 Beware of uneven surfaces
 17 Proper lifting of spools
 20 Vehicle movement

My crew and I are familiar with the safety hazards/considerations for this job. We are prepared to perform the work in a safe "workmanship" like manner. I have reviewed these considerations with the ArcelorMittal representative named below.

Contractor or crew leader B. Otto ArcelorMittal representative Warner Howard Replacement rep/phone _____