



01-Jul-2024

Tim Sullivan
U.S. Steel - Gary Works
1 North Broadway
Mail Station 70
Gary, IN 46402

Re: **USS Midwest - EBSP 06.26.24**

Work Order: **24061321**

Dear Tim,

ALS Environmental received 6 samples on 26-Jun-2024 01:26 PM 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 19.

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,

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

Client: U.S. Steel - Gary Works
 Project: USS Midwest - EBS 06.26.24
 Work Order: 24061321

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>
24061321-01	KMXX_06262024	Aqueous		6/26/2024 11:40	6/26/2024 13:04	<input type="checkbox"/>
24061321-01	KMXX_06262024	Aqueous		6/26/2024 11:40	6/27/2024 13:00	<input type="checkbox"/>
24061321-02	IDBW_06262024	Aqueous		6/26/2024 11:16	6/26/2024 13:04	<input type="checkbox"/>
24061321-02	IDBW_06262024	Aqueous		6/26/2024 11:16	6/27/2024 13:00	<input type="checkbox"/>
24061321-03	BDMZ_06262024	Aqueous		6/26/2024 10:35	6/26/2024 13:04	<input type="checkbox"/>
24061321-03	BDMZ_06262024	Aqueous		6/26/2024 10:35	6/27/2024 13:00	<input type="checkbox"/>
24061321-04	BDXX_06262024	Aqueous		6/26/2024 10:10	6/26/2024 13:04	<input type="checkbox"/>
24061321-04	BDXX_06262024	Aqueous		6/26/2024 10:10	6/27/2024 13:00	<input type="checkbox"/>
24061321-05	BDXX_06262024_DUP	Aqueous		6/26/2024 10:15	6/26/2024 13:04	<input type="checkbox"/>
24061321-05	BDXX_06262024_DUP	Aqueous		6/26/2024 10:15	6/27/2024 13:00	<input type="checkbox"/>
24061321-06	BDXX_06262024_FB	Aqueous		6/26/2024 10:15	6/26/2024 13:04	<input type="checkbox"/>
24061321-06	BDXX_06262024_FB	Aqueous		6/26/2024 10:15	6/27/2024 13:00	<input type="checkbox"/>

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Work Order: 24061321

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: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: KMXX_06262024
Collection Date: 6/26/2024 11:40 AM

Work Order: 24061321
Lab ID: 24061321-01
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)							Analyst: ALS
pH (field)	8.28		0		s.u.	1	6/26/2024 11:40
FIELD TEMPERATURE							Analyst: ALS
Field Temperature	71.6		0		°F	1	6/26/2024 11:40
TURBIDITY (FIELD)							Analyst: ALS
Turbidity (field)	2.61		1.0	1.0	n.t.u.	1	6/26/2024 11:40
METALS BY ICP-MS							Analyst: STP
Chromium	0.000763	J	0.00061	0.0050	mg/L	1	6/27/2024 17:36
CHROMIUM, HEXAVALENT (LOW LEVEL)							Analyst: CHC
Chromium, Hexavalent	0.137		0.0130	0.0350	µg/L	1	6/28/2024 12:44
CYANOBACTERIA IN RECREATIONAL WATER							Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000							Analyst: JH
Escherichia coli	<1		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS							Analyst: HTS
Total Suspended Solids	3.90		0.300	2.00	mg/L	1	6/27/2024 17:00

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

ALS Group, USA

Date: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: IDBW_06262024
Collection Date: 6/26/2024 11:16 AM

Work Order: 24061321
Lab ID: 24061321-02
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)							Analyst: ALS
pH (field)	8.25		0		s.u.	1	6/26/2024 11:16
FIELD TEMPERATURE							Analyst: ALS
Field Temperature	71.9		0		°F	1	6/26/2024 11:16
TURBIDITY (FIELD)							Analyst: ALS
Turbidity (field)	2.48		1.0	1.0	n.t.u.	1	6/26/2024 11:16
METALS BY ICP-MS							Analyst: STP
Chromium	0.000688	J	0.00043	0.0020	mg/L	1	6/27/2024 17:41
CHROMIUM, HEXAVALENT (LOW LEVEL)							Analyst: CHC
Chromium, Hexavalent	0.134		0.0130	0.0350	µg/L	1	6/28/2024 12:55
CYANOBACTERIA IN RECREATIONAL WATER							Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000							Analyst: JH
Escherichia coli	6.20		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS							Analyst: HTS
Total Suspended Solids	3.70		0.300	2.00	mg/L	1	6/27/2024 17:00

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

ALS Group, USA

Date: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: BDMZ_06262024
Collection Date: 6/26/2024 10:35 AM

Work Order: 24061321
Lab ID: 24061321-03
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)							Analyst: ALS
pH (field)	7.90		0		s.u.	1	6/26/2024 10:35
FIELD TEMPERATURE							Analyst: ALS
Field Temperature	76.4		0		°F	1	6/26/2024 10:35
TURBIDITY (FIELD)							Analyst: ALS
Turbidity (field)	7.13		1.0	1.0	n.t.u.	1	6/26/2024 10:35
METALS BY ICP-MS							Analyst: STP
Chromium	0.000917	J	0.00043	0.0020	mg/L	1	6/27/2024 17:42
CHROMIUM, HEXAVALENT (LOW LEVEL)							Analyst: CHC
Chromium, Hexavalent	0.0299	J	0.0130	0.0350	µg/L	1	6/28/2024 13:06
CYANOBACTERIA IN RECREATIONAL WATER							Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000							Analyst: JH
Escherichia coli	274		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS							Analyst: HTS
Total Suspended Solids	10.4		0.300	2.00	mg/L	1	6/27/2024 17:00

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

ALS Group, USA

Date: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: BDXX_06262024
Collection Date: 6/26/2024 10:10 AM

Work Order: 24061321
Lab ID: 24061321-04
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)							Analyst: ALS
pH (field)	7.90		0		s.u.	1	6/26/2024 10:10
FIELD TEMPERATURE							Analyst: ALS
Field Temperature	76.1		0		°F	1	6/26/2024 10:10
TURBIDITY (FIELD)							Analyst: ALS
Turbidity (field)	8.43		1.0	1.0	n.t.u.	1	6/26/2024 10:10
METALS BY ICP-MS							Analyst: STP
Chromium	0.000956	J	0.00043	0.0020	mg/L	1	6/27/2024 17:44
CHROMIUM, HEXAVALENT (LOW LEVEL)							Analyst: CHC
Chromium, Hexavalent	0.0225	J	0.0130	0.0350	µg/L	1	6/28/2024 13:17
CYANOBACTERIA IN RECREATIONAL WATER							Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000							Analyst: JH
Escherichia coli	388		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS							Analyst: HTS
Total Suspended Solids	11.8		0.300	2.00	mg/L	1	6/27/2024 17:00

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

ALS Group, USA

Date: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: BDXX_06262024_DUP
Collection Date: 6/26/2024 10:15 AM

Work Order: 24061321
Lab ID: 24061321-05
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PH (FIELD)							Analyst: ALS
pH (field)	7.90		0		s.u.	1	6/26/2024 10:15
FIELD TEMPERATURE							Analyst: ALS
Field Temperature	75.7		0		°F	1	6/26/2024 10:15
TURBIDITY (FIELD)							Analyst: ALS
Turbidity (field)	7.97		1.0	1.0	n.t.u.	1	6/26/2024 10:15
METALS BY ICP-MS							Analyst: STP
Chromium	0.000874	J	0.00043	0.0020	mg/L	1	6/27/2024 17:46
CHROMIUM, HEXAVALENT (LOW LEVEL)							Analyst: CHC
Chromium, Hexavalent	0.0247	J	0.0130	0.0350	µg/L	1	6/28/2024 13:27
CYANOBACTERIA IN RECREATIONAL WATER							Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000							Analyst: JH
Escherichia coli	303		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS							Analyst: HTS
Total Suspended Solids	11.0		0.300	2.00	mg/L	1	6/27/2024 17:00

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

ALS Group, USA

Date: 01-Jul-24

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
Sample ID: BDXX_06262024_FB
Collection Date: 6/26/2024 10:15 AM

Work Order: 24061321
Lab ID: 24061321-06
Matrix: AQUEOUS

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			Method: E200.8		Prep: CEM-NPDES / 6/26/24		Analyst: STP
Chromium	U		0.00043	0.0020	mg/L	1	6/27/2024 17:47
CHROMIUM, HEXAVALENT (LOW LEVEL)			Method: E218.6				Analyst: CHC
Chromium, Hexavalent	U		0.0130	0.0350	µg/L	1	6/28/2024 13:38
CYANOBACTERIA IN RECREATIONAL WATER			Method: ABRAXIS 520022				Analyst: JH
Microcystins and Nodularins	U		1.0	1.0	µg/L	1	6/27/2024 11:40
E. COLI BY COLILERT QUANTI-TRAY/2000			Method: A9223B		Prep: Incubation / 6/26/24		Analyst: JH
Escherichia coli	<1		1.0	1.0	MPN/100mL	1	6/27/2024 14:08
TOTAL SUSPENDED SOLIDS			Method: A2540 D-15		Prep: A2540 D-15 / 6/27/24		Analyst: HTS
Total Suspended Solids	U		0.300	2.00	mg/L	1	6/27/2024 17:00

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

Client: U.S. Steel - Gary Works
Project: USS Midwest - EBSP 06.26.24
WorkOrder: 24061321

**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
n	Analyte accreditation is not offered
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>
°F	Degrees Fahrenheit
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
MPN/100mL	
n.t.u.	Nephelometric Turbidity Units
s.u.	Standard Units

Client: U.S. Steel - Gary Works
Work Order: 24061321
Project: USS Midwest - EBSP 06.26.24

QC BATCH REPORT

Batch ID: **242656** Instrument ID **ICPMS3** Method: **E200.8**

MBLK		Sample ID: MBLK-242656-242656				Units: mg/L		Analysis Date: 6/27/2024 05:29 PM			
Client ID:		Run ID: ICPMS3_240627A				SeqNo: 10908400		Prep Date: 6/26/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chromium			U	0.0050							

LCS		Sample ID: LCS-242656-242656				Units: mg/L		Analysis Date: 6/27/2024 05:31 PM			
Client ID:		Run ID: ICPMS3_240627A				SeqNo: 10908401		Prep Date: 6/26/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chromium	0.1016	0.0050	0.1	0	102	85-115	0				

MS		Sample ID: 24061321-01D MS				Units: mg/L		Analysis Date: 6/27/2024 05:37 PM			
Client ID: KMXX_06262024		Run ID: ICPMS3_240627A				SeqNo: 10908405		Prep Date: 6/26/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chromium	0.1031	0.0050	0.1	0.0007634	102	70-130	0				

MSD		Sample ID: 24061321-01D MSD				Units: mg/L		Analysis Date: 6/27/2024 05:39 PM			
Client ID: KMXX_06262024		Run ID: ICPMS3_240627A				SeqNo: 10908406		Prep Date: 6/26/2024		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chromium	0.102	0.0050	0.1	0.0007634	101	70-130	0.1031	1.1	20		

The following samples were analyzed in this batch:

24061321-01D	24061321-02D	24061321-03D
24061321-04D	24061321-05D	24061321-06D

Client: U.S. Steel - Gary Works
Work Order: 24061321
Project: USS Midwest - EBSP 06.26.24

QC BATCH REPORT

Batch ID: **242698** Instrument ID **VAL-WC** Method: **A9223B**

MBLK	Sample ID: MBLK-242698-242698			Units: MPN/100mL	Analysis Date: 6/27/2024 02:08 PM					
Client ID:	Run ID: VAL-WC_240627B		SeqNo: 10905614	Prep Date: 6/26/2024	DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Escherichia coli	U	1.0								
------------------	---	-----	--	--	--	--	--	--	--	--

The following samples were analyzed in this batch:

24061321-01B	24061321-02B	24061321-03B
24061321-04B	24061321-05B	24061321-06B

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

Client: U.S. Steel - Gary Works
Work Order: 24061321
Project: USS Midwest - EBSP 06.26.24

QC BATCH REPORT

Batch ID: **242736** Instrument ID **VAL-TSS** Method: **A2540 D-15**

MBLK	Sample ID: MBLK-242736-242736				Units: mg/L		Analysis Date: 6/27/2024 05:00 PM			
Client ID:	Run ID: VAL-TSS_240627A			SeqNo: 10904932		Prep Date: 6/27/2024		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Suspended Solids U 2.0

LCS	Sample ID: LCS-242736-242736				Units: mg/L		Analysis Date: 6/27/2024 05:00 PM			
Client ID:	Run ID: VAL-TSS_240627A			SeqNo: 10904930		Prep Date: 6/27/2024		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Suspended Solids 90 20 100 0 90 80-115 0

The following samples were analyzed in this batch:

24061321-01A	24061321-02A	24061321-03A
24061321-04A	24061321-05A	24061321-06A

Client: U.S. Steel - Gary Works
 Work Order: 24061321
 Project: USS Midwest - EBSP 06.26.24

QC BATCH REPORT

Batch ID: **R406787** Instrument ID **VAL-WC** Method: **Abraxis 520022**

MBLK		Sample ID: MB-R406787-R406787				Units: µg/L		Analysis Date: 6/27/2024 11:40 AM			
Client ID:		Run ID: VAL-WC_240627A				SeqNo: 10904444		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Microcystins and Nodularins U 1.0

LCS		Sample ID: LCS-R406787-R406787				Units: µg/L		Analysis Date: 6/27/2024 11:40 AM			
Client ID:		Run ID: VAL-WC_240627A				SeqNo: 10904445		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Microcystins and Nodularins 1 1.0 1 0 100 0

DUP		Sample ID: 24061164-01E DUP				Units: µg/L		Analysis Date: 6/27/2024 11:40 AM			
Client ID:		Run ID: VAL-WC_240627A				SeqNo: 10904447		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Microcystins and Nodularins U 1.0 0 0 0 0 0 0 0 20

DUP		Sample ID: 24061321-02E DUP				Units: µg/L		Analysis Date: 6/27/2024 11:40 AM			
Client ID: IDBW_06262024		Run ID: VAL-WC_240627A				SeqNo: 10904458		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Microcystins and Nodularins U 1.0 0 0 0 0 0 0 0 20

LCS2		Sample ID: LCS2-R406787				Units: µg/L		Analysis Date: 6/27/2024 11:40 AM			
Client ID:		Run ID: VAL-WC_240627A				SeqNo: 10904463		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Microcystins and Nodularins 5 1.0 5 0 100 75-125 0

The following samples were analyzed in this batch:

24061321-01E	24061321-02E	24061321-03E
24061321-04E	24061321-05E	24061321-06E

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

Client: U.S. Steel - Gary Works
 Work Order: 24061321
 Project: USS Midwest - EBSP 06.26.24

QC BATCH REPORT

Batch ID: **R406945** Instrument ID **VAL-IC** Method: **E218.6**

MBLK		Sample ID: MBLK-R406945			Units: µg/L		Analysis Date: 6/28/2024 10:18 AM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909947		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 0.050

LCS		Sample ID: LCS-R406945			Units: µg/L		Analysis Date: 6/28/2024 10:29 AM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909948		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.8124 0.050 0.8 0 102 90-110 0

MS		Sample ID: 24061207-06A MS			Units: µg/L		Analysis Date: 6/28/2024 02:34 PM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909970		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.553 0.050 0.5 0.0161 107 90-110 0

MS		Sample ID: 24061323-01B MS			Units: µg/L		Analysis Date: 6/28/2024 03:18 PM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909974		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.5647 0.050 0.5 0.0062 112 90-110 0 S

MSD		Sample ID: 24061207-06A MSD			Units: µg/L		Analysis Date: 6/28/2024 02:45 PM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909971		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.5546 0.050 0.5 0.0161 108 90-110 0.553 0.289 20

MSD		Sample ID: 24061323-01B MSD			Units: µg/L		Analysis Date: 6/28/2024 03:29 PM			
Client ID:		Run ID: VAL-IC_240628A			SeqNo: 10909975		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.5583 0.050 0.5 0.0062 110 90-110 0.5647 1.14 20 S

The following samples were analyzed in this batch:

24061321-01C	24061321-02C	24061321-03C
24061321-04C	24061321-05C	24061321-06C

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



Chain of Custody Form

Page 1 of 1

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

Customer Information		ALS Project Manager: Amanda Grzybowski		ALS Work Order #: 24061321	
Purchase Order		Project Information		Parameter/Method Request for Analysis	
Work Order		Project Name USS Midwest EBSP		A TSS (2540D)	
Company Name USS / Ramboll		Project Number		B E. Coli (9223B) 1 L Plastic - Neat	
Send Report To Tim Sullivan		Bill To Company USS		C HexChrome (218.6) [Field Filtered] (2) 100ml Plastic - Bacti	
Address 6300 US-12		Invoice Attn.		D Total Chrome (200.8) 125ml Plastic - NH4	
City/State/Zip Portage, IN 46368		Address		E Cyano Bacteria (Abraxis) 250ml Plastic - HNO3	
Phone 219-763-5022		City/State/Zip		F pH - Field Test (See Field Log) Clear Vial - Neat	
Fax		Phone		G Temp - Field Test (See Field Log)	
e-Mail Address		Fax		H Turbidity - Field Test (See Field Log)	
				I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	KMXX 20240624	6/26/24	1140	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
2	IDBW	6/26/24	1116	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
3	BDMZ	6/26/24	1035	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
4	BDXX	6/26/24	1010	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
5	BDXX	6/26/24	1015	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
6	BDXX 20240624	6/26/24	1015	AQ	2, 7, 8	6	X	X	X	X	X	X	X	X			
7							X	X	X	X	X						
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Sampler(s): Please Print & Sign
 Bowers / ALS
Shipment Method: 10 Wk Days 5 Wk Days 3 Wk Days 2 Wk Days 24 Hour

Required Turnaround Time: (Check Box)
 10 Wk Days 5 Wk Days 3 Wk Days 2 Wk Days 24 Hour

Results Due Date:

Relinquished by: [Signature] / ALS
 Date: 6/26/24 Time: 1304

Received by: [Signature]
 Date: 6/26/24 Time: 1304

Relinquished by (Laboratory): [Signature]
 Date: Time:

Received by (Laboratory): [Signature]
 Date: Time:

Logged by (Laboratory): [Signature]
 Date: Time:

Checked by (Laboratory): [Signature]
 Date: Time:

ALS Cooler ID: 173.15
Cooler Temp: 24.3°C

QC Package: (Check Box Below)
 Level II: Standard QC Level III: Raw Data
 TRRP LRC TRRP Level IV
 Level IV: SW846 Methods/CLP like
 Other:

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₃ 6-NaHSO₄ 7-Other 8-Neat, 0-6°C

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

Project:

U. S. Steel State-Only Environmentally Beneficial Project (SEBP),
Lake Michigan's Indiana Shoreline Sampling

Date: 6-26-24

Ramboll

Field Team Members: B. Owen / S. Mallow

Weather Conditions: Cloudy / Slt Wind (w)

Air Temp °F: 74.

Field Test Meters:	Thermo Scientific Orion Star A121	Traceable Kangaroo Thermocouple Thermometer	HACH 2100P Turbidometer
--------------------	-----------------------------------	---	-------------------------

Field Calibration Form Completed? YES / NO- YES If NO, Why?:

Site	Time	pH s.u.	Temp °F	Turbidity NTU
KMXX	1140	8.28	76.6	2.61
IDBW	1116	8.25	71.9	2.98
Standard Check	1142	7.00= 7.07		20= 20.5
BDMZ	1035	7.9	76.4	7.13
BDXX	1010	7.9	76.1	8.43
Standard Check	1040	7.00= 7.01		20= 20.8
BDXX -DUP	1015	7.9	75.7	7.97

Notes/Observations:

Sample Receipt Checklist

Client Name: **USS-GARY**

Date/Time Received: **26-Jun-24 13:26**

Work Order: **24061321**

Received by: **JBT**

Checklist completed by Diane Shaw 28-Jun-24 Reviewed by: _____
eSignature Date 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):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

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: BDXX - FB Hex Chrome sample pH out; adjusted by analyst at workbench | HOLLAND - 3.8/4.8 c IR3, pH check <2.

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

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction: