

Work Order No.: 1910105

September 4, 2019

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

Re: NPDES Excursion-CN

Dear Teri Kirk:

Microbac Laboratories, Inc. - Chicagoland Division received 3 sample(s) on 9/4/2019 10:10:00AM for the analyses presented in the following report as Work Order 19l0105.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Ron Misiunas, Division Manager, at ron.misiunas@microbac.com.

Sincerely,

Microbac Laboratories, Inc.

Carry Hadgala

Carey Gadzala Project Manager



WORK ORDER SAMPLE SUMMARY

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

Lab Order: 1910105

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
1910105-01	lagoon Channel Inlet		09/04/2019 07:50	9/4/2019 10:10:00AM
1910105-02	South Lagoon Inlet		09/04/2019 07:55	9/4/2019 10:10:00AM
1910105-03	011		09/04/2019 08:00	9/4/2019 10:10:00AM

Wednesday, September 4, 2019

Date:



Analytical Results Date: Wednesday, September 4, 2019

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

Client Sample ID:lagoon Channel InletWork Order/ID:19I0105-01Sample Description:Sampled:09/04/20197:50

 Sample Description:
 Sampled:
 09/04/2019
 7:50

 Matrix:
 Aqueous
 Received:
 09/04/2019
 10:10

Analyses Certs AT Result RL Qual Units DF Analyzed

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

 Total Cyanide
 Prep Method: NA
 Prep Date/Time: 09/04/2019 12:06

 Cyanide, Total
 dij
 A
 0.0074
 0.0050
 mg/L
 1
 09/04/2019 14:19



Analytical Results Date: Wednesday, September 4, 2019

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

Client Sample ID: South Lagoon Inlet Work Order/ID: 1910105-02

 Sample Description:
 Sampled:
 09/04/2019
 7:55

 Matrix:
 Aqueous
 Received:
 09/04/2019
 10:10

Analyses Certs AT Result RL Qual Units DF Analyzed

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

 Total Cyanide
 Prep Method: NA
 Prep Date/Time: 09/04/2019 12:06

 Cyanide, Total
 dij
 A
 0.0076
 0.0050
 mg/L
 1
 09/04/2019 14:21



Analytical Results Date: Wednesday, September 4, 2019

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

 Client Sample ID:
 011
 Work Order/ID:
 1910105-03

 Sample Description:
 Sampled:
 09/04/2019
 8:00

 Matrix:
 Aqueous
 Received:
 09/04/2019
 10:10

Analyses Certs AT Result RL Qual Units DF Analyzed

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

 Total Cyanide
 Prep Method: NA
 Prep Date/Time: 09/04/2019 12:06

 Cyanide, Total
 dij
 A
 ND
 0.0050
 mg/L
 1
 09/04/2019 14:23

ANALYTE TYPES: (AT)

A,B = Target Analyte

I = Internal Standard
M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)



QC SAMPLE IDENTIFICATIONS

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

ICSA = Interference Check Standard "A"
ICSAB = Interference Check Standard "AB"
BSD = Method Blank Spike Duplicate
MSD = Matrix Spike Duplicate
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
OPR = Ongoing Precision and Recovery Standard
SD = Serial Dilution

PDS = Post Digestion Spike QCS = Quality Control Standard

CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- d Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
- i Kansas Dept Health & Env. NELAP (#E-10397)
- J Kentucky Wastewater Laboratory Certification Program (#108202)

FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

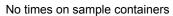
RL: Reporting Limit

RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler

Comments





Cooler Inspection Checklist

Ice Present or not required?	Yes
Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes
Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes
Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes
Sample type identified on COC?	No
Correct type of Containers Received	Yes
Correct number of containers listed on COC?	Yes
Containers Intact?	Yes
COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes
Sample labels match COC (Name, Date & Time?)	No
Samples arrived within hold time?	Yes
Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes
Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes

SIM (S)	(A) MICROBAC:							CHAIN OF CUSTODY RECORD	CORD
) 			5					Number 1522 (3 Instructions on back	
Lab Report Address	Address	Invoice Address	Address			Turnaround T	ume	TO BE COMPLETED BY MICROBAC	C , 3
Client Nam	Client Name: かんこしゃ しょし	Client Name:	ame:			☐ Routine (☐ Routine (5 to 7 business days) ☐ RUSH* (notify lab)	Temperature Upon Receipt (°C) Therm ID	
Address:		Address:	:4					Holding Time	lis
City, State, Zip:	, Zip:	City, State, Zip	ate, Zip:			(needed by)		Samples Received on Ice? VI Yes No N/A	s ☐ No ☐ N/A
Contact:	Y 2 200	Contact:				Report Type		Custody Seals Intact? ☐ Yes ☐ No 以N/A	JNO DINA
Telephone No.:	No.:	Telephone No.:	ne No.:			☐ Results Only	ly Level 1 Level 2	☐ Level 3 ☐ Level 4 ☐ EDD	
Send Report via:	rt via:	(address)			Send Invoice via:	:	ıx ☐ e-mail (address)		
Project:		Location:			PO No.:		Compliance Monitoring?	oring? ☐ Yes ☐ No	
Sampled by	Sampled by (PRINT): Warren Hin	Sampler	Sampler Signature:			Sampler Phone No.:			
*	* Matrix Types: Soil/Solid (S), Sl. ** Preservative Types: (1) HNO3, (2) H:	udge, Oil, Wipe, Drinking \ 2SO4, (3) HCI, (4) NaOH,	Water (DW), Grou (5) Zinc Acetate	undwater (GW e, (6) Methan	/), Surface Water ol, (7) Sodium Bis	(SW), Waste Waste Waste Waste Waste Waste Waste.	Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) (1) HNO3, (2) H2SO4, (3) HCJ, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate. (8) Sodium Thiosulfate. (9) Hexane. (1) Unpreserved	(U) Unpreserved	
				-	_		REQUESTED ANALYSIS		
19I0105 Arcelor NPDES 		200	ontainers	dwo		-			
Mittal - Excurs 019	Client Sample ID	Date Time Collected	oO to .oV	XinteM Stab / Co	Preservative Zn	Ch P		75/	50/075
rey C Burr ion-C	pt 00	9		J	×	X			orial Notes
าธ H	290	9/3/19	~	U	- 111	×		\	
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r, IN	South layou talet	9K/19 07	55 (O		.X		707	
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Possible Ha:	Possible Hazard Identification	lous Non-Hazardous	Radioactive		Sample D	Sample Disposition	☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	Return Archive	
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rev.12/26/2017	2017							' I I	Rage 8 of 8