

#### Partial 9/13/2019

September 13, 2019

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

Work Order No.: 1910789

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 21 sample(s) on 9/13/2019 10:30:00AM for the analyses presented in the following report as Work Order 1910789.

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.

Carup Macipala

Carey Gadzala Project Manager

Microbac Laboratories, Inc.



# Partial 9/13/2019

#### WORK ORDER SAMPLE SUMMARY

Date:

Friday, September 13, 2019

Project: Daily	Client:	Arcelor Mittal USA, Inc.
··· <b>·</b>	Project:	Daily
Lab Order: 1910789	Lab Order:	1910789

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
1910789-01	011-Composite	011	09/12/2019 06:15	9/13/2019 10:30:00AM
1910789-02	011-Grab	011	09/12/2019 06:15	9/13/2019 10:30:00AM
1910789-03	001-Composite	001	09/12/2019 06:35	9/13/2019 10:30:00AM
1910789-04	001-Grab	001	09/12/2019 06:35	9/13/2019 10:30:00AM
1910789-05	031-Grab	031	09/13/2019 06:49	9/13/2019 10:30:00AM
1910789-06	Mixed Liquor-Grab	Mixed Liquor	09/13/2019 06:51	9/13/2019 10:30:00AM
1910789-07	J-Box-Grab	J-Box	09/13/2019 06:47	9/13/2019 10:30:00AM
1910789-08	WWII-Grab	WWII	09/13/2019 07:20	9/13/2019 10:30:00AM
1910789-09	Coldwell-Grab	Coldwell	09/13/2019 07:35	9/13/2019 10:30:00AM
1910789-10	RSB FT Overflow-Grab	RSB FT Overflow	09/13/2019 07:40	9/13/2019 10:30:00AM
1910789-11	RSB FT Influent-Grab	RSB FT Influent	09/13/2019 07:41	9/13/2019 10:30:00AM
1910789-12	BFTD-Grab	BFTD	09/13/2019 08:15	9/13/2019 10:30:00AM
1910789-13	999-Grab	999	09/13/2019 08:00	9/13/2019 10:30:00AM
1910789-14	BFTC-Grab	BFTC	09/13/2019 08:20	9/13/2019 10:30:00AM
1910789-15	002-Grab	002	09/12/2019 08:25	9/13/2019 10:30:00AM
1910789-16	WAL-Grab	WAL	09/12/2019 08:34	9/13/2019 10:30:00AM
1910789-17	CM1-Grab	CM1	09/13/2019 00:00	9/13/2019 10:30:00AM
1910789-18	CM2-Grab	CM2	09/13/2019 00:00	9/13/2019 10:30:00AM
1910789-19	CM6-Grab	CM6	09/13/2019 00:00	9/13/2019 10:30:00AM
1910789-20	HM2-Grab	HM2	09/13/2019 00:00	9/13/2019 10:30:00AM
1910789-21	HM3-Grab	HM3	09/13/2019 00:00	9/13/2019 10:30:00AM



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Client:	Arcelor Mittal USA, Inc.	Work Order:	1910789
Client Project:	Daily	Work Order.	19107 09
Client Sample ID:	011-Grab	Work Order/ID:	1910789-02
Sample Description:	011	Sampled:	09/12/2019 06:15
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.8	pH Units
Client Sample ID:	001-Grab	Work Order/ID:	1910789-04
Sample Description:	001	Sampled:	09/12/2019 06:35
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.8	pH Units
Client Sample ID:	J-Box-Grab	Work Order/ID:	1910789-07
Sample Description:	J-Box	Sampled:	09/13/2019 06:47
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
рН		8.4	pH Units
Client Sample ID:	RSB FT Overflow-Grab	Work Order/ID:	1910789-10
Sample Description:	RSB FT Overflow	Sampled:	09/13/2019 07:40
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
рН		8.9	pH Units
Client Sample ID:	999-Grab	Work Order/ID:	1910789-13
Sample Description:	999	Sampled:	09/13/2019 08:00
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
рН		7.8	pH Units
Client Sample ID:	002-Grab	Work Order/ID:	1910789-15
Sample Description:	002	Sampled:	09/12/2019 08:25
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
рН		8.2	pH Units
Client Sample ID:	WAL-Grab	Work Order/ID:	1910789-16
Sample Description:	WAL	Sampled:	09/12/2019 08:34
Matrix:	Aqueous	Received:	09/13/2019 10:30
Analyses		Result	Units
pH		8.9	pH Units

#### Microbac Laboratories, Inc.

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#### **Field Results**

Friday, September 13, 2019

Date:

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Analytical Re	sults							Date:	Friday,	September 13, 2019
Client:	Arcelor Mittal US	A, Inc.								
Client Project:	Daily									
Client Sample ID:	011-Composite							Work (	Order/ID:	1910789-01
Sample Description:	011							Sampl	ed:	09/12/2019 6:15
Matrix:	Aqueous							Receiv	ved:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: E	PA 200.7 Re	ev 4.4			Ar	nalyst: <b>RPL</b>
Total Recoverable Me	tals by ICP								Prep Date/	/Time:09/13/2019 11:03
Lead		eij	Α	0.0042	0.0033	0.0075	J	mg/L	1	09/13/2019 13:41
Zinc		eij	A	0.021	0.0073	0.020		mg/L	1	09/13/2019 13:41
Total Cyanide				Method: S	M 4500-CN	C/E-1999				nalyst: <b>ABG</b> /Time: <b>09/13/2019 11:41</b>
Cyanide, Total		eij	Α	0.0030	0.0020	0.0050		mg/L	1	09/13/2019 14:13
				Method: S	W-846 9014				Ar	nalyst: ABG
Free Cyanide									Prep Date/	/Time:09/13/2019 12:39
Free Cyanide			Α	ND		0.0062		mg/L	1	09/13/2019 14:06
Nitrogen, Ammonia as	: N			Method: E	PA 350.1 Re	ev 2.0				nalyst: <b>ABG</b> /Time: <b>09/13/2019 12:03</b>
Nitrogen, Ammonia (A		ei	Α	0.43	0.054	0.10		mg/L	1	09/13/2019 14:03
				Method: E	PA 420.4 Re	ev 1.0			Ar	nalyst: ABG
Total Phenolics									Prep Date/	/Time:09/13/2019 11:41
Phenolics, Total Reco	verable	eij	A	ND	0.0060	0.010	U	mg/L	1	09/13/2019 15:13
				Method: S	M 2540 D-19	997				nalyst: <b>KMT</b>
Total Suspended Solid										/Time:09/13/2019 10:50
Total Suspended Solid	ls	eij	A	2.3	1.0	1.0		mg/L	1	09/13/2019 12:40

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Analytical Re	sults						0	Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	011-Grab 011							Work Samp	Order/ID: ed:	19I0789-02 09/12/2019 6:15
Matrix:	Aqueous							Receiv		09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	EPA 1664B				Ana	alyst: <b>KMT</b>
Oil & Grease (HEM) by	y SPE								Prep Date/	Time:09/13/2019 08:31
Oil & Grease (HEM)		eij	Α	NE	1.4	5.0	Ur	ng/L	1	09/13/2019 8:31

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Client:	Arcelor Mittal US	A. Inc.								
Client Project:	Daily	,								
Client Sample ID:	001-Composite							Work (	Order/ID:	1910789-03
Sample Description:	001							Sample		09/12/2019 6:35
Matrix:	Aqueous							Receiv		09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: EI	PA 200.7 Re	v 4.4			Ana	alyst: RPL
Total Recoverable Met	als by ICP								Prep Date/1	īme:09/13/2019 11:03
Copper		eij	Α	0.0032	0.0013	0.010	J	mg/L	1	09/13/2019 13:46
Lead		eij	Α	ND	0.0033	0.0075	U	mg/L	1	09/13/2019 13:46
Zinc		eij	Α	ND	0.0073	0.020	U	mg/L	1	09/13/2019 13:46
				Method: SI	M 4500-CN	C/E-1999			Ana	alyst: ABG
Total Cyanide									Prep Date/1	īme:09/13/2019 11:41
Cyanide, Total		eij	Α	ND	0.0020	0.0050	U	mg/L	1	09/13/2019 14:14
				Method: SI	N-846 9014				Ana	alyst: ABG
Free Cyanide									Prep Date/1	ime:09/13/2019 12:39
Free Cyanide			Α	ND		0.0062		mg/L	1	09/13/2019 14:08
				Method: EI	PA 350.1 Re	v 2.0			Ana	alyst: ABG
Nitrogen, Ammonia as	Ν									ime:09/13/2019 12:03
Nitrogen, Ammonia (As		ei	Α	0.38	0.054	0.10		mg/L	1	09/13/2019 14:05
				Method: El	PA 420.4 Re	v 1 0			Δna	alyst: ABG
				Method. LI	A 420.4 Ne	V 1.0				ime:09/13/2019 11:41
Total Phenolics										
Total Phenolics Phenolics, Total Recov	erable	eij	A	ND	0.0060	0.010	U	mg/L	1	09/13/2019 15:15
	erable	eij	A		0.0060		U	mg/L	1	09/13/2019 15:15

A 2.3

eij

**Total Suspended Solids** 

1.0

1.0

mg/L

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09/13/2019 12:40

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Analytical Re	sults						0	Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	001-Grab 001							Work Samp	Order/ID:	19I0789-04 09/12/2019 6:35
Matrix:	Aqueous							Receiv		09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	EPA 1664B				Ana	alyst: <b>KMT</b>
Oil & Grease (HEM) by	y SPE								Prep Date/	Time:09/13/2019 08:31
Oil & Grease (HEM)		eij	Α	NE	1.4	5.0	Ur	ng/L	1	09/13/2019 8:31

Analytical Re	sults						0	ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID:	031-Grab							Work	Order/ID:	1910789-05
Sample Description:	031							Samp		09/13/2019 6:49
Matrix:	Aqueous							Receiv	vea:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			Ana	alyst: <b>KMT</b>
<b>Total Suspended Soli</b>	ds								Prep Date/	Time:09/13/2019 10:50
Total Suspended Solid	ls	eij	Α	5.1	1.0	1.0	r	ng/L	1	09/13/2019 12:40

Analytical Re	sults						D	ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID:	Mixed Liguor-Grat	)						Work	Order/ID:	1910789-06
Sample Description: Matrix:	Mixed Liquor Aqueous							Sampl Receiv		09/13/2019 6:51 09/13/2019 10:30
Matrix. Analyses	Aqueous	Certs	АТ	Result	MDL	RL	Qual	Units	DF	Analyzed
Analyses		Genta			M 2540 F-19		Quai	Onits		alyst: DAT
Settleable Solids									Prep Date/	Time: 09/13/2019 11:08
Settleable Solids		i	A	140	1.0	1.0	n	nl/L	1	09/13/2019 11:08
				Method: S	M 2540 D-19	97			An	alyst: <b>KMT</b>
Total Suspended Soli	ds								Prep Date/	Time:09/13/2019 10:50
Total Suspended Solid	ls	eij	Α	1600	1.0	1.0	n	ng/L	1	09/13/2019 12:40

Analytical Re	sults						Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	A, Inc.							
Client Sample ID:	J-Box-Grab						W	ork Order/ID:	1910789-07
Sample Description:	J-Box						Sa	mpled:	09/13/2019 6:47
Matrix:	Aqueous						Re	eceived:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual Un	nits DF	Analyzed
				Method:	EPA 350.1 Re	v 2.0		An	alyst: ABG
Nitrogen, Ammonia as	5 N							Prep Date/	Time:09/13/2019 12:03
Nitrogen, Ammonia (A	s N)	ei	A	0.55	0.054	0.10	mg/L	1	09/13/2019 14:08
				Method:	EPA 420.4 Re	v 1.0		An	alyst: ABG
Total Phenolics								Prep Date/	Time: 09/13/2019 11:41
Phenolics, Total Reco	verable	eij	Α	0.0062	0.0060	0.010	mg/L	1	09/13/2019 15:16
				Method:	SM 2540 D-19	97		An	alyst: <b>KMT</b>
Total Suspended Soli	ds							Prep Date/	Time:09/13/2019 10:50
Total Suspended Solid	ls	eij	Α	12	1.0	1.0	mg/L	1	09/13/2019 12:40

Analytical Re	sults							Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description: Matrix:	WWII-Grab WWII Aqueous							Work Sampl Receiv		1910789-08 09/13/2019 7:20 09/13/2019 10:30
Analyses	/\quebus	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 4500-CN	C/E-1999			Ana	alyst: ABG
Total Cyanide									Prep Date/	Time:09/13/2019 11:41
Cyanide, Total		eij	Α	0.11	0.0020	0.0050		mg/L	1	09/13/2019 14:16

Analytical Re	sults						Dat	e:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US/ Daily	A, Inc.								
Client Sample ID:	Coldwell-Grab							Work (	Order/ID:	1910789-09
Sample Description:	Coldwell							Sampl	ed:	09/13/2019 7:35
Matrix:	Aqueous							Receiv	ved:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: S	M 4500-CN	C/E-1999			An	alyst: ABG
Total Cyanide									Prep Date/	Time: 09/13/2019 11:41
Cyanide, Total		eij	Α	0.072	0.0020	0.0050	mg/	Ľ	1	09/13/2019 14:21
				Method: E	PA 350.1 Re	ev 2.0			An	alyst: ABG
Nitrogen, Ammonia as	5 N								Prep Date/	Time:09/13/2019 12:03
Nitrogen, Ammonia (A	s N)	ei	Α	51	0.54	1.0	mg/	Ľ	1	09/13/2019 14:10
				Method: S	SM 2540 D-19	997			An	alyst: <b>KMT</b>
Total Suspended Soli	ds								Prep Date/	Time:09/13/2019 10:50
Total Suspended Solid	ls	eij	Α	36	1.0	1.0	mg/	Ľ	1	09/13/2019 12:40

Analytical Re	sults							Date:	Friday,	September 13, 2019
Client:	Arcelor Mittal USA	, Inc.								
Client Project:	Daily									
Client Sample ID:	RSB FT Overflow-	Grab						Work	Order/ID:	1910789-10
Sample Description:	RSB FT Overflow							Sampl	ed:	09/13/2019 7:40
Matrix:	Aqueous							Receiv	ved:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	EPA 350.1 Re	v 2.0			An	alyst: ABG
Nitrogen, Ammonia as	s N								Prep Date/	Time:09/13/2019 12:11
Nitrogen, Ammonia (A	s N)	ei	Α	7.9	0.054	0.10		mg/L	1	09/13/2019 14:13
				Method:	SM 2540 D-19	97			An	alyst: <b>KMT</b>
Total Suspended Soli	ds								Prep Date/	Time:09/13/2019 10:50
Total Suspended Solid	ds	eij	A	11	1.0	1.0		mg/L	1	09/13/2019 12:40

Analytical Re	sults						D	)ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID: Sample Description: Matrix:	RSB FT Influent-G RSB FT Influent Aqueous	rab						Work Sampl Receiv		1910789-11 09/13/2019 7:41 09/13/2019 10:30
Analyses	•	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: S	M 2540 D-19	97			Ana	alyst: <b>KMT</b>
<b>Total Suspended Soli</b>	ds								Prep Date/1	īme:09/13/2019 10:50
Total Suspended Solid	ls	eij	Α	350	1.0	1.0	r	ng/L	1	09/13/2019 12:40

Analytical Re	sults						0	)ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID:	BFTD-Grab							Work	Order/ID:	1910789-12
Sample Description:	BFTD							Samp	ed:	09/13/2019 8:15
Matrix:	Aqueous							Receiv	ved:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
		Method: SM 2540 D-1997							Ana	alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/	Time:09/13/2019 10:50
Total Suspended Solids eij			Α	39	1.0	1.0	r	ng/L	1	09/13/2019 12:40

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#### **Analytical Results** Friday, September 13, 2019 Date: Arcelor Mittal USA, Inc. **Client: Client Project:** Daily 999-Grab Work Order/ID: 1910789-13 **Client Sample ID:** 999 09/13/2019 8:00 Sample Description: Sampled: Matrix: Aqueous **Received:** 09/13/2019 10:30 AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/13/2019 10:50 A 5.0 1.0 1.0 mg/L 09/13/2019 12:40 Total Suspended Solids eij 1

Analytical Re	sults						0	Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description: Matrix:	BFTC-Grab BFTC Aqueous							Work Samp Recei		1910789-14 09/13/2019 8:20 09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			Ana	alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/	Time:09/13/2019 10:50
Total Suspended Solids eij			Α	37	1.0	1.0	r	ng/L	1	09/13/2019 12:40

Analytical Re	sults						0	)ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	A, Inc.								
Client Sample ID:	WAL-Grab							Work	Order/ID:	1910789-16
Sample Description:	WAL							Samp	ed:	09/12/2019 8:34
Matrix:	Aqueous							Receiv	ved:	09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
		Method: SM 2540 D-1997							Ana	alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/1	Time:09/13/2019 10:50
Total Suspended Solids eij A 5.2			5.2	1.0	1.0	r	ng/L	1	09/13/2019 12:40	

Analytical Re	sults						0	)ate:	Friday,	September 13, 2019	
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.									
Client Sample ID: Sample Description: Matrix:	CM1-Grab CM1 Aqueous							Work Order/ID: Sampled: Received:		1910789-17 09/13/2019 0:00 09/13/2019 10:30	
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed	
				Method:	SM 2540 D-1	997			Ana	alyst: <b>KMT</b>	
Total Suspended Solids									Prep Date/	Time: 09/13/2019 10:50	
Total Suspended Solids eij			Α	11	1.0	1.0	r	ng/L	1	09/13/2019 12:40	

Analytical Re	sults						D	ate:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description: Matrix:	CM2-Grab CM2 Aqueous							Work Samp Receiv		1910789-18 09/13/2019 0:00 09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
		Method: SM 2540 D-1997								alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/1	Time: 09/13/2019 10:50
Total Suspended Solids eij			Α	12	1.0	1.0	r	ng/L	1	09/13/2019 12:40

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#### **Analytical Results** Friday, September 13, 2019 Date: Arcelor Mittal USA, Inc. **Client: Client Project:** Daily CM6-Grab Work Order/ID: 1910789-19 **Client Sample ID:** CM6 09/13/2019 0:00 Sample Description: Sampled: Matrix: Aqueous **Received:** 09/13/2019 10:30 AT Result MDL RL Units DF Analyses Certs Qual Analyzed Method: SM 2540 D-1997 Analyst: KMT **Total Suspended Solids** Prep Date/Time: 09/13/2019 10:50 A 13 1.0 1.0 mg/L 09/13/2019 12:40 Total Suspended Solids eij 1

Analytical Re	sults						0	Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal U	SA, Inc.								
Client Sample ID:	HM2-Grab								Order/ID:	1910789-20
Sample Description: Matrix:	HM2 Aqueous							Samp Receiv		09/13/2019 0:00 09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			Ana	alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/	Time:09/13/2019 10:50
Total Suspended Solids eij			Α	20	1.0	1.0	r	ng/L	1	09/13/2019 12:40

Analytical Re	sults						0	Date:	Friday,	September 13, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	HM3-Grab HM3							Work Sampl	Order/ID: led:	19I0789-21 09/13/2019 0:00
Matrix:	Aqueous							Receiv		09/13/2019 10:30
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			Ana	alyst: <b>KMT</b>
Total Suspended Solids									Prep Date/	Time:09/13/2019 10:50
Total Suspended Solids eij A 16				16	1.0	1.0	r	mg/L	1	09/13/2019 12:40

#### 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 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)
- <sup>i</sup> 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



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: 1970789

\* Date Obtained \*\* Sample Date: 9

Location	Time	Sampler	Туре	Preserved	Cooled	Containers			Deven of the second	
		$\left( \overline{A} \right)$		1 ICServed	Cooled	Туре	Qty	Vol. (ml)	Parameters	Comments
011 **	06:15	9	Comp	No	Yes	Glass	1	4000		01
	Nein		Grab	No	No	Plastic	1	125	pH	02
001 **	06:35		Comp	No	Yes	Glass	1	4000	NH3	03
	00.00		Grab	No	No	Plastic	1	125	pH	04
031 *	06:49		Grab	No	No	Plastic	1	1000	TSS	05
			Grab	No	No	Plastic	1	1000	BOD	J J
Mixed Liquor *	06:51		Grab	No	No	Plastic	1	2000	TSS, Settling	06
J-Box *	06:47		Grab	No	No	Glass	2	1000	NH3, Phenol, TSS, pH	07
DIW-131 *	NA		Grab	No	No	Plastic	1	125	pHq	
WWII*	07:20		Grab	No	No	Plastic	1	1000	Cn	08
Coldwell	07:35		Grab	No	No	Plastic	2	2000	NH3, CN, Pb, Zn, TSS	69
RSB FT Overflow *	07:40		Grab	No	No	Plastic	2	1000	NH3, pH, TSS, Pb, Zn	10
RSB FT Influent *	07:41		Grab	No	No	Plastic	1	500	TSS	17
BFTD *	08:15		Grab	No	No	Plastic	1	500	TSS	12
999 *	08:00		Grab	No	No	Plastic	1	500	TSS, pH	13
BFTC *	08:20		Grab	No	No	Plastic	1	500	TSS	14
002 **	08:25		Grab	No	No	Plastic	1	125	Hq	15
WAL 1 **	08:34		Grab	No	No	Glass	1	1000	TSS, pH	16
WAL 2 **	5-2		Grab	No	No	Glass	1	1000	TSS, pH	
WAL 3 **	08:34		Grab	No	No	Glass	1	1000	TSS, pH	<u> </u>
SWTP *	iA	****	Grab	No	No	Plastic	75	1000	TSS	17-21

\*\*\* WPL is for previous sample date \*\*\*\* Sample collected by Water Process personnel

N. CM3+HM1



Relinquished by: OFF Received by:

Date: Date: 9/ 4

Time: Time:

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

Carey Gadzala 1910789 ArcelorMittal - Burns Harbor, IN Daily 09/13/2019

Microbac Laboratories, Inc. - Chicagoland Division

Total Residual Chlorine - Amperometric Titration - SM Method 4500-CI E - 2000 for Arcelor Mittal - Burns Harbor

-		· · · · · · · · · · · · · · · · · · ·				
Control Trans.	9/12/10				STD ID / Lot #	Exp. Date
	14/1	ł		KI Solution:	KI Solution: 146367	6/30/20
Analyst:		E			744611	7/29/20
pH Paper Lot #:	HT 626	Exp. Date		Acetate purier.	-	
	A 9074	11/20		PAO Titrant	2 / 5 / 1	7/3//20
	Samila Vol		Titrant Start	Titrant Stop	Titrant Vol.	Result
		nH (nH Units)	(mL)	(mL)	(mL)	(mg/L)
	200	С Т Т	0.00	0.00	00.0	0-00
blank	0 -	23		0.10	0.10	0.10
		2 ~ 2		0.00	0.00	0.00
Outfall 001					0.00	0.00
Outfall 002		1.0		0.07	0.00	00.00
Outfall 003		4.0				0 9 0
Outfall 011		4.0	-	0.00	6.60	
Outfall 011 Dup		4.0		6.00	0.00	0.00
-	>	4.0	ð	0.00	0.00	0.00
	9/12/2	1010			STD ID / Lot #	Exp. Date
				KI Solution:	KI Solution: 146367	6/30/20
Analyst.				Aretate huffer	Acetate huffer 14 7 9 9 6	7/29/20
pH Paper Lot #:	11)660	Exp. uate			0147.	6/21/20
	V 4 N 7 V	0/20		PAO Titrant:	145 340	2/ 2/

Analyst: _				KI Solution:	KI Solution: /46 26 /	7/29/20
pH Paper Lot #:	479678	Exp. Date		Acetate pullet.		6/21/20
	LCSID: 49074	11/20		PAO Titrant	145543	2/16/2
			Titrant Start	Titrant Stop	Titrant Vol.	Result
Sample	Sample Vol.	nu (nu I hite)	(ml)	(ml)	(ml)	(mg/L)
U)	(111)			6 6. 6	0,00	00.0
Blank	2002	4.0	0.00			ſ
		4.0		50.07	0.07	20-0
- LUO		5 0		00.0	0.00	0.00
Outfall 001	-	>				( ( (
Outfall 002		r, 0		00.0	0.00	0
		2		0.00	0000	0.00
Outtall 003		2°.		0	0.00	000
Outfall 011		4.0		0,0		
		10		0,00	9.00	0.00
		2				0.00
Outfall 002 Dup	$\rightarrow$	0 X	÷	00.0	0 - (70	
	/ ( [m (000) / [m (0)/++;	ml ) / (Samnle Vol ml )	ml )		revis	revision: a_01_2016

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

ME-3493

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#### 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: 18-5909	7: 188312	10: 191040		
Calibration	$(\mathcal{A}   \mathcal{O}   \mathcal{O})$		BAO	9/13/19	0830
ICV	4 1(1) 10	6.99		1	· ·
Slope		100.4			
Lake 999	,	7.97			
Location 001		7.78			
Location 002	· · · · · · · · · · · · · · · · · · ·	8.23			
Location 011		7.84			
WAL 1		8.87			
WAL 2					
SWTP J-Box		8.41			
DIW 131	<b></b>				
RSB		8.93			
Dup- 00 (		7.79		· · ·	
CCV		7.01			

Sample ID		рН	Analyst	Date/Time of Analysis
Buffer ID:	4:	7:	10:	
Meter ID:				
Calibration	4 / 7 / 10			
ICV ,	4 / 7 / 10			
Slope				
Lake 999				
Location 001				
Location 002				
Location 011				
WAL 1				
WAL 2				
SWTP J-Box				
DIW 131				
RSB				
Dup-				
CCV				
	```			

**k**sitten

Page 29 of 31

(	k	ArcelorMittal		Form number 309705	ser Ser 77	Percent job complete	lal Job notes					The first in the first						and the second sec	Is this job capital work?	Yes				or employees, hours, and date listed on the te date and plant work location listed above.	Job title	Date / 3 / 18200 20 26 21	2013-08-BH-ContractorTimeSheet
					Requisition number		Billable Total equipment/subcontractors/material	Description	Qty Hours/amt total	ID Description	Qty Hours/amt total	ID Description	Qty Hours/amt total	5	Oty Hours/amt total	ID Description	Oty Hours/amt total	Docesietion		Qty Hours/amt total	lanation of the abbr	SU 151	Section 6	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.	Arcelor Mittal authorization signature	Printed name	Page /
				Sontractor ref #/job #	PO number	mples		~													abbreviation. See reverse side of forr	 LIC OE				307332	)
				Contractor company name Microbac Lab		Description of work	Craft	Brian TEC	a second build									Total hours this sheet	Dravious hours	Total hours to date	ר craft in the box to the right of each	CNI MI		e timesheet were actually worked by the date listed above.	PLD France Tech	Date / 13/19	Gold - AM
	Burns Harbor	Contractor timesheet	1	Date 7 13 19 Shift	ArcelorMittal Representative Howard	Department	Section 2 Badge no.   Last name   Fir	2 0+10											Shift start time	Shift end time	on 3	BM CP FN	Section 4	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.	Contractor authorization signature	Printed name Otto	White - Contractor Canary - Contractor Pink - AM Receiver

	orkers
	siting wo
	for all vi
	C
307330	work authorization form
	Daily

For each job, and before starting work at the job site, a contractor representative must meet face to face with the ArcelorMittal chocific cafatri - I - - - I - representative responsible for the work and discuss the work to be

representative responsible for the work and discuss the work to be performed and any specific safety requirements.	nd any specific safety requirements.
Section 1	The named contractor or work crew is cleared to perform the job described herein:
Company name Microbac Labs	ArcelorMittal representative by arriver the and
Company contact/phone no Carey Gad zala, 76 5-8378	ArcelorMittal representative department $\widetilde{E} \sim D$ Date $?  (3) '   2$
Location and project/job description Enviro Blog/innter Sinples ArcelorMittal representative phone number 4867	ArcelorMittal representative phone number 467 Cell
Section 2	Clinic pickup point

Vac N/A NO	N sel		Permits	Yes N/A NO	Yes N/A NO			No	Other Hazards and Considerations for Discussion Yes N/A No
	]	Q.,		and the state of the set	equipment, etc.)	Ż	]		rooms, overhead power lines, etc.)?
		1	(tools, PPE, mobile	18) Has equipment been inspected prior to use? (tools, PPE, mobile	18) Has equipment	Ì	Ľ	(	9) Is someone working on or near energized electrical equipment (motor control
¢		Ó		17) Can we strain or overexert ourselves?	17) Can we strain o	ø		0	8) Is there a potential for exposure (chemical, radiation, laser, temperature)?
٥	٥	P.		16) Have all affected people been notified?	16) Have all affecte	ý		٢	<ol><li>Is additional PPE required?</li></ol>
ø		0	vel to and from the job)?	15) Can we slip or trip on anything (including travel to and from the job)?	15) Can we slip or t	٥			6) Do we have the correct tools for the job?
	0	þ	1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14) Are flags and derails in place if needed?		Þ	Q		5) Are there potential hazards or high risk job steps?
٥		Ż		13) Is everyone properly trained for this job?	13) Is everyone pro	þ		٥	4) Are there adjacent work crews exposed (including ArcelorMittal employees)?
\$		٥	sone else?	12) Can something fall and/or strike me or someone else?	12) Can something	٢		D	<ol><li>Will everyone apply a personal safety lock?</li></ol>
à		٢	rom height?	11) Could someone get hurt as a result of a fall from height?	11) Could someone	Q	V	0	2) Is there a current and valid isolation (LOTO) procedure?
<b>İ</b>	0	٢	/thing?	10) Could someone be caught in or between anything?	10) Could someone		Π	Þ	1) Are emergency evacuation areas identified and known?
No	N/A	Yes				No	N/A	Yes	HIRAC-Lite

	No		, D	þ	þ	þ		
	Yes N/A					0	14175	
	Yes	٥	٥	0	٥	٥		
Permits		37) Confined space	38) Energized electrical work	39) Excavation / drilling	40) Hot work	41) Other	5. PPE	
-	No			1	Les.		trative	
							dminist	
3	Yes N/A						6 4. Ac	
	Ye			V	V	, T	neering	
	No	Asbestos	🛃 34) Noise	🛃 35) Lasers	🛃 36) Sewers		Substitution 3. Engir	
1	I/A	Π	Π	Π	Π		ion 2.	1000
	Yes N/A No						iminati	
	<u>&gt;</u>	29) Scaffold work	🛃 30) Explosives   📢	🛃 31) Barricades   🌗	32) Radiation		Hierarchy of Controls 1. Elimination 2. Substitution 3. Engineering 4. Administrative 5. PPE	
	No	<b>N</b>	Ŵ	Q,	Ż	ġ		7 17 13
	Yes N/A No	Π	0					
	Yes	٥			١			
	a a for the second s	💒 24) Housekeeping	25) Production hazards	26) Material handling	27) Crane and rigging	🛃 28) Overhead work		Constant of Consta
SSIOL	. 3	24) H	25) PI	26) N	27) CI	28) 0		
niscu	No	N.	0	<b>N</b>	à	D.	8 	10000
TOL	N/A	D.	Π			Π		
rious	Yes N/A No		0		١			
ULTIEL HAZALOS AND CONSIGERATIONS TOF DISCUSSION		19) Pneumatic air tools & lines	20) Vehicle / mob equip traffic 人	21) Gas hazards-CO, CO2, etc.	22) Hot process, metal, temp.	23) Pressurized / steam pipe	Section 3	

Visiting worker name (print) B. Otto	Badge #   <i>6 4 0 4 2</i>	Hazard # Controls	Responsible Person Hazard #	Hazard #	Controls	Responsible Person
				Oby, and a sol		V. 378 31.5
				La constantino de la	2	
1 1 1		15 Bewar of un run Surta eer	unta cer			
	- 1 30 F	17 Paros (1) the of	of sauler			A PART OF THE PARTY AND A PART
		1 mail	10		가는 그 가장 정말에 내 귀화.	191 - 201 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 -
		ALL M. W. T. L. MILLEY. ALMANDER	*			- 10 17 July 10 190
	100	· · · · · · · · · · · · · · · · · · ·			d	
				transitional tr	A NO	
2. (S.)	and the second second	and the state of the set of the set of the		1.144	A CONTRACTOR	
My crew and I are familiar with the safety ha ArcelorMittal representative named below.	amed below.	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.	rform the work in a safe "w	orkmanship" like manr	her. I have reviewed these	e considerations with the
Contractor or crew leader	12-100	ArcelorMittal representative 2	1/1/1/1/1/1	Renlacen	Renlacement ren/nhone	

(Ensure form is fully completed prior to signing) Original to contractor, (1) copy to AreclorMittal representative ArcelorMittal representative 2 Contractor or crew leader 2 - 00

2016-04-BH-DailyWorkAuthorization Controlled by Maintenance Administration Dept. Arcelor@REal & UrRF Harbor Replacement rep/phone\_