



August 22, 2019

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

Work Order No.: 19H1394

Re: NPDES Excursion

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 23 sample(s) on 8/22/2019 9:50:00AM for the analyses presented in the following report as Work Order 19H1394.

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.

A handwritten signature in black ink that reads "Carey Gadzala". The signature is written in a cursive, flowing style.

Carey Gadzala
Project Manager

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WORK ORDER SAMPLE SUMMARY

Date: *Thursday, August 22, 2019*

Client: Arcelor Mittal USA, Inc.
Project: NPDES Excursion
Lab Order: 19H1394

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
19H1394-01	#8		08/21/2019 10:14	8/22/2019 9:50:00AM
19H1394-02	#9		08/21/2019 10:17	8/22/2019 9:50:00AM
19H1394-03	#10		08/21/2019 10:21	8/22/2019 9:50:00AM
19H1394-04	#11		08/21/2019 10:24	8/22/2019 9:50:00AM
19H1394-05	#12		08/21/2019 10:27	8/22/2019 9:50:00AM
19H1394-06	#13		08/21/2019 10:33	8/22/2019 9:50:00AM
19H1394-07	SL-8		08/21/2019 10:45	8/22/2019 9:50:00AM
19H1394-08	SL-7		08/21/2019 10:51	8/22/2019 9:50:00AM
19H1394-09	SL-6		08/21/2019 10:56	8/22/2019 9:50:00AM
19H1394-10	SL-5		08/21/2019 11:00	8/22/2019 9:50:00AM
19H1394-11	SL-4		08/21/2019 11:03	8/22/2019 9:50:00AM
19H1394-12	SL-3		08/21/2019 11:07	8/22/2019 9:50:00AM
19H1394-13	SL-2		08/21/2019 11:11	8/22/2019 9:50:00AM
19H1394-14	SL-1		08/21/2019 11:14	8/22/2019 9:50:00AM
19H1394-15	7		08/21/2019 11:34	8/22/2019 9:50:00AM
19H1394-16	6		08/21/2019 11:39	8/22/2019 9:50:00AM
19H1394-17	5		08/21/2019 11:42	8/22/2019 9:50:00AM
19H1394-18	4		08/21/2019 11:52	8/22/2019 9:50:00AM
19H1394-19	3		08/21/2019 11:57	8/22/2019 9:50:00AM
19H1394-20	2		08/21/2019 12:03	8/22/2019 9:50:00AM
19H1394-21	1		08/21/2019 12:11	8/22/2019 9:50:00AM
19H1394-22	OF001		08/21/2019 12:19	8/22/2019 9:50:00AM
19H1394-23	000		08/21/2019 13:23	8/22/2019 9:50:00AM

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Field Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.	Work Order: 19H1394
Client Project: NPDES Excursion	
Client Sample ID: #8	Work Order/ID: 19H1394-01
Sample Description:	Sampled: 08/21/2019 10:14
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.63	pH Units
Temperature	24.8	Deg C

Client Sample ID: #9	Work Order/ID: 19H1394-02
Sample Description:	Sampled: 08/21/2019 10:17
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.73	pH Units
Temperature	25.2	Deg C

Client Sample ID: #10	Work Order/ID: 19H1394-03
Sample Description:	Sampled: 08/21/2019 10:21
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.71	pH Units
Temperature	24.9	Deg C

Client Sample ID: #11	Work Order/ID: 19H1394-04
Sample Description:	Sampled: 08/21/2019 10:24
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.67	pH Units
Temperature	24.9	Deg C

Client Sample ID: #12	Work Order/ID: 19H1394-05
Sample Description:	Sampled: 08/21/2019 10:27
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.69	pH Units
Temperature	25.6	Deg C

Client Sample ID: #13	Work Order/ID: 19H1394-06
Sample Description:	Sampled: 08/21/2019 10:33
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	8.05	pH Units
Temperature	24.6	Deg C

Field Results

Date: *Thursday, August 22, 2019*

Client Sample ID:	SL-8	Work Order/ID:	19H1394-07
Sample Description:		Sampled:	08/21/2019 10:45
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.16	pH Units
Temperature	25.1	Deg C

Client Sample ID:	SL-7	Work Order/ID:	19H1394-08
Sample Description:		Sampled:	08/21/2019 10:51
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.17	pH Units
Temperature	24.7	Deg C

Client Sample ID:	SL-6	Work Order/ID:	19H1394-09
Sample Description:		Sampled:	08/21/2019 10:56
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.09	pH Units
Temperature	24.8	Deg C

Client Sample ID:	SL-5	Work Order/ID:	19H1394-10
Sample Description:		Sampled:	08/21/2019 11:00
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.11	pH Units
Temperature	25.1	Deg C

Client Sample ID:	SL-4	Work Order/ID:	19H1394-11
Sample Description:		Sampled:	08/21/2019 11:03
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.08	pH Units
Temperature	24.9	Deg C

Client Sample ID:	SL-3	Work Order/ID:	19H1394-12
Sample Description:		Sampled:	08/21/2019 11:07
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.08	pH Units
Temperature	24.6	Deg C

Client Sample ID:	SL-2	Work Order/ID:	19H1394-13
Sample Description:		Sampled:	08/21/2019 11:11
Matrix:	Aqueous	Received:	08/22/2019 09:50

Analyses	Result	Units
pH	8.06	pH Units

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Field Results

Date: Thursday, August 22, 2019

Temperature	24.8	Deg C
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Client Sample ID: SL-1
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-14
Sampled: 08/21/2019 11:14
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.93	pH Units
Temperature	25.2	Deg C

Client Sample ID: 7
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-15
Sampled: 08/21/2019 11:34
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.68	pH Units
Temperature	25.7	Deg C

Client Sample ID: 6
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-16
Sampled: 08/21/2019 11:39
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.64	pH Units
Temperature	25.7	Deg C

Client Sample ID: 5
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-17
Sampled: 08/21/2019 11:42
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.73	pH Units
Temperature	26.6	Deg C

Client Sample ID: 4
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-18
Sampled: 08/21/2019 11:52
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.81	pH Units
Temperature	25.4	Deg C

Client Sample ID: 3
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-19
Sampled: 08/21/2019 11:57
Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.81	pH Units
Temperature	25.4	Deg C

Field Results

Date: *Thursday, August 22, 2019*

Client Sample ID: 2	Work Order/ID: 19H1394-20
Sample Description:	Sampled: 08/21/2019 12:03
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.82	pH Units
Temperature	26.7	Deg C

Client Sample ID: 1	Work Order/ID: 19H1394-21
Sample Description:	Sampled: 08/21/2019 12:11
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.92	pH Units
Temperature	26.5	Deg C

Client Sample ID: OF001	Work Order/ID: 19H1394-22
Sample Description:	Sampled: 08/21/2019 12:19
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.83	pH Units
Temperature	27.8	Deg C

Client Sample ID: 000	Work Order/ID: 19H1394-23
Sample Description:	Sampled: 08/21/2019 13:23
Matrix: Aqueous	Received: 08/22/2019 09:50

Analyses	Result	Units
pH	7.77	pH Units
Temperature	22.4	Deg C

Analytical Results

Date: *Thursday, August 22, 2019*

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-01
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:14
Client Sample ID:	#8	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:03
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 13:50
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	5.7	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.23	0.10		mg/L	1	08/22/2019 13:11

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-02
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:17
Client Sample ID:	#9	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:04
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	0.011	0.0062		mg/L	1	08/22/2019 13:55
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	6.1	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.22	0.10		mg/L	1	08/22/2019 13:13

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-03
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:21
Client Sample ID:	#10	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:06
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:03
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	5.9	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.28	0.10		mg/L	1	08/22/2019 13:16

Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: #11
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-04
Sampled: 08/21/2019 10:24
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 10:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:08
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:09
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	6.0	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35		
Nitrogen, Ammonia (As N)	di	A	0.28	0.10		mg/L	1	08/22/2019 13:18

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-05
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:27
Client Sample ID:	#12	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:09
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:10
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	5.4	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.20	0.10		mg/L	1	08/22/2019 13:21

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-06
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:33
Client Sample ID:	#13	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:11
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:12
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	7.8	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:23



Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: SL-8
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-07
Sampled: 08/21/2019 10:45
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 10:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:13
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:14
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	8.4	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35		
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:25

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Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: SL-7
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-08
Sampled: 08/21/2019 10:51
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 10:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:14
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:15
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	8.5	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35		
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:28

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-09
Client Project:	NPDES Excursion	Sampled:	08/21/2019 10:56
Client Sample ID:	SL-6	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: SM 4500-CN C/E-1999			Analyst: ABG			
Total Cyanide		Prep Method: NA			Prep Date/Time: 08/22/2019 10:45			
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:16
		Method: SW-846 9014			Analyst: ABG			
Free Cyanide		Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22			
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:17
		Method: SM 4500-O C-2001			Analyst: DAT			
Dissolved Oxygen		Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19			
Oxygen, Dissolved	di	A	8.4	0.20	H	mg/L	1	08/22/2019 11:19
		Method: EPA 350.1 Rev 2.0			Analyst: ABG			
Nitrogen, Ammonia as N		Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35			
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:30



Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: SL-5
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-10
Sampled: 08/21/2019 11:00
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 10:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:25
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:19
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	8.4	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35		
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:32

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Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-11
Client Project:	NPDES Excursion	Sampled:	08/21/2019 11:03
Client Sample ID:	SL-4	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 10:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:21
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:24
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	8.4	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:40

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Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: SL-3
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-12
Sampled: 08/21/2019 11:07
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 10:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:23
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:25
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	8.4	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 11:35		
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:42

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Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-13
Client Project:	NPDES Excursion	Sampled:	08/21/2019 11:11
Client Sample ID:	SL-2	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
		Method: SM 4500-CN C/E-1999					Analyst: ABG	
Total Cyanide		Prep Method: NA					Prep Date/Time: 08/22/2019 12:45	
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:26
		Method: SW-846 9014					Analyst: ABG	
Free Cyanide		Prep Method: SW-846 9014					Prep Date/Time: 08/22/2019 12:22	
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:27
		Method: SM 4500-O C-2001					Analyst: DAT	
Dissolved Oxygen		Prep Method: SM 4500-O C-2001					Prep Date/Time: 08/22/2019 11:19	
Oxygen, Dissolved	di	A	8.3	0.20	H	mg/L	1	08/22/2019 11:19
		Method: EPA 350.1 Rev 2.0					Analyst: ABG	
Nitrogen, Ammonia as N		Prep Method: EPA 350.1 Rev 2.0					Prep Date/Time: 08/22/2019 11:35	
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 13:44

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-14
Client Project:	NPDES Excursion	Sampled:	08/21/2019 11:14
Client Sample ID:	SL-1	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 12:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:28
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:29
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	7.8	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 11:35								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.11	0.10		mg/L	1	08/22/2019 13:47



Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: 7
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-15
Sampled: 08/21/2019 11:34
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 12:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:30
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:31
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	5.9	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 12:51		
Nitrogen, Ammonia (As N)	di	A	0.25	0.10		mg/L	1	08/22/2019 14:35

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Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: 6
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-16
Sampled: 08/21/2019 11:39
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 12:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:35
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:32
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	6.7	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 12:51		
Nitrogen, Ammonia (As N)	di	A	0.25	0.10		mg/L	1	08/22/2019 14:42

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-17
Client Project:	NPDES Excursion	Sampled:	08/21/2019 11:42
Client Sample ID:	5	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 12:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:36
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:34
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	6.8	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 12:51								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.25	0.10		mg/L	1	08/22/2019 14:44



Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: 4
Sample Description:
Matrix: Aqueous

Work Order/ID: 19H1394-18
Sampled: 08/21/2019 11:52
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 12:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:42
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:36
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	7.0	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 12:51		
Nitrogen, Ammonia (As N)	di	A	0.23	0.10		mg/L	1	08/22/2019 14:47

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Analytical Results

Date: Thursday, August 22, 2019

Client: Arcelor Mittal USA, Inc.
Client Project: NPDES Excursion
Client Sample ID: 3
Sample Description:
Matrix: Aqueous
Work Order/ID: 19H1394-19
Sampled: 08/21/2019 11:57
Received: 08/22/2019 9:50

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999			Analyst: ABG		
Total Cyanide			Prep Method: NA			Prep Date/Time: 08/22/2019 12:45		
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:43
			Method: SW-846 9014			Analyst: ABG		
Free Cyanide			Prep Method: SW-846 9014			Prep Date/Time: 08/22/2019 12:22		
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:37
			Method: SM 4500-O C-2001			Analyst: DAT		
Dissolved Oxygen			Prep Method: SM 4500-O C-2001			Prep Date/Time: 08/22/2019 11:19		
Oxygen, Dissolved	di	A	7.1	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0			Analyst: ABG		
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0			Prep Date/Time: 08/22/2019 12:51		
Nitrogen, Ammonia (As N)	di	A	0.20	0.10		mg/L	1	08/22/2019 14:54

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Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-20
Client Project:	NPDES Excursion	Sampled:	08/21/2019 12:03
Client Sample ID:	2	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 12:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:45
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:39
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	7.2	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 12:51								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.21	0.10		mg/L	1	08/22/2019 14:56

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-21
Client Project:	NPDES Excursion	Sampled:	08/21/2019 12:11
Client Sample ID:	1	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
Method: SM 4500-CN C/E-1999 Analyst: ABG								
Prep Method: NA Prep Date/Time: 08/22/2019 12:45								
Total Cyanide								
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:47
Method: SW-846 9014 Analyst: ABG								
Prep Method: SW-846 9014 Prep Date/Time: 08/22/2019 12:22								
Free Cyanide								
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:44
Method: SM 4500-O C-2001 Analyst: DAT								
Prep Method: SM 4500-O C-2001 Prep Date/Time: 08/22/2019 11:19								
Dissolved Oxygen								
Oxygen, Dissolved	di	A	7.2	0.20	H	mg/L	1	08/22/2019 11:19
Method: EPA 350.1 Rev 2.0 Analyst: ABG								
Prep Method: EPA 350.1 Rev 2.0 Prep Date/Time: 08/22/2019 12:51								
Nitrogen, Ammonia as N								
Nitrogen, Ammonia (As N)	di	A	0.27	0.10		mg/L	1	08/22/2019 14:59

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-22
Client Project:	NPDES Excursion	Sampled:	08/21/2019 12:19
Client Sample ID:	OF001	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999		Analyst: ABG			
Total Cyanide			Prep Method: NA		Prep Date/Time: 08/22/2019 12:45			
Cyanide, Total	dij	A	0.0050	0.0050		mg/L	1	08/22/2019 15:52
			Method: SW-846 9014		Analyst: ABG			
Free Cyanide			Prep Method: SW-846 9014		Prep Date/Time: 08/22/2019 12:22			
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:46
			Method: SM 4500-O C-2001		Analyst: DAT			
Dissolved Oxygen			Prep Method: SM 4500-O C-2001		Prep Date/Time: 08/22/2019 11:19			
Oxygen, Dissolved	di	A	7.1	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0		Analyst: ABG			
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0		Prep Date/Time: 08/22/2019 12:51			
Nitrogen, Ammonia (As N)	di	A	0.30	0.10		mg/L	1	08/22/2019 15:01

Analytical Results

Date: Thursday, August 22, 2019

Client:	Arcelor Mittal USA, Inc.	Work Order/ID:	19H1394-23
Client Project:	NPDES Excursion	Sampled:	08/21/2019 13:23
Client Sample ID:	000	Received:	08/22/2019 9:50
Sample Description:			
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: SM 4500-CN C/E-1999		Analyst: ABG			
Total Cyanide			Prep Method: NA		Prep Date/Time: 08/22/2019 12:45			
Cyanide, Total	dij	A	ND	0.0050		mg/L	1	08/22/2019 15:53
			Method: SW-846 9014		Analyst: ABG			
Free Cyanide			Prep Method: SW-846 9014		Prep Date/Time: 08/22/2019 12:22			
Free Cyanide		A	ND	0.0062		mg/L	1	08/22/2019 14:47
			Method: SM 4500-O C-2001		Analyst: DAT			
Dissolved Oxygen			Prep Method: SM 4500-O C-2001		Prep Date/Time: 08/22/2019 11:19			
Oxygen, Dissolved	di	A	7.8	0.20	H	mg/L	1	08/22/2019 11:19
			Method: EPA 350.1 Rev 2.0		Analyst: ABG			
Nitrogen, Ammonia as N			Prep Method: EPA 350.1 Rev 2.0		Prep Date/Time: 08/22/2019 12:51			
Nitrogen, Ammonia (As N)	di	A	ND	0.10		mg/L	1	08/22/2019 15:03

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

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)**H:** Sample was analyzed past holding time.**RL:** Reporting Limit**RPD:** Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler

Temp: 2.7°C
 MICROBAC®

Comments

No dates or times on sample containers

Cooler Inspection Checklist

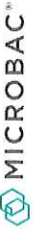
Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	No
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified 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

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RUSH!

CHAIN OF CUSTODY RECORD



Number **152352**
Instructions on back

Lab Report Address
 Invoice Address
 Client Name:
 Address:
 City, State, Zip:
 Contact:
 Telephone No.:

Turnaround Time
 Routine (5 to 7 business days)
 RUSH* (notify lab)
 (needed by)
 Report Type
 Results Only Level 1 Level 2 Level 3 Level 4 EDD

Temperature Upon Receipt (°C) **3**
 Therm ID
 Holding Time
 Samples Received on Ice? Yes No N/A
 Custody Seals Intact? Yes No N/A

Send Report via: Mail Fax e-mail (address)
 Compliance Monitoring? Yes No
 Agency/Program

PO No.:
 Sampler Phone No.: **219. 644-7585**

Project: **Receiving Water Monitoring**
 Location:
 Sampler Signature: *[Signature]*
 Sampler Name: **Patrick M. Gorman**

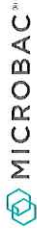
Sampled by (PRINT): **Patrick M. Gorman**
 Date: **19H1394**

* 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

Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types**	D.O.	NH4	Free Cu	Temp	Additional Notes
8	8-21-19	10:14	4	AR	U, 2, 4					24.8	7.63-01
9		10:17								25.2	7.73-02
10		10:21								24.9	7.76-03
11		10:24								24.9	7.67-04
12		10:27								25.6	7.69-05
13		10:33								24.6	8.05-06
56-8		10:45								25.1	8.26-07
56-7		10:51								24.7	8.17-08
56-6		10:56								24.8	8.09-09
56-5		11:00								25.1	8.11-10

Possible Hazard Identification Hazardous Non-Hazardous Radioactive
 Comments
 Relinquished By (signature) *[Signature]* Date/Time **8-21-19 15:00hrs**
 Relinquished By (signature) *[Signature]* Date/Time **8/22/19 0950**
 Relinquished By (signature) *[Signature]* Date/Time **8-22-19/0950**

CHAIN OF CUSTODY RECORD



Number **152354**
Instructions on back

Lab Report Address: **TO BE COMPLETED BY MICROBAC**

Client Name: Routine (5 to 7 business days) RUSH* (notify lab)

Address: Mail Fax e-mail (address)

City, State, Zip: (needed by)

Contact: **Report Type** Results Only Level 1 Level 2 Level 3 Level 4 EDD

Telephone No.: Mail Fax e-mail (address)

Send Report via: Mail Fax e-mail (address)

Temperature Upon Receipt (°C) Yes No N/A

Therm ID Yes No N/A

Holding Time Yes No N/A

Custody Seals Intact? Yes No N/A

PO No.: Yes No

Compliance Monitoring? Yes No

Agency/Program

Project: **Receiving Water Monitoring**

Sampler Signature: *John M. Gorman*

Sampler Phone No.: **219-644-7585**

Sampled by (PRINT): **Patrick Gorman**

PH 314

* 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

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	DO	NH4	CN	FreeN	Temp	Additional Notes
	SL-4	8-21-19	11:03	4	AS	5	U, 2, 4					24.9	8.08-11
	SL-3		11:07									24.6	8.08-12
	SL-2		11:11									24.8	8.08-13
	JU-1		11:14									25.2	7.92-14
	7		11:34									25.7	7.68-15
	6		11:39									25.7	7.64-16
	5		11:42									26.6	7.73-17
	4		11:52									25.4	7.81-18
	3		11:57									25.4	7.81-19
	2		12:03									26.7	7.82-20

Possible Hazard Identification Hazardous Non-Hazardous Radioactive

Sample Disposition Dispose as appropriate Return Archive

Comments: **Temp & pH recorded when samples were collected.**

Relinquished By (signature): *John M. Gorman* Date/Time: **8-21-19 15:00hrs**

Relinquished By (signature): *M. Gorman* Date/Time: **8/22/19 0950**

Relinquished By (signature): *Nedra Parward* Date/Time: **8-22-19 0630**

