Work Order No.: 19H0114



August 28, 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 22 sample(s) on 8/2/2019 11:00:00AM for the analyses presented in the following report as Work Order 19H0114.

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



Revised 8/28/2019

Wednesday, August 28, 2019

Date:

WORK ORDER SAMPLE SUMMARY

Client: Arcelor Mittal USA, Inc.

Project: Daily Lab Order: 19H0114

Client Sample ID	Tag Number	Collection Date	Date Received
011-Composite	011	08/01/2019 06:00	8/2/2019 11:00:00AM
011-Grab	011	08/01/2019 06:00	8/2/2019 11:00:00AM
001-Composite	001	08/01/2019 06:10	8/2/2019 11:00:00AM
001-Grab	001	08/01/2019 06:10	8/2/2019 11:00:00AM
031-Grab	031	08/02/2019 06:26	8/2/2019 11:00:00AM
Mixed Liquor-Grab	Mixed Liquor	08/02/2019 06:28	8/2/2019 11:00:00AM
J-Box-Grab	J-Box	08/02/2019 06:24	8/2/2019 11:00:00AM
WWII-Grab	WWII	08/02/2019 07:15	8/2/2019 11:00:00AM
Coldwell-Grab	Coldwell	08/02/2019 07:40	8/2/2019 11:00:00AM
RSB FT Overflow-Grab	RSB FT Overflow	08/02/2019 07:50	8/2/2019 11:00:00AM
RSB FT Influent-Grab	RSB FT Influent	08/02/2019 07:51	8/2/2019 11:00:00AM
BFTD-Grab	BFTD	08/02/2019 07:55	8/2/2019 11:00:00AM
999-Grab	999	08/02/2019 08:00	8/2/2019 11:00:00AM
BFTC-Grab	BFTC	08/02/2019 08:25	8/2/2019 11:00:00AM
002-Grab	002	08/01/2019 08:30	8/2/2019 11:00:00AM
WAL-Grab	WAL	08/01/2019 08:42	8/2/2019 11:00:00AM
CM1-Grab	CM1	08/02/2019 00:00	8/2/2019 11:00:00AM
CM2-Grab	CM2	08/02/2019 00:00	8/2/2019 11:00:00AM
CM6-Grab	CM6	08/02/2019 00:00	8/2/2019 11:00:00AM
HM1-Grab	HM1	08/02/2019 00:00	8/2/2019 11:00:00AM
HM2-Grab	HM2	08/02/2019 00:00	8/2/2019 11:00:00AM
HM3-Grab	HM3	08/02/2019 00:00	8/2/2019 11:00:00AM
	011-Composite 011-Grab 001-Composite 001-Grab 031-Grab Mixed Liquor-Grab J-Box-Grab WWII-Grab Coldwell-Grab RSB FT Overflow-Grab RSB FT Influent-Grab BFTD-Grab 999-Grab BFTC-Grab 002-Grab WAL-Grab CM1-Grab CM2-Grab HM1-Grab HM1-Grab HM2-Grab	011-Composite 011 011-Grab 011 001-Composite 001 001-Grab 001 031-Grab 031 Mixed Liquor-Grab Mixed Liquor J-Box-Grab J-Box WWII-Grab Coldwell RSB FT Overflow-Grab RSB FT Overflow RSB FT Influent-Grab RSB FT Influent BFTD-Grab BFTD 999-Grab 999 BFTC-Grab 002 WAL-Grab CM1 CM1-Grab CM2 CM6-Grab CM6 HM1-Grab HM1 HM2-Grab HM2	011-Composite 011 08/01/2019 06:00 011-Grab 011 08/01/2019 06:00 001-Composite 001 08/01/2019 06:10 001-Grab 001 08/01/2019 06:10 031-Grab 031 08/02/2019 06:26 Mixed Liquor-Grab Mixed Liquor 08/02/2019 06:28 J-Box-Grab J-Box 08/02/2019 06:24 WWII-Grab WWII 08/02/2019 07:15 Coldwell-Grab Coldwell 08/02/2019 07:40 RSB FT Overflow-Grab RSB FT Overflow 08/02/2019 07:50 RSB FT Influent-Grab RSB FT Influent 08/02/2019 07:51 BFTD-Grab BFTD 08/02/2019 07:55 999-Grab 999 08/02/2019 08:00 BFTC-Grab BFTC 08/02/2019 08:25 002-Grab 002 08/01/2019 08:30 WAL-Grab CM1 08/02/2019 00:00 CM2-Grab CM2 08/02/2019 00:00 CM6-Grab CM6 08/02/2019 00:00 HM1-Grab HM1 08/02/2019 00:00 HM2-Grab H



Client Project: Daily	Field Results		Date: Wedneso	ay, August 28, 2019
Criteri Sample ID: 011-Grab	Client:		Work Order:	19H0114
Sample Description: 011	Client Project:	Daily		
Matrix: Aqueous Received: 08/02/2019 11:00	Client Sample ID:	011-Grab	Work Order/ID:	
Analyses	Sample Description:	011	Sampled:	08/01/2019 06:00
Description: Result Units	Matrix:	Aqueous	Received:	08/02/2019 11:00
Client Sample ID: 001-Grab	Analyses		Result	Units
Sample Description: 001 Aqueous Received: 08/01/2019 06:16 Received: 08/02/2019 11:00 Received: 08/02/2019 06:24 Received: 08/02/2019 11:00 Received: 08/02/2019	рН		7.8	pH Units
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units DH 7.8 pH Units Client Sample ID: J-Box-Grab Work Order/ID: 19H0114-07 Sample Description: J-Box Sampled: 08/02/2019 11:00 Analyses Received: 08/02/2019 11:00 Analyses Result Units DH Is.3 pH Units Client Sample ID: RSB FT Overflow-Grab Work Order/ID: 19H0114-10 Sample Description: RSB FT Overflow Sampled: 08/02/2019 07:50 Matrix: Aqueous Received: 08/02/2019 07:50 Analyses Result Units DH Is.7 pH Units Client Sample ID: 999-Grab Work Order/ID: 19H0114-13 Sample Description: 999 Sampled: 08/02/2019 11:00 Analyses Result Units DH Is.3 pH Units Client Sample ID: 002-Grab Work Order/ID:	Client Sample ID:	001-Grab	Work Order/ID:	19H0114-04
Analyses	Sample Description:	001	Sampled:	08/01/2019 06:10
DH	Matrix:	Aqueous	Received:	08/02/2019 11:00
Client Sample ID:	Analyses		Result	Units
Sample Description: J-Box Aqueous Sampled: Received: 08/02/2019 06:24 Received: 08/02/2019 11:00 Received: 08/02/2019 07:50 Received: 08/02/2019 11:00 Received:<	рН		7.8	pH Units
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: RSB FT Overflow-Grab Work Order/ID: 19H0114-10 Sample Description: RSB FT Overflow Sampled: 08/02/2019 07:50 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units PH 8.7 PH Units Sample Description: 999 Sampled: 08/02/2019 08:00 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units PH 8.3 pH Units Client Sample ID: 002-Grab Work Order/ID: 19H0114-15 Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: <td>Client Sample ID:</td> <td>J-Box-Grab</td> <td>Work Order/ID:</td> <td>19H0114-07</td>	Client Sample ID:	J-Box-Grab	Work Order/ID:	19H0114-07
Analyses	Sample Description:	J-Box	Sampled:	08/02/2019 06:24
DH	Matrix:	Aqueous	Received:	08/02/2019 11:00
DH	Analyses		Result	Units
Sample Description: RSB FT Overflow Aqueous Sampled: 08/02/2019 07:50 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 08:00 Received: 08/02/2019 08:00 Received: 08/02/2019 08:00 Received: 08/02/2019 11:00 Received:<			8.3	pH Units
Sample Description: RSB FT Overflow Aqueous Sampled: 08/02/2019 07:50 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 11:00 Received: 08/02/2019 08:00 Received: 08/02/2019 08:00 Received: 08/02/2019 08:00 Received: 08/02/2019 11:00 Received:<				
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.7 pH Units Client Sample ID: 999-Grab Work Order/ID: 19H0114-13 Sample Description: 999 Sampled: 08/02/2019 08:00 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: 002-Grab Work Order/ID: 19H0114-15 Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	Client Sample ID:	RSB FT Overflow-Grab	Work Order/ID:	19H0114-10
Result Units	Sample Description:	RSB FT Overflow	Sampled:	08/02/2019 07:50
PH	Matrix:	Aqueous	Received:	08/02/2019 11:00
PH 8.7 pH Units	Analyses		Result	Units
Sample Description: 999 Sampled: 08/02/2019 08:00 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: 002-Grab Work Order/ID: 19H0114-15 Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units			8.7	pH Units
Sample Description: 999 Sampled: 08/02/2019 08:00 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: 002-Grab Work Order/ID: 19H0114-15 Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	Client Sample ID:	999-Grab	Work Order/ID:	19H0114-13
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: 002-Grab Work Order/ID: 19H0114-15 Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	-	999	Sampled:	08/02/2019 08:00
PH	Matrix:	Aqueous	Received:	08/02/2019 11:00
PH	Analyses		Result	Units
Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units			8.3	pH Units
Sample Description: 002 Sampled: 08/01/2019 08:30 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	Client Sample ID:	002-Grab	Work Order/ID:	19H0114-15
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units pH 8.3 pH Units Client Sample ID: WAL-Grab Work Order/ID: 19H0114-16 Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units				08/01/2019 08:30
PH	Matrix:	Aqueous		08/02/2019 11:00
PH	Analvses		Result	Units
Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units				
Sample Description: WAL Sampled: 08/01/2019 08:42 Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	Client Sample ID:	WAL-Grab	Work Order/ID:	19H0114-16
Matrix: Aqueous Received: 08/02/2019 11:00 Analyses Result Units	-			
	Matrix:			08/02/2019 11:00
	Analyses		Result	Units



CASE NARRATIVE Date: Wednesday, August 28, 2019

Client: Arcelor Mittal USA, Inc.

Project: Daily Lab Order: 19H0114

Report has been reissued to include NH4 for Outfall 011 per the clients request. 8/28/19



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 011-Composite
 Work Order/ID:
 19H0114-01

 Sample Description:
 011
 Sampled:
 08/01/2019
 6:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

ΑT Result MDL RL Units DF **Analyses** Certs Qual Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Date/Time: 08/22/2019 04:56 Nitrogen, Ammonia as N A 0.18 0.054 0.10 mg/L 08/22/2019 10:03 Nitrogen, Ammonia (As N) ei



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 001-Composite
 Work Order/ID:
 19H0114-03

 Sample Description:
 001
 Sampled:
 08/01/2019
 6:10

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

ΑT Result MDL RL Units DF **Analyses** Certs Qual Analyzed Method: EPA 350.1 Rev 2.0 Analyst: ABG Prep Date/Time: 08/02/2019 11:07 Nitrogen, Ammonia as N A 0.29 0.054 0.10 mg/L 08/02/2019 13:14 Nitrogen, Ammonia (As N) ei



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 031-Grab
 Work Order/ID:
 19H0114-05

 Sample Description:
 031
 Sampled:
 08/02/2019
 6:26

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: S	Analyst: EF					
Biochemical Oxygen Demand								Prep Date/1	īme: 08/02/2019 15:43
Biochemical Oxygen Demand	eij	А	ND	2.0	2.0	U	mg/L	1	08/07/2019 22:03
			Method: S	M 2540 D-19	97			Ana	alyst: KMT
Total Suspended Solids								Prep Date/1	īme:08/02/2019 11:26
Total Suspended Solids	eij	Α	4.7	1.0	1.0		mg/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 Mixed Liquor-Grab
 Work Order/ID:
 19H0114-06

 Sample Description:
 Mixed Liquor
 Sampled:
 08/02/2019
 6:28

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual Un	its DF	Analyzed
			Method:	SM 2540 F-19	97		А	nalyst: DAT
Settleable Solids							Prep Date	e/Time: 08/02/2019 11:20
Settleable Solids	i	Α	240	1.0	1.0	ml/L	1	08/02/2019 11:20
			А	nalyst: KMT				
Total Suspended Solids							Prep Date	e/Time: 08/02/2019 11:26
Total Suspended Solids	eij	Α	2400	1.0	1.0	mg/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 J-Box-Grab
 Work Order/ID:
 19H0114-07

 Sample Description:
 J-Box
 Sampled:
 08/02/2019
 6:24

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Matrix: Aqueous							Recei	ved:	08/02/2019 11:00
Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
		Method: EPA 350.1 Rev 2.0							nalyst: ABG
Nitrogen, Ammonia as N								Prep Date/	Time:08/02/2019 11:07
Nitrogen, Ammonia (As N)	ei	Α	0.69	0.054	0.10	r	ng/L	1	08/02/2019 13:17
			Method:	EPA 420.4 Re	v 1.0			Ar	nalyst: ABG
Total Phenolics								Prep Date/	Time:08/02/2019 11:07
Phenolics, Total Recoverable	eij	Α	0.014	0.0060	0.010	r	mg/L	1	08/02/2019 13:23
			Method:	SM 2540 D-19	97			Ar	nalyst: KMT
Total Suspended Solids								Prep Date/	Time:08/02/2019 11:26
Total Suspended Solids	eij	Α	16	1.0	1.0	r	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 WWII-Grab
 Work Order/ID:
 19H0114-08

 Sample Description:
 WWII
 Sampled:
 08/02/2019
 7:15

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual U	nits DF	Analyzed
			Method:	A	Analyst: ABG			
Total Cyanide							Prep Dat	e/Time:08/02/2019 11:07
Cyanide, Total	eij	Α	0.016	0.0020	0.0050	mg/L	1	08/02/2019 14:35



08/02/2019 13:08

Analytical Results Date: Wednesday, August 28, 2019

Client: Arcelor Mittal USA, Inc.

Client Project: Daily

Total Suspended Solids

 Client Sample ID:
 Coldwell-Grab
 Work Order/ID:
 19H0114-09

 Sample Description:
 Coldwell
 Sampled:
 08/02/2019
 7:40

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Campic Decempnent Columns								00.02.20.0
Matrix: Aqueous						Recei	ved:	08/02/2019 11:0
Analyses	Certs	ΑT	Result	MDL	RL	Qual Units	DF	Analyzed
			Method: I	EPA 200.7 Re	v 4.4		Ar	nalyst: RPL
Total Recoverable Metals by ICP							Prep Date	/Time: 08/05/2019 08:47
Lead	eij	Α	0.11	0.0033	0.0075	mg/L	1	08/05/2019 13:00
Zinc	eij	А	0.58	0.0073	0.020	mg/L	1	08/05/2019 13:00
			Method:	SM 4500-CN	C/E-1999		Ar	nalyst: ABG
Total Cyanide							Prep Date	/Time: 08/02/2019 11:07
Cyanide, Total	eij	Α	0.0094	0.0020	0.0050	mg/L	1	08/02/2019 14:37
			Method:	EPA 350.1 Re	ev 2.0		Ar	nalyst: ABG
Nitrogen, Ammonia as N							Prep Date	/Time: 08/02/2019 11:07
Nitrogen, Ammonia (As N)	ei	А	38	0.54	1.0	mg/L	1	08/02/2019 13:19
			Method:	SM 2540 D-19	997		Ar	nalyst: KMT
Total Suspended Solids							Prep Date	/Time: 08/02/2019 11:26

1.0

1.0

mg/L

A 85

eij



08/02/2019 13:22

Analytical Results Date: Wednesday, August 28, 2019

Client: Arcelor Mittal USA, Inc.

Client Project: Daily

Nitrogen, Ammonia (As N)

 Client Sample ID:
 RSB FT Overflow-Grab
 Work Order/ID:
 19H0114-10

 Sample Description:
 RSB FT Overflow
 Sampled:
 08/02/2019
 7:50

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method:	Analyst: RPL					
Total Recoverable Metals by ICP								Prep Date/	Time: 08/05/2019 08:47
Lead	eij	Α	0.038	0.0033	0.0075	r	ng/L	1	08/05/2019 13:20
Zinc	eij	Α	0.11	0.0073	0.020	r	ng/L	1	08/05/2019 13:20
Method: EPA 350.1 Rev 2.0								Ana	alyst: ABG
Nitrogen, Ammonia as N								Prep Date/	Time: 08/02/2019 11:07

 Method: SM 2540 D-1997
 Analyst: KMT

 Total Suspended Solids
 eij
 A
 20
 1.0
 1.0
 mg/L
 1
 08/02/2019 13:08

0.054

0.10

mg/L

A 5.5

ei



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 RSB FT Influent-Grab
 Work Order/ID:
 19H0114-11

 Sample Description:
 RSB FT Influent
 Sampled:
 08/02/2019
 7:51

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Ana	yst: KMT					
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α	1700	1.0	1.0	r	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 BFTD-Grab
 Work Order/ID:
 19H0114-12

 Sample Description:
 BFTD
 Sampled:
 08/02/2019
 7:55

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Analyst: KMT						
Total Suspended Solids									Time: 08/02/2019 11:26
Total Suspended Solids	eij	Α	48	1.0	1.0	m	g/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 999-Grab
 19H0114-13

 Sample Description:
 999
 Sampled:
 08/02/2019
 8:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Anal	lyst: KMT					
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α ;	3.7	1.0	1.0	m	ıg/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 BFTC-Grab
 Work Order/ID:
 19H0114-14

 Sample Description:
 BFTC
 Sampled:
 08/02/2019
 8:25

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Analyst: KMT						
Total Suspended Solids									Time: 08/02/2019 11:26
Total Suspended Solids	eij	Α	46	1.0	1.0	m	g/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 WAL-Grab
 Work Order/ID:
 19H0114-16

 Sample Description:
 WAL
 Sampled:
 08/01/2019
 8:42

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
	Method: SM 2540 D-1997							Analyst: KMT		
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26	
Total Suspended Solids	eij	Α .	5.4	1.0	1.0	m	ng/L	1	08/02/2019 13:08	



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 CM1-Grab
 Work Order/ID:
 19H0114-17

 Sample Description:
 CM1
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: §	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me: 08/02/2019 11:26
Total Suspended Solids	eij	A	21	1.0	1.0	m	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 CM2-Grab
 Work Order/ID:
 19H0114-18

 Sample Description:
 CM2
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method:	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α :	15	1.0	1.0	m	g/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 CM6-Grab
 Work Order/ID:
 19H0114-19

 Sample Description:
 CM6
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: §	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α :	12	1.0	1.0	m	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 HM1-Grab
 Work Order/ID:
 19H0114-20

 Sample Description:
 HM1
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: §	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me: 08/02/2019 11:26
Total Suspended Solids	eij	A	21	1.0	1.0	m	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 HM2-Grab
 Work Order/ID:
 19H0114-21

 Sample Description:
 HM2
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method:	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α	13	1.0	1.0	n	ng/L	1	08/02/2019 13:08



Client: Arcelor Mittal USA, Inc.

Client Project: Daily

 Client Sample ID:
 HM3-Grab
 Work Order/ID:
 19H0114-22

 Sample Description:
 HM3
 Sampled:
 08/02/2019
 0:00

 Matrix:
 Aqueous
 Received:
 08/02/2019
 11:00

Analyses	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: §	SM 2540 D-1	997			Anal	yst: KMT
Total Suspended Solids								Prep Date/Ti	me:08/02/2019 11:26
Total Suspended Solids	eij	Α :	16	1.0	1.0	m	ng/L	1	08/02/2019 13:08

ANALYTE TYPES: (AT)

A,B = Target Analyte I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



Revised 8/28/2019

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

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

Reporting Limit RL:

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 ID: Default Cooler



8/28/2019

Cooler Inspection Checklist		8/28/2019
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	