

Partial 8/23/2019

August 23, 2019

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

Work Order No.: 19H1487

Re: Daily

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 22 sample(s) on 8/23/2019 10:00:00AM for the analyses presented in the following report as Work Order 19H1487.

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 Macizala

Carey Gadzala Project Manager

Microbac Laboratories, Inc.



Partial 8/23/2019

WORK ORDER SAMPLE SUMMARY

Date:

Friday, August 23, 2019

Client:Arcelor Mittal USA, Inc.Project:DailyLab Order:19H1487

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
19H1487-01	011-Composite	011	08/22/2019 06:08	8/23/2019 10:00:00AM
19H1487-02	011-Grab	011	08/22/2019 06:08	8/23/2019 10:00:00AM
19H1487-03	001-Composite	001	08/22/2019 06:21	8/23/2019 10:00:00AM
19H1487-04	001-Grab	001	08/22/2019 06:21	8/23/2019 10:00:00AM
19H1487-05	031-Grab	031	08/23/2019 06:43	8/23/2019 10:00:00AM
19H1487-06	Mixed Liquor-Grab	Mixed Liquor	08/23/2019 06:45	8/23/2019 10:00:00AM
19H1487-07	J-Box-Grab	J-Box	08/23/2019 06:40	8/23/2019 10:00:00AM
19H1487-08	WWII-Grab	WWII	08/23/2019 07:00	8/23/2019 10:00:00AM
19H1487-09	Coldwell-Grab	Coldwell	08/23/2019 07:16	8/23/2019 10:00:00AM
19H1487-10	RSB FT Overflow-Grab	RSB FT Overflow	08/23/2019 07:21	8/23/2019 10:00:00AM
19H1487-11	RSB FT Influent-Grab	RSB FT Influent	08/23/2019 07:22	8/23/2019 10:00:00AM
19H1487-12	BFTD-Grab	BFTD	08/23/2019 07:44	8/23/2019 10:00:00AM
19H1487-13	999-Grab	999	08/23/2019 07:29	8/23/2019 10:00:00AM
19H1487-14	BFTC-Grab	BFTC	08/23/2019 07:48	8/23/2019 10:00:00AM
19H1487-15	002-Grab	002	08/22/2019 07:53	8/23/2019 10:00:00AM
19H1487-16	WAL-Grab	WAL	08/22/2019 08:04	8/23/2019 10:00:00AM
19H1487-17	CM1-Grab	CM1	08/23/2019 00:00	8/23/2019 10:00:00AM
19H1487-18	CM2-Grab	CM2	08/23/2019 00:00	8/23/2019 10:00:00AM
19H1487-19	CM6-Grab	CM6	08/23/2019 00:00	8/23/2019 10:00:00AM
19H1487-20	HM1-Grab	HM1	08/23/2019 00:00	8/23/2019 10:00:00AM
19H1487-21	HM2-Grab	HM2	08/23/2019 00:00	8/23/2019 10:00:00AM
19H1487-22	HM3-Grab	HM3	08/23/2019 00:00	8/23/2019 10:00:00AM



Partial 8/23/2019

Field Results		Date: Frid	ay, August 23, 2019
Client: Client Project:	Arcelor Mittal USA, Inc. Daily	Work Order:	19H1487
Client Sample ID:	011-Grab	Work Order/ID:	19H1487-02
Sample Description:	011	Sampled:	08/22/2019 06:08
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.8	pH Units
Client Sample ID:	001-Grab	Work Order/ID:	19H1487-04
Sample Description:	001	Sampled:	08/22/2019 06:21
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
FLD_CL_TITR		0.00	mg/L
рН		7.8	pH Units
Client Sample ID:	J-Box-Grab	Work Order/ID:	19H1487-07
Sample Description:	J-Box	Sampled:	08/23/2019 06:40
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
рН		8.5	pH Units
Client Sample ID:	RSB FT Overflow-Grab	Work Order/ID:	19H1487-10
Sample Description:	RSB FT Overflow	Sampled:	08/23/2019 07:21
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
рН		9.0	pH Units
Client Sample ID:	999-Grab	Work Order/ID:	19H1487-13
Sample Description:	999	Sampled:	08/23/2019 07:29
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
рН		8.1	pH Units
Client Sample ID:	002-Grab	Work Order/ID:	19H1487-15
Sample Description:	002	Sampled:	08/22/2019 07:53
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
рН		8.3	pH Units
Client Sample ID:	WAL-Grab	Work Order/ID:	19H1487-16
Sample Description:	WAL	Sampled:	08/22/2019 08:04
Matrix:	Aqueous	Received:	08/23/2019 10:00
Analyses		Result	Units
pН		9.1	pH Units

Microbac Laboratories, Inc.

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Field Results

Date:

Friday, August 23, 2019

Analytical Re	sults							Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	A, Inc.								
Client Sample ID:	011-Composite							Work (Order/ID:	19H1487-01
Sample Description:	011							Sampl	ed:	08/22/2019 6:08
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: El	PA 200.7 Re	v 4.4			Ana	alyst: BTM
Total Recoverable Me	tals by ICP								Prep Date/	Time:08/23/2019 11:18
Lead		eij	Α	0.0033	0.0033	0.0075	J	mg/L	1	08/23/2019 13:46
Zinc		eij	Α	0.0096	0.0073	0.020	J	mg/L	1	08/23/2019 13:46
				Method: SI	M 4500-CN (C/E-1999			Ana	alyst: ABG
Total Cyanide									Prep Date/	Time:08/23/2019 11:24
Cyanide, Total		eij	Α	ND	0.0020	0.0050	U	mg/L	1	08/23/2019 14:04
				Method: S	W-846 9014				Ana	alyst: ABG
Free Cyanide									Prep Date/	Time:08/23/2019 14:00
Free Cyanide			Α	ND		0.0062		mg/L	1	08/23/2019 16:04

Analytical Re	sults							Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID: Sample Description:	011-Grab 011							Sampl		19H1487-02 08/22/2019 6:08
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: S	6M 4500 H+	B-2000			An	alyst: RJM
Field pH									Prep Date/	Time:08/22/2019 06:08
рН			Α	ND		0.100	U	pH at 25°C	1	08/22/2019 6:08

Analytical Res	sults							Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US	A, Inc.								
Client Sample ID:	001-Composite							Work (Order/ID:	19H1487-03
Sample Description:	001							Sample	ed:	08/22/2019 6:21
Matrix:	Aqueous							Receiv	red:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: El	PA 200.7 Re	ev 4.4			Ana	alyst: BTM
Total Recoverable Met	als by ICP								Prep Date/	Time:08/23/2019 11:18
Lead		eij	Α	ND	0.0033	0.0075	U	mg/L	1	08/23/2019 13:51
Zinc		eij	Α	0.0073	0.0073	0.020	J	mg/L	1	08/23/2019 13:51
				Method: SI	M 4500-CN	C/E-1999			Ana	alyst: ABG
Total Cyanide										Time: 08/23/2019 11:24
Cyanide, Total		eij	Α	ND	0.0020	0.0050	U	mg/L	1	08/23/2019 14:06
				Method: SI	N-846 9014				Ana	alyst: ABG
Free Cyanide									Prep Date/	Time:08/23/2019 14:00
Free Cyanide			Α	ND		0.0062		mg/L	1	08/23/2019 15:54
				Method: EI	PA 350.1 Re	ev 2.0			Ana	alyst: ABG
Nitrogen, Ammonia as	N									Time:08/23/2019 10:38
Nitrogen, Ammonia (A		ei	Α	0.34	0.054	0.10		mg/L	1	08/23/2019 13:28

Analytical Re	sults							Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID: Sample Description:	001-Grab 001							Samp		19H1487-04 08/22/2019 6:21
Matrix: Analyses	Aqueous	Certs	AT	Result	MDL	RL	Qual	Receiv Units	/ea: DF	08/23/2019 10:00 Analyzed
				Method: S	SM 4500 H+	B-2000				alyst: RJM
Field pH pH			A	ND)	0.100	U	pH at 25°C	Prep Date/	Time: 08/22/2019 06:21 08/22/2019 6:21

Analytical Re	sults						[Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID:	031-Grab							Work	Order/ID:	19H1487-05
Sample Description:	031							Samp	ed:	08/23/2019 6:43
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Soli	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	3.3	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Res	sults							Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID:	Mixed Liquor-Grat	D						Work	Order/ID:	19H1487-06
Sample Description:	Mixed Liquor							Samp	ed:	08/23/2019 6:45
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 F-19	97			An	alyst: DAT
Settleable Solids									Prep Date/	Time:08/23/2019 10:44
Settleable Solids		i	Α	180	1.0	1.0		ml/L	1	08/23/2019 10:44
				Method:	SM 2540 D-19	97			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solic	ls	eij	Α	1800	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Res	sults							Date:	day, August 23, 2019	
Client: Client Project:	Arcelor Mittal US Daily	A, Inc.								
Client Sample ID:	J-Box-Grab							Work	Order/ID:	19H1487-07
Sample Description:	J-Box							Sampl	ed:	08/23/2019 6:40
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: SN	/I 4500 H+ E	8-2000			An	alyst: RJM
Field pH								-	Prep Date/	Time:08/23/2019 06:40
рН			Α	ND		0.100	U	pH at 25°C	1	08/23/2019 6:40
				Method: EF	PA 350.1 Re	v 2.0			An	alyst: ABG
Nitrogen, Ammonia as	N								Prep Date/	Time:08/23/2019 10:38
Nitrogen, Ammonia (A		ei	Α	0.25	0.054	0.10		mg/L	1	08/23/2019 13:40
				Method: EF	PA 420.4 Re	v 1.0			An	alyst: ABG
Total Phenolics										Time: 08/23/2019 11:30
Phenolics, Total Recov	verable	eij	Α	ND	0.0060	0.010	U	mg/L	1	08/23/2019 14:26
				Method: SN	/I 2540 D-19	97			An	alyst: KMT
Total Suspended Solic	ls								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	s	eij	Α	14	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Re	sults							Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	WWII-Grab WWII							Work Sampl	Order/ID: led:	19H1487-08 08/23/2019 7:00
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 4500-CN	C/E-1999			An	alyst: ABG
Total Cyanide									Prep Date/	Time:08/23/2019 11:24
Cyanide, Total		eij	Α	0.017	0.0020	0.0050		mg/L	1	08/23/2019 14:08

Analytical Re	sults						Da	te:	Fri	day, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	A, Inc.								
Client Sample ID:	Coldwell-Grab							Work	Order/ID:	19H1487-09
Sample Description:	Coldwell							Sampl	ed:	08/23/2019 7:16
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
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:08/23/2019 11:24
Cyanide, Total		eij	A	0.067	0.0020	0.0050	mg	j/L	1	08/23/2019 14:09
				Method: E	PA 350.1 Re	v 2.0			An	alyst: ABG
Nitrogen, Ammonia as	5 N								Prep Date/	Time:08/23/2019 10:38
Nitrogen, Ammonia (A	s N)	ei	Α	42	0.54	1.0	mg	J/L	1	08/23/2019 13:43
				Method: S	M 2540 D-19	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	63	1.0	1.0	mg	j/L	1	08/23/2019 12:40

Analytical Re	nalytical Results							Date:	Fr	iday, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID:	RSB FT Overflow-	Grab						Work	Order/ID:	19H1487-10
Sample Description:	RSB FT Overflow							Sampl	ed:	08/23/2019 7:21
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: SI	M 4500 H+ I	B-2000			A	nalyst: RJM
Field pH									Prep Date	/Time:08/23/2019 07:21
рН			A	ND		0.100	U	pH at 25°C	1	08/23/2019 7:21
				Method: EI	PA 350.1 Re	ev 2.0			A	nalyst: ABG
Nitrogen, Ammonia as	5 N								Prep Date	/Time:08/23/2019 10:38
Nitrogen, Ammonia (A	s N)	ei	Α	6.3	0.054	0.10		mg/L	1	08/23/2019 13:45
				Method: SI	M 2540 D-19	997			A	nalyst: KMT
Total Suspended Solid	ds								Prep Date	/Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	22	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Re	sults							Date:	Fri	day, August 23, 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 Samp Receiv		19H1487-11 08/23/2019 7:22 08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Soli	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ds	eij	Α	14000	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Re	sults						0	Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	BFTD-Grab BFTD							Work Sampl	Order/ID: led:	19H1487-12 08/23/2019 7:44
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	77	1.0	1.0	r	ng/L	1	08/23/2019 12:40

Analytical Re	sults							Date:	Fric	day, August 23, 2019
Client:	Arcelor Mittal USA	A, Inc.								
Client Project:	Daily									
Client Sample ID:	999-Grab							Work	Order/ID:	19H1487-13
Sample Description:	999							Samp	led:	08/23/2019 7:29
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: SI	M 4500 H+ I	B-2000			An	alyst: RJM
Field pH									Prep Date/	Time:08/23/2019 07:29
pН			Α	ND		0.100	U	pH at 25°C	1	08/23/2019 7:29
				Method: SI	M 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	A	3.7	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Re	sults						0	Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	BFTC-Grab BFTC							Work Samp	Order/ID: led:	19H1487-14 08/23/2019 7:48
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	32	1.0	1.0	l I	mg/L	1	08/23/2019 12:40

Analytical Re	sults							Date:	Frie	day, August 23, 2019
Client: Client Project:	Arcelor Mittal USA Daily	, Inc.								
Client Sample ID: Sample Description:	002-Grab 002							Work Samp	Order/ID: led:	19H1487-15 08/22/2019 7:53
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: S	6M 4500 H+	- B-2000			An	alyst: RJM
Field pH									Prep Date/	Time: 08/22/2019 07:53
pН			Α	ND		0.100	U	pH at 25°C	1	08/22/2019 7:53

Analytical Re	sults							Date:	Frie	day, August 23, 2019
Client:	Arcelor Mittal USA	A, Inc.								
Client Project:	Daily									
Client Sample ID:	WAL-Grab							Work	Order/ID:	19H1487-16
Sample Description:	WAL							Samp	led:	08/22/2019 8:04
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method: SI	M 4500 H+	B-2000			An	alyst: RJM
Field pH									Prep Date/	Time:08/22/2019 08:04
pН			Α	ND		0.100	U	pH at 25°C	1	08/22/2019 8:04
				Method: SI	M 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ls								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	10	1.0	1.0		mg/L	1	08/23/2019 12:40

Analytical Re	sults						0	Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description: Matrix:	CM1-Grab CM1 Aqueous							Work Samp Recei ^s		19H1487-17 08/23/2019 0:00 08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-19	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time: 08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	14	1.0	1.0	I	mg/L	1	08/23/2019 12:40

Analytical Re	sults						C	Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID:	CM2-Grab								Order/ID:	19H1487-18
Sample Description: Matrix:	CM2 Aqueous							Samp Receiv		08/23/2019 0:00 08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	11	1.0	1.0	r	ng/L	1	08/23/2019 12:40

Analytical Re	sults						0	Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description: Matrix:	CM6-Grab CM6 Aqueous							Work Samp Recei		19H1487-19 08/23/2019 0:00 08/23/2019 10:00
Analyses	Aqueous	Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
Total Querranda d Qall	4-			Method:	SM 2540 D-1	997				alyst: KMT
Total Suspended Solid		eij	Α	10	1.0	1.0	r	ng/L	1	Time: 08/23/2019 11:23 08/23/2019 12:40

Analytical Re	sults						0	Date:	Frie	day, August 23, 2019
Client:	Arcelor Mittal US	SA, Inc.								
Client Project:	Daily									
Client Sample ID:	HM1-Grab							Work	Order/ID:	19H1487-20
Sample Description:	HM1							Samp	led:	08/23/2019 0:00
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	16	1.0	1.0	l I	mg/L	1	08/23/2019 12:40

Analytical Re	sults						0	Date:	Fric	day, August 23, 2019
Client: Client Project:	Arcelor Mittal US Daily	SA, Inc.								
Client Sample ID: Sample Description:	HM2-Grab HM2							Work Samp	Order/ID: led:	19H1487-21 08/23/2019 0:00
Matrix:	Aqueous							Receiv	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Soli	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	14	1.0	1.0	r	ng/L	1	08/23/2019 12:40

Analytical Re	sults						[Date:	Frie	day, August 23, 2019
Client:	Arcelor Mittal US	SA, Inc.								
Client Project:	Daily									
Client Sample ID:	HM3-Grab							Work	Order/ID:	19H1487-22
Sample Description:	HM3							Samp	ed:	08/23/2019 0:00
Matrix:	Aqueous							Recei	ved:	08/23/2019 10:00
Analyses		Certs	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
				Method:	SM 2540 D-1	997			An	alyst: KMT
Total Suspended Solid	ds								Prep Date/	Time:08/23/2019 11:23
Total Suspended Solid	ls	eij	Α	12	1.0	1.0		mg/L	1	08/23/2019 12:40

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



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: 19H1487

* Date Obtained ** Sample Date:

Location	Time	Time Sampler Type Preserved Cooled Containers			D					
		$\overline{\mathbf{A}}$		TICSCIVED	COOleg	Type	Qty	Vol. (ml)	Parameters	Comments
011 **	06:08	4	Comp	No	Yes	Glass	1	4000		01
	CEDU		Grab	No	No	Plastic	1	125	pH	02
001 **	A.21		Comp	No	Yes	Glass	1	4000	NH3	03
	PP.FI		Grab	No	No	Plastic	1	125	рН	04
031 *	06:43		Grab	No	No	Plastic	1	1000	TSS	05
	86.0		Grab	No	No	Plastic	1	1000	BOD	I I
Mixed Liquor *	06:45		Grab	No	No	Plastic	1	2000	TSS, Settling	06
J-Box *	06:40	2	Grab	No	No	Glass	2	1000	NH3, Phenol, TSS, pH	07
DIW-131 *			Grab	No	No	Plastic	1	125	pH	×
WWII *	07:00		Grab	No	No	Plastic	1	1000	Cn	08
Coldwell	67:16		Grab	No	No	Plastic	2	2000	NH3, CN, Pb, Zn, TSS	09
RSB FT Overflow *	07:21		Grab	No	No	Plastic	2	1000	NH3, pH, TSS, Pb, Zn	10
RSB FT Influent *	07:22		Grab	No	No	Plastic	1	500	TSS	
BFTD *	07:44		Grab	No	No	Plastic	1	500	TSS	12
999 *	07:29		Grab	No	No	Plastic	1	500	TSS, pH	13
BFTC *	07:48		Grab	No	No	Plastic	1	500	TSS	14
002 **	07:53		Grab	No	No	Plastic	1	125	Ha	19
WAL 1 **	08:04		Grab	No	No	Glass	1	1000	TSS, pH	16
WAL 2 **	5-D	Î	Grab	No	No	Glass	1	1000	TSS, pH	
WAL 3 **	08:04		Grab	No	No	Glass	1	1000	TSS, pH	
SWTP*	47	****	Grab	No	No	Plastic	16	1000	TSS	17-22

*** WPL is for previous sample date

**** Sample collected by Water Process personnel

No cm 3

6.5

Relinguished by Received by:

Date: Date: 87

Time: 08. Time: 0820

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

19H1487 Carey Gadzala ArcelorMittal - Burns Harbor, IN Daily 08/23/2019



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

		6/30/10	7/25/20	5/31/20	Result	(mg/L)	00.0	0.10	0.00	00.0	0.00	0.00	0.00	00.0		Exp. Date	6/30/20	2/22/20	5/31/20	Result	(mg/L)	0,00		0.00	00.0	00.0	00-00	0.00	0.00		revision: a_01_2016
	STD ID / Lot #	146367	146366	14 5 348	Titrant V/ol	(mL)	0.00	0.10	0.00	0.00	0.0	00.0	00.0	000		STD ID / Lot #	146367				(ml)	0.00	0.07	00.0	000	0.00	00-00	0.00	00.0		revi
s Harbor		KI Solution:	Aretate huffer:	PAO Titrant:		Titrant Stop (mL)	00.0	0.10	00.0	000	00.0	00.0	0.00				KI Solution:	Acatata huffer	PAO Titrant:		(ml)	08	000	00.0	00.0	0.00	0	१ •	3 6	0,00	
for Arcelor Mittal - Burns Harbor						Titrant Start	0 0 0								X						Titrant Start		0,00							→	ol., mL)
for Arce		0		Exp. Date	07/1)		pH (pH Units)	4,0	0",".	0,1,0	4.0	4.0	0 '7	63.1	4,0		0800	Į	Exp. Date	11/20		pH (pH Units)	4.0	e''	a.2	۔ ۱۳۰۰ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ - ۲۰۰۹ -	4.0	4.0	4, 0	4.0	(Titrant Vol., mL) (200 mL) / (Sample Vol., mL)
	1 1	8/22/19 0750	1040	H7626	A9074	Sample Vol.		200	,						ト		8/23/19	BAO		A 9074	Sample Vol.	(ml)	200								
)		Date/Time:	Analyst	pH Paper Lot #.	LCS ID:	Sample	Ō	Blank	LCS	Outfall 001	Outfall 002	Outfall 003	Outfall 011	Outfall 011 Dup	Outfall on Z Dup		Date/Time:	Analyst	pH Paper Lot #:	LCS ID:	Sample	Ð	Blank	LCS	Outfall 001	Outfall 002	Outfall 003	Outfall 011	Outfall 011 Dup		Chlorine, mg/L =

50 of 50

Arcelo	170027		Job notes	e 11											Is this job capital work?				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.	Job title See , O c - u Sul	
Form number	Requisition number	01110	Billable equipment/subcontractors/material	Description	Hours/amt total	Description	Hours/amt total	of the abbreviations.	TEC &	TM	ave verified that contractor en urate. complete /valid for the da	Arcelor Mittal authorization signature	trans to a								
Contractor ref #/job #			Total equipme		Qty	<u></u>	Qty	<u></u>	Otv	<u>0</u>	Qty	<u>Q</u>	Qty	<u>_</u>	l Oty	orm for an explanation	PF	SU	Section 6 I the undersigned f timesheet are accu	Arcelor Mittal autho	Printed name
		5 - (0)														Enter the total hours worked by each craft in the box to the right of each abbreviation. See reverse side of form for an explanation of the abbreviations.	LTR	OE	Section 5 Work authorization permit #		1.1.000
	PO number	ork Samb	raft	U										Total hours this sheet	Previous hours Total hours to date	the right of each abbrevia	I A		tually worked by ve.	Service tech	
Contract	Microbac	Description of work	First name	<				~			đ			Total hou	Pr Total h	each craft in the box to t	212 GLZ	M	n the timesheet were ac	Job title	~
Burns Harbor Contractor timesheet	ive L	9	Soft service		senthan 1					 					7.	e total hours worked by	E E	2 B	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.	signature	
Burns Harbor Contractor	ttal Rep	Department	Section 2 Badge no. Last name	1000							9			Shift start time	Shift end time	ion 3	BI CO	CD	Section 4 I the undersigned attest the the contractor employee a	Contractor authorization signature	Printed name

307246 Daily Work authorization form for all visiting Workers The responsible for the work at the job site, a contractor representative must meet face to face with the ArcelonMittal representative responsible for the work at the job site, a contractor representative must meet face to face with the ArcelonMittal representative responsible for the work at the job site, a contractor representative must meet face to face with the ArcelonMittal representative responsible for the work at the job site, a contractor representative must meet face common work at the job site, <u>workson</u> <u>Cab</u> <u>And</u> <u>An</u>

pH - METHOD 9045D Arcelor Mittal /Burns Harbor NPDES

Sample ID		рН	Analyst	Date/Time of Analysis
Buffer ID:	4: 185909	7: 188312	10:	
Meter ID:	187707	188712	187680	
Calibration	<u>(A) (D) (D)</u>		BAO	8/23/19 0800
ICV	4 10/ 10	6.98		
Slope		98.2		
Lake 999		8.10		
Location 001		7.78		
Location 002		8.33		
Location 011		7.77		
WAL 1		9.08		
WAL 2	·	·		
SWTP J-Box		8.45	l	
DIW 131	<u> </u>	·		
RSB		9.00		
Dup- JBOX	· ·	8.43		·
CCV		7.01	V V	
			1974 - Maria - Maria Andrea - Carlos -	· ·
	**** *********************************			

Sample ID		рН	Analyst	Date/Time of Analysis
Buffer ID:	4:	7:	10:	
Meter ID:				
Calibration	4 / 7 / 10			
ICV	4 / 7 / 10			
Slope			5	
Lake 999				· · · · · · · · · · · · · · · · · · ·
Location 001				
Location 002				
Location 011				
WAL 1				
WAL 2				· · · · · · · · · · · · · · · · · · ·
SWTP J-Box	· ·			
DIW 131				
RSB				
Dup-				
CCV				
			·	
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ME-3415

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