

Work Order No.: 19H1551

August 25, 2019

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

Re: NPDES Excursion

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 24 sample(s) on 8/25/2019 10:00:00AM for the analyses presented in the following report as Work Order 19H1551.

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



# **WORK ORDER SAMPLE SUMMARY**

Date: Sunday, August 25, 2019

Client: Arcelor Mittal USA, Inc.
Project: NPDES Excursion

**Lab Order: 19H1551** 

Lab Sample ID	Client Sample ID	Tag Number	<b>Collection Date</b>	Date Received
19H1551-01	#9		08/24/2019 09:41	8/25/2019 10:00:00AM
19H1551-02	#10		08/24/2019 09:50	8/25/2019 10:00:00AM
19H1551-03	#11		08/24/2019 09:58	8/25/2019 10:00:00AM
19H1551-04	#12		08/24/2019 10:05	8/25/2019 10:00:00AM
19H1551-05	#8		08/24/2019 10:20	8/25/2019 10:00:00AM
19H1551-06	Marina Shores West Basin		08/24/2019 10:33	8/25/2019 10:00:00AM
19H1551-07	#7		08/24/2019 10:42	8/25/2019 10:00:00AM
19H1551-08	#6		08/24/2019 10:49	8/25/2019 10:00:00AM
19H1551-09	#5		08/24/2019 10:55	8/25/2019 10:00:00AM
19H1551-10	#4		08/24/2019 11:02	8/25/2019 10:00:00AM
19H1551-11	#3		08/24/2019 11:10	8/25/2019 10:00:00AM
19H1551-12	#2		08/24/2019 11:15	8/25/2019 10:00:00AM
19H1551-13	#1		08/24/2019 11:25	8/25/2019 10:00:00AM
19H1551-14	OF001		08/24/2019 11:36	8/25/2019 10:00:00AM
19H1551-15	Portage Marina East		08/24/2019 12:29	8/25/2019 10:00:00AM
19H1551-16	000		08/24/2019 14:28	8/25/2019 10:00:00AM
19H1551-17	SL-1		08/24/2019 15:10	8/25/2019 10:00:00AM
19H1551-18	SL-2		08/24/2019 15:30	8/25/2019 10:00:00AM
19H1551-19	SL-3		08/24/2019 15:43	8/25/2019 10:00:00AM
19H1551-20	SL-4		08/24/2019 15:54	8/25/2019 10:00:00AM
19H1551-21	SL-5		08/24/2019 16:06	8/25/2019 10:00:00AM
19H1551-22	SL-6		08/24/2019 16:43	8/25/2019 10:00:00AM
19H1551-23	SL-7		08/24/2019 16:52	8/25/2019 10:00:00AM
19H1551-24	SL-8		08/24/2019 17:39	8/25/2019 10:00:00AM



Field Results		Date: Sund	ay, August 25, 2019
Client:	Arcelor Mittal USA, Inc.	Work Order:	19H1551
Client Project:	NPDES Excursion		
Client Sample ID:	#9	Work Order/ID:	19H1551-01
Sample Description:	•	Sampled:	08/24/2019 09:41
Matrix:	Aqueous	Received:	08/25/2019 10:00
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Analyses		Result	Units
Dissolved Oxygen		5.2	mg/L
pH		7.52	pH Units
Temperature		23.7	Deg C
Client Sample ID:	#10	Work Order/ID:	19H1551-02
Sample Description:	#1 <b>0</b>	Sampled:	08/24/2019 09:50
Matrix:	Aguagua	Received:	08/25/2019 10:00
watrix:	Aqueous	Received:	06/25/2019 10.00
Analyses		Result	Units
Dissolved Oxygen		5.4	mg/L
pH		7.70	pH Units
Temperature		23.3	Deg C
	1144		40114554.00
Client Sample ID:	#11	Work Order/ID:	19H1551-03
Sample Description:		Sampled:	08/24/2019 09:58
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		5.8	mg/L
pH		7.66	pH Units
Temperature		23.4	Deg C
Client Sample ID:	#12	Work Order/ID:	19H1551-04
Sample Description:	1112	Sampled:	08/24/2019 10:05
Matrix:	Aqueous	Received:	08/25/2019 10:00
	Aqueous		00/23/2013 10.00
Analyses		Result	Units
Dissolved Oxygen		5.5	mg/L
pН		7.71	pH Units
Temperature		24	Deg C
Client Sample ID:	#8	Work Order/ID:	19H1551-05
Sample Description:		Sampled:	08/24/2019 10:20
Matrix:	Aqueous	Received:	08/25/2019 10:00
	Aqueous		
Analyses		Result	Units
Dissolved Oxygen		6.1	mg/L
pH		7.80	pH Units
Temperature		22.2	Deg C
Client Sample ID:	Marina Shores West Basin	Work Order/ID:	19H1551-06
Sample Description:	Manife Choros Frost Busin	Sampled:	08/24/2019 10:33
	Aqueous	Received:	08/25/2019 10:33
Matriv.	COUNTY DESCRIPTION OF THE PROPERTY OF THE PROP	neceiveu.	00/20/2018 10.00
	7.440040		
Matrix:  Analyses  Dissolved Oxygen	7,1400000	Result 7.9	Units mg/L



Field Results		Date: Sund	ay, August 25, 2019
pН		7.99	pH Units
Temperature		24.1	Deg C
lient Sample ID:	#7	Work Order/ID:	19H1551-07
ample Description:		Sampled:	08/24/2019 10:42
latrix:	Aqueous	Received:	08/25/2019 10:00
ınalyses		Result	Units
Dissolved Oxygen		5.4	mg/L
pH		7.56	pH Units
Temperature		23.3	Deg C
Client Sample ID:	#6	Work Order/ID:	19H1551-08
Sample Description:	#0	Sampled:	08/24/2019 10:49
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		5.6	mg/L
pH		7.64	pH Units
Temperature		23.1	Deg C
Client Sample ID:	#5	Work Order/ID:	19H1551-09
Sample Description:	#5	Sampled:	08/24/2019 10:5
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses	·	Result	Units
Dissolved Oxygen		5.4	mg/L
pH		7.77	pH Units
Temperature		22.4	Deg C
Client Comple ID:	#4	Work Order/ID:	19H1551-10
Client Sample ID: Sample Description:	<del>""</del>		08/24/2019 11:02
Matrix:	Aqueous	Sampled: Received:	08/25/2019 10:00
Analyses	4	Result	Units
Dissolved Oxygen		6.0	mg/L
pH		7.78	pH Units
Temperature		22.7	Deg C
	110		40114554 44
Client Sample ID:	#3	Work Order/ID:	19H1551-11
Sample Description: Matrix:	Aqueous	Sampled: Received:	08/24/2019 11:10 08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		6.9	mg/L
рH		7.85	pH Units
		22.8	Deg C
Temperature			
	#2	Work Order/ID:	19H1551-12
Client Sample ID:	#2	Work Order/ID: Sampled:	
	#2 Aqueous	Work Order/ID: Sampled: Received:	19H1551-12 08/24/2019 11:15 08/25/2019 10:00



Field Results		1	
Dissolved Oxygen		6.5	mg/L
pH		7.75	pH Units
Temperature		22.9	Deg C
Client Sample ID:	#1	Work Order/ID:	19H1551-13
Sample Description:	•	Sampled:	08/24/2019 11:25
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		6.5	mg/L
pН		7.81	pH Units
Temperature		23.8	Deg C
Client Sample ID:	OF001	Work Order/ID:	19H1551-14
Sample Description:		Sampled:	08/24/2019 11:36
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		6.7	mg/L
pН		7.81	pH Units
Temperature		24.8	Deg C
Client Sample ID: Sample Description: Matrix:	Portage Marina East  Aqueous	Work Order/ID: Sampled: Received:	19H1551-15 08/24/2019 12:29 08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		7.7	mg/L
pH		7.67	pH Units
Temperature		25.1	Deg C
Client Sample ID:	000	Work Order/ID:	19H1551-16
Sample Description:		Sampled:	08/24/2019 14:28
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		6.6	mg/L
pН		7.60	pH Units
Temperature		25	Deg C
Client Sample ID:	SL-1	Work Order/ID:	19H1551-17
Sample Description:	-	Sampled:	08/24/2019 15:10
Matrix:	Aqueous	Received:	08/25/2019 10:00
mati ixi			
		Result	Units
Analyses Dissolved Oxygen		Result 7.0	Units mg/L
Analyses			

Temperature

Deg C



Client Sample ID:	SL-2	Work Order/ID:	19H1551-18
Sample Description:	<u> </u>	Sampled:	08/24/2019 15:30
Matrix:	Aqueous	Received:	08/25/2019 10:00
	Aqueous		
Analyses		Result	Units
Dissolved Oxygen		7.8	mg/L
pH		7.91	pH Units
Temperature		25	Deg C
Oliant Canania ID.	SL-3	Marile Ouder/ID.	19H1551-19
Client Sample ID:	SL-3	Work Order/ID:	
Sample Description:		Sampled:	08/24/2019 15:4
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		7.2	mg/L
рH		8.0	pH Units
Temperature		25	Deg C
			40114554.00
Client Sample ID:	SL-4	Work Order/ID:	19H1551-20
Sample Description:		Sampled:	08/24/2019 15:5
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		7.0	mg/L
pН		8.02	pH Units
Temperature		23.4	Deg C
Client Sample ID:	SL-5	Work Order/ID:	19H1551-21
Sample Description:		Sampled:	08/24/2019 16:06
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		6.9	mg/L
pH		7.92	pH Units
Temperature		23.2	Deg C
Client Sample ID:	SL-6	Work Order/ID:	19H1551-22
Sample Description:		Sampled:	08/24/2019 16:4
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
Dissolved Oxygen		7.0	mg/L
pН		8.09	pH Units
Temperature		23.3	Deg C
Client Comple ID:	CI 7	Work Order/ID:	1011551 22
Client Sample ID:	SL-7		19H1551-23
Sample Description:		Sampled:	08/24/2019 16:5
Matrix:	Aqueous	Received:	08/25/2019 10:00
Analyses		Result	Units
		7.6	mg/L
Dissolved Oxygen			
		8.08 23.1	pH Units Deg C



Field Results

Date: Sunday, August 25, 2019

Client Sample ID: SL-8 Work Order/ID: 19H1551-24

 Sample Description:
 Sampled:
 08/24/2019 17:39

 Matrix:
 Aqueous
 Received:
 08/25/2019 10:00

Analyses	Result	Units
Dissolved Oxygen	7.3	mg/L
pH	8.03	pH Units
Temperature	22.9	Deg C



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #9
 Work Order/ID:
 19H1551-01

 Sample Description:
 Sampled:
 08/24/2019
 9:41

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

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Analyses	Certs	ΑT	Result	RL	Qual I	Jnits	DF	Analyzed
			Method: SM 4500-	CN C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			Р	rep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	mg/l	-	1	08/25/2019 14:30
			Method: SW-846 9	014			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 9	014		Р	rep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg/l	-	1	08/25/2019 11:41
			Method: EPA 350.1	I Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.	1 Rev 2.0		Р	rep Date/	Time: <b>08/25/2019 12:49</b>
Nitrogen, Ammonia (As N)	di	Α	0.26	0.10	mg/l	_	1	08/25/2019 14:44



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #10
 Work Order/ID:
 19H1551-02

 Sample Description:
 Sampled:
 08/24/2019
 9:50

 Sample Description:
 Sampled:
 08/24/2019
 9:50

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 14:32
			Method: SW-846 90	14			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	ı	mg/L	1	08/25/2019 11:46
			Method: <b>EPA 350.1</b> l	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.27	0.10		mg/L	1	08/25/2019 14:51



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #11
 Work Order/ID:
 19H1551-03

 Sample Description:
 Sampled:
 08/24/2019
 9:58

 Matrix:
 Aqueous

 Received:
 08/25/2019 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	А	ND	0.0050	1	mg/L	1	08/25/2019 14:37
			Method: SW-846 90	14			An	alyst: lachat4
Free Cyanide		F	Prep Method: SW-846 90	14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		А	ND	0.0062	ı	mg/L	1	08/25/2019 11:48
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.16	0.10	1	ng/L	1	08/25/2019 14:54



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #12
 Work Order/ID:
 19H1551-04

 Sample Description:
 Sampled:
 08/24/2019 10:05

 Matrix:
 Aqueous
 Sampled:
 06/24/2019 10:05

 Received:
 08/25/2019 10:00

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Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			Ana	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time:08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 14:38
			Method: SW-846 90	14			Ana	alyst: lachat4
Free Cyanide		F	Prep Method: SW-846 90	14			Prep Date/	Time:08/25/2019 10:06
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 11:49
			Method: EPA 350.1	Rev 2.0			Ana	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.17	0.10		mg/L	1	08/25/2019 14:56



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #8
 Work Order/ID:
 19H1551-05

 Sample Description:
 Sampled:
 08/24/2019
 10:20

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-	CN C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			F	Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	mg/	L	1	08/25/2019 14:40
			Method: SW-846 9	014			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 9	014		F	Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg/	L	1	08/25/2019 11:51
			Method: EPA 350.1	I Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.	1 Rev 2.0		F	Prep Date/	Time: <b>08/25/2019 12:49</b>
Nitrogen, Ammonia (As N)	di	Α	0.39	0.10	mg/	L	1	08/25/2019 14:58



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

Client Sample ID: Marina Shores West Basin Work Order/ID: 19H1551-06

Sample Description:Sampled:08/24/2019 10:33

Matrix: Aqueous Received: 08/25/2019 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN	C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 14:42
			Method: SW-846 901	4			An	alyst: lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4			Prep Date/	Time:08/25/2019 10:06
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 11:53
			Method: EPA 350.1 R	ev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 R	lev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	ND	0.10		mg/L	1	08/25/2019 15:01



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #7
 Work Order/ID:
 19H1551-07

 Sample Description:
 Sampled:
 08/24/2019
 10:42

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-0	CN C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	r	ng/L	1	08/25/2019 16:30
			Method: SW-846 90	014			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	014			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	r	ng/L	1	08/25/2019 11:54
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.28	0.10	r	ng/L	1	08/25/2019 15:03



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #6
 Work Order/ID:
 19H1551-08

 Sample Description:
 Sampled:
 08/24/2019
 10:49

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	m	g/L	1	08/25/2019 14:47
			Method: SW-846 90	14			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	)14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	m	g/L	1	08/25/2019 11:56
			Method: <b>EPA 350.1</b>	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.23	0.10	m	g/L	1	08/25/2019 15:06



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #5
 Work Order/ID:
 19H1551-09

 Sample Description:
 Sampled:
 08/24/2019
 10:55

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-	CN C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			I	Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	mg	/L	1	08/25/2019 14:48
			Method: SW-846 9	014			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 9	014		1	Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg	/L	1	08/25/2019 12:01
			Method: EPA 350.1	I Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.	1 Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.24	0.10	mg	/L	1	08/25/2019 15:08



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #4
 Work Order/ID:
 19H1551-10

 Sample Description:
 Sampled:
 08/24/2019
 11:02

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-0	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 14:50
			Method: SW-846 90	14			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	)14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 12:03
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.20	0.10		mg/L	1	08/25/2019 15:48



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #3
 Work Order/ID:
 19H1551-11

 Sample Description:
 Sampled:
 08/24/2019
 11:10

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 14:55
			Method: SW-846 90	14			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	)14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 12:04
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.20	0.10		mg/L	1	08/25/2019 15:51



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #2
 Work Order/ID:
 19H1551-12

 Sample Description:
 Sampled:
 08/24/2019
 11:15

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

RL **Analyses** Certs AT Result Qual **Units** DF Analyzed Method: SM 4500-CN C/E-1999 Analyst: EF Prep Date/Time: 08/25/2019 11:15 Prep Method: NA **Total Cyanide** Cyanide, Total dij Α ND 0.0050 mg/L 08/25/2019 14:57 Method: SW-846 9014 Analyst: lachat4 Prep Method: SW-846 9014 Prep Date/Time: 08/25/2019 10:06 Free Cyanide Free Cyanide Α 0.0062 08/25/2019 12:09 mg/L Method: EPA 350.1 Rev 2.0 Analyst: EF Nitrogen, Ammonia as N Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/25/2019 12:49 Nitrogen, Ammonia (As N) di A 0.17 0.10 mg/L 08/25/2019 15:53



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 #1
 Work Order/ID:
 19H1551-13

 Sample Description:
 Sampled:
 08/24/2019
 11:25

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

1							
Analyses	Certs	ΑT	Result	RL	Qual Uni	ts DF	Analyzed
			Method: SM 4500-	CN C/E-1999		Aı	nalyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			Prep Date	/Time:08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	mg/L	1	08/25/2019 14:59
			Method: SW-846 9	014		Aı	nalyst:lachat4
Free Cyanide		F	Prep Method: SW-846 9	014		Prep Date	/Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg/L	1	08/25/2019 12:11
			Method: EPA 350.1	1 Rev 2.0		Aı	nalyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.	1 Rev 2.0		Prep Date	/Time:08/25/2019 12:49
Nitrogen, Ammonia (As N)	di	Α	0.18	0.10	mg/L	1	08/25/2019 15:56



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 OF001
 Work Order/ID:
 19H1551-14

 Sample Description:
 Sampled:
 08/24/2019 11:36

 Matrix:
 Aqueous

 Received:
 08/25/2019 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-0	CN C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050	n	ng/L	1	08/25/2019 15:00
			Method: SW-846 96	014			An	alyst: lachat4
Free Cyanide		F	Prep Method: SW-846 9	014			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	n	ng/L	1	08/25/2019 12:13
			Method: EPA 350.1	Rev 2.0			Ana	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: <b>EPA 350.</b> 1	Rev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	0.30	0.10	n	ng/L	1	08/25/2019 15:58



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

Client Sample ID: Portage Marina East Work Order/ID: 19H1551-15

 Sample Description:
 Sampled:
 08/24/2019 12:29

Matrix: Aqueous Received: 08/25/2019 10:00

Matrix.						IXCCCIV	cu.	00/20/2010 10.0
Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 11:15
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 15:02
			Method: SW-846 90	14			An	alyst:lachat4
Free Cyanide		F	Prep Method: SW-846 90	14			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 12:15
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	0.16	0.10		mg/L	1	08/25/2019 16:00



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 000
 Work Order/ID:
 19H1551-16

 Sample Description:
 Sampled:
 08/24/2019
 14:28

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

RL **Analyses** Certs AT Result Qual **Units** DF Analyzed Method: SM 4500-CN C/E-1999 Analyst: EF Prep Date/Time: 08/25/2019 14:00 Prep Method: NA **Total Cyanide** Cyanide, Total dij Α ND 0.0050 mg/L 08/25/2019 16:32 Method: SW-846 9014 Analyst: lachat4 Prep Method: SW-846 9014 Prep Date/Time: 08/25/2019 10:06 Free Cyanide Α 0.0062 08/25/2019 12:16 Free Cyanide mg/L Method: EPA 350.1 Rev 2.0 Analyst: EF Nitrogen, Ammonia as N Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/25/2019 15:00 Nitrogen, Ammonia (As N) di Α ND 0.10 mg/L 08/25/2019 16:03



Arcelor Mittal USA, Inc. Client: **Client Project:** NPDES Excursion

SL-1 Work Order/ID: 19H1551-17 **Client Sample ID:** 08/24/2019 15:10

**Sample Description:** Sampled:

Aqueous Matrix: Received: 08/25/2019 10:00

1,							
Analyses	Certs	ΑT	Result	RL	Qual Uni	s DF	Analyzed
			Method: SM 4500-CN	C/E-1999		Aı	nalyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			Prep Date	/Time: 08/25/2019 14:00
Cyanide, Total	dij	А	ND	0.0050	mg/L	1	08/25/2019 16:33
			Method: SW-846 901	4		Αı	nalyst:lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4		Prep Date	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg/L	1	08/25/2019 12:21
			Method: EPA 350.1 R	ev 2.0		A	nalyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 F	lev 2.0		Prep Date	/Time:08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10	mg/L	1	08/25/2019 16:05



Arcelor Mittal USA, Inc. Client: **Client Project:** NPDES Excursion

SL-2 Work Order/ID: 19H1551-18 **Client Sample ID:** 

**Sample Description:** Sampled: 08/24/2019 15:30

Aqueous Matrix: Received: 08/25/2019 10:00

1							
Analyses	Certs	ΑT	Result	RL	Qual Ui	nits DF	Analyzed
			Method: SM 4500-CN	C/E-1999		Aı	nalyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA			Prep Date	/Time: 08/25/2019 14:00
Cyanide, Total	dij	Α	ND	0.0050	mg/L	1	08/25/2019 16:35
			Method: SW-846 901	4		Aı	nalyst:lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4		Prep Date	/Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	mg/L	1	08/25/2019 12:23
			Method: EPA 350.1 R	ev 2.0		Aı	nalyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 R	lev 2.0		Prep Date	/Time:08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10	mg/L	1	08/25/2019 16:17



Arcelor Mittal USA, Inc. Client: **Client Project:** NPDES Excursion

SL-3 Work Order/ID: 19H1551-19 **Client Sample ID:** 

**Sample Description:** Sampled: 08/24/2019 15:43

Aqueous Matrix: Received: 08/25/2019 10:00

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Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN	C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 14:00
Cyanide, Total	dij	Α	ND	0.0050	ı	mg/L	1	08/25/2019 16:37
			Method: SW-846 901	4			An	alyst:lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	ı	mg/L	1	08/25/2019 12:25
			Method: EPA 350.1 R	ev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 F	lev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10	ı	mg/L	1	08/25/2019 16:24



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 SL-4
 Work Order/ID:
 19H1551-20

 Sample Description:
 Sampled:
 08/24/2019 15:54

 Matrix
 Approximate to the control of the cont

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Matrix:						1100011	<del></del>	00/20/2010 10:0
Analyses	Certs	ΑT	Result	RL	Qual	Units DF Analyz	Analyzed	
			Method: SM 4500-CN	I C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 14:00
Cyanide, Total	dij	Α	ND	0.0050	r	ng/L	1	08/25/2019 16:38
			Method: SW-846 901	4			Ana	alyst: lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4			Prep Date/	Time: 08/25/2019 10:06
Free Cyanide		Α	ND	0.0062	r	ng/L	1	08/25/2019 12:26
			Method: EPA 350.1 R	lev 2.0			Ana	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 F	Rev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10	r	ng/L	1	08/25/2019 16:27



Arcelor Mittal USA, Inc. Client: **Client Project:** NPDES Excursion

SL-5 Work Order/ID: 19H1551-21 **Client Sample ID:** 

**Sample Description:** Sampled: 08/24/2019 16:06

Matrix: Aqueous Received: 08/25/2019 10:00

7.945545						. 100011		00/20/2010 10:00
Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-C	N C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 14:35
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 16:40
			Method: SW-846 90	14			An	alyst: lachat4
Free Cyanide		F	Prep Method: SW-846 90	14			Prep Date/	Time: 08/25/2019 10:07
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 12:28
			Method: EPA 350.1	Rev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1	Rev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10		mg/L	1	08/25/2019 16:29



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 SL-6
 Work Order/ID:
 19H1551-22

 Sample Description:
 Sampled:
 08/24/2019 16:43

 Sample Description:
 Sampled:
 08/24/2019
 16:43

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

Analyses	Certs	ΑT	Result	RL	Qual I	Jnits	DF	Analyzed
			Method: SM 4500-CN	I C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 14:35
Cyanide, Total	dij	Α	ND	0.0050	mg/l	-	1	08/25/2019 16:42
			Method: SW-846 901	4			Ana	alyst:lachat4
Free Cyanide		F	Prep Method: <b>SW-846 90</b> 1	4			Prep Date/	Time:08/25/2019 10:07
Free Cyanide		Α	ND	0.0062	mg/l	-	1	08/25/2019 12:30
			Method: EPA 350.1 F	Rev 2.0			Ana	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 F	Rev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10	mg/l	_	1	08/25/2019 16:31



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

 Client Sample ID:
 SL-7
 Work Order/ID:
 19H1551-23

 Sample Description:
 Sampled:
 08/24/2019 16:52

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

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Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN	C/E-1999			An	alyst: <b>EF</b>
Total Cyanide		F	Prep Method: NA				Prep Date/	Time: 08/25/2019 14:35
Cyanide, Total	dij	Α	ND	0.0050		mg/L	1	08/25/2019 16:47
			Method: SW-846 901	4			An	alyst:lachat4
Free Cyanide		F	Prep Method: <b>SW-846 901</b>	4			Prep Date/	Time: 08/25/2019 10:07
Free Cyanide		Α	ND	0.0062		mg/L	1	08/25/2019 12:31
			Method: EPA 350.1 R	ev 2.0			An	alyst: <b>EF</b>
Nitrogen, Ammonia as N		F	Prep Method: EPA 350.1 R	lev 2.0			Prep Date/	Time: 08/25/2019 15:00
Nitrogen, Ammonia (As N)	di	Α	ND	0.10		mg/L	1	08/25/2019 16:34



Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion

Client Sample ID: SL-8 Work Order/ID: 19H1551-24

 Sample Description:
 Sampled:
 08/24/2019
 17:39

 Matrix:
 Aqueous
 Received:
 08/25/2019
 10:00

 Analyses
 Certs
 AT
 Result
 RL
 Qual
 Units
 DF
 Analyzed

 Method: SM 4500-CN C/E-1999
 Analyst: EF

 Total Cyanide
 Prep Method: NA
 Prep Date/Time: 08/25/2019 14:35

 Cyanide, Total
 dij
 A
 ND
 0.0050
 mg/L
 1
 08/25/2019 16:49

 Cyanide, Total
 dij
 A
 ND
 0.0050
 mg/L
 1
 08/25/2019 16:49

 Method: SW-846 9014
 Analyst: lachat4

 Free Cyanide
 Prep Method: SW-846 9014
 Prep Date/Time: 08/25/2019 10:07

Free Cyanide A ND 0.0050 mg/L 1 08/25/2019 12:43

 Method: EPA 350.1 Rev 2.0
 Analyst: EF

 Nitrogen, Ammonia as N
 Prep Method: EPA 350.1 Rev 2.0
 Prep Date/Time: 08/25/2019 15:00

 Nitrogen, Ammonia (As N)
 di A 0.10
 0.10
 mg/L
 1 08/25/2019 16:36

### **ANALYTE TYPES: (AT)**

A,B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



# QC SAMPLE IDENTIFICATIONS

BLK = Method Blank
DUP = Method Duplicate
BS = Method Blank Spike
MS = Matrix Spike
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
CRI = Client Required Reporting Lir

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)

RL: Reporting Limit

RPD: Relative Percent Difference

## **Cooler Receipt Log**

Cooler ID: Default Cooler

Comments



No dates or times on sample containers

## **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?	No
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?)	No
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

						r										100	101	00	60	0					_ 9
CHAIN OF CUSTODY RECORD  Number 152303  Instructions on back	TO BE COMPLETED BY MICRÓBAC  Temperature Upon Receipt (°C)  Therm ID  CO. S  Holding Time	Samples Received on Ice? XFYes \( \Dag{NO} \) \( \Dag{N} \)	Custody Seals Intact?   Yes   No EAN/A	☐ Level 4 ☐ EDD		ON D		erved		1911/55	0/	20	03	20	9 05	Sylvania	Re La elle	10-35	P-99-08-	10-04	Archive	Date/Time 8/25/19 0815	Date/Time	Stray 6900	Page Page 34 of 36
CHAIN OF CUS- Number 15 Instructions on back	TO BE COMPL Temperature Therm ID	amples Rec	ustody Seal	☐ Level 3		ng? Tes	158	(U) Unprese		(D)01)	75	2,	5	5,5	7	2,9	から	5.6	5,5	0	Return 📋	A		10	10
OZE		: v	O.	☐ Level 2	e-mail (address)	Compliance Monitoring? ☐ Agency/Program	-ph9-	* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) * Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved	VALYSIS	(10)017) HC	7.82	2,26	7,66	1,0,7	7.80	2.99	7,5%	7,64	7,77	7,1%		(signature)	(signature)	(signature)	012
	ne to 7 busines fy lab)			Level 1		Comp	8 No.: 2/ S	er (WW), Ot n Thiosulfat	REQUESTED ANALYSIS	(F1814)	23,7	233	73,4	240	22,2		23,3	23.1	さらい	22,7	Dispose as appropriate	Received By (signature)	Received By (signature)	Received By (signature)	,
	Turnaround Time □ Routine(5 to 7 business days) KRUSH* (notify lab)	(needed by)	Report Type	Results Only	☐ Mail ☐ Fax		Sampler Phone No.: 219-644	(GW), Surface Water (SW), Waste Water (WW), Other (specify) hanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane	RE	(21/21 <i>EE</i> ) (27/1841)	X X									>		3.5	Ö		
	≒ □ <i>1</i> <b>24</b>	٤	Re	Ш	Send Invoice via:	PO No.:	S	e Water (SW odium Bisulfat		त्राप्तत	X	-				_				>	Sample Disposition	e S	8		
					Send In		and	(GW), Surfac hanol, (7) Sc		Preservative Tvpes **	4,8,4		,			1		_		>		Date/Time	Date/Time	ĮΨ	
						,	the M	/), Groundwate Acetate, (6) Met		Matrix Grab / Comp	0									> ~		S. Marie Contraction of the Cont	LE J	) (in line)	
É	e:	, Zip:		No.:			gnature:	ter (DW), Gr ) Zinc Aceta		Vo. of Containers			20	0	Q	0	4		10	<u> </u>	Radioactive	(By (signature)	d By (signar	d By (signat	
а	Invoice Address Client Name: Address:	City, State, Zip:	Contact:	Telephone No.:		Location:	Sampler Signature	Drinking Wat (4) NaOH, (5		Time	4:4	9:50	9:5	10:08	10:2	10:3	20:43	60:00	10:5	11:02	azardous [	Relinodish	Relinquished By (s	Relinquished By (s	
					dress)	146		e, Oil, Wipe, 04, (3) HCI, (		Date	8/24/19	7				_	_	_		>	s Non-Hazardous	MARKER	Lue to	Hons	741
					☐ e-mail (address)	Mintel	Collman	Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc A							700.00	10 B					Hazardous	The state	AKEN	WAVES S CONDIT	;
	7				☐ Mail ☐ Fax	Warted.	PATILIEK GE	ypes: Soil/So ypes: (1) HN		nt Sample ID	9	Q	11	7	90	madus 2/1805	,	je.	2	2	5	10 N		MYSERES	
OBAC*	dress AMB,	×					RINT): PAT	* Matrix Types: reservative Types:								N MA					d Identificatio	Nectes	/	Som?	
∅ MICROBAC*	Lab Report Address Client Name: $\mathcal{H}$ , Address:	City, State, Zip:	Contact:	Telephone No.:	Send Report via:	Project: ReceiviNA	TIAL	H1551 elorM	AL	Carey Gadzala al - Burns Harbor ursion	. IN							-			Possible Hazard Identification Comments	when G	H	1 emp	rev.12/26/2017

∅ MICROBAC<sup>∗</sup>

MICROBAC			CHAIN OF CUST-ODY-RECORD 152299	
			Instructions on back	
ab Report Address	Invoice Address	Turnaround Time	TO BE COMPLETED BY MICROBAC	
lient Name:	Client Name:	☐ Routine (5 to 7 business days) ☐ RUSH* (notify lab)	Temperature Upon Receipt (°C) Therm ID	
ddress:	Address:		Holding Time	
ity, State, Zip:	City, State, Zip:	(needed by)	Samples Received on Ice? ☐ Yes ☐ No ☐ N/A	
ontact:	Contact:	Report Type	Custody Seals Intact? Tes No N/A	
elephone No.:	Telephone No.:	☐ Results Only ☐ Level 1 ☐ Level 2	: Clevel 3 Clevel 4 Cleb	
end Report via:	Send Invoice via:	oice via:		
roject: Pacolulas Wated Monthallas	Location:	PO No.: Compliance Monitoring?	oring? ☐ Yes ☐ No m	
ampled by (PRINT): PATALL CALINGAL	Sampler Signature:	Sampler Phone No.: 29-644	2832	
* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater ** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCI, (4) NaOH, (5) Zinc Acetate, (6) Me	1	(GW), Surface Water (SW), Waste Water (WW), Other (specify) hanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane	e, (U) Unpreserved	
	>	REQUESTED ANALYSIS		
Date Client Sample ID Collected	Time 10. of Containers 10. of Compared 10. of Containers	(4,019) 64(4,019) 64(4,66) 64(4,66) 64(4,66)	190,000 (AM 1557	
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7	11:25	13.18 7.81	E) 8 13	3
OKODÍ		<u> </u>	6.7 43	19
Postret INNIUM CAST V		V V ZS. 17.67	7,7	.10
ossible Hazard Identification Hazardous Nooments	□ Non-Hazardous □ Radioactive Sa	Sample Disposition Dispose as appropriate	Return Archive	
whon Collected Time	gnature)	13:55	Date/Time/ 8/25/19 0815	
724)	Date/	1,9 0900	Date/Time	
00'	Relinquished By (Signature) Date/Time	Received By (signature)	8/25/19 09c0	
v.12/26/2017			Page Page 35 of 36	

♠ MICROBAC\*

				CHAIN OF CUSTODY RECORD
The find the second time of the control of the cont	AC*	ane.	2 0	Number 152298
Holding Time   Samples Received on kee?   Yes   No   No   Castoby State Intact?   Yes   No   No   No   Castoby Integer   Castoby State Intact?   Yes   No   No   Castoby Integer   Castoby I	m B4		Turnaround Time  Routine (5 to 7 business days)	TO BE COMPLETED BY MICROBAC Temperature Upon Receipt (°C) Therm ID
Contract:   Cont				Holding Time
Telephone No.   Send Invoice via:   Reserts Corp.   Level 1   Level 2   Level 4   EDD   No.		City, State, Zip:	(needed by)	Samples Received on Ice?    Yes    No    N/A
Telephone No.   Conditions   Conditions of		Contact:	Report Type	Custody Seals Intact? ☐ Yes ☐ No ☐ N/A
Contents   Sampler Phone No.   Compliance Notitioning   Ves   No		Telephone No.:	☐ Level 1	☐ Level 3 ☐ Level 4
Conclusion: Compliance Monitoring? The Conclusion Notes Sampler Phone No.: 279—6414—7535  4. (3) HGL (4) Model, (5) Zur. Averater, (5) Meghanol, (7) Sodium Bisulties, (8) Sampler Phone No.: 279—6414—7535  Date Time Of Conclusion (10) Meghanol, (7) Sodium Bisulties, (8) Sampler Phone No.: 279—6414—7535  Date Time Of Conclusion (10) Meghanol, (7) Sodium Bisulties, (8) Sampler Phone No.: 279—6414—7535  Date Time Of Conclusion (10) Meghanol, (7) Sodium Bisulties, (8) Sampler Phone No.: 279—779  Date Time Of Conclusion (10) Meghanol, (7) Sodium Bisulties, (8) Sample Date Time No. 2510—779  Date Time Of Conclusion (10) Meghanol, (10)	☐ Mail ☐ Fax ☐ e-ma	ail (address)	☐ Mail ☐ Fax ☐	
Sampler Phone No.: 219-644-7535  4. (3) HCl. (4) NaOH, (5) Zinc Acetate, (6) Néghnol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hacen, (10) Unpreserved  Collected Colle	`			ing?   Yes
1, 01, Wine, Dinking Water (DM), Surface Water (SW), Waste Water (WW), Other (specify)  1, (3) HOI, (4) NaOH, (5) Zinc Acetare, (6) Methods (7) Sodium Bsulfate, (8) Sodium Bsulfate, (9) Heare, (1) Unpreserved  10 Date  Time  10 Collected  1	Patrick Golon	An Sampler Signature:	Sampler Phone No.:	
Collected   Coll	Matrix Types: Soil/Solid (S), vative Types: (1) HNO3, (2)	Sludge, Oil, Wipe, Drinking Water (DW), Groundwater H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Me	(GW), Surface Water (SW), Waste Water (WW), Other (specificand), (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexa	y) ne. (U) Unpreserved
Collected   Coll			REQUESTED ANALYSIS	
0: \$124/19 147.28	Client Sample ID	Tipe of Containers	Preservative Alltold)	(Sold)
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15   15   16   16   16   16   16   16	31.18	76.30	5.0 7.4	51100
	インタ	10.00	400	108/12
	2-5	16:06	27.9	DR 0.9
	9-75	16:43	5	701
Hazardous   Non-Hazardous   Relinquished By (signature)   Pate/Time   Received By (signature)   Pate/Time	55.7	16:53	13,1 3.08	7
□ Hazardous □ Non-Hazardous □ Radioactive Sample Disposition □ Dispose as appropriate □ Return □ Archive  Relinquished By (signature) Date/Time Received By (signature) Date/Time 8/29/19  Relinquished By (signature) Date/Time Received By (signature) Date/Time Pate/Time Pate/T	56-8	V 17:39 V V	<b>&gt;</b>	782
Received By (signature)		Non-Hazardous		Return Archive
	Vectus	Relinguished By (signature)		
gnature) Date/Time/ Received By (signature) Date/Time Bate/Time Received By (signature) Date/Time Bate/Time			18:51	5/29,9
gnature) Date/Time Received By (signature) Date/Time		Kelinquished By Kignature)	0000 61	
1	Á	Relinquished By (signature)		Date/Time