



09-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: **19090198**

Dear Robert,

ALS Environmental received 25 samples on 04-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 43.

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.

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RIGHT SOLUTIONS RIGHT PARTNER

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090198

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>
19090198-01	15	Aqueous		9/4/2019 13:38	9/4/2019 20:20	<input type="checkbox"/>
19090198-01	15	Aqueous		9/4/2019 13:38	9/5/2019 09:30	<input type="checkbox"/>
19090198-02	14	Aqueous		9/4/2019 13:46	9/4/2019 20:20	<input type="checkbox"/>
19090198-02	14	Aqueous		9/4/2019 13:46	9/5/2019 09:30	<input type="checkbox"/>
19090198-03	7	Aqueous		9/4/2019 13:55	9/4/2019 20:20	<input type="checkbox"/>
19090198-03	7	Aqueous		9/4/2019 13:55	9/5/2019 09:30	<input type="checkbox"/>
19090198-04	6	Aqueous		9/4/2019 14:04	9/4/2019 20:20	<input type="checkbox"/>
19090198-04	6	Aqueous		9/4/2019 14:04	9/5/2019 09:30	<input type="checkbox"/>
19090198-05	5	Aqueous		9/4/2019 14:13	9/4/2019 20:20	<input type="checkbox"/>
19090198-05	5	Aqueous		9/4/2019 14:13	9/5/2019 09:30	<input type="checkbox"/>
19090198-06	4	Aqueous		9/4/2019 14:24	9/4/2019 20:20	<input type="checkbox"/>
19090198-06	4	Aqueous		9/4/2019 14:24	9/5/2019 09:30	<input type="checkbox"/>
19090198-07	3	Aqueous		9/4/2019 14:33	9/4/2019 20:20	<input type="checkbox"/>
19090198-07	3	Aqueous		9/4/2019 14:33	9/5/2019 09:30	<input type="checkbox"/>
19090198-08	2	Aqueous		9/4/2019 14:44	9/4/2019 20:20	<input type="checkbox"/>
19090198-08	2	Aqueous		9/4/2019 14:44	9/5/2019 09:30	<input type="checkbox"/>
19090198-09	1	Aqueous		9/4/2019 14:57	9/4/2019 20:20	<input type="checkbox"/>
19090198-09	1	Aqueous		9/4/2019 14:57	9/5/2019 09:30	<input type="checkbox"/>
19090198-10	OF001	Aqueous		9/4/2019 14:15	9/4/2019 20:20	<input type="checkbox"/>
19090198-10	OF001	Aqueous		9/4/2019 14:15	9/5/2019 09:30	<input type="checkbox"/>
19090198-11	8	Aqueous		9/4/2019 15:41	9/4/2019 20:20	<input type="checkbox"/>
19090198-11	8	Aqueous		9/4/2019 15:41	9/5/2019 09:30	<input type="checkbox"/>
19090198-12	9	Aqueous		9/4/2019 15:50	9/4/2019 20:20	<input type="checkbox"/>
19090198-12	9	Aqueous		9/4/2019 15:50	9/5/2019 09:30	<input type="checkbox"/>
19090198-13	10	Aqueous		9/4/2019 16:00	9/4/2019 20:20	<input type="checkbox"/>
19090198-13	10	Aqueous		9/4/2019 16:00	9/5/2019 09:30	<input type="checkbox"/>
19090198-14	11	Aqueous		9/4/2019 16:09	9/4/2019 20:20	<input type="checkbox"/>
19090198-14	11	Aqueous		9/4/2019 16:09	9/5/2019 09:30	<input type="checkbox"/>
19090198-15	12	Aqueous		9/4/2019 16:18	9/4/2019 20:20	<input type="checkbox"/>
19090198-15	12	Aqueous		9/4/2019 16:18	9/5/2019 09:30	<input type="checkbox"/>
19090198-16	13	Aqueous		9/4/2019 16:29	9/4/2019 20:20	<input type="checkbox"/>
19090198-16	13	Aqueous		9/4/2019 16:29	9/5/2019 09:30	<input type="checkbox"/>
19090198-17	SL-1	Aqueous		9/4/2019 16:38	9/4/2019 20:20	<input type="checkbox"/>
19090198-17	SL-1	Aqueous		9/4/2019 16:38	9/5/2019 09:30	<input type="checkbox"/>
19090198-18	SL-2	Aqueous		9/4/2019 16:57	9/4/2019 20:20	<input type="checkbox"/>
19090198-18	SL-2	Aqueous		9/4/2019 16:57	9/5/2019 09:30	<input type="checkbox"/>
19090198-19	SL-3	Aqueous		9/4/2019 17:12	9/4/2019 20:20	<input type="checkbox"/>
19090198-19	SL-3	Aqueous		9/4/2019 17:12	9/5/2019 09:30	<input type="checkbox"/>
19090198-20	SL-4	Aqueous		9/4/2019 17:24	9/4/2019 20:20	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090198

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>
19090198-20	SL-4	Aqueous		9/4/2019 17:24	9/5/2019 09:30	<input type="checkbox"/>
19090198-21	SL-5	Aqueous		9/4/2019 17:39	9/4/2019 20:20	<input type="checkbox"/>
19090198-21	SL-5	Aqueous		9/4/2019 17:39	9/5/2019 09:30	<input type="checkbox"/>
19090198-22	SL-6	Aqueous		9/4/2019 17:50	9/4/2019 20:20	<input type="checkbox"/>
19090198-22	SL-6	Aqueous		9/4/2019 17:50	9/5/2019 09:30	<input type="checkbox"/>
19090198-23	SL-7	Aqueous		9/4/2019 18:15	9/4/2019 20:20	<input type="checkbox"/>
19090198-23	SL-7	Aqueous		9/4/2019 18:15	9/5/2019 09:30	<input type="checkbox"/>
19090198-24	SL-8	Aqueous		9/4/2019 18:40	9/4/2019 20:20	<input type="checkbox"/>
19090198-24	SL-8	Aqueous		9/4/2019 18:40	9/5/2019 09:30	<input type="checkbox"/>
19090198-25	000	Aqueous		9/4/2019 19:24	9/4/2019 20:20	<input type="checkbox"/>
19090198-25	000	Aqueous		9/4/2019 19:24	9/5/2019 09:30	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090198

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: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 15
Collection Date: 9/4/2019 01:38 PM

Work Order: 19090198
Lab ID: 19090198-01
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.40		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.43		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	23.1		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:33
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.162		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:12
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 14
Collection Date: 9/4/2019 01:46 PM

Work Order: 19090198
Lab ID: 19090198-02
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.70		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.58		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.8		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:34
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0890		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:13
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 7
Collection Date: 9/4/2019 01:55 PM

Work Order: 19090198
Lab ID: 19090198-03
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							Analyst: ALS
Dissolved Oxygen (field)	7.40		0		mg/L	1	9/4/2019
PH (FIELD)							Analyst: ALS
pH (field)	7.50		0		s.u.	1	9/4/2019
TEMPERATURE (FIELD)							Analyst: ALS
Temperature (field)	21.6		0		°C	1	9/4/2019
CYANIDE, WEAK ACID DISSOCIABLE							Analyst: JB
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
CYANIDE, TOTAL							Analyst: CD
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:35
AMMONIA AS NITROGEN							Analyst: CD
Ammonia as Nitrogen	0.141		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:15

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 6
Collection Date: 9/4/2019 02:04 PM

Work Order: 19090198
Lab ID: 19090198-04
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.30		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.54		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.2		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:36
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.133		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:16
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 5
Collection Date: 9/4/2019 02:13 PM

Work Order: 19090198
Lab ID: 19090198-05
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.30		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.58		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.0		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:38
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.162		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:17
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 4
Collection Date: 9/4/2019 02:24 PM

Work Order: 19090198
Lab ID: 19090198-06
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.59		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.1		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:39
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.165		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:18
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 3
Collection Date: 9/4/2019 02:33 PM

Work Order: 19090198
Lab ID: 19090198-07
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.90		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.63		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:40
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.160		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:20
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 2
Collection Date: 9/4/2019 02:44 PM

Work Order: 19090198
Lab ID: 19090198-08
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.80		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.70		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.7		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:43
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.176		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:23
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 1
Collection Date: 9/4/2019 02:57 PM

Work Order: 19090198
Lab ID: 19090198-09
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.10		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.62		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:44
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.190		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:24
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: OF001
Collection Date: 9/4/2019 02:15 PM

Work Order: 19090198
Lab ID: 19090198-10
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.57		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.5		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:45
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.262		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:28
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 8
Collection Date: 9/4/2019 03:41 PM

Work Order: 19090198
Lab ID: 19090198-11
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.10		0		mg/L	1	9/4/2019
PH (FIELD)							
pH (field)	7.59		0		s.u.	1	9/4/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.4		0		°C	1	9/4/2019
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:47
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.129		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:29

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 9
Collection Date: 9/4/2019 03:50 PM

Work Order: 19090198
Lab ID: 19090198-12
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.54		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.4		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:48
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.140		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:30
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 10
Collection Date: 9/4/2019 04:00 PM

Work Order: 19090198
Lab ID: 19090198-13
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.63		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.7		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:49
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.128		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:32
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 11
Collection Date: 9/4/2019 04:09 PM

Work Order: 19090198
Lab ID: 19090198-14
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.73		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.3		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:50
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0856		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:33
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 12
Collection Date: 9/4/2019 04:18 PM

Work Order: 19090198
Lab ID: 19090198-15
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.10		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.74		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.3		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:51
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.101		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:34
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 13
Collection Date: 9/4/2019 04:29 PM

Work Order: 19090198
Lab ID: 19090198-16
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.90		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.61		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.1		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:52
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.124		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:38
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-1
Collection Date: 9/4/2019 04:38 PM

Work Order: 19090198
Lab ID: 19090198-17
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.30		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.05		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.3		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:53
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0741		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:39
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-2
Collection Date: 9/4/2019 04:57 PM

Work Order: 19090198
Lab ID: 19090198-18
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							Analyst: ALS
Dissolved Oxygen (field)	7.10		0		mg/L	1	9/4/2019
PH (FIELD)							Analyst: ALS
pH (field)	7.92		0		s.u.	1	9/4/2019
TEMPERATURE (FIELD)							Analyst: ALS
Temperature (field)	20.6		0		°C	1	9/4/2019
CYANIDE, WEAK ACID DISSOCIABLE							Analyst: JB
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
CYANIDE, TOTAL							Analyst: CD
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:57
AMMONIA AS NITROGEN							Analyst: CD
Ammonia as Nitrogen	0.0819		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:42

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-3
Collection Date: 9/4/2019 05:12 PM

Work Order: 19090198
Lab ID: 19090198-19
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	6.90		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.85		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	20.4		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:58
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0558		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:44
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-4
Collection Date: 9/4/2019 05:24 PM

Work Order: 19090198
Lab ID: 19090198-20
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							Analyst: ALS
Dissolved Oxygen (field)	7.90		0		mg/L	1	9/4/2019
PH (FIELD)							Analyst: ALS
pH (field)	7.90		0		s.u.	1	9/4/2019
TEMPERATURE (FIELD)							Analyst: ALS
Temperature (field)	20.7		0		°C	1	9/4/2019
CYANIDE, WEAK ACID DISSOCIABLE							Analyst: JB
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
CYANIDE, TOTAL							Analyst: CD
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 12:59
AMMONIA AS NITROGEN							Analyst: CD
Ammonia as Nitrogen	0.0437		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:45

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-5
Collection Date: 9/4/2019 05:39 PM

Work Order: 19090198
Lab ID: 19090198-21
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.30		0		mg/L	1	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.87		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	20.3		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 13:04
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.117		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:48
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-6
Collection Date: 9/4/2019 05:50 PM

Work Order: 19090198
Lab ID: 19090198-22
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.95		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	20.1		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 13:05
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0508		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:52
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-7
Collection Date: 9/4/2019 06:15 PM

Work Order: 19090198
Lab ID: 19090198-23
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.98		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.9		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 13:06
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0676		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:53
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-8
Collection Date: 9/4/2019 06:40 PM

Work Order: 19090198
Lab ID: 19090198-24
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	9/4/2019
							Analyst: ALS
							Method: A4500-O G-11
PH (FIELD)							
pH (field)	7.95		0		s.u.	1	9/4/2019
							Analyst: ALS
							Method: A4500-H B-11
TEMPERATURE (FIELD)							
Temperature (field)	19.6		0		°C	1	9/4/2019
							Analyst: ALS
							Method: A2550 B-10
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/5/2019 12:24
							Analyst: JB
							Method: KELADA-01
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 13:07
							Analyst: CD
							Prep: A4500-CN C-11 / 9/6/19
							Method: A4500-CN E-11
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0599		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:57
							Analyst: CD
							Method: E350.1 R2.0

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

ALS Group, USA

Date: 09-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 000
Collection Date: 9/4/2019 07:24 PM

Work Order: 19090198
Lab ID: 19090198-25
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	9/4/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.76		0		s.u.	1	9/4/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.0		0		°C	1	9/4/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/6/2019 13:27
				Method: KELADA-01			Analyst: JB
CYANIDE, TOTAL							
Cyanide, Total	U		0.00200	0.00500	mg/L	1	9/7/2019 13:10
				Method: A4500-CN E-11	Prep: A4500-CN C-11 / 9/6/19		Analyst: CD
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0556		0.00980	0.0320	mg NH3-N/L	1	9/5/2019 12:58
				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: 19090198

**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: 19090198

Project: Arcelor Mittal - Burns Harbor E.R.

Batch ID: **R269880b** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK	Sample ID: MB-R269880-R269880b				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID:	Run ID: SKALAR1_190905A			SeqNo: 5896470		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-R269880-R269880b				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID:	Run ID: SKALAR1_190905A			SeqNo: 5896471		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1056 0.0050 0.1 0 106 90-110 0

MS	Sample ID: 19090198-01C MS				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID: 15	Run ID: SKALAR1_190905A			SeqNo: 5896473		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1063 0.0050 0.1 -0.00122 108 90-110 0

MS	Sample ID: 19090198-11C MS				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID: 8	Run ID: SKALAR1_190905A			SeqNo: 5896948		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.105 0.0050 0.1 -0.00119 106 90-110 0

MSD	Sample ID: 19090198-01C MSD				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID: 15	Run ID: SKALAR1_190905A			SeqNo: 5896474		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 -0.00122 108 90-110 0.1063 0.0752 20

MSD	Sample ID: 19090198-11C MSD				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM			
Client ID: 8	Run ID: SKALAR1_190905A			SeqNo: 5896949		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1069 0.0050 0.1 -0.00119 108 90-110 0.105 1.8 20

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

Client: ArcelorMittal USA LLC
Work Order: 19090198
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R269880b** Instrument ID **SKALAR1** Method: **Kelada-01**

The following samples were analyzed in this batch:

19090198-01C	19090198-02C	19090198-03C
19090198-04C	19090198-05C	19090198-06C
19090198-07C	19090198-08C	19090198-09C
19090198-10C	19090198-11C	19090198-12C
19090198-13C	19090198-14C	19090198-15C
19090198-16C	19090198-17C	19090198-18C
19090198-19C	19090198-20C	

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

Client: ArcelorMittal USA LLC
 Work Order: 19090198
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R269880d** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R269880-R269880d				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM		
Client ID:		Run ID: SKALAR1_190905A				SeqNo: 5896961		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-R269880-R269880d				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM		
Client ID:		Run ID: SKALAR1_190905A				SeqNo: 5896962		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 0 104 90-110 0

MS		Sample ID: 19090198-21C MS				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM		
Client ID: SL-5		Run ID: SKALAR1_190905A				SeqNo: 5896964		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1022 0.0050 0.1 -0.00179 104 90-110 0

MSD		Sample ID: 19090198-21C MSD				Units: mg/L		Analysis Date: 9/5/2019 12:24 PM		
Client ID: SL-5		Run ID: SKALAR1_190905A				SeqNo: 5896965		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1044 0.0050 0.1 -0.00179 106 90-110 0.1022 2.12 20

The following samples were analyzed in this batch:

19090198-21C	19090198-22C	19090198-23C
19090198-24C		

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

Client: ArcelorMittal USA LLC
 Work Order: 19090198
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R269969** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK	Sample ID: MB-R269969-R269969		Units: mg/L		Analysis Date: 9/6/2019 01:27 PM					
Client ID:	Run ID: SKALAR1_190906B		SeqNo: 5899307		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-R269969-R269969		Units: mg/L		Analysis Date: 9/6/2019 01:27 PM					
Client ID:	Run ID: SKALAR1_190906B		SeqNo: 5899308		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1044 0.0050 0.1 0 104 90-110 0

MS	Sample ID: 19090073-02C MS		Units: mg/L		Analysis Date: 9/6/2019 01:27 PM					
Client ID:	Run ID: SKALAR1_190906B		SeqNo: 5899311		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1023 0.0050 0.1 -0.00034 103 90-110 0

MSD	Sample ID: 19090073-02C MSD		Units: mg/L		Analysis Date: 9/6/2019 01:27 PM					
Client ID:	Run ID: SKALAR1_190906B		SeqNo: 5899312		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1027 0.0050 0.1 -0.00034 103 90-110 0.1023 0.42 20

The following samples were analyzed in this batch:

19090198-25C

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

Client: ArcelorMittal USA LLC
 Work Order: 19090198
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: 142091 Instrument ID VAL-LACHAT Method: A4500-CN E-11

MBLK	Sample ID: MBLK-142091-142091		Units: mg/L		Analysis Date: 9/7/2019 12:30 PM					
Client ID:	Run ID: VAL-LACHAT_190907B		SeqNo: 5900606		Prep Date: 9/6/2019 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-142091-142091		Units: mg/L		Analysis Date: 9/7/2019 12:31 PM					
Client ID:	Run ID: VAL-LACHAT_190907B		SeqNo: 5900607		Prep Date: 9/6/2019 DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1025 0.0050 0.1 0 102 90-110 0

The following samples were analyzed in this batch:

19090198-01B	19090198-02B	19090198-03B
19090198-04B	19090198-05B	19090198-06B
19090198-07B	19090198-08B	19090198-09B
19090198-10B	19090198-11B	19090198-12B
19090198-13B	19090198-14B	19090198-15B
19090198-16B	19090198-17B	19090198-18B
19090198-19B	19090198-20B	

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

Client: ArcelorMittal USA LLC
Work Order: 19090198
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **142092** Instrument ID **VAL-LACHAT** Method: **A4500-CN E-11**

MBLK	Sample ID: MBLK-142092-142092				Units: mg/L			Analysis Date: 9/7/2019 01:00 PM		
Client ID:	Run ID: VAL-LACHAT_190907B			SeqNo: 5900633		Prep Date: 9/6/2019		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-142092-142092				Units: mg/L			Analysis Date: 9/7/2019 01:01 PM		
Client ID:	Run ID: VAL-LACHAT_190907B			SeqNo: 5900634		Prep Date: 9/6/2019		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1045 0.0050 0.1 0 104 90-110 0

The following samples were analyzed in this batch:

19090198-21B	19090198-22B	19090198-23B
19090198-24B	19090198-25B	

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

Client: ArcelorMittal USA LLC
 Work Order: 19090198
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R269856** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MBLK	Sample ID: MBLK-R269856				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:10 PM		
Client ID:	Run ID: VAL-LACHAT_190905A				SeqNo: 5895818		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-R269856				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:46 PM		
Client ID:	Run ID: VAL-LACHAT_190905A				SeqNo: 5895848		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-R269856				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:11 PM		
Client ID:	Run ID: VAL-LACHAT_190905A				SeqNo: 5895819		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-R269856				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:47 PM		
Client ID:	Run ID: VAL-LACHAT_190905A				SeqNo: 5895849		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 0.394 0.032 0.4 0 98.5 90-110 0

MS	Sample ID: 19090198-09A MS				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:26 PM		
Client ID: 1	Run ID: VAL-LACHAT_190905A				SeqNo: 5895831		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 0.36 0.032 0.2 0.19 85 90-110 0 S

MS	Sample ID: 19090198-17A MS				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:40 PM		
Client ID: SL-1	Run ID: VAL-LACHAT_190905A				SeqNo: 5895843		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 0.26 0.032 0.2 0.0741 93 90-110 0

MS	Sample ID: 19090198-23A MS				Units: mg NH3-N/L			Analysis Date: 9/5/2019 12:54 PM		
Client ID: SL-7	Run ID: VAL-LACHAT_190905A				SeqNo: 5895855		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 0.248 0.032 0.2 0.0676 90.2 90-110 0

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

Client: ArcelorMittal USA LLC
 Work Order: 19090198
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R269856** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MSD		Sample ID: 19090198-09A MSD				Units: mg NH3-N/L		Analysis Date: 9/5/2019 12:27 PM		
Client ID: 1		Run ID: VAL-LACHAT_190905A				SeqNo: 5895832		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	0.363	0.032	0.2	0.19	86.5	90-110	0.36	0.83	20	S

MSD		Sample ID: 19090198-17A MSD				Units: mg NH3-N/L		Analysis Date: 9/5/2019 12:41 PM		
Client ID: SL-1		Run ID: VAL-LACHAT_190905A				SeqNo: 5895844		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	0.265	0.032	0.2	0.0741	95.4	90-110	0.26	1.9	20	

MSD		Sample ID: 19090198-23A MSD				Units: mg NH3-N/L		Analysis Date: 9/5/2019 12:56 PM		
Client ID: SL-7		Run ID: VAL-LACHAT_190905A				SeqNo: 5895856		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	0.0676	91.2	90-110	0.248	0.803	20	

The following samples were analyzed in this batch:

19090198-01A	19090198-02A	19090198-03A
19090198-04A	19090198-05A	19090198-06A
19090198-07A	19090198-08A	19090198-09A
19090198-10A	19090198-11A	19090198-12A
19090198-13A	19090198-14A	19090198-15A
19090198-16A	19090198-17A	19090198-18A
19090198-19A	19090198-20A	19090198-21A
19090198-22A	19090198-23A	19090198-24A
19090198-25A		

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



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Chain of Custody Form

Page 1 of 3

Client Information		Project Information		ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090198									
Purchase Order		Project Name	Receiving Water Monitoring	A	Ammonia	Parameter/Method Request for Analysis									
Work Order		Project Number		B	Total Cyanide										
Company Name	ArcelorMittal (Burns Harbor)	Company Name	ArcelorMittal (Burns Harbor)	C	Free Cyanide										
Send Report To		Invoice Attn.	Accounts Payable	D	pH (Field)										
Address	250 US 12	Address	250 US 12	E	Temperature (Field)										
City/State/Zip	Burns Harbor, IN 46304	City/State/Zip	Burns Harbor, IN 46304	F	Dissolved Oxygen (Field)										
Phone	(219) 787-2120	Phone	(219) 787-2120												
Fax		Fax													
e-Mail Address															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	pH	Temp. °C	DO
1		9/4/19	138	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.43	23.1	6.4
2			146	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.50	22.8	6.7
3			155	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.50	21.6	7.4
4			204	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.54	22.2	7.3
5			213	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.58	22.0	6.3
6			224	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.59	22.1	7.0
7			233	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.63	21.8	6.9
8			244	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.70	21.7	6.8
9			257	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.62	21.9	7.1
10	OFO01		315	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.57	22.5	7.4

Sampler(s): Please Print & Sign	Shipment Method:	Required Turnaround Time:	Results Due Date:
		<input type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour <input type="checkbox"/> Other	

Relinquished by:	Date:	Received by:	Time:	Notes:
<i>[Signature]</i>	9/4/19	<i>[Signature]</i>	1930	Rec'd 9/5/19 0930 272 L HW 26.0
Relinquished by:	Date:	Received by (Laboratory):	Time:	
<i>[Signature]</i>	9-4-19		2020	
Logged by (Laboratory):	Date:	Checked by (Laboratory):	Time:	

QC Package: (Check Box Below)	Cooler Temp.
<input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Standard QC + Raw Data <input type="checkbox"/> Level IV: SW846 Methods/CLP Other:	4.1°C

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

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Chain of Custody Form

Page 2 of 3

ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090198													
Parameter/Method Request for Analysis															
Project Information															
Purchase Order	Project Name	Receiving Water Monitoring	A Ammonia												
Work Order	Project Number		B Total Cyanide												
Company Name	Company Name	ArcelorMittal (Burns Harbor)	C Free Cyanide												
Send Report To	Invoice Attn.	Accounts Payable	D pH (Field)												
Address	Address	250 US 12	E Temperature (Field)												
City/State/Zip	City/State/Zip	Burns Harbor, IN 46304	F Dissolved Oxygen (Field)												
Phone	Phone	(219) 787-2120													
Fax	Fax														
e-Mail Address															
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	pH	Temp. °C	DO
11		9/4/19	341	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.59	22.4	7.1
12			350	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.54	22.4	7.4
13			400	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.63	21.7	7.8
14			409	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.73	22.3	7.4
15			418	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.74	22.3	7.1
16			429	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.61	21.1	6.9
17	SL-1		438	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	8.05	21.3	7.3
18	SL-2		457	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.92	20.6	7.1
19	SL-3		512	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.85	20.4	6.9
20	SL-4		524	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.96	20.7	7.9
Sampler(s): Please Print & Sign				Shipment Method:		Required Turnaround Time:		Results Due Date:							
						<input type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour									
Relinquished by: <i>[Signature]</i>				Date: 9/4/19		Time: 1930		Received by: <i>[Signature]</i>							
Relinquished by: <i>[Signature]</i>				Date: 9-4-19		Time: 2020		Received by (Laboratory): <i>[Signature]</i>							
Logged by (Laboratory): <i>[Signature]</i>				Date:		Time:		Checked by (Laboratory):							
								Cooler Temp. 4.1°C							
								QC Package: (Check Box Below) Level II: Standard QC Level III: Standard QC + Raw Data Level IV: SW846 Methods/CLP Other:							
								Notes: Rec'd 9/5/19 0930 2020 L HN 2.0°C							

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



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Chain of Custody Form

Page 3 of 3

Client Information		Project Information		ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090198									
Purchase Order		Project Name	Receiving Water Monitoring	Parameter/Method Request for Analysis											
Work Order		Project Number		A Ammonia											
Company Name	ArcelorMittal (Burns Harbor)	Company Name	ArcelorMittal (Burns Harbor)	B Total Cyanide											
Send Report To	250 US 12	Invoice Attn.	Accounts Payable	C Free Cyanide											
Address	250 US 12	Address		D pH (Field)											
City/State/Zip	Burns Harbor, IN 46304	City/State/Zip	Burns Harbor, IN 46304	E Temperature (Field)											
Phone	(219) 787-2120	Phone	(219) 787-2120	F Dissolved Oxygen (Field)											
Fax		Fax													
e-Mail Address		e-Mail Address													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	pH	Temp. °C	DO
21	SL-5	9/4/19	5:39	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.87	20.3	7.3
22	SL-6	↓	5:50	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.95	20.1	7.8
23	SL-7	↓	6:15	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.98	19.9	7.5
24	SL-8	↓	6:40	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.95	19.6	8.0
25	OOO	↓	7:24	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.76	19.0	8.0
26				Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X			
27				Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X			
28				Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X			
29				Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X			
30				Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X			

Sampler(s): Please Print & Sign		Shipment Method:		Required Turnaround Time:		Results Due Date:	
				<input type="checkbox"/> STD 10 WK Days <input type="checkbox"/> 5 WK Days <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour			
Relinquished by:	Date: 9/4/19	Time: 1930	Received by:	Notes: Rec'd 9/15/19 0930 Q2XL			
Relinquished by:	Date: 9-4-19	Time: 2020	Received by (Laboratory):	Cooler Temp. 4.1°C			
Relinquished by:	Date:	Time:	Checked by (Laboratory):	QC Package: (Check Box Below)			
				<input type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Standard QC + Raw Data <input type="checkbox"/> Level IV: SW846 Methods/CLP <input type="checkbox"/> Other:			

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: **04-Sep-19 00:00**

Work Order: **19090198**

Received by: **JH**

Checklist completed by Diane Shaw 05-Sep-19
eSignature Date

Reviewed by: Amanda Przybowski 05-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):	<u>4.1</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>9/4/19 20:20</u>		
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:			

Login Notes: Holland - 2.6/2.6 c SR2

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: