



11-Sep-2019

Robert Macial
ArcelorMittal USA LLC
Gary Plate Processing
One North Buchanan Street
Gary, IN 46402

Re: **Arcelor Mittal - Burns Harbor E.R.**

Work Order: **19090418**

Dear Robert,

ALS Environmental received 25 samples on 07-Sep-2019 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 44.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink that reads "Amanda Grzybowski".

Electronically approved by: Amanda Grzybowski

Amanda Grzybowski
Project Manager

Report of Laboratory Analysis

Certificate No: IN: C-MI-08

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS Environmental logo icon consisting of a stylized flame inside a triangle.

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090418

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19090418-01	15	Aqueous		9/7/2019 09:15	9/8/2019 07:00	<input type="checkbox"/>
19090418-01	15	Aqueous		9/7/2019 09:15	9/9/2019 13:30	<input type="checkbox"/>
19090418-02	14	Aqueous		9/7/2019 09:24	9/8/2019 07:00	<input type="checkbox"/>
19090418-02	14	Aqueous		9/7/2019 09:24	9/9/2019 13:30	<input type="checkbox"/>
19090418-03	7	Aqueous		9/7/2019 09:36	9/8/2019 07:00	<input type="checkbox"/>
19090418-03	7	Aqueous		9/7/2019 09:36	9/9/2019 13:30	<input type="checkbox"/>
19090418-04	6	Aqueous		9/7/2019 09:47	9/8/2019 07:00	<input type="checkbox"/>
19090418-04	6	Aqueous		9/7/2019 09:47	9/9/2019 13:30	<input type="checkbox"/>
19090418-05	5	Aqueous		9/7/2019 09:56	9/8/2019 07:00	<input type="checkbox"/>
19090418-05	5	Aqueous		9/7/2019 09:56	9/9/2019 13:30	<input type="checkbox"/>
19090418-06	4	Aqueous		9/7/2019 10:09	9/8/2019 07:00	<input type="checkbox"/>
19090418-06	4	Aqueous		9/7/2019 10:09	9/9/2019 13:30	<input type="checkbox"/>
19090418-07	3	Aqueous		9/7/2019 10:18	9/8/2019 07:00	<input type="checkbox"/>
19090418-07	3	Aqueous		9/7/2019 10:18	9/9/2019 13:30	<input type="checkbox"/>
19090418-08	2	Aqueous		9/7/2019 10:27	9/8/2019 07:00	<input type="checkbox"/>
19090418-08	2	Aqueous		9/7/2019 10:27	9/9/2019 13:30	<input type="checkbox"/>
19090418-09	1	Aqueous		9/7/2019 10:36	9/8/2019 07:00	<input type="checkbox"/>
19090418-09	1	Aqueous		9/7/2019 10:36	9/9/2019 13:30	<input type="checkbox"/>
19090418-10	OF001	Aqueous		9/7/2019 10:52	9/8/2019 07:00	<input type="checkbox"/>
19090418-10	OF001	Aqueous		9/7/2019 10:52	9/9/2019 13:30	<input type="checkbox"/>
19090418-11	8	Aqueous		9/7/2019 11:20	9/8/2019 07:00	<input type="checkbox"/>
19090418-11	8	Aqueous		9/7/2019 11:20	9/9/2019 13:30	<input type="checkbox"/>
19090418-12	9	Aqueous		9/7/2019 11:31	9/8/2019 07:00	<input type="checkbox"/>
19090418-12	9	Aqueous		9/7/2019 11:31	9/9/2019 13:30	<input type="checkbox"/>
19090418-13	10	Aqueous		9/7/2019 11:43	9/8/2019 07:00	<input type="checkbox"/>
19090418-13	10	Aqueous		9/7/2019 11:43	9/9/2019 13:30	<input type="checkbox"/>
19090418-14	11	Aqueous		9/7/2019 11:55	9/8/2019 07:00	<input type="checkbox"/>
19090418-14	11	Aqueous		9/7/2019 11:55	9/9/2019 13:30	<input type="checkbox"/>
19090418-15	12	Aqueous		9/7/2019 12:09	9/8/2019 07:00	<input type="checkbox"/>
19090418-15	12	Aqueous		9/7/2019 12:09	9/9/2019 13:30	<input type="checkbox"/>
19090418-16	13	Aqueous		9/7/2019 12:19	9/8/2019 07:00	<input type="checkbox"/>
19090418-16	13	Aqueous		9/7/2019 12:19	9/9/2019 13:30	<input type="checkbox"/>
19090418-17	SL-1	Aqueous		9/7/2019 12:50	9/8/2019 07:00	<input type="checkbox"/>
19090418-17	SL-1	Aqueous		9/7/2019 12:50	9/9/2019 13:30	<input type="checkbox"/>
19090418-18	SL-2	Aqueous		9/7/2019 13:24	9/8/2019 07:00	<input type="checkbox"/>
19090418-18	SL-2	Aqueous		9/7/2019 13:24	9/9/2019 13:30	<input type="checkbox"/>
19090418-19	SL-3	Aqueous		9/7/2019 13:39	9/8/2019 07:00	<input type="checkbox"/>
19090418-19	SL-3	Aqueous		9/7/2019 13:39	9/9/2019 13:30	<input type="checkbox"/>
19090418-20	SL-4	Aqueous		9/7/2019 13:50	9/8/2019 07:00	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090418

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19090418-20	SL-4	Aqueous		9/7/2019 13:50	9/9/2019 13:30	<input type="checkbox"/>
19090418-21	SL-5	Aqueous		9/7/2019 14:14	9/8/2019 07:00	<input type="checkbox"/>
19090418-21	SL-5	Aqueous		9/7/2019 14:14	9/9/2019 13:30	<input type="checkbox"/>
19090418-22	SL-6	Aqueous		9/7/2019 14:29	9/8/2019 07:00	<input type="checkbox"/>
19090418-22	SL-6	Aqueous		9/7/2019 14:29	9/9/2019 13:30	<input type="checkbox"/>
19090418-23	SL-7	Aqueous		9/7/2019 15:00	9/8/2019 07:00	<input type="checkbox"/>
19090418-23	SL-7	Aqueous		9/7/2019 15:00	9/9/2019 13:30	<input type="checkbox"/>
19090418-24	SL-8	Aqueous		9/7/2019 15:45	9/8/2019 07:00	<input type="checkbox"/>
19090418-24	SL-8	Aqueous		9/7/2019 15:45	9/9/2019 13:30	<input type="checkbox"/>
19090418-25	000	Aqueous		9/7/2019 16:30	9/8/2019 07:00	<input type="checkbox"/>
19090418-25	000	Aqueous		9/7/2019 16:30	9/9/2019 13:30	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090418

Case Narrative

Samples in this Work Order were received and analyzed at the ALS Valparaiso facility at 2400 Cumberland Drive, Valparaiso, Indiana; under Florida NELAP certification ID# E871119.

Any Batch MS/MSD results that are flagged, but not addressed in this Case Narrative, are not related to this project's sample(s); therefore the data does not require qualification.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 15
Collection Date: 9/7/2019 09:15 AM

Work Order: 19090418
Lab ID: 19090418-01
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.40		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.75		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.162		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 14
Collection Date: 9/7/2019 09:24 AM

Work Order: 19090418
Lab ID: 19090418-02
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.20		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.93		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.7		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0562		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 7
Collection Date: 9/7/2019 09:36 AM

Work Order: 19090418
Lab ID: 19090418-03
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.50		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.73		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.2		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.168		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:23
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 6
Collection Date: 9/7/2019 09:47 AM

Work Order: 19090418
Lab ID: 19090418-04
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.80		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.80		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.6		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.158		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:25
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 5
Collection Date: 9/7/2019 09:56 AM

Work Order: 19090418
Lab ID: 19090418-05
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.80		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	U		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.168		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:28
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 4
Collection Date: 9/7/2019 10:09 AM

Work Order: 19090418
Lab ID: 19090418-06
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.50		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.83		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.163		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:32
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 3
Collection Date: 9/7/2019 10:18 AM

Work Order: 19090418
Lab ID: 19090418-07
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.60		0		mg/L	1	9/7/2019
							Analyst: ALS
PH (FIELD)							
pH (field)	7.81		0		s.u.	1	9/7/2019
							Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.0		0		°C	1	9/7/2019
							Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
							Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
							Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.151		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:33
							Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 2
Collection Date: 9/7/2019 10:27 AM

Work Order: 19090418
Lab ID: 19090418-08
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.40		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.87		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.3		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.157		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 1
Collection Date: 9/7/2019 10:36 AM

Work Order: 19090418
Lab ID: 19090418-09
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.20		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.82		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	23.8		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.188		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:36
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: OF001
Collection Date: 9/7/2019 10:52 AM

Work Order: 19090418
Lab ID: 19090418-10
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.10		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.85		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	24.5		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.250		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:37

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 8
Collection Date: 9/7/2019 11:20 AM

Work Order: 19090418
Lab ID: 19090418-11
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.60		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.74		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	23.8		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.153		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:40
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 9
Collection Date: 9/7/2019 11:31 AM

Work Order: 19090418
Lab ID: 19090418-12
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.10		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.76		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	23.2		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.140		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:42
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 10
Collection Date: 9/7/2019 11:43 AM

Work Order: 19090418
Lab ID: 19090418-13
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.70		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.79		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	23.7		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.145		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:43

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 11
Collection Date: 9/7/2019 11:55 AM

Work Order: 19090418
Lab ID: 19090418-14
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.50		0		mg/L	1	9/7/2019
PH (FIELD)							
pH (field)	7.77		0		s.u.	1	9/7/2019
TEMPERATURE (FIELD)							
Temperature (field)	24.9		0		°C	1	9/7/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.105		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 12
Collection Date: 9/7/2019 12:09 PM

Work Order: 19090418
Lab ID: 19090418-15
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.00		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.77		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	23.6		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.103		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:48
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 13
Collection Date: 9/7/2019 12:19 PM

Work Order: 19090418
Lab ID: 19090418-16
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.00		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.63		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.6		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0966		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:49
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-1
Collection Date: 9/7/2019 12:50 PM

Work Order: 19090418
Lab ID: 19090418-17
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.00		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.92		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.8		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0538		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:50
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-2
Collection Date: 9/7/2019 01:24 PM

Work Order: 19090418
Lab ID: 19090418-18
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.50		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.94		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0599		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:54
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-3
Collection Date: 9/7/2019 01:39 PM

Work Order: 19090418
Lab ID: 19090418-19
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.20		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.15		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0184	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 10:57
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-4
Collection Date: 9/7/2019 01:50 PM

Work Order: 19090418
Lab ID: 19090418-20
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.80		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.14		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.3		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.00982	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:01
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-5
Collection Date: 9/7/2019 02:14 PM

Work Order: 19090418
Lab ID: 19090418-21
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.00		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.11		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.1		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0113	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:02
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-6
Collection Date: 9/7/2019 02:29 PM

Work Order: 19090418
Lab ID: 19090418-22
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.80		0		mg/L	1	9/7/2019
							Analyst: ALS
							Method: A4500-O G-11
PH (FIELD)							
pH (field)	8.12		0		s.u.	1	9/7/2019
							Analyst: ALS
							Method: A4500-H B-11
TEMPERATURE (FIELD)							
Temperature (field)	22.3		0		°C	1	9/7/2019
							Analyst: ALS
							Method: A2550 B-10
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
							Analyst: JB
							Method: KELADA-01
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
							Analyst: JB
							Method: KELADA-01
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0104	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:03
							Analyst: CD
							Method: E350.1 R2.0

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-7
Collection Date: 9/7/2019 03:00 PM

Work Order: 19090418
Lab ID: 19090418-23
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.90		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.09		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.1		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0131	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:07
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-8
Collection Date: 9/7/2019 03:45 PM

Work Order: 19090418
Lab ID: 19090418-24
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.20		0		mg/L	1	9/7/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	8.10		0		s.u.	1	9/7/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/7/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
			Method: KELADA-01				Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
			Method: KELADA-01				Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0322		0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:08
			Method: E350.1 R2.0				Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 11-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 000
Collection Date: 9/7/2019 04:30 PM

Work Order: 19090418
Lab ID: 19090418-25
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.00		0		mg/L	1	9/7/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.87		0		s.u.	1	9/7/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.8		0		°C	1	9/7/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/10/2019 12:38
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/11/2019 09:51
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0313	J	0.00980	0.0320	mg NH3-N/L	1	9/9/2019 11:09
				Method: E350.1 R2.0			Analyst: CD

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
WorkOrder: 19090418

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
°C	Degrees Celcius
mg NH3-N/L	Milligrams Ammonia-Nitrogen per Liter
mg/L	Milligrams per Liter
s.u.	Standard Units

Client: ArcelorMittal USA LLC

QC BATCH REPORT

Work Order: 19090418

Project: Arcelor Mittal - Burns Harbor E.R.

Batch ID: **R270193a** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK	Sample ID: MB-R270193-R270193a				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID:	Run ID: SKALAR1_190910A			SeqNo: 5907777		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total U 0.0050

LCS	Sample ID: LCS-R270193-R270193a				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID:	Run ID: SKALAR1_190910A			SeqNo: 5907778		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.09289 0.0050 0.1 0 92.9 90-110 0

MS	Sample ID: 19090418-01B MS				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID: 15	Run ID: SKALAR1_190910A			SeqNo: 5907780		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.09887 0.0050 0.1 -0.00007 98.9 90-110 0

MS	Sample ID: 19090418-10B MS				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID: OF001	Run ID: SKALAR1_190910A			SeqNo: 5907793		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.104 0.0050 0.1 0.00027 104 90-110 0

MSD	Sample ID: 19090418-01B MSD				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID: 15	Run ID: SKALAR1_190910A			SeqNo: 5907781		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1011 0.0050 0.1 -0.00007 101 90-110 0.09887 2.24 20

MSD	Sample ID: 19090418-10B MSD				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM			
Client ID: OF001	Run ID: SKALAR1_190910A			SeqNo: 5907794		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.105 0.0050 0.1 0.00027 105 90-110 0.104 0.909 20

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
Work Order: 19090418
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270193a** Instrument ID **SKALAR1** Method: **Kelada-01**

The following samples were analyzed in this batch:

19090418-01B	19090418-02B	19090418-03B
19090418-04B	19090418-05B	19090418-06B
19090418-07B	19090418-08B	19090418-09B
19090418-10B	19090418-11B	19090418-12B
19090418-13B	19090418-14B	19090418-15B
19090418-16B	19090418-17B	19090418-18B
19090418-19B	19090418-20B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270193b** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270193-R270193b				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID:		Run ID: SKALAR1_190910A		SeqNo: 5908304		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total U 0.0050

LCS		Sample ID: LCS-R270193-R270193b				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID:		Run ID: SKALAR1_190910A		SeqNo: 5908305		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.09559 0.0050 0.1 0 95.6 90-110 0

MS		Sample ID: 19090418-21B MS				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID: SL-5		Run ID: SKALAR1_190910A		SeqNo: 5908307		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1015 0.0050 0.1 0.00013 101 90-110 0

MS		Sample ID: 19090440-05B MS				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID:		Run ID: SKALAR1_190910A		SeqNo: 5908320		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1053 0.0050 0.1 0.00174 104 90-110 0

MSD		Sample ID: 19090418-21B MSD				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID: SL-5		Run ID: SKALAR1_190910A		SeqNo: 5908308		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1015 0.0050 0.1 0.00013 101 90-110 0.1015 0.0493 20

MSD		Sample ID: 19090440-05B MSD				Units: mg/L		Analysis Date: 9/10/2019 12:38 PM		
Client ID:		Run ID: SKALAR1_190910A		SeqNo: 5908321		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1053 0.0050 0.1 0.00174 104 90-110 0.1053 0.0095 20

The following samples were analyzed in this batch:

19090418-21B	19090418-22B	19090418-23B
19090418-24B	19090418-25B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270286a** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270286-R270286a				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A				SeqNo: 5910699		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD U 0.0050

LCS		Sample ID: LCS-R270286-R270286a				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A				SeqNo: 5910700		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.09956 0.0050 0.1 0 99.6 90-110 0

MS		Sample ID: 19090418-01C MS				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: 15		Run ID: SKALAR1_190911A				SeqNo: 5910702		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.103 0.0050 0.1 -0.00054 104 90-110 0

MS		Sample ID: 19090418-10C MS				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: OF001		Run ID: SKALAR1_190911A				SeqNo: 5910715		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.107 0.0050 0.1 0.0001 107 90-110 0

MSD		Sample ID: 19090418-01C MSD				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: 15		Run ID: SKALAR1_190911A				SeqNo: 5910703		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1045 0.0050 0.1 -0.00054 105 90-110 0.103 1.4 20

MSD		Sample ID: 19090418-10C MSD				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: OF001		Run ID: SKALAR1_190911A				SeqNo: 5910716		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1064 0.0050 0.1 0.0001 106 90-110 0.107 0.562 20

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
Work Order: 19090418
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270286a** Instrument ID **SKALAR1** Method: **Kelada-01**

The following samples were analyzed in this batch:

19090418-01C	19090418-02C	19090418-03C
19090418-04C	19090418-05C	19090418-06C
19090418-07C	19090418-08C	19090418-09C
19090418-10C	19090418-11C	19090418-12C
19090418-13C	19090418-14C	19090418-15C
19090418-16C	19090418-17C	19090418-18C
19090418-19C	19090418-20C	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270286b** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270286-R270286b				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A		SeqNo: 5910731		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD U 0.0050

LCS		Sample ID: LCS-R270286-R270286b				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A		SeqNo: 5910732		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.09775 0.0050 0.1 0 97.8 90-110 0

MS		Sample ID: 19090418-21C MS				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: SL-5		Run ID: SKALAR1_190911A		SeqNo: 5910734		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.103 0.0050 0.1 -0.00085 104 90-110 0

MS		Sample ID: 19090440-05C MS				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A		SeqNo: 5910779		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1055 0.0050 0.1 -0.00021 106 90-110 0

MSD		Sample ID: 19090418-21C MSD				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: SL-5		Run ID: SKALAR1_190911A		SeqNo: 5910735		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1042 0.0050 0.1 -0.00085 105 90-110 0.103 1.1 20

MSD		Sample ID: 19090440-05C MSD				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A		SeqNo: 5910780		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1067 0.0050 0.1 -0.00021 107 90-110 0.1055 1.11 20

The following samples were analyzed in this batch:

19090418-21C	19090418-22C	19090418-23C
19090418-24C	19090418-25C	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270077** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MBLK	Sample ID: MBLK-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:19 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903579		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen U 0.032

MBLK	Sample ID: MBLK-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:55 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903635		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen U 0.032

MBLK	Sample ID: MBLK-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:33 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903667		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen U 0.032

LCS	Sample ID: LCS-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:20 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903580		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.389 0.032 0.4 0 97.2 90-110 0

LCS	Sample ID: LCS-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:56 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903636		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.391 0.032 0.4 0 97.8 90-110 0

LCS	Sample ID: LCS-R270077		Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:35 AM					
Client ID:	Run ID: VAL-LACHAT_190909A		SeqNo: 5903668		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.388 0.032 0.4 0 97 90-110 0

MS	Sample ID: 19090418-04A MS		Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:26 AM					
Client ID: 6	Run ID: VAL-LACHAT_190909A		SeqNo: 5903611		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.337 0.032 0.2 0.158 89.5 90-110 0 S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270077** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MS		Sample ID: 19090418-10A MS				Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:38 AM		
Client ID: OF001		Run ID: VAL-LACHAT_190909A				SeqNo: 5903621		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.402 0.032 0.2 0.25 76 90-110 0 S

MS		Sample ID: 19090418-17A MS				Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:51 AM		
Client ID: SL-1		Run ID: VAL-LACHAT_190909A				SeqNo: 5903632		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.25 0.032 0.2 0.0538 98.1 90-110 0

MS		Sample ID: 19090418-22A MS				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:04 AM		
Client ID: SL-6		Run ID: VAL-LACHAT_190909A				SeqNo: 5903643		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.202 0.032 0.2 0.0104 95.8 90-110 0

MS		Sample ID: 19090440-04A MS				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:18 AM		
Client ID:		Run ID: VAL-LACHAT_190909A				SeqNo: 5903654		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.338 0.032 0.2 0.175 81.5 90-110 0 S

MS		Sample ID: 19090440-11A MS				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:31 AM		
Client ID:		Run ID: VAL-LACHAT_190909A				SeqNo: 5903665		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.315 0.032 0.2 0.125 95 90-110 0

MSD		Sample ID: 19090418-04A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:27 AM		
Client ID: 6		Run ID: VAL-LACHAT_190909A				SeqNo: 5903612		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.337 0.032 0.2 0.158 89.5 90-110 0.337 0 20 S

MSD		Sample ID: 19090418-10A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:39 AM		
Client ID: OF001		Run ID: VAL-LACHAT_190909A				SeqNo: 5903622		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.403 0.032 0.2 0.25 76.5 90-110 0.402 0.248 20 S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ArcelorMittal USA LLC
 Work Order: 19090418
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270077** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MSD		Sample ID: 19090418-17A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 10:52 AM		
Client ID: SL-1		Run ID: VAL-LACHAT_190909A				SeqNo: 5903633		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.245 0.032 0.2 0.0538 95.6 90-110 0.25 2.02 20

MSD		Sample ID: 19090418-22A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:06 AM		
Client ID: SL-6		Run ID: VAL-LACHAT_190909A				SeqNo: 5903644		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.201 0.032 0.2 0.0104 95.3 90-110 0.202 0.496 20

MSD		Sample ID: 19090440-04A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:19 AM		
Client ID:		Run ID: VAL-LACHAT_190909A				SeqNo: 5903655		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.34 0.032 0.2 0.175 82.5 90-110 0.338 0.59 20 S

MSD		Sample ID: 19090440-11A MSD				Units: mg NH3-N/L		Analysis Date: 9/9/2019 11:32 AM		
Client ID:		Run ID: VAL-LACHAT_190909A				SeqNo: 5903666		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Ammonia as Nitrogen 0.309 0.032 0.2 0.125 92 90-110 0.315 1.92 20

The following samples were analyzed in this batch:

19090418-01A	19090418-02A	19090418-03A
19090418-04A	19090418-05A	19090418-06A
19090418-07A	19090418-08A	19090418-09A
19090418-10A	19090418-11A	19090418-12A
19090418-13A	19090418-14A	19090418-15A
19090418-16A	19090418-17A	19090418-18A
19090418-19A	19090418-20A	19090418-21A
19090418-22A	19090418-23A	19090418-24A
19090418-25A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



ALS Environmental
 3352 128th Avenue
 Holland, Michigan 49424
 (Tel) 616.399.6070
 (Fax) 616.399.6185

Chain of Custody Form

Page 1 of 3

ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090418	
Parameter/Method Request for Analysis			
Project Information		Receiving Water Monitoring	
Purchase Order	Project Name	A Ammonia	
Work Order	Project Number	B Total Cyanide	
Company Name	Company Name	C Free Cyanide	
Send Report To	Invoice Attn:	D pH (Field)	
Address	Address	E Temperature (Field)	
City/State/Zip	City/State/Zip	F Dissolved Oxygen (Field)	
Phone	Phone		
Fax	Fax		
e-Mail Address			
Client Information		ALS Project Manager: Amanda Gryzbowski	
Project Name		ALS Work Order #: 19090418	
Project Number		Parameter/Method Request for Analysis	
Company Name		Receiving Water Monitoring	
Invoice Attn:		A Ammonia	
Address		B Total Cyanide	
City/State/Zip		C Free Cyanide	
Phone		D pH (Field)	
Fax		E Temperature (Field)	
e-Mail Address		F Dissolved Oxygen (Field)	
Sample Description		Matrix	
No.	Date	Time	Pres.
1	9/7/19	9:15	H ₂ SO ₄ , NaOH
2	9/7/19	9:29	H ₂ SO ₄ , NaOH
3	9/7/19	9:36	H ₂ SO ₄ , NaOH
4	9/7/19	9:47	H ₂ SO ₄ , NaOH
5	9/7/19	9:56	H ₂ SO ₄ , NaOH
6	9/7/19	10:09	H ₂ SO ₄ , NaOH
7	9/7/19	10:18	H ₂ SO ₄ , NaOH
8	9/7/19	10:27	H ₂ SO ₄ , NaOH
9	9/7/19	10:36	H ₂ SO ₄ , NaOH
10	9/7/19	10:52	H ₂ SO ₄ , NaOH
Sample(s): Please Print & Sign		Shipment Method:	
Relinquished by: <i>[Signature]</i>		Required Turnaround Time: <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour	
Date: 9/7/19		Results Due Date:	
Time: 4:43		Received by: <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date: 9/7/19	
Time: 6:00		Received by (Laboratory): <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date: 9/7/19	
Time: 6:00		Checked by (Laboratory): <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date: 9/7/19	
Time: 6:00		Cooler Temp. 13	
Relinquished by: <i>[Signature]</i>		QC Package: (Check Box Below)	
Time: 6:00		Level II: Standard QC <input type="checkbox"/>	
Relinquished by: <i>[Signature]</i>		Level III: Standard QC + Raw Data <input type="checkbox"/>	
Time: 6:00		Level IV: SW846 Methods/CLP <input type="checkbox"/>	
Relinquished by: <i>[Signature]</i>		Other: <input type="checkbox"/>	
Time: 6:00		Notes: Rec'd 9/19/19 1300 <i>[Signature]</i>	

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS

Copyright 2007 by ALS Laboratory Group

ALS Environmental
 3352 128th Avenue
 Holland, Michigan 49424
 (Tel) 616.399.6070
 (Fax) 616.399.6185

Chain of Custody Form

Page 3 of 3



ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090418	
Parameter/Method Request for Analysis			
Project Information			
Project Name: Receiving Water Monitoring		A Ammonia	
Project Number:		B Total Cyanide	
Company Name: ArcelorMittal (Burns Harbor)		C Free Cyanide	
Invoice Attn.: Accounts Payable		D pH (Field)	
Address: 250 US 12		E Temperature (Field)	
City/State/Zip: Burns Harbor, IN 46304		F Dissolved Oxygen (Field)	
Phone: (219) 787-2120			
Fax:			
e-Mail Address:			
Client Information			
Purchase Order	Sample Description	Date	Time
Work Order		9/7/19	2:12
Company Name: ArcelorMittal (Burns Harbor)			2:29
Send Report To			3:00
			3:45
			4:30
Address: 250 US 12			
City/State/Zip: Burns Harbor, IN 46304			
Phone: (219) 787-2120			
Fax:			
e-Mail Address:			
No.	Sample Description	Date	Time
21	SL-5	9/7/19	2:12
22	SL-6		2:29
23	SL-7		3:00
24	SL-8		3:45
25	OOO		4:30
26			
27			
28			
29			
30			
Sampler(s): Please Print & Sign		Shipment Method:	
Relinquished by: <i>[Signature]</i>		Required Turnaround Time: <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour	
Date: 9/7/19		Results Due Date:	
Time: 4:43			
Relinquished by: <i>[Signature]</i>		Notes: Rec'd 9/9/19 1300 229L	
Date: 9/7/19			
Time: 6:00			
Relinquished by: <i>[Signature]</i>			
Date: 9/7/19			
Time: 6:00			
Logged by (Laboratory):		Cooler Temp. 1.3	
Date:		QC Package: (Check Box Below)	
Time:		Level II: Standard QC	
		Level III: Standard QC + Raw Data	
		Level IV: SW846 Methods/CLP	
		Other: X	

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS

Sample Receipt Checklist

Client Name: **ARCELORMITTAL-BURNSHARBO**

Date/Time Received: **07-Sep-19 00:00**

Work Order: **19090418**

Received by: **CD**

Checklist completed by Diane Shaw 09-Sep-19
eSignature Date

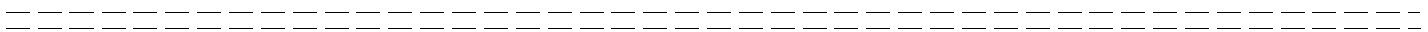
Reviewed by: Amanda Przybowski 09-Sep-19
eSignature Date

Matrices: Aqueous

Carrier name: ALSHN

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="1.3"/>		
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<input type="text" value="9/8/19 07:00"/>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes: Holland - 2.2/2.2 c SR2



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction: