

September 6, 2019

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

Work Order No.: 19I0301

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 20 sample(s) on 9/6/2019 9:55:00AM for the analyses presented in the following report as Work Order 1910301.

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 Macizala

Carey Gadzala Project Manager

Microbac Laboratories, Inc.



Partial 9/6/2019

WORK ORDER SAMPLE SUMMARY

Date:

Friday, September 6, 2019

Client:Arcelor Mittal USA, Inc.Project:DailyLab Order:1910301

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
1910301-01	011-Composite	011	09/05/2019 06:00	9/6/2019 9:55:00AM
1910301-02	011-Grab	011	09/05/2019 06:00	9/6/2019 9:55:00AM
1910301-03	001-Composite	001	09/05/2019 06:20	9/6/2019 9:55:00AM
1910301-04	001-Grab	001	09/05/2019 06:20	9/6/2019 9:55:00AM
1910301-05	031-Grab	031	09/06/2019 06:41	9/6/2019 9:55:00AM
1910301-06	Mixed Liquor-Grab	Mixed Liquor	09/06/2019 06:44	9/6/2019 9:55:00AM
1910301-07	J-Box-Grab	J-Box	09/06/2019 06:39	9/6/2019 9:55:00AM
1910301-08	WWII-Grab	WWII	09/06/2019 07:14	9/6/2019 9:55:00AM
1910301-09	Coldwell-Grab	Coldwell	09/06/2019 07:33	9/6/2019 9:55:00AM
1910301-10	RSB FT Overflow-Grab	RSB FT Overflow	09/06/2019 07:36	9/6/2019 9:55:00AM
1910301-11	RSB FT Influent-Grab	RSB FT Influent	09/06/2019 07:37	9/6/2019 9:55:00AM
1910301-12	999-Grab	999	09/06/2019 07:45	9/6/2019 9:55:00AM
1910301-13	BFTC-Grab	BFTC	09/06/2019 07:59	9/6/2019 9:55:00AM
1910301-14	002-Grab	002	09/05/2019 08:02	9/6/2019 9:55:00AM
1910301-15	WAL-Grab	WAL	09/05/2019 08:10	9/6/2019 9:55:00AM
1910301-16	CM1-Grab	CM1	09/06/2019 00:00	9/6/2019 9:55:00AM
1910301-17	CM2-Grab	CM2	09/06/2019 00:00	9/6/2019 9:55:00AM
1910301-18	CM6-Grab	CM6	09/06/2019 00:00	9/6/2019 9:55:00AM
1910301-19	HM2-Grab	HM2	09/06/2019 00:00	9/6/2019 9:55:00AM
1910301-20	HM3-Grab	HM3	09/06/2019 00:00	9/6/2019 9:55:00AM



Partial 9/6/2019

Field Results		Date: Friday,	September 6, 2019
Client: Client Project:	Arcelor Mittal USA, Inc. Daily	Work Order:	1910301
Client Sample ID:	011-Grab	Work Order/ID:	1910301-02
Sample Description:	011	Sampled:	09/05/2019 06:00
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.9	pH Units
Client Sample ID:	001-Grab	Work Order/ID:	1910301-04
Sample Description:	001	Sampled:	09/05/2019 06:20
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.8	pH Units
Client Sample ID:	J-Box-Grab	Work Order/ID:	1910301-07
Sample Description:	J-Box	Sampled:	09/06/2019 06:39
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
рН		8.6	pH Units
Client Sample ID:	RSB FT Overflow-Grab	Work Order/ID:	1910301-10
Sample Description:	RSB FT Overflow	Sampled:	09/06/2019 07:36
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
рН		9.0	pH Units
Client Sample ID:	999-Grab	Work Order/ID:	1910301-12
Sample Description:	999	Sampled:	09/06/2019 07:45
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
рН		7.9	pH Units
Client Sample ID:	002-Grab	Work Order/ID:	1910301-14
Sample Description:	002	Sampled:	09/05/2019 08:02
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
рН		8.1	pH Units
Client Sample ID:	WAL-Grab	Work Order/ID:	1910301-15
Sample Description:	WAL	Sampled:	09/05/2019 08:10
Matrix:	Aqueous	Received:	09/06/2019 09:55
Analyses		Result	Units
pН		9.0	pH Units

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com





Field Results

Friday, September 6, 2019

Date:

Partial 9/6/2019

Analytical Re	sults							Date:	Friday	, September 6, 2019
Client:	Arcelor Mittal US	A, Inc.								
Client Project:	Daily									
Client Sample ID:	011-Composite							Work	Order/ID:	1910301-01
Sample Description:	011							Samp	ed:	09/05/2019 6:00
Matrix:	Aqueous							Receiv	ved:	09/06/2019 9:55
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: E	PA 200.7 Re	ev 4.4				alyst: RPL
Total Recoverable Me	tals by ICP								Prep Date/	Time:09/06/2019 10:51
Lead		eij	A	0.0040	0.0033	0.0075	J	mg/L	1	09/06/2019 14:09
Zinc		eij	A	0.013	0.0073	0.020	J	mg/L	1	09/06/2019 14:09
				Method: S	M 4500-CN	C/E-1999			An	alyst: ABG
Total Cyanide									Prep Date/	Time:09/06/2019 11:03
Cyanide, Total		eij	Α	ND	0.0020	0.0050	U	mg/L	1	09/06/2019 13:42
				Method: S	W-846 9014				An	alyst: ABG
Free Cyanide									Prep Date/	Time:09/06/2019 11:58
Free Cyanide			Α	ND		0.0062		mg/L	1	09/06/2019 13:20
				Method: E	PA 350.1 Re	ev 2.0			An	alyst: ABG
Nitrogen, Ammonia as	s N								Prep Date/	Time:09/06/2019 11:32
Nitrogen, Ammonia (A		ei	Α	0.18	0.054	0.10		mg/L	1	09/06/2019 12:57
				Method: F	PA 420.4 Re	•v 1 0			An	alyst: ABG
Total Phenolics										Time:09/06/2019 11:32
Phenolics, Total Reco	verable	eij	Α	ND	0.0060	0.010	U	mg/L	1	09/06/2019 13:36
				Method: S	M 2540 D-1	997			An	alyst: KMT
Total Suspended Soli	ds									Time:09/06/2019 10:27
Total Suspended Solid		eij	Α	68	1.0	1.0		mg/L	1	09/06/2019 12:22
· · · · ·										

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily 011-Grab Work Order/ID: 1910301-02 **Client Sample ID:** 011 09/05/2019 6:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT MDL RL Units DF Analyses Certs Result Qual Analyzed Method: EPA 1664B Analyst: KMT Oil & Grease (HEM) by SPE Prep Date/Time: 09/06/2019 07:56 А ND 1.4 5.0 mg/L 09/06/2019 15:03 Oil & Grease (HEM) eij U 1

Partial 9/6/2019

Friday, September 6, 2019

Date:

Analytical Results

Client: Client Project:	Arcelor Mittal US Daily	A, Inc.								
Client Sample ID:	001-Composite							Work	Order/ID:	1910301-0
Sample Description:	001							Sampl	ed:	09/05/2019 6:2
Matrix:	Aqueous							Receiv		09/06/2019 9:5
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: EF	A 200.7 Re	v 4.4			Ana	alyst: RPL
Total Recoverable Me	tals by ICP							1	Prep Date/1	īme:09/06/2019 10:51
Lead		eij	A	ND	0.0033	0.0075	U	mg/L	1	09/06/2019 14:14
Zinc		eij	A	ND	0.0073	0.020	U	mg/L	1	09/06/2019 14:14
Total Cyanide				Method: SN	/I 4500-CN (C/E-1999				alyst: ABG īme: 09/06/2019 11:03
Cyanide, Total		eij	Α	ND	0.0020	0.0050	U	mg/L	1	09/06/2019 13:48
				Method: SV	V-846 9014				Ana	alyst: ABG
Free Cyanide									Prep Date/1	ime:09/06/2019 11:58
Free Cyanide			A	ND		0.0062		mg/L	1	09/06/2019 13:25
				Method: EF	PA 350.1 Re	v 2.0			Ana	alyst: ABG
Nitrogen, Ammonia as	5 N								Prep Date/1	īme:09/06/2019 11:32
Nitrogen, Ammonia (A	s N)	ei	Α	0.35	0.054	0.10		mg/L	1	09/06/2019 12:59
				Method: EF	PA 420.4 Re	v 1.0			Ana	alyst: ABG
Total Phenolics									Prep Date/1	īme:09/06/2019 11:32
Phenolics, Total Recor	verable	eij	A	ND	0.0060	0.010	U	mg/L	1	09/06/2019 13:38
				Method: SN	/ 2540 D-19	97			Ana	alyst: KMT
Total Suspended Solid	ds								Prep Date/1	īme:09/06/2019 10:27
Total Suspended Solid	ds	eij	A	5.6	1.0	1.0		mg/L	1	09/06/2019 12:22

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily 001-Grab Work Order/ID: 1910301-04 **Client Sample ID:** 001 09/05/2019 6:20 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT MDL RL Units DF Analyses Certs Result Qual Analyzed Method: EPA 1664B Analyst: KMT Oil & Grease (HEM) by SPE Prep Date/Time: 09/06/2019 07:56 А ND 1.4 5.0 mg/L 09/06/2019 15:03 Oil & Grease (HEM) eij U 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily 031-Grab Work Order/ID: 1910301-05 **Client Sample ID:** 031 09/06/2019 6:41 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT MDL RL Units DF Analyses Certs Result Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 3.2 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1

Partial 9/6/2019

Analytical Re	sults							Date:	Friday	, September 6,	2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.									
Client Sample ID:	Mixed Liquor-Grat)						Work	Order/ID:	19103	01-06
Sample Description:	Mixed Liquor							Samp	led:	09/06/2019	6:44
Matrix:	Aqueous							Receiv	ved:	09/06/2019	9:55
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
				Method:	SM 2540 F-19	97			An	alyst: DAT	
Settleable Solids									Prep Date/	Time:09/06/2019 10):40
Settleable Solids		i	A	180	1.0	1.0		ml/L	1	09/06/2019 10:	:40
				Method:	SM 2540 D-19	97			An	alyst: KMT	
Total Suspended Solid	ds								Prep Date/	Time:09/06/2019 10):27
Total Suspended Solid	ls	eij	Α	1700	1.0	1.0		mg/L	1	09/06/2019 12:	22

Partial 9/6/2019

Analytical Re	sults							Date:	Friday	, September 6, 2019
Client:	Arcelor Mittal U	SA, Inc.								
Client Project:	Daily									
Client Sample ID:	J-Box-Grab							Work	Order/ID:	1910301-07
Sample Description:	J-Box							Sampl	ed:	09/06/2019 6:39
Matrix:	Aqueous							Receiv	/ed:	09/06/2019 9:55
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: EF	PA 350.1 Re	v 2.0			Ana	alyst: ABG
Nitrogen, Ammonia as	5 N								Prep Date/	Time:09/06/2019 11:32
Nitrogen, Ammonia (A	s N)	ei	A	0.17	0.054	0.10		mg/L	1	09/06/2019 13:01
				Method: EF	PA 420.4 Re	v 1.0			Ana	alyst: ABG
Total Phenolics									Prep Date/	Time:09/06/2019 11:32
Phenolics, Total Reco	verable	eij	A	ND	0.0060	0.010	U	mg/L	1	09/06/2019 13:40
				Method: SI	M 2540 D-19	97			Ana	alyst: KMT
Total Suspended Soli	ds								Prep Date/	Time:09/06/2019 10:27
Total Suspended Solid	ls	eij	Α	11	1.0	1.0		mg/L	1	09/06/2019 12:22



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily WWII-Grab Work Order/ID: 1910301-08 **Client Sample ID:** WWII 09/06/2019 7:14 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 4500-CN C/E-1999 Analyst: ABG Prep Date/Time: 09/06/2019 11:03 **Total Cyanide** A 0.011 0.0020 0.0050 mg/L 09/06/2019 13:53 Cyanide, Total eij 1

Partial 9/6/2019

Analytical Re	sults						Date	e:	Friday	, September 6,	2019
Client: Client Project:	Arcelor Mittal US Daily	A, Inc.									
Client Sample ID:	Coldwell-Grab							Work (Order/ID:	19103	01-09
Sample Description:	Coldwell							Sampl	ed:	09/06/2019	7:33
Matrix:	Aqueous							Receiv	ved:	09/06/2019	9:55
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
				Method:	SM 4500-CN	C/E-1999			Ana	alyst: ABG	
Total Cyanide									Prep Date/1	Time:09/06/2019 11	:03
Cyanide, Total		eij	A	0.012	0.0020	0.0050	mg/l	L	1	09/06/2019 13:	54
				Method:	EPA 350.1 Re	v 2.0			Ana	alyst: ABG	
Nitrogen, Ammonia as	s N								Prep Date/1	Time:09/06/2019 11	:32
Nitrogen, Ammonia (A	s N)	ei	A	48	0.54	1.0	mg/l	L	1	09/06/2019 13:	:04
				Method:	SM 2540 D-19	997			Ana	alyst: KMT	
Total Suspended Soli	ds								Prep Date/1	Time:09/06/2019 10):27
Total Suspended Solid	ds	eij	Α	62	1.0	1.0	mg/l	L	1	09/06/2019 12:	22

Partial 9/6/2019

Analytical Re	sults							Date:	Friday	, September 6,	2019
Client:	Arcelor Mittal USA	, Inc.									
Client Project:	Daily										
Client Sample ID:	RSB FT Overflow-	Grab						Work Order/ID: 1910			01-10
Sample Description:	RSB FT Overflow							Samp	ed:	09/06/2019	7:36
Matrix:	Aqueous							Receiv	ved:	09/06/2019	9:55
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
				Method:	EPA 350.1 Re	v 2.0			An	alyst: ABG	
Nitrogen, Ammonia as	5 N								Prep Date/	Time:09/06/2019 11	:32
Nitrogen, Ammonia (A	Nitrogen, Ammonia (As N)		Α	7.2	0.054	0.10		mg/L	1	09/06/2019 13:	06
Method: SM 2540 D-1997								Analyst: KMT			
Total Suspended Solid	ds								Prep Date/	Time:09/06/2019 10):27
Total Suspended Solid	ls	eij	Α	36	1.0	1.0		mg/L	1	09/06/2019 12:	22



Analytical Results Date: Friday, September 6, 2019 **Client:** Arcelor Mittal USA, Inc. **Client Project:** Daily **RSB FT Influent-Grab** Work Order/ID: 1910301-11 **Client Sample ID: RSB FT Influent** 09/06/2019 7:37 Sample Description: Sampled: Matrix: Aqueous **Received:** 09/06/2019 9:55 AT MDL RL Units DF Analyses Certs Result Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 10000 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily 999-Grab Work Order/ID: 1910301-12 **Client Sample ID:** 999 09/06/2019 7:45 Sample Description: Sampled: Matrix: Aqueous **Received:** 09/06/2019 9:55 AT MDL RL Units DF Analyses Certs Result Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 1.8 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1



Analytical Results Date: Friday, September 6, 2019 **Client:** Arcelor Mittal USA, Inc. **Client Project:** Daily **BFTC-Grab** Work Order/ID: 1910301-13 **Client Sample ID:** BFTC 09/06/2019 7:59 Sample Description: Sampled: Matrix: Aqueous **Received:** 09/06/2019 9:55 AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 35 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily WAL-Grab Work Order/ID: 1910301-15 **Client Sample ID:** WAL 09/05/2019 8:10 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij A 8.2 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily CM1-Grab Work Order/ID: 1910301-16 **Client Sample ID:** CM1 09/06/2019 0:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 12 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily CM2-Grab Work Order/ID: 1910301-17 **Client Sample ID:** CM2 09/06/2019 0:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 16 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily CM6-Grab Work Order/ID: 1910301-18 **Client Sample ID:** CM6 09/06/2019 0:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 28 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1

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



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily HM2-Grab Work Order/ID: 1910301-19 **Client Sample ID:** HM2 09/06/2019 0:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 28 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1

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



Analytical Results Date: Friday, September 6, 2019 Arcelor Mittal USA, Inc. **Client: Client Project:** Daily HM3-Grab Work Order/ID: 1910301-20 **Client Sample ID:** НМ3 09/06/2019 0:00 Sample Description: Sampled: 09/06/2019 9:55 Matrix: Aqueous **Received:** AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/06/2019 10:27 A 20 1.0 1.0 mg/L 09/06/2019 12:22 Total Suspended Solids eij 1

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

A,B = Target Analyte I = Internal Standard

- M = Summation Analyte
- S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

MICROBAC[®]



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)

J: MDL:	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample. 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 9/6/2019

Cooler	Inspection	h Checklist
000101	mopoonor	

•	
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: 1970301

* Date Obtained 9-6-19** Sample Date: 9-5-19

Location	Time	Sampler	Туре	Preserved	Cooled	Containers			Paramotors	Comments
LOCATION	1 IIIIe		Type	rieseiveu	COOIEG	Туре	Qty	Vol. (ml)	Parameters	Comments
011 **	Vina	PV	Comp	No	Yes	Glass	1	4000		01
	40.W	1	Grab	No	No	Plastic	1	125	рН	02
001 **	Nº120		Comp	No	Yes	Glass	1	4000	NH3	03
001	96:20		Grab	No	No	Plastic	1	125	pН	04
031 *	06:41		Grab	No	No	Plastic	1	1000	TSS	05
001	00.91		Grab	No	No	Plastic	1	1000	BOD	L.F.
Mixed Liquor *	06:44		Grab	No	No	Plastic	1	2000	TSS, Settling	06
J-Box *	de: 39		Grab	No	No	Glass	2	1000	NH3, Phenol, TSS, pH	07
DIW-131 *	1th		Grab	No	No	Plastic	1	125	pН	
WWII *	\$ 7:14		Grab	No	No	Plastic	1	1000	Cn	08
Coldwell	07.33		Grab	No	No	Plastic	2	2000	NH3, CN, Pb, Zn, TSS	09
RSB FT Overflow *			Grab	No	No	Plastic	2	1000	NH3, pH, TSS, Pb, Zn) 0
RSB FT Influent *	07:37		Grab	No	No	Plastic	1	500	TSS	1
BFTD *	100-		Grab	No	No	Plastic	1	500	TSS	×
999 *	07:48		Grab	No	No	Plastic	1	500	TSS, pH	12
BFTC *	07:59		Grab	No	No	Plastic	1	500	TSS	13
002 **	18:02		Grab	No	No	Plastic	1	125	pH	14
WAL 1 **	OS'.ID		Grab	No	No	Glass	1	1000	TSS, pH	15
WAL 2 **	50		Grab	No	No	Glass	1	1000	TSS, pH	
WAL 3 **	08:10		Grab	No	No	Glass	1	1000	TSS, pH	×
SWTP *		***	Grab	No	No	Plastic	79	1000	TSS	16-20

*** WPL is for previous sample date

**** Sample collected by Water Process personnel

No HMI+CM3

Relinguished by: - · RED Received by: 1

Date: 6 Date:

Time: Time: 08

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

1910301 Carey Gadzala ArcelorMittal - Burns Harbor, IN Daily 09/06/2019



Microbac Laboratories - Chicagoland Division pH - METHOD 9045D Arcelor Mittal /Burns Harbor NPDES

Sample ID		рН	Analyst	Date/Time of Analysis
Buffer ID: Meter ID:	4: 185909	7: 188312	10: 191040	
Calibration	$(\mathcal{P} \mathcal{P} \mathcal{D})$		BAD	9/5/11 0800
	4 <i>(売</i> / 10			
Slope		101.0		
Lake 999		7.91		
Location 001		7.76		
Location 002		8.13		· · · · ·
Location 011		7.77		
WAL 1	· · · · · · · · · · · · · · · · · · ·			
WAL 2	·			
SWTP J-Box		8.63		
DIW 131				
RSB		8.87		
Dup- 999		7.92		
CCV		7.01		
·····				······
			1	

Sample ID		pН	Analyst	Date/Time of Analysis
Buffer ID: Meter ID:	4: 185 909	7: 188312	10: 191040	
Calibration	(4)1 (1) (0)		BAO	9/6/19 0805
ICV	4/0/10	6.99		
Slope		100.7		
Lake 999		7.93		
Location 001		7.82		
Location 002		8.13		
Location 011		7.85		
WAL 1		9-00		
WAL 2		~		
SWTP J-Box		8.60		
DIW 131	~	· · · · · · · · · · · · · · · · · · ·		
RSB		8.97		
Dup-001		7.83		
CCV		7.02		\mathbf{V}
			-1:	
				, <u></u>
		An		1

3 of 50

Page 27 of 29

Total Residual Chlorine - Amperometric Titration - SM Method 4500-CI E - 2000 Microbac Laboratories, Inc. - Chicagoland Division

for Arcelor Mittal - Burns Harbor

20 20 0 N Exp. Date Exp. Date Result 0,01 0 00 0000 0-00 Result (mg/L) (mg/L) 0,00 0.00 00.00 0 000 30/ 52 131 0 Ś STD ID / Lot # STD ID / Lot # 147996 145348 0.00 0,00 00000 9-02 00.0 00.0 Fitrant Vol. Fitrant Vol. 14636 0.00 00.0 (mL) <u>_</u> KI Solution: Acetate buffer: PAO Titrant: KI Solution: Acetate buffer: PAO Titrant: Titrant Stop Titrant Stop 0 0 0 20.0 0000 00,0 00 0000 0.00 0.00 (mL) Ē Ø Ø Ø Titrant Start Titrant Start .00 (mL) Î Ø pH (pH Units) pH (pH Units) Exp. Date Exp. Date 20/2/ 4.0 9.0 4. 0 4,0 ч С 4.0 4.0 4.0 0805 HJ626 Sample Vol. Sample Vol. A9074 9/6/19 (mL) 340 200 Î pH Paper Lot #: _ Date/Time: LCS ID: Date/Time: Analyst: pH Paper Lot #: LCS ID: Dup Analyst: Dup Sample ID Sample ₽ 001 Outfall 003 Outfall 011 Outfall 002 Outfall 003 Outfall 011 Outfall 002 Outfall 011 Dutfall 001 Outfall 001 Outfall Blank Blank လို လို

Chlorine, mg/L = (Titrant Vol., mL) (200 mL) / (Sample Vol., mL)

dnd

Outfall 011

Dup

Outfall

Page 28 of 29

revision: a_01_2016

ME-3493

2013-08-BH-ContractorTimeSheet	of					Gold - AM Authorizer		Canary - Contractor Pink - AM Receiver		White - Contractor
Date (2/19	Howard	pame	6 Printed name	30729		6/19	Date 9/		OHO	
Job title Sic perces	zation signature	authory	Arcelorn		tech	ferrice	Per se		Contractor authorization signature	
I the undersigned have verified that contractor employees, hours, and date listed on the timesheet are accurate, complete, valid for the date and plant work location listed above.	verified that contractor employ complete, valid for the date and	dersigned have		Work authorization permit #		e actually wor above.	ne timesheet wer n the date listed	I the undersigned attest that the hours recorded on the timesheet were actually worked by the contractor employee at the plant work location on the date listed above.	attest that the h mployee at the pla	I the undersigne the contractor
		Ъ р		Section 5						Section 4
	TM	SU		OE	LIC	WI		FN	କ (BM
	TEC 7	PF		LTR	JAN				3 P	ABW
	explanation of the abbreviations.	explanation of t	le of form for an e	Enter the total hours worked by each craft in the box to the right of each abbreviation. See reverse side of form for an	f each abbrevia	to the right of	h craft in the box	urs worked by eac	Enter the total ho	Section 3
No A		 	-		te /	Total hours to date	ы		Shirt end time	SUILL
is job capital work?					S	Previous hours				
	Description	D			et /	Total hours this sheet	Total		Chift start time	Shift et
	Hours/amt total	Uty H								
	Description	D								
		L L L L L L L L L L L L L L L L L L L			100					
					5	11				
	Description	D	-							
	Hours/amt total	Otv H		I.		8				
	Description	D								
					1. 1. 1.					
	Hours/amt total	Qty H				15. A. A.			Nu Chan	-,
	Description	D		Line -		2 IN 2				
	Hours/amt total	Qty H						10 A		
	Description	D	~		C -	- TEO	Brin		04%0	164042
Job notes	Billable equipment/subcontractors/material	Billable equipment/s	Total		ST	Craft	First name	Fir	Last name	Section 2 Badge no.
Percent job complete		у. н. 		S	Sample.)	Description of work		50	
.7	Requisition number				PO number			(marg)	arra	5 5
						1000	1.1.0	in a	precentative	Arcolor Mittal Re
689606	Form number	+	Contractor ref #/job #	Cont	Labs	Contractor company name	Contractor o	2	Shift	Date $q(L)q$
ArcelorMittal								esheet	Contractor timesheet	Contractor
þ									Paç	Page 29 of 29