Element
Suite 100, 328 Ley Road
Fort Wayne, Indiana
46825, United States

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E: Info.FortWayne@element.com
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October 19, 2022

Ken Myers
East Chicago Sanitary District
5201 Indianapolis Blvd
East Chicago, IN 46312

RE: Upstream

Dear Ken Myers: Lot Id: 127858

Element Materials Technology – Fort Wayne received 7 sample(s) on 10/6/2022 for the analyses presented in the following report.

In accordance with your instructions, a laboratory of Element Materials Technology Fort Wayne LLC either conducted or subcontracted theses analyses. Subcontracted analyses will be identified in an accompanying case narrative and any associated report(s) will be attached in full. Unless otherwise noted in the case narrative, all analyses were conducted using approved methodologies. Reported results relate only to the items tested.

Estimated uncertainty is available upon request. This report shall not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

Nicole Breauchy
Project Manager
Suite 100, 328 Ley Road,
Fort Wayne, IN 46825

Accreditation	**Cert #**
TNI:2016 (Florida)	E871168
ISO 17025:2017 (A2LA)	6190.02
Indiana	M-02-05
Michigan	9030
South Dakota	--
Tennessee	04911

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Analytical Report

Bill To: East Chicago Sanitary District
5201 Indianapolis Blvd
East Chicago, IN, United States
46312
Attn: Ken Myers
Sampled By: HP
Company:

Project ID: Upstream
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **127858**
Control Number:
Date Received: Oct 6, 2022
Date Reported: Oct 19, 2022
Report Number: 228452

Reference Number **127858-1** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Subcontracted Services							
Subcontractor Report ID		180-145788-1		1		Oct 14, 2022 14:27	MK
Cyanide, Available		<0.002	mg/L	1	0.002	Oct 13, 2022 11:08	MK

Reference Number **127858-2** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Aggregate Organic Constituents							
Oil & Grease, Total		<5	mg/L	1		Oct 07, 2022 15:24	SK
Oil & Grease, Total	Calculated Reporting Limit	<5	mg/L	1		Oct 07, 2022 15:24	SK

Reference Number **127858-3** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Microbiology							
Escherichia coli	Multi Well	133	MPN/100mL	1	1	Oct 06, 2022 17:11	CS

Reference Number **127858-4** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Subcontracted Services							
Subcontractor Report ID		29.9		1		Oct 08, 2022 07:30	MK

Reference Number **127858-5** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Aggregate Organic Constituents							
Biochemical Oxygen Demand	BOD	6	mg/L	1	2	Oct 14, 2022 16:00	AS
Physical and Aggregate Properties							
Total Suspended Solids	Non-Filterable Residue	144	mg/L	1	2	Oct 07, 2022 13:21	AS
Routine Water							
Chloride		50	mg/L	5	2	Oct 11, 2022 17:19	RB
Sulfate		40	mg/L	5	2	Oct 11, 2022 17:19	RB

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Analytical Report

Bill To: East Chicago Sanitary District
5201 Indianapolis Blvd
East Chicago, IN, United States
46312
Attn: Ken Myers
Sampled By: HP
Company:

Project ID: Upstream
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **127858**
Control Number:
Date Received: Oct 6, 2022
Date Reported: Oct 19, 2022
Report Number: 228452

Reference Number **127858-6** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte		Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Metals - Total in Water by ICP-MS							
Cadmium	Total	<0.0002	mg/L	1	0.0002	Oct 07, 2022 06:11	FR
Chromium	Total	0.0014	mg/L	1	0.0004	Oct 07, 2022 06:11	FR
Copper	Total	0.0019	mg/L	1	0.0002	Oct 07, 2022 06:11	FR
Lead	Total	<0.0002	mg/L	1	0.0002	Oct 07, 2022 06:11	FR
Nickel	Total	0.011	mg/L	1	0.001	Oct 07, 2022 06:11	FR
Zinc	Total	0.0075	mg/L	1	0.0004	Oct 07, 2022 06:11	FR

Reference Number **127858-7** **Sample Date** 2022-10-06 09:34
Sample Description Upstream **Sample Matrix** Wastewater

Analyte	Result	Units	DF	Nominal DL	Analysis Start Date/Time	Analyst Initials
Inorganic Nonmetallic Parameters						
Nitrogen, Ammonia (As N)	0.1	mg/L	1	0.1	Oct 10, 2022 15:22	RW
Nitrogen, Nitrate + Nitrite (As N)	1.5	mg/L	1	0.1	Oct 12, 2022 14:44	RW
Total Phosphorus	0.4	mg/L	1	0.1	Oct 12, 2022 14:51	AS
Total Kjeldahl Nitrogen	1.4	mg/L	1	0.5	Oct 11, 2022 22:59	AS
Total Nitrogen	2.9	mg/L	1	0.5	Oct 11, 2022 22:59	AS

Approved by: Nicole Breauchy

Nicole Breauchy
Project Manager

Data have been validated by Analytical Quality Control and Element's Integrated Data Validation System (IDVS).
Generation and distribution of the report, and approval by the digitized signature above, are performed through a secure and controlled automatic process.

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Methodology and Notes

Bill To: East Chicago Sanitary District
5201 Indianapolis Blvd
East Chicago, IN, United States
46312
Attn: Ken Myers
Sampled By: HP
Company:

Project ID: Upstream
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **127858**
Control Number:
Date Received: Oct 6, 2022
Date Reported: Oct 19, 2022
Report Number: 228452

Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Ammonia-N by FIA	EPA	Determination of Ammonia Nitrogen by Semi-Automated Colorimetry, E350.1	Oct 10, 2022	Fort Wayne
Anions by IC in Water	EPA	Determination of Inorganic Anions by Ion Chromatography, E300.0	Oct 11, 2022	Fort Wayne
BOD and CBOD in water	SMEWW	BOD: 5-Day Test, 5210B	Oct 14, 2022	Fort Wayne
Coliforms by Quantitray	SMEWW	Enzyme Substrate Test, 9223B	Oct 6, 2022	Fort Wayne
External Sublet Data Entry	Ext. Lab	External Lab, Ext. Lab	Oct 13, 2022	Fort Wayne
Metals ICP-MS Total in water	EPA	Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry, E200.8	Oct 7, 2022	Fort Wayne
Nitrate Nitrite in Water by FIA	EPA	Determination of Nitrate-Nitrite Nitrogen by Automated Colorimetry, E353.2	Oct 12, 2022	Fort Wayne
Oil and Grease	EPA	n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, E1664	Oct 7, 2022	Fort Wayne
Phosphorus Total in Water by FIA	SMEWW	Phosphorus: Automated Ascorbic Acid Reduction Method, 4500-P F	Oct 12, 2022	Fort Wayne
Solids - Suspended	SMEWW	Total Suspended Solids, 2540D	Oct 7, 2022	Fort Wayne
Sublet to Purves Environmental	Ext. Lab	External Lab, Ext. Lab	Oct 8, 2022	Purves Environmental Inc.
Sublet to Test America-Pittsburgh	Ext. Lab	External Lab, Ext. Lab	Oct 14, 2022	Test America-Pittsburgh
TKN in Water by FIA	Calculated	Calculated Result, Calculated	Oct 11, 2022	Fort Wayne
TKN in Water by FIA	EPA	Total Kjeldahl Nitrogen by Semi-Automated Colorimetry, E351.2	Oct 11, 2022	Fort Wayne

References

Calculated	Calculated Result
EPA	United States Environmental Protection Agency
Ext. Lab	External Laboratory
SMEWW	Standard Methods for the Examination of Water and Wastewater

Comments:

- Oct 10, 2022 - The low level mercury testing was subcontracted to Purves Environmental. Their report is attached in its entirety. (BRL = Below Reporting Limit).
- Oct 14, 2022 - The Available Cyanide testing was subcontracted to Eurofins/Test America Pittsburgh PA. Their report is attached in its entirety.
- Oct 19, 2022 - Sample 127858-5; 120728: The BOD result for sample 127858-5 is an estimate. Dilutions were used that would typically provide results within instrument range for this type of sample, however this sample had a higher concentration than is typical. A smaller sample volume (larger dilution) would have been necessary to produce a result within the instrument range, however the hold time for the BOD test is 48 hours and test results are not available until after the 5 day incubation period.
- Oct 19, 2022 - The dilution water blank for the BOD analysis was outside of acceptance limits. This data is accepted based on acceptable recoveries in additional associated QC.

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Fort Wayne, Indiana
46825, United States

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Methodology and Notes

Bill To:	East Chicago Sanitary District 5201 Indianapolis Blvd East Chicago, IN, United States 46312	Project ID:	Upstream
Attn:	Ken Myers	Project Name:	
Sampled By:	HP	Project Location:	
Company:		LSD:	
		P.O.:	
		Proj. Acct. code:	

Lot ID:	**127858**
Control Number:	
Date Received:	Oct 6, 2022
Date Reported:	Oct 19, 2022
Report Number:	228452

Please direct any inquiries regarding this report to our Client Services group.
Results relate only to samples as submitted.
The test report shall not be reproduced except in full, without the written approval of the laboratory.

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Report Transmission Cover Page

Bill To: East Chicago Sanitary District
5201 Indianapolis Blvd
East Chicago, IN, United States
46312
Attn: Ken Myers
Sampled By: HP
Company:

Project ID: Upstream
Project Name:
Project Location:
LSD:
P.O.:
Proj. Acct. code:

Lot ID: **127858**
Control Number:
Date Received: Oct 6, 2022
Date Reported: Oct 19, 2022
Report Number: 228452

Contact	Company	Address
Ken Myers	**East Chicago Sanitary District**	5201 Indianapolis Blvd East Chicago, IN 46312 Phone: (219) 391-8466 Fax: Email: kmyers@eastchicago.com

Delivery	Format	Deliverables
Email - Merge Deliverables	PDF	COC / Test Report
Email - Multiple Deliverables By Lot	East Chicago	Test Report

Contact	Company	Address
Megan Krauskopf	**East Chicago Sanitary District**	Fort Wayne, IN null Phone: (260) 471-7000 Fax: Email: megan.krauskopf@element.com

Delivery	Format	Deliverables
Email - Single Deliverable	East Chicago	Test Report

Contact	Company	Address
San Operator	**East Chicago Sanitary District**	5201 Indianapolis Blvd. East Chicago, IN 46312 Phone: (219) 391-8466 Fax: Email: sanoperator@eastchicago.com

Delivery	Format	Deliverables
Email - Merge Deliverables	PDF	COC / Test Report
Email - Multiple Deliverables By Lot	East Chicago	Test Report

Notes To Clients:

- Oct 10, 2022 - The low level mercury testing was subcontracted to Purves Environmental. Their report is attached in its entirety. (BRL = Below Reporting Limit).
- Oct 14, 2022 - The Available Cyanide testing was subcontracted to Eurofins/Test America Pittsburgh PA. Their report is attached in its entirety.
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- Oct 19, 2022 - The dilution water blank for the BOD analysis was outside of acceptance limits. This data is accepted based on acceptable recoveries in additional associated QC.

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If you receive this transmission by error, or if this transmission is not satisfactory, please notify us by telephone.

element

External Sublet Request

Purchase Order Number: PO# PIFW002529
Printed Date: Oct 06, 2022
Shipping Method: Ground

To:
Attn: Melissa Kimbrough
Purves Environmental Inc.
77 Maple Drive
Hudson, OH 44236
Phone: (330) 687-3360
Fax:
Email: m-kimbrough1@hotmail.com

Results To:
Fort Wayne
Suite 100, 328 Ley Road
Fort Wayne, IN 46825
Phone: (260) 471-7000
Fax: (260) 471-7777
Email: Info.FortWayne@element.com

Bill To:
Attn: Accounts Payable
Element Materials Technology Canada Inc.
3701 Port Union Road
Fairfield OH 45014
United States
Phone: (513) 984-4112
Fax: (513) 984-8258
Email: accpayable.americas@element.com, wregpurch@element.com

Please contact the requisitioner named below with all questions related to this purchase order.
** THE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES. INVOICES MUST BE SENT TO BOTH BILL TO EMAIL ADDRESSES. **

Due Date	Requisitioner	Sample Id	Sampled Date	Element Service Code	Vendor Service Code	Service Name	Sample Description
Oct 20, 2022	John Himelick	127858 - 4	Oct 06, 2022 09:34	HG LL	HG LL	Mercury, Low Level	Upstream - 221005T-2

	Relinquished By	Date/Time	Received By	Date/Time	Temp of Samples	Attempt to Cool? Y / N
1		10/6/22 ~~1845~~ 1845		10/7/22 1300	°C	
2					Comments: Due Oct 13	
3						

AEK 10-6-22

RUSH!

The standard terms and conditions of purchase below are included in each purchase order (PO) of Element Materials Technology Canada Inc. and its subsidiaries (Element) as part of its contract with a supplier of goods and/or services (Vendor). Any Vendor terms and conditions of supply do not apply unless Element agrees in writing. Where terms and conditions exist under an existing written contract between Element and a Vendor, these terms and conditions do not apply.

NOTE: Element Materials Technology Canada Inc. is not an exempt entity and subject to GST, HST, QST and applicable provincial sales taxes.

Terms and Conditions: http://www.element.com/terms/terms-and-conditions

Purves Environmental, Inc.

Mercury Analysis

Analytical Report **Report #: 221008-03 Element FW**

EPA Method 1631E **Page 1 of 1**

Customer Name: Element Materials Technology **10/8/22**
328 Ley Rd.
Fort Wayne, Indiana 46825

Attention:

Project/PO# **emt01**

Lab /(Field ID) or (Customer ID)	Results ng/L	Results ng/L	Results ng/L	Results ng/L	Purves Env ID
127858-4 (Upstream)	**29.9**				221007-02
Sample Type	Upstream				
Date Sampled:	10/06/22				
Date Received:	10/7/22				
Date Prepared:	10/7/22				
Date Analyzed:	10/8/22				
Time Analyzed	7:30:29 AM				
Dilution Factor	10				
High Cal Range Used 1-1000 ng/L					**QCS/MS/MSD**
Method Detection Limit	0.2ng/L				**Acceptable Range**
QCS (Quality Control Standard)	92%				71-125%
Method Blank Result	<0.2	Method Blank Requirement			<0.2

M= Modified: See Below for Explanation

Dilution Factors are calculated into the results.

Method Reporting Limit 0.5ng/L RPD Acceptable Range <20%

Matrix Spike/ Matrix Spike Duplicate Recoveries MS/MSD Acceptable Range 71-125%

Sample ID	**MS %Recovery**	**MSD %Recovery**	**RPD**
221007-08	97.9%	97.1%	0.9%

Normal Calibration range 0.5-100ng/L

The results are related only to the samples presented on this report.

The test results are certified to meet all requirements of the certifying authority West Virginia Cert # 348

Other Codes

J* = Estimated result ,

*** A value found between the Reporting Limit and the Method Detection Limit is considered estimated**

or the sample was not received in proper condition as required by the method.

R* = Rejected, Sample may not have met Method or sampling requirements. CLYM

William W. Purves

Rev 4 6/23/11

Phone: 330-687-3360 77 Maple Dr. Hudson, OH 44236

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-145788-1
Client Project/Site: Available Cyanide 127858

For:
Element Materials Technology
328 Ley Rd
Suite100
Fort Wayne, Indiana 46825

Attn: Don Ellis

Khadejha Brown

Authorized for release by:
10/14/2022 1:15:54 PM

Khadejha Brown, Project Management Assistant I
(412)963-7058
Khadejha.Brown@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 4
Certification Summary 5
Sample Summary 6
Method Summary 7
Lab Chronicle 8
Client Sample Results 9
QC Sample Results 10
QC Association Summary 11
Chain of Custody 12
Receipt Checklists 13

Case Narrative

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Job ID: 180-145788-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative
180-145788-1

Receipt
The sample was received on 10/7/2022 7:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Element Materials Technology
Job ID: 180-145788-1
Project/Site: Available Cyanide 127858

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22 *
Florida	NELAP	E871008	06-30-23
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-23
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-23
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-22
South Carolina	State	89014	04-20-23
Texas	NELAP	T104704528	03-31-23
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-23
Virginia	NELAP	10043	09-14-23
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Sample Summary

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-145788-1	127858-1	Water	10/06/22 09:34	10/07/22 07:40

Method Summary

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Method	Method Description	Protocol	Laboratory
OIA - 1677	Available Cyanide by Flow Injection, Lig	EPA	EET PIT

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Client Sample ID: 127858-1
Date Collected: 10/06/22 09:34
Date Received: 10/07/22 07:40

Lab Sample ID: 180-145788-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OIA - 1677		1			415039	10/13/22 11:08	CMR	EET PIT
	Instrument ID: ALPKEM3									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Analysis

CMR = Carl Reagle

Client Sample Results

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Client Sample ID: 127858-1
Date Collected: 10/06/22 09:34
Date Received: 10/07/22 07:40

Lab Sample ID: 180-145788-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Available (EPA OIA - 1677)	ND		0.0020	0.0016	mg/L			10/13/22 11:08	1

QC Sample Results

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

Method: OIA - 1677 - Available Cyanide by Flow Injection, Lig

Lab Sample ID: MB 180-415039/80
Matrix: Water
Analysis Batch: 415039

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Available	ND		0.0020	0.0016	mg/L			10/13/22 10:48	1

Lab Sample ID: LCS 180-415039/81
Matrix: Water
Analysis Batch: 415039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Available			0.0501	0.0481		mg/L		96	82 - 132		

QC Association Summary

Client: Element Materials Technology
Project/Site: Available Cyanide 127858

Job ID: 180-145788-1

General Chemistry

Analysis Batch: 415039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-145788-1	127858-1	Total/NA	Water	OIA - 1677	
MB 180-415039/80	Method Blank	Total/NA	Water	OIA - 1677	
LCS 180-415039/81	Lab Control Sample	Total/NA	Water	OIA - 1677	

element

External Sublet Request

Purchase Order Number: PO# PIFW002528
Printed Date: Oct 06, 2022
Shipping Method: Ground

To:
Attn: Sample Receiving
Test America-Pittsburgh
301 Alpha Dr
Pittsburgh, PA 15238
Phone: (111) 111-1111
Fax:
Email:

Results To:
Fort Wayne
Suite 100, 328 Ley Road
Fort Wayne, IN 46825
Phone: (260) 471-7000
Fax: (260) 471-7777
Email: Info.FortWayne@element.com

Bill To:
Attn: Accounts Payable
Element Materials Technology Canada Inc.
3701 Port Union Road
Fairfield OH 45014
United States
Phone: (513) 984-4112
Fax: (513) 984-8258
Email: accpayable.americas@element.com, wregpurch@element.com

Please contact the requisitioner named below with all questions related to this purchase order.
** THE PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES. INVOICES MUST BE SENT TO BOTH BILL TO EMAIL ADDRESSES. **

Due Date	Requisitioner	Sample Id	Sampled Date	Element Service Code	Vendor Service Code	Service Name	Sample Description
Oct 13, 2022	John Himelick	127858 - 1	Oct 06, 2022 09:34	CYAN 1677	CYAN 1677	Cyanide, Available by Ligand Exchange	Upstream

	Relinquished By	Date/Time	Received By	Date/Time	Temp of Samples _____ °C	Attempt to Cool? Y / N
1	[signature]	10/6/22 1855	[signature]	10-7-22 0740	Comments:	
2						
3						

180-145788 Chain of Custody

RUSH!

The standard terms and conditions of purchase below are included in each purchase order (PO) of Element Materials Technology Canada Inc. and its subsidiaries (Element) as part of its contract with a supplier of goods and/or services (Vendor) Any Vendor terms and conditions of supply do not apply unless Element agrees in writing Where terms and conditions exist under an existing written contract between Element and a Vendor, these terms and conditions do not apply

NOTE: Element Materials Technology Canada Inc. is not an exempt entity and subject to GST, HST, QST and applicable provincial sales taxes.

Terms and Conditions http //www element.com/terms/terms-and-conditions

Login Sample Receipt Checklist

Client: Element Materials Technology

Job Number: 180-145788-1

Login Number: 145788
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

element™

Chain of Custody

Laboratory Number: 127858

	Client Information:	Billing Information:	PO Number:	Project Name/Number:
Company Name:	East Chicago Sanitary District	Same		Upstream
Contact Name:	Henry Padilla		Quote Number:	
Address:	5201 Indianapolis Blvd			Sampler's Signature
			Required QC Level	
City, State Zip:	East Chicago IN 46401			
Phone Number:	219-391-8466 Ext. 240	Ext:	Bill Monthly	Shipping Method:
Fax Number:			☐Yes	UPS / FedEx / Airborne
E-mail Address:	hpadilla@eastchicago.com		☐No	DHL / Element / Hand / Mail

Page 1 of 1

Matrix Code

DW = Drinking Water
WW = Waste Water
GW = Ground Water
AQ = Aqueous
OT = Other
SL = Sludge SOL = Solid
O = Oil SO = Soil
F = Food SW = Swab
NG = Natural Gas
NGL = Natural Gas Liquid
PW = Produced Water
CF = Completion Fluid

Which Regulations Apply:
☐RCRA ☐Drinking Water
☐POTW ☐Distribution
☐NPDES ☐Special
☐USDA/FDA ☐State
☐RECAP/RISC ☐Other

Turn Time
5 TAT

(Rush turn times will incur a surcharge and must be pre-approved by lab.)

Sample ID/Description	Collection Information: Date	Time	Grab / Composite	Matrix	Container: Quantity	Type P=Plastic, G=Glass, V=Vial	Pres.: HCl, HNO_3, H_2SO_4, NaOH, $Na_2S_2O_3$	CYANIDE 1677	Oil & Grease	E. coli	300: Chlor, SO4	*Metals	NH3,T.Phos, Total N	TSS, BOD			Low level Hg
Upstream	10-6-22	9:34		WW	1	P	NAOH	X									
				WW	1	G	H2SO4		X								
				WW	1	G	Na2S2O3			X							
				WW	1	G	BrCl										X
				WW	2	P	NONE				X			X			
				WW	1	P	HNO3					X					
				WW	1	P	H2SO4						X				

Comments

Samples Meet Acceptance Policy
Yes No

*Cd, Cr, Cu, Pb, Ni Zn

Low level Hg is once a week

FS96PPP

	Relinquished by	Date/Time	Received by	Date/Time
1		10-6-22 11:45AM		10-6-22-11:45A
2	RMill	10-6-22 - 1705		10/6/22 17:05
3				

Composite Sampler:
Start Date/Time: 10-6-22 9:34
End Date/Time: _____

Received at lab on ice?
☒Yes ☐No Temp: 2.8°C

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples.
Element Materials Technology reserves the right to return unused sample portio

8800 North US 31
Columbus, IN
47201 USA
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F: 812-375-0731

328 Ley Road, Suite 100
Fort Wayne, IN
46825 USA
P: 260-471-7000
F: 260-471-7777

909 Executive Dr.
Warsaw, IN
46580 USA
P: 574-267-3305
F: 574-269-6569

3371 C

Lot: 127858 COC