



15-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: **19090596**

Dear Robert,

ALS Environmental received 25 samples on 10-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.

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Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090596

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>
19090596-01	15	Aqueous		9/10/2019 08:35	9/10/2019 17:15	<input type="checkbox"/>
19090596-01	15	Aqueous		9/10/2019 08:35	9/11/2019 13:30	<input type="checkbox"/>
19090596-02	14	Aqueous		9/10/2019 08:46	9/10/2019 17:15	<input type="checkbox"/>
19090596-02	14	Aqueous		9/10/2019 08:46	9/11/2019 13:30	<input type="checkbox"/>
19090596-03	7	Aqueous		9/10/2019 08:58	9/10/2019 17:15	<input type="checkbox"/>
19090596-03	7	Aqueous		9/10/2019 08:58	9/11/2019 13:30	<input type="checkbox"/>
19090596-04	6	Aqueous		9/10/2019 09:11	9/10/2019 17:15	<input type="checkbox"/>
19090596-04	6	Aqueous		9/10/2019 09:11	9/11/2019 13:30	<input type="checkbox"/>
19090596-05	5	Aqueous		9/10/2019 09:23	9/10/2019 17:15	<input type="checkbox"/>
19090596-05	5	Aqueous		9/10/2019 09:23	9/11/2019 13:30	<input type="checkbox"/>
19090596-06	4	Aqueous		9/10/2019 09:36	9/10/2019 17:15	<input type="checkbox"/>
19090596-06	4	Aqueous		9/10/2019 09:36	9/11/2019 13:30	<input type="checkbox"/>
19090596-07	3	Aqueous		9/10/2019 09:45	9/10/2019 17:15	<input type="checkbox"/>
19090596-07	3	Aqueous		9/10/2019 09:45	9/11/2019 13:30	<input type="checkbox"/>
19090596-08	2	Aqueous		9/10/2019 09:58	9/10/2019 17:15	<input type="checkbox"/>
19090596-08	2	Aqueous		9/10/2019 09:58	9/11/2019 13:30	<input type="checkbox"/>
19090596-09	1	Aqueous		9/10/2019 10:09	9/10/2019 17:15	<input type="checkbox"/>
19090596-09	1	Aqueous		9/10/2019 10:09	9/11/2019 13:30	<input type="checkbox"/>
19090596-10	OF001	Aqueous		9/10/2019 10:25	9/10/2019 17:15	<input type="checkbox"/>
19090596-10	OF001	Aqueous		9/10/2019 10:25	9/11/2019 13:30	<input type="checkbox"/>
19090596-11	8	Aqueous		9/10/2019 10:58	9/10/2019 17:15	<input type="checkbox"/>
19090596-11	8	Aqueous		9/10/2019 10:58	9/11/2019 13:30	<input type="checkbox"/>
19090596-12	9	Aqueous		9/10/2019 11:12	9/10/2019 17:15	<input type="checkbox"/>
19090596-12	9	Aqueous		9/10/2019 11:12	9/11/2019 13:30	<input type="checkbox"/>
19090596-13	10	Aqueous		9/10/2019 11:25	9/10/2019 17:15	<input type="checkbox"/>
19090596-13	10	Aqueous		9/10/2019 11:25	9/11/2019 13:30	<input type="checkbox"/>
19090596-14	11	Aqueous		9/10/2019 11:39	9/10/2019 17:15	<input type="checkbox"/>
19090596-14	11	Aqueous		9/10/2019 11:39	9/11/2019 13:30	<input type="checkbox"/>
19090596-15	12	Aqueous		9/10/2019 11:55	9/10/2019 17:15	<input type="checkbox"/>
19090596-15	12	Aqueous		9/10/2019 11:55	9/11/2019 13:30	<input type="checkbox"/>
19090596-16	13	Aqueous		9/10/2019 12:11	9/10/2019 17:15	<input type="checkbox"/>
19090596-16	13	Aqueous		9/10/2019 12:11	9/11/2019 13:30	<input type="checkbox"/>
19090596-17	SL-1	Aqueous		9/10/2019 12:38	9/10/2019 17:15	<input type="checkbox"/>
19090596-17	SL-1	Aqueous		9/10/2019 12:38	9/11/2019 13:30	<input type="checkbox"/>
19090596-18	SL-2	Aqueous		9/10/2019 12:56	9/10/2019 17:15	<input type="checkbox"/>
19090596-18	SL-2	Aqueous		9/10/2019 12:56	9/11/2019 13:30	<input type="checkbox"/>
19090596-19	SL-3	Aqueous		9/10/2019 13:13	9/10/2019 17:15	<input type="checkbox"/>
19090596-19	SL-3	Aqueous		9/10/2019 13:13	9/11/2019 13:30	<input type="checkbox"/>
19090596-20	SL-4	Aqueous		9/10/2019 13:29	9/10/2019 17:15	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090596

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>
19090596-20	SL-4	Aqueous		9/10/2019 13:29	9/11/2019 13:30	<input type="checkbox"/>
19090596-21	SL-5	Aqueous		9/10/2019 13:48	9/10/2019 17:15	<input type="checkbox"/>
19090596-21	SL-5	Aqueous		9/10/2019 13:48	9/11/2019 13:30	<input type="checkbox"/>
19090596-22	SL-6	Aqueous		9/10/2019 14:16	9/10/2019 17:15	<input type="checkbox"/>
19090596-22	SL-6	Aqueous		9/10/2019 14:16	9/11/2019 13:30	<input type="checkbox"/>
19090596-23	SL-7	Aqueous		9/10/2019 14:43	9/10/2019 17:15	<input type="checkbox"/>
19090596-23	SL-7	Aqueous		9/10/2019 14:43	9/11/2019 13:30	<input type="checkbox"/>
19090596-24	SL-8	Aqueous		9/10/2019 15:26	9/10/2019 17:15	<input type="checkbox"/>
19090596-24	SL-8	Aqueous		9/10/2019 15:26	9/11/2019 13:30	<input type="checkbox"/>
19090596-25	000	Aqueous		9/10/2019 15:56	9/10/2019 17:15	<input type="checkbox"/>
19090596-25	000	Aqueous		9/10/2019 15:56	9/11/2019 13:30	<input type="checkbox"/>

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Work Order: 19090596

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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 15
Collection Date: 9/10/2019 08:35 AM

Work Order: 19090596
Lab ID: 19090596-01
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	7.20		0		mg/L	1	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.22		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				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	0.127		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:05
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 14
Collection Date: 9/10/2019 08:46 AM

Work Order: 19090596
Lab ID: 19090596-02
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	9/10/2019
PH (FIELD)							
pH (field)	7.61		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.1		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
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	0.0118	J	0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:06

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 7
Collection Date: 9/10/2019 08:58 AM

Work Order: 19090596
Lab ID: 19090596-03
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	9/10/2019
PH (FIELD)							
pH (field)	7.59		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
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	0.179		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:07

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 6
Collection Date: 9/10/2019 09:11 AM

Work Order: 19090596
Lab ID: 19090596-04
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.61		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.0		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				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	0.170		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:09
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 5
Collection Date: 9/10/2019 09:23 AM

Work Order: 19090596
Lab ID: 19090596-05
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	9/10/2019
PH (FIELD)							
pH (field)	7.69		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	21.8		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
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	9/11/2019 12:10

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 4
Collection Date: 9/10/2019 09:36 AM

Work Order: 19090596
Lab ID: 19090596-06
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD) Dissolved Oxygen (field)	7.20		0		mg/L	1	9/10/2019
			Method: A4500-O G-11		Analyst: ALS		
PH (FIELD) pH (field)	7.67		0		s.u.	1	9/10/2019
			Method: A4500-H B-11		Analyst: ALS		
TEMPERATURE (FIELD) Temperature (field)	21.7		0		°C	1	9/10/2019
			Method: A2550 B-10		Analyst: ALS		
CYANIDE, TOTAL Cyanide, Total	0.0012	J	0.0012	0.0050	mg/L	1	9/13/2019 12:01
			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	0.166		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:11
			Method: E350.1 R2.0		Analyst: CD		

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 3
Collection Date: 9/10/2019 09:45 AM

Work Order: 19090596
Lab ID: 19090596-07
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	9/10/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.63		0		s.u.	1	9/10/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.9		0		°C	1	9/10/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	0.0015	J	0.0012	0.0050	mg/L	1	9/13/2019 12:01
			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	0.198		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 2
Collection Date: 9/10/2019 09:58 AM

Work Order: 19090596
Lab ID: 19090596-08
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	9/10/2019
			Method: A4500-O G-11		Analyst: ALS		
PH (FIELD) pH (field)	7.71		0		s.u.	1	9/10/2019
			Method: A4500-H B-11		Analyst: ALS		
TEMPERATURE (FIELD) Temperature (field)	21.7		0		°C	1	9/10/2019
			Method: A2550 B-10		Analyst: ALS		
CYANIDE, TOTAL Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
			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	0.154		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 1
Collection Date: 9/10/2019 10:09 AM

Work Order: 19090596
Lab ID: 19090596-09
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	8.90		0		mg/L	1	9/10/2019
			Method: A4500-O G-11				Analyst: ALS
PH (FIELD)							
pH (field)	7.70		0		s.u.	1	9/10/2019
			Method: A4500-H B-11				Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	21.3		0		°C	1	9/10/2019
			Method: A2550 B-10				Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
			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	0.178		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: OF001
Collection Date: 9/10/2019 10:25 AM

Work Order: 19090596
Lab ID: 19090596-10
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							Analyst: ALS
Dissolved Oxygen (field)	7.30		0		mg/L	1	9/10/2019
PH (FIELD)							Analyst: ALS
pH (field)	7.64		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							Analyst: ALS
Temperature (field)	22.6		0		°C	1	9/10/2019
CYANIDE, TOTAL							Analyst: JB
Cyanide, Total	0.0014	J	0.0012	0.0050	mg/L	1	9/13/2019 12:01
CYANIDE, WEAK ACID DISSOCIABLE							Analyst: JB
Cyanide, WAD		U	0.0011	0.0050	mg/L	1	9/11/2019 09:51
AMMONIA AS NITROGEN							Analyst: CD
Ammonia as Nitrogen	0.247		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:18

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 8
Collection Date: 9/10/2019 10:58 AM

Work Order: 19090596
Lab ID: 19090596-11
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.62		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.6		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.174		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:19
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 9
Collection Date: 9/10/2019 11:12 AM

Work Order: 19090596
Lab ID: 19090596-12
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	9/10/2019
PH (FIELD)							
pH (field)	7.64		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.0		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.168		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:21

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 10
Collection Date: 9/10/2019 11:25 AM

Work Order: 19090596
Lab ID: 19090596-13
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.67		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	22.1		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.143		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:22
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 11
Collection Date: 9/10/2019 11:39 AM

Work Order: 19090596
Lab ID: 19090596-14
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	9/10/2019
PH (FIELD)							
pH (field)	7.61		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	22.3		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0946		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:23

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 12
Collection Date: 9/10/2019 11:55 AM

Work Order: 19090596
Lab ID: 19090596-15
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.79		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.6		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0523		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 13
Collection Date: 9/10/2019 12:11 PM

Work Order: 19090596
Lab ID: 19090596-16
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.83		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.2		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0592		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:25
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-1
Collection Date: 9/10/2019 12:38 PM

Work Order: 19090596
Lab ID: 19090596-17
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							Analyst: ALS
Dissolved Oxygen (field)	8.30		0		mg/L	1	9/10/2019
PH (FIELD)							Analyst: ALS
pH (field)	7.95		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							Analyst: ALS
Temperature (field)	18.4		0		°C	1	9/10/2019
CYANIDE, TOTAL							Analyst: JB
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
CYANIDE, WEAK ACID DISSOCIABLE							Analyst: JB
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
AMMONIA AS NITROGEN							Analyst: CD
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:27

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-2
Collection Date: 9/10/2019 12:56 PM

Work Order: 19090596
Lab ID: 19090596-18
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.86		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	18.7		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-3
Collection Date: 9/10/2019 01:13 PM

Work Order: 19090596
Lab ID: 19090596-19
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	9/10/2019
PH (FIELD)							
pH (field)	7.94		0		s.u.	1	9/10/2019
TEMPERATURE (FIELD)							
Temperature (field)	18.9		0		°C	1	9/10/2019
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0357		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:34

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-4
Collection Date: 9/10/2019 01:29 PM

Work Order: 19090596
Lab ID: 19090596-20
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	9.90		0		mg/L	1	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.00		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	18.8		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:35
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-5
Collection Date: 9/10/2019 01:48 PM

Work Order: 19090596
Lab ID: 19090596-21
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.89		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	18.6		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	0.0191	J	0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:41
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-6
Collection Date: 9/10/2019 02:16 PM

Work Order: 19090596
Lab ID: 19090596-22
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.95		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.2		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:45
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-7
Collection Date: 9/10/2019 02:43 PM

Work Order: 19090596
Lab ID: 19090596-23
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD)							
Dissolved Oxygen (field)	9.40		0		mg/L	1	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	8.05		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	18.9		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 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: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: SL-8
Collection Date: 9/10/2019 03:26 PM

Work Order: 19090596
Lab ID: 19090596-24
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	9/10/2019
				Method: A4500-O G-11			Analyst: ALS
PH (FIELD)							
pH (field)	7.99		0		s.u.	1	9/10/2019
				Method: A4500-H B-11			Analyst: ALS
TEMPERATURE (FIELD)							
Temperature (field)	19.3		0		°C	1	9/10/2019
				Method: A2550 B-10			Analyst: ALS
CYANIDE, TOTAL							
Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
				Method: KELADA-01			Analyst: JB
CYANIDE, WEAK ACID DISSOCIABLE							
Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
				Method: KELADA-01			Analyst: JB
AMMONIA AS NITROGEN							
Ammonia as Nitrogen	U		0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:49
				Method: E350.1 R2.0			Analyst: CD

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

ALS Group, USA

Date: 15-Sep-19

Client: ArcelorMittal USA LLC
Project: Arcelor Mittal - Burns Harbor E.R.
Sample ID: 000
Collection Date: 9/10/2019 03:56 PM

Work Order: 19090596
Lab ID: 19090596-25
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
DISSOLVED OXYGEN (FIELD) Dissolved Oxygen (field)	11.8		0		mg/L	1	9/10/2019
			Method: A4500-O G-11		Analyst: ALS		
PH (FIELD) pH (field)	7.75		0		s.u.	1	9/10/2019
			Method: A4500-H B-11		Analyst: ALS		
TEMPERATURE (FIELD) Temperature (field)	23.4		0		°C	1	9/10/2019
			Method: A2550 B-10		Analyst: ALS		
CYANIDE, TOTAL Cyanide, Total	U		0.0012	0.0050	mg/L	1	9/13/2019 12:01
			Method: KELADA-01		Analyst: JB		
CYANIDE, WEAK ACID DISSOCIABLE Cyanide, WAD	U		0.0011	0.0050	mg/L	1	9/12/2019 11:18
			Method: KELADA-01		Analyst: JB		
AMMONIA AS NITROGEN Ammonia as Nitrogen	0.0258	J	0.00980	0.0320	mg NH3-N/L	1	9/11/2019 12:51
			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: 19090596

**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
Work Order: 19090596
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270286e** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270286-R270286e				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A				SeqNo: 5910922		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-R270286e				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID:		Run ID: SKALAR1_190911A				SeqNo: 5910923		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, WAD	0.09873	0.0050	0.1	0	98.7	90-110	0			

MS		Sample ID: 19090596-01C MS				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: 15		Run ID: SKALAR1_190911A				SeqNo: 5910925		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, WAD	0.1004	0.0050	0.1	-0.00094	101	90-110	0			

MSD		Sample ID: 19090596-01C MSD				Units: mg/L		Analysis Date: 9/11/2019 09:51 AM		
Client ID: 15		Run ID: SKALAR1_190911A				SeqNo: 5910926		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	-0.00094	106	90-110	0.1004	4.9	20	

The following samples were analyzed in this batch:

19090596-01C	19090596-02C	19090596-03C
19090596-04C	19090596-05C	19090596-06C
19090596-07C	19090596-08C	19090596-09C
19090596-10C		

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270358** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270358-R270358				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID:		Run ID: SKALAR1_190912B				SeqNo: 5913120		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-R270358-R270358				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID:		Run ID: SKALAR1_190912B				SeqNo: 5913121		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 0 107 90-110 0

MS		Sample ID: 19090596-11C MS				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID: 8		Run ID: SKALAR1_190912B				SeqNo: 5913123		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1058 0.0050 0.1 0.00108 105 90-110 0

MS		Sample ID: 19090596-19C MS				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID: SL-3		Run ID: SKALAR1_190912B				SeqNo: 5913171		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1052 0.0050 0.1 0.00041 105 90-110 0

MSD		Sample ID: 19090596-11C MSD				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID: 8		Run ID: SKALAR1_190912B				SeqNo: 5913124		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1079 0.0050 0.1 0.00108 107 90-110 0.1058 1.95 20

MSD		Sample ID: 19090596-19C MSD				Units: mg/L		Analysis Date: 9/12/2019 11:18 AM		
Client ID: SL-3		Run ID: SKALAR1_190912B				SeqNo: 5913172		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, WAD 0.1092 0.0050 0.1 0.00041 109 90-110 0.1052 3.64 20

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

Client: ArcelorMittal USA LLC
Work Order: 19090596
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270358** Instrument ID **SKALAR1** Method: **Kelada-01**

The following samples were analyzed in this batch:

19090596-11C	19090596-12C	19090596-13C
19090596-14C	19090596-15C	19090596-16C
19090596-17C	19090596-18C	19090596-19C
19090596-20C	19090596-21C	19090596-22C
19090596-23C	19090596-24C	19090596-25C

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270470a** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270470-R270470a				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID:		Run ID: SKALAR1_190913A				SeqNo: 5916684		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-R270470-R270470a				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID:		Run ID: SKALAR1_190913A				SeqNo: 5916685		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 0 105 90-110 0

MS		Sample ID: 19090596-11B MS				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: 8		Run ID: SKALAR1_190913A				SeqNo: 5916687		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1063 0.0050 0.1 0.00077 106 90-110 0

mS		Sample ID: 19090596-19B MS				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: SL-3		Run ID: SKALAR1_190913A				SeqNo: 5916699		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1026 0.0050 0.1 -0.00035 103 90-110 0

MSD		Sample ID: 19090596-11B MSD				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: 8		Run ID: SKALAR1_190913A				SeqNo: 5916688		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1065 0.0050 0.1 0.00077 106 90-110 0.1063 0.188 20

MSD		Sample ID: 19090596-19B MSD				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: SL-3		Run ID: SKALAR1_190913A				SeqNo: 5916700		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1037 0.0050 0.1 -0.00035 104 90-110 0.1026 1.05 20

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

Client: ArcelorMittal USA LLC
Work Order: 19090596
Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270470a** Instrument ID **SKALAR1** Method: **Kelada-01**

The following samples were analyzed in this batch:

19090596-11B	19090596-12B	19090596-13B
19090596-14B	19090596-15B	19090596-16B
19090596-17B	19090596-18B	19090596-19B
19090596-20B	19090596-21B	19090596-22B
19090596-23B	19090596-24B	19090596-25B

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270470b** Instrument ID **SKALAR1** Method: **Kelada-01**

MBLK		Sample ID: MB-R270470-R270470b				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID:		Run ID: SKALAR1_190913A				SeqNo: 5916713		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-R270470-R270470b				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID:		Run ID: SKALAR1_190913A				SeqNo: 5916714		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.1037 0.0050 0.1 0 104 90-110 0

MS		Sample ID: 19090596-01B MS				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: 15		Run ID: SKALAR1_190913A				SeqNo: 5916716		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.09908 0.0050 0.1 -0.00028 99.4 90-110 0

MSD		Sample ID: 19090596-01B MSD				Units: mg/L		Analysis Date: 9/13/2019 12:01 PM		
Client ID: 15		Run ID: SKALAR1_190913A				SeqNo: 5916717		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Cyanide, Total 0.101 0.0050 0.1 -0.00028 101 90-110 0.09908 1.95 20

The following samples were analyzed in this batch:

19090596-01B	19090596-02B	19090596-03B
19090596-04B	19090596-05B	19090596-06B
19090596-07B	19090596-08B	19090596-09B
19090596-10B		

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270270** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MBLK	Sample ID: MBLK-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 12:03 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910233		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-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 12:39 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910282		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-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 01:17 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910319		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-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 12:04 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910234		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 0.406 0.032 0.4 0 102 90-110 0

LCS	Sample ID: LCS-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 12:40 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910284		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 0.397 0.032 0.4 0 99.2 90-110 0

LCS	Sample ID: LCS-R270270			Units: mg NH3-N/L			Analysis Date: 9/11/2019 01:18 PM			
Client ID:	Run ID: VAL-LACHAT_190911A			SeqNo: 5910320		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

MS	Sample ID: 19090596-18A MS			Units: mg NH3-N/L			Analysis Date: 9/11/2019 12:31 PM			
Client ID: SL-2	Run ID: VAL-LACHAT_190911A			SeqNo: 5910271		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 0.169 0.032 0.2 -0.0222 95.6 90-110 0

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270270** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

MS		Sample ID: 19090596-20A MS				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:36 PM		
Client ID: SL-4		Run ID: VAL-LACHAT_190911A				SeqNo: 5910278		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 0.196 0.032 0.2 -0.00395 100 90-110 0

MS		Sample ID: 19090596-22A MS				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:46 PM		
Client ID: SL-6		Run ID: VAL-LACHAT_190911A				SeqNo: 5910292		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 0.193 0.032 0.2 0.00742 92.8 90-110 0

MS		Sample ID: 19090596-25A MS				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:52 PM		
Client ID: 000		Run ID: VAL-LACHAT_190911A				SeqNo: 5910298		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 0.18 0.032 0.2 0.0258 77.1 90-110 0 S

MS		Sample ID: 19090659-09B MS				Units: mg NH3-N/L		Analysis Date: 9/11/2019 01:05 PM		
Client ID:		Run ID: VAL-LACHAT_190911A				SeqNo: 5910309		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 0.283 0.032 0.2 0.108 87.5 90-110 0 S

MSD		Sample ID: 19090596-18A MSD				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:33 PM		
Client ID: SL-2		Run ID: VAL-LACHAT_190911A				SeqNo: 5910273		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 0.172 0.032 0.2 -0.0222 97.1 90-110 0.169 1.76 20

MSD		Sample ID: 19090596-20A MSD				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:37 PM		
Client ID: SL-4		Run ID: VAL-LACHAT_190911A				SeqNo: 5910280		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 0.205 0.032 0.2 -0.00395 104 90-110 0.196 4.49 20

MSD		Sample ID: 19090596-22A MSD				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:47 PM		
Client ID: SL-6		Run ID: VAL-LACHAT_190911A				SeqNo: 5910294		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 0.187 0.032 0.2 0.00742 89.8 90-110 0.193 3.16 20 S

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

Client: ArcelorMittal USA LLC
 Work Order: 19090596
 Project: Arcelor Mittal - Burns Harbor E.R.

QC BATCH REPORT

Batch ID: **R270270** Instrument ID **VAL-LACHAT** Method: **E350.1 R2.0**

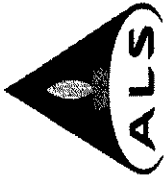
MSD		Sample ID: 19090596-25A MSD				Units: mg NH3-N/L		Analysis Date: 9/11/2019 12:53 PM			
Client ID: 000		Run ID: VAL-LACHAT_190911A				SeqNo: 5910299		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Ammonia as Nitrogen	0.184	0.032	0.2	0.0258	79.1	90-110	0.18	2.2	20	S	

MSD		Sample ID: 19090659-09B MSD				Units: mg NH3-N/L		Analysis Date: 9/11/2019 01:06 PM			
Client ID:		Run ID: VAL-LACHAT_190911A				SeqNo: 5910310		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	0.281	0.032	0.2	0.108	86.5	90-110	0.283	0.709	20	S	

The following samples were analyzed in this batch:

19090596-01A	19090596-02A	19090596-03A
19090596-04A	19090596-05A	19090596-06A
19090596-07A	19090596-08A	19090596-09A
19090596-10A	19090596-11A	19090596-12A
19090596-13A	19090596-14A	19090596-15A
19090596-16A	19090596-17A	19090596-18A
19090596-19A	19090596-20A	19090596-21A
19090596-22A	19090596-23A	19090596-24A
19090596-25A		

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 #: 9090596									
Purchase Order		Project Name		Receiving Water Monitoring		Parameter/Method Request for Analysis									
Work Order		Project Number		A Ammonia		B Total Cyanide									
Company Name		Company Name		C Free Cyanide		D pH (Field)									
Send Report To		Invoice Attn.		E Temperature (Field)		F Dissolved Oxygen (Field)									
Address		Address		A		B									
City/State/Zip		City/State/Zip		C		D									
Phone		Phone		E		F									
Fax		Fax		G		H									
e-Mail Address		e-Mail Address		I		J									
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	pH	Temp. °C	DO
1		9/10/19	8:35	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.22	21.8	7.2
2			8:46	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.61	22.1	7.1
3			8:58	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.59	21.9	6.3
4			9:11	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.61	22.0	6.4
5			9:23	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.69	21.8	6.6
6			9:36	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.67	21.7	7.2
7			9:45	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.63	21.9	6.9
8			9:58	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.71	21.7	7.3
9			10:09	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.70	21.3	8.9
10	OFO01		10:25	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.64	22.6	7.3

Shipper 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"/> Other	<input type="checkbox"/> 24 Hour	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
<i>[Signature]</i>	9-10-19	1600	<i>[Signature]</i>	9-10-19	17:15
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:
<i>[Signature]</i>			<i>[Signature]</i>		
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	Date:	Time:
			<i>[Signature]</i>		

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

Notes: Rec'd 9/11/19 1330 Q272 XL

Cooler Temp: 2.4

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

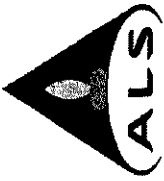
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Chain of Custody Form

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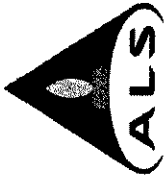


ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090596													
Parameter/Method Request for Analysis															
Project Information															
Purchase Order	Project Name	Receiving Water Monitoring													
Work Order	Project Number														
Company Name	Company Name	ArceforMittal (Burns Harbor)													
Send Report To	Invoice Attn.	Accounts Payable													
Address	Address	250 US 12													
City/State/Zip	City/State/Zip	Burns Harbor, IN 46304													
Phone	Phone	(219) 787-2120													
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
11		9/10/19	1058	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.62	22.6	7.8
12			1112	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.64	22.0	6.7
13			1125	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.67	22.1	7.5
14			1139	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.61	22.3	7.6
15			1155	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.79	19.6	8.1
16			1210	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.83	19.2	7.8
17	SL-1		1230	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.95	18.4	8.3
18	SL-2		1256	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.86	18.7	8.1
19	SL-3		113	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.94	18.9	8.5
20	SL-4		129	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	8.0	18.8	9.9
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 <input type="checkbox"/> Other											
Relinquished by:		Date:	Time:	Received by:		Notes:									
<i>[Signature]</i>		9-10-19	1600	<i>[Signature]</i>		Rec'd 9/11/19 1330 272 L									
Relinquished by:		Date:	Time:	Received by (Laboratory):		QC Package: (Check Box Below)									
<i>[Signature]</i>		9-10-19	1715	<i>[Signature]</i>		<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:									
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):		Cooler Temp.									
						2.4									

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

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HW 4.0 °C



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Chain of Custody Form

Page 3 of 3

ALS Project Manager: Amanda Gryzbowski		ALS Work Order #: 19090596	
Project Information		Parameter/Method Request for Analysis	
Purchase Order	Project Name	Receiving Water Monitoring	
Work Order	Project Number		
Company Name	Company Name	ArcelorMittal (Burns Harbor)	
Send Report To	Invoice Attn.	Accounts Payable	
Address	Address	250 US 12	
City/State/Zip	City/State/Zip	Burns Harbor, IN 46304	
Phone	Phone	(219) 787-2120	
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	9/10/19	148	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.89	18.6	8.2
22	SL-6		216	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.95	19.2	7.5
23	SL-7		243	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	8.05	18.9	9.4
24	SL-8		326	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.99	19.3	8.2
25	OOO		356	Water	H ₂ SO ₄ , NaOH	2	X	X	X	X	X	X	7.75	23.4	11.8
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"/> Other:	
Relinquished by:	Received by:	Time:	Notes:
<i>[Signature]</i>	<i>[Signature]</i>	1600	Rec'd 9/11/19 1330 <i>[Signature]</i>
Relinquished by:	Received by (Laboratory):	Time:	QC Package: (Check Box Below)
<i>[Signature]</i>	<i>[Signature]</i>	17:15	<input checked="" type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Standard QC + Raw Data <input type="checkbox"/> Level IV: SW846 Methods/CLP Other:
Logged by (Laboratory):	Checked by (Laboratory):	Time:	Cooler Temp.
			2.4

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

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Sample Receipt Checklist

Client Name: ARCELORMITTAL-BURNSHARBO

Date/Time Received: 10-Sep-19 00:00

Work Order: 19090596

Received by: CD

Checklist completed by Diane Shaw 11-Sep-19
eSignature Date

Reviewed by: Amanda Przybowski 11-Sep-19
eSignature Date

Matrices: Aqueous

Carrier name: ALSHN

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Yes No

Sample(s) received on ice? Yes No

Temperature(s)/Thermometer(s): 2.4

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 9/10/19 17:15

Water - VOA vials have zero headspace? Yes No No VOA vials submitted

Water - pH acceptable upon receipt? Yes No N/A

pH adjusted? Yes No N/A

pH adjusted by:

Login Notes: Holland - 4.0/4.0 c SR2

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: