



**St. Lawrence Testing  
& Inspection Co. Ltd.**

P.O. Box 997, Cornwall, ON, Canada K6H 5V1  
814 Second Street W., Phone (613) 938-2521  
E-mail: [gib@stlawrencetesting.com](mailto:gib@stlawrencetesting.com) Fax (613) 938-7395

July 24, 2025

Mr. Paul McMunn  
Director of Public Works & Utilities  
Town of Smiths Falls  
77 Beckwith Street North  
PO Box 695  
Smiths Falls, ON  
K7A 2B8

**RE: Property located at the Smiths Falls Compost Site, 3514 Lanark  
County Road 43, Smiths Falls, ON  
Environmental Assessment - Update  
Report No. 25C177**

Dear McMunn:

In accordance with verbal and emailed instructions received from you, this report is submitted, updating the results of an environmental assessment of the soil and groundwater carried out at the Smiths Falls Compost Site located at 3514 Lanark County Road 43 in Smiths Falls, Ontario.

## **A) INTRODUCTION AND EXECUTIVE SUMMARY**

On June 24<sup>th</sup> and 25<sup>th</sup>, St. Lawrence Testing directed the drilling of 7 boreholes (BH 1 to BH 7) on the property. Each of these boreholes were implemented with monitoring wells. The soil and groundwater sampled were analyzed for benzene, toluene, ethylbenzene and xylenes along with petroleum hydrocarbon fractions F<sub>1</sub> to F<sub>4</sub> (PHC) in addition to polycyclic aromatic

hydrocarbons (PAH), metals, chromium VI and mercury. The results of this work were described in our report 25C163R.

On July 9, 2025, an additional borehole (BH 8) was drilled on the property at the location your hydrologist recommended. Soil samples were collected at 2 ft. intervals to a depth of 8.5 ft. bgs when auger refusal was met. The borehole was then implemented with a monitoring well (MW 8) for groundwater evaluation.

Two soil samples (S14 and S15) from BH 8 were submitted to the Bureau Veritas laboratory in Mississauga, Ontario for PHC, PAH along with metals including chromium VI and mercury.

On July 18, 2025, a groundwater sample was collected from both MW 5 and MW 8 using a low flow peristaltic pump. These samples were also submitted to the Bureau Veritas laboratory for PHC, PAH along with dissolved metals including chromium VI and mercury.

The soil and groundwater results were compared to the standards found in Ontario Regulation 153/04, Table 2 for a commercial property with coarse soil and potable groundwater (Table 2).

The soil results from BH 8 were found to satisfy the Table 2 standards for all parameters tested. The groundwater results determined that the samples collected from MW 5 and MW 8 met the Table 2 standards except for an exceedance of dissolved cobalt in MW 8. The concentration of cobalt was 7.3 µg/L. The Table 2 standard is 3.8 µg/L.

It is the opinion of St. Lawrence Testing that there is cobalt contamination in the groundwater at the location of MW 8. As the soil results for cobalt from BH 8 met the Table 2 standards, the groundwater concentration of cobalt may be the result of bedrock leaching into the groundwater and not from the use of the compost site.

It is recommended that the groundwater from each monitoring well (MW 1 to MW 8) be sampled on a regular schedule to ensure no contaminants are migrating towards the creek.

## **B) DESCRIPTION OF FIELD WORK**

Prior to any site drilling, public locates were done for underground services. The field work for the borehole and monitoring well was carried out using Eastern Ontario Diamond Drilling of Hawkesbury, Ontario. Supervision was by the undersigned environmental engineer.

On July 9, 2025, St. Lawrence Testing arrived on the subject property and met with the drill crew from Eastern Ontario Diamond Drilling. A single borehole (BH 8) was drilled to a depth of 8.5 ft. bgs at the location recommended by your hydrologist. Auger refusal was encountered at 8.5 ft. bgs.

The soil was collected in 2-foot increments using a split spoon sampler. The soil was evaluated on-site for indications of gross debris and malodours. The soil was placed into glass jars and identified by their collection depth. BH 8 was then implemented with a monitoring well (MW 8) for future groundwater evaluation. A black, PVC pipe was then placed over the exposed riser to protect

the well from damage. MW 8 was tagged A417903 as per Ontario Regulation 903.

Our previous work left MW 5 without an above ground protector. This was corrected with the addition of a black PVC pipe and lid over the exposed riser of the well.

All soil samples were returned to the St. Lawrence Testing laboratory for further evaluation. Upon review of the soil sampling depths, their locations and our field notes, 2 soil samples were created for further laboratory analyses.

Sample ID	Location	Depth (bgs)
S14	BH 8	0 to 4.5 ft.
S15	BH 8	5 to 8.5 ft.

No debris or malodours were found in any of the soil collected. The soil samples (S14 & S15) were placed into laboratory supplied glass jars/vials for PHC, PAH, metals, chromium VI and mercury analysis. The samples were then packaged on ice within a hard-sided insulated cooler and submitted to the Bureau Veritas laboratory under a regular turnaround time for the results.

On July 18, 2025, a technician from St. Lawrence Testing arrived at the property and inspected both MW 5 and MW 8. At the previous inspection, MW 5 did not contain sufficient groundwater to collect without the use of a low flow pump. The depth and static water height within each well was measured using a Solinst™ water meter. The water volumes within each well were then calculated.

Well ID	Depth (bgs)	H <sub>2</sub> O Height (bgs)	Volume	Comments
MW 5	2.70 m	2.51 m	0.37 L	No sheen or malodour detected in purge water. No well tag present.
MW 8	2.37 m	1.68 m	1.4 L	No sheen or malodour detected in purge water. Tag: A417903.

Dedicated low flow tubing was added into each well. Each well was then emptied a total of 3 well volumes using a low flow peristaltic pump. Following the 3<sup>rd</sup> emptying, a groundwater sample was collected into laboratory supplied vials/bottles for PHC and PAH analyses. The groundwater was also filtered using an attached 0.45 µm filter for the collection of dissolved metals, chromium VI and mercury collection. The samples were then returned to the St. Lawrence Testing laboratory and placed within the sample refrigerator.

On July 21, 2025, the groundwater samples were packaged on ice within hard-sided insulated coolers and delivered to the Bureau Veritas drop off location in Ottawa, Ontario. The requested turnaround time for the results was 1 day.

An overhead view of the property, showing the locations of the 8 boreholes/monitoring wells, is attached to this report.

### **C) DISCUSSION OF TEST RESULTS**

The property under assessment is currently commercial in use as a municipal compost site. There is a creek traveling through the property and it is near the Town of Smiths Falls water intake location. As such the test results were compared with Ontario Regulation 153/04, Table 2 standards for a commercial property with coarse soil and potable groundwater (Table 2).

The soil results determine that both samples (S14 & S15) from BH 8 met the Table 2 standards for PHC, PAH and metals including chromium VI and mercury.

The groundwater from both MW 5 and MW 8 were found to meet the Table 2 standards for PHC, PAH, dissolved chromium VI, dissolved mercury and dissolved metals except for an exceedance of cobalt in the sample from MW 8. The concentration of cobalt in this sample was 7.3 µg/L. The Table 2 standard is 3.8 µg/L.

A copy of the soil and groundwater test results are attached to this report.

#### **D) LIMITATIONS**

The environmental investigation was carried out to address the intent of applicable provincial guidelines. Achieving the objectives stated in the report has required us to arrive at conclusions based upon the best information presently known to us. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of the conclusions. Like all professional persons rendering advice we do not act as absolute insurers of the conclusions we reach, but we commit ourselves to care and competence in reaching those conclusions.

Our undertaking is to perform our work within the limits prescribed by our clients, with the usual thoroughness and competence of the engineering profession. It is intended that the outcome of this investigation assists in

reducing the client's risks associated with environmental impairment; our work should not be considered "risk mitigation". No other warranty expressed or implied, is included or intended in this report.

The information presented in this report is based on a limited investigation designed to provide information to support an overall assessment of the current environmental conditions on the subject property. The conclusions and recommendations presented in this report reflect existing site conditions within the scope of our investigation.

This report was prepared for the exclusive use of The Town of Smiths Falls as per the agreement and terms of reference between The Town of Smiths Falls and St. Lawrence Testing & Inspection Co. Ltd. Any use and interpretation of this report by any other party is entirely at their own risk.

## **E) OPINION**

Subject to the Limitations in the previous section and based on our site inspection along with the analytical results from the soil samples recently obtained from BH 8 along with the groundwater samples collected from MW 5 & MW 8, it is the opinion of St. Lawrence Testing that the Smiths Falls Compost Site located at 3514 Lanark County Road 43 in Smiths Falls, Ontario contains localized cobalt groundwater contamination at MW 8. This may be the result of cobalt leaching from the bedrock and not from the use of the compost site directly.

Report No. 25C177  
Continued

Page 8

It is recommended that the groundwater from each monitoring well (MW 1 to MW 8) be sampled on regular schedule to ensure no contaminants are migrating towards the creek.

Respectfully submitted,

ST. LAWRENCE TESTING & INSPECTION CO. LTD.



G.G. McIntee, P. Eng.

GGM:sr

Attachments

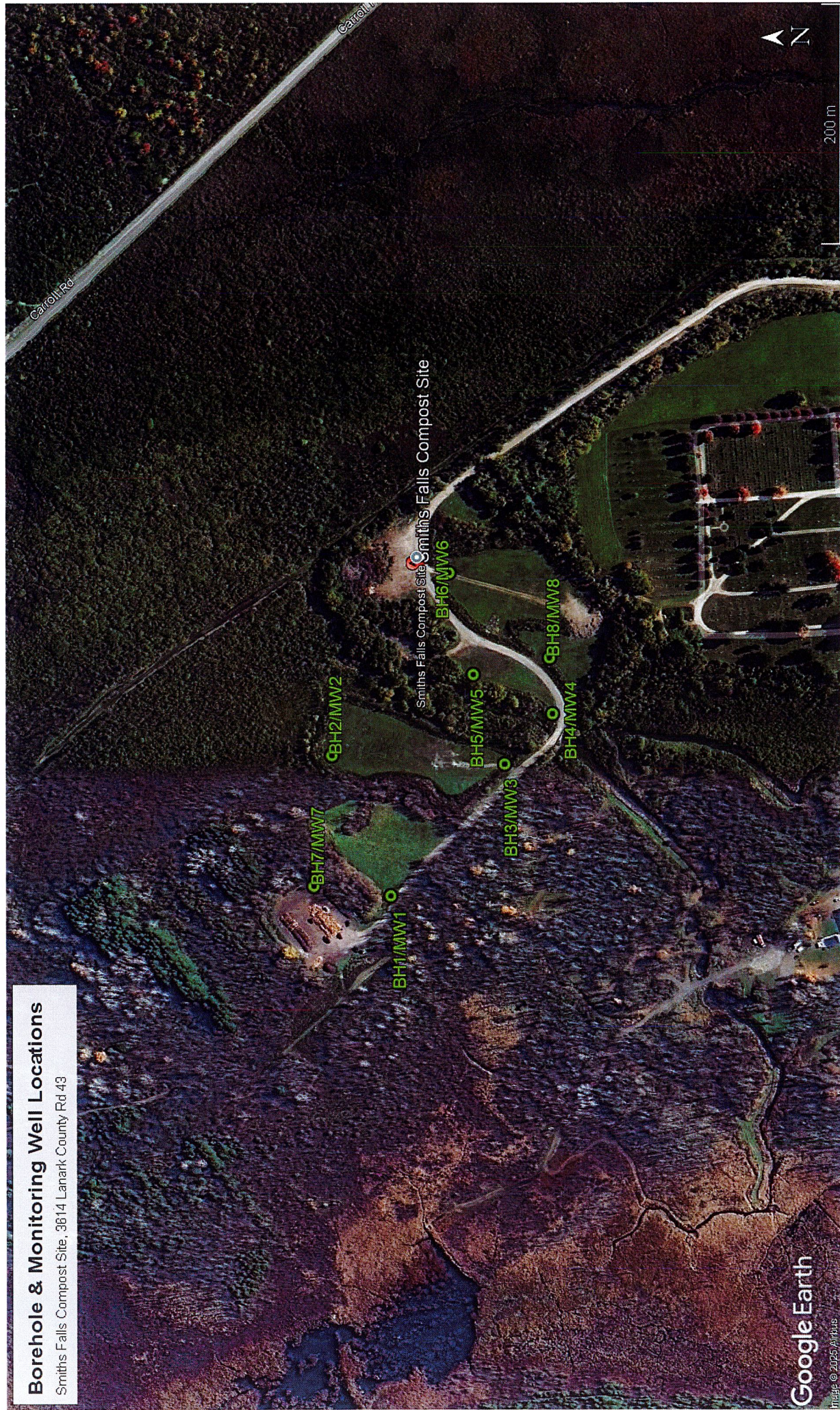
c.c. Russell Chown





## Borehole & Monitoring Well Locations

Smiths Falls Compost Site, 3814 Lanark County Rd 43



St. Lawrence Testing  
Report 25C177  
July 2025



REPORT NO. 25C177

CLIENT Town of Smiths Falls

BOREHOLE NO. 8

LOCATION Compost Site

CASING HF Auger

DATE OF BORING July 9, 2025

DATE OF WL READING

DATUM

[illegible]



Your Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Your C.O.C. #: N/A

**Attention: Gib McIntee**

St Lawrence Testing & Inspection Co Ltd

814 Second St W  
PO Box 997  
Cornwall, ON  
CANADA K6H 5V1

**Report Date: 2025/07/18**

Report #: R8579001

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C582980**

**Received: 2025/07/11, 09:02**

Sample Matrix: Soil  
# Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	2	N/A	2025/07/16	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	2	2025/07/17	2025/07/18	CAM SOP-00408	R153 Ana. Prot. 2011
Hexavalent Chromium in Soil by IC (1)	2	2025/07/17	2025/07/17	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2025/07/16	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2025/07/17	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	2	2025/07/15	2025/07/15	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	2	2025/07/17	2025/07/17	CAM SOP-00447	EPA 6020B m
Moisture	2	N/A	2025/07/14	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM)	2	2025/07/15	2025/07/16	CAM SOP-00318	EPA 8270E

**Remarks:**

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Your C.O.C. #: N/A

**Attention: Gib McIntee**

St Lawrence Testing & Inspection Co Ltd

814 Second St W  
PO Box 997  
Cornwall, ON  
CANADA K6H 5V1

**Report Date: 2025/07/18**

Report #: R8579001

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C582980**

**Received: 2025/07/11, 09:02**

- (1) Soils are reported on a dry weight basis unless otherwise specified.
- (2) No lab extraction date is given for F1BTX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.
- (3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Jolanta Goralczyk  
Project Manager  
18 Jul 2025 17:41:22

Please direct all questions regarding this Certificate of Analysis to:

Jolanta Goralczyk, Project Manager

Email: Jolanta.Goralczyk@bureauveritas.com

Phone# (905)817-5751

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2

Page 2 of 15

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### O.REG 153 METALS PACKAGE (SOIL)

Bureau Veritas ID		ASVX79	ASVX80			ASVX80		
Sampling Date		2025/07/09 10:00	2025/07/09 10:20			2025/07/09 10:20		
COC Number		N/A	N/A			N/A		
	UNITS	S14	S15	RDL	QC Batch	S15 Lab-Dup	RDL	QC Batch
<b>Inorganics</b>								
Chromium (VI)	ug/g	ND	0.22	0.18	9971769	0.27	0.18	9971769
<b>Metals</b>								
Hot Water Ext. Boron (B)	ug/g	0.19	0.20	0.050	9971708			
Acid Extractable Antimony (Sb)	ug/g	0.20	ND	0.20	9971715			
Acid Extractable Arsenic (As)	ug/g	3.5	1.9	1.0	9971715			
Acid Extractable Barium (Ba)	ug/g	59	140	0.50	9971715			
Acid Extractable Beryllium (Be)	ug/g	0.28	0.50	0.20	9971715			
Acid Extractable Boron (B)	ug/g	ND	ND	5.0	9971715			
Acid Extractable Cadmium (Cd)	ug/g	0.15	ND	0.10	9971715			
Acid Extractable Chromium (Cr)	ug/g	14	26	1.0	9971715			
Acid Extractable Cobalt (Co)	ug/g	4.1	8.0	0.10	9971715			
Acid Extractable Copper (Cu)	ug/g	15	15	0.50	9971715			
Acid Extractable Lead (Pb)	ug/g	35	11	1.0	9971715			
Acid Extractable Molybdenum (Mo)	ug/g	1.8	0.94	0.50	9971715			
Acid Extractable Nickel (Ni)	ug/g	8.4	15	0.50	9971715			
Acid Extractable Selenium (Se)	ug/g	ND	ND	0.50	9971715			
Acid Extractable Silver (Ag)	ug/g	ND	ND	0.20	9971715			
Acid Extractable Thallium (Tl)	ug/g	0.13	0.17	0.050	9971715			
Acid Extractable Uranium (U)	ug/g	0.40	0.45	0.050	9971715			
Acid Extractable Vanadium (V)	ug/g	19	38	5.0	9971715			
Acid Extractable Zinc (Zn)	ug/g	41	42	5.0	9971715			
Acid Extractable Mercury (Hg)	ug/g	0.13	ND	0.050	9971715			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.								



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980

Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd

Client Project #: COMPOST SITE

Site Location: SMITHS FALLS

Sampler Initials: GM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		ASVX79	ASVX80		
Sampling Date		2025/07/09 10:00	2025/07/09 10:20		
COC Number		N/A	N/A		
	<b>UNITS</b>	<b>S14</b>	<b>S15</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Calculated Parameters</b>					
Methylnaphthalene, 2-(1-)	ug/g	ND	ND	0.0071	9968284
<b>Polyaromatic Hydrocarbons</b>					
Acenaphthene	ug/g	ND	ND	0.0050	9970022
Acenaphthylene	ug/g	0.0051	ND	0.0050	9970022
Anthracene	ug/g	0.012	ND	0.0050	9970022
Benzo(a)anthracene	ug/g	0.068	ND	0.0050	9970022
Benzo(a)pyrene	ug/g	0.083	ND	0.0050	9970022
Benzo(b/j)fluoranthene	ug/g	0.11	ND	0.0050	9970022
Benzo(g,h,i)perylene	ug/g	0.063	ND	0.0050	9970022
Benzo(k)fluoranthene	ug/g	0.039	ND	0.0050	9970022
Chrysene	ug/g	0.067	ND	0.0050	9970022
Dibenzo(a,h)anthracene	ug/g	0.013	ND	0.0050	9970022
Fluoranthene	ug/g	0.16	ND	0.0050	9970022
Fluorene	ug/g	ND	ND	0.0050	9970022
Indeno(1,2,3-cd)pyrene	ug/g	0.067	ND	0.0050	9970022
1-Methylnaphthalene	ug/g	ND	ND	0.0050	9970022
2-Methylnaphthalene	ug/g	ND	ND	0.0050	9970022
Naphthalene	ug/g	ND	ND	0.0050	9970022
Phenanthrene	ug/g	0.054	ND	0.0050	9970022
Pyrene	ug/g	0.13	ND	0.0050	9970022
<b>Surrogate Recovery (%)</b>					
D10-Anthracene	%	93	95		9970022
D14-Terphenyl (FS)	%	99	103		9970022
D8-Acenaphthylene	%	85	86		9970022
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.					



Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

**O.REG 153 PHCS, BTEX/F1-F4 (SOIL)**

Bureau Veritas ID		ASVX79	ASVX80		
Sampling Date		2025/07/09 10:00	2025/07/09 10:20		
COC Number		N/A	N/A		
	<b>UNITS</b>	<b>S14</b>	<b>S15</b>	<b>RDL</b>	<b>QC Batch</b>
<b>BTEX &amp; F1 Hydrocarbons</b>					
Benzene	ug/g	ND	ND	0.020	9970470
Toluene	ug/g	ND	ND	0.020	9970470
Ethylbenzene	ug/g	ND	ND	0.020	9970470
o-Xylene	ug/g	ND	ND	0.020	9970470
p+m-Xylene	ug/g	ND	ND	0.040	9970470
Total Xylenes	ug/g	ND	ND	0.040	9970470
F1 (C6-C10)	ug/g	ND	ND	10	9970470
F1 (C6-C10) - BTEX	ug/g	ND	ND	10	9970470
<b>F2-F4 Hydrocarbons</b>					
F2 (C10-C16 Hydrocarbons)	ug/g	ND	ND	7.0	9969480
F3 (C16-C34 Hydrocarbons)	ug/g	ND	ND	50	9969480
F4 (C34-C50 Hydrocarbons)	ug/g	68	ND	50	9969480
Reached Baseline at C50	ug/g	Yes	Yes		9969480
<b>Surrogate Recovery (%)</b>					
1,4-Difluorobenzene	%	97	103		9970470
4-Bromofluorobenzene	%	102	97		9970470
D10-o-Xylene	%	116	115		9970470
D4-1,2-Dichloroethane	%	103	101		9970470
o-Terphenyl	%	97	97		9969480
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.					



Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		ASVX79	ASVX80		
Sampling Date		2025/07/09 10:00	2025/07/09 10:20		
COC Number		N/A	N/A		
	UNITS	S14	S15	RDL	QC Batch
<b>Inorganics</b>					
Moisture	%	9.4	26	1.0	9968842
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					





**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

## TEST SUMMARY

**Bureau Veritas ID:** ASVX79  
**Sample ID:** S14  
**Matrix:** Soil

**Collected:** 2025/07/09  
**Shipped:**  
**Received:** 2025/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9968284	N/A	2025/07/16	Automated Statchk
Hot Water Extractable Boron	ICP	9971708	2025/07/17	2025/07/18	Jolly John
Hexavalent Chromium in Soil by IC	IC/SPEC	9971769	2025/07/17	2025/07/17	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9970470	N/A	2025/07/17	Anca Ganea
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9969480	2025/07/15	2025/07/15	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9971715	2025/07/17	2025/07/17	Gagandeep Rai
Moisture	BAL	9968842	N/A	2025/07/14	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9970022	2025/07/15	2025/07/16	Jonghan Yoon

**Bureau Veritas ID:** ASVX80  
**Sample ID:** S15  
**Matrix:** Soil

**Collected:** 2025/07/09  
**Shipped:**  
**Received:** 2025/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9968284	N/A	2025/07/16	Automated Statchk
Hot Water Extractable Boron	ICP	9971708	2025/07/17	2025/07/18	Jolly John
Hexavalent Chromium in Soil by IC	IC/SPEC	9971769	2025/07/17	2025/07/17	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9970470	N/A	2025/07/16	Anca Ganea
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9969480	2025/07/15	2025/07/15	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9971715	2025/07/17	2025/07/17	Gagandeep Rai
Moisture	BAL	9968842	N/A	2025/07/14	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9970022	2025/07/15	2025/07/16	Jonghan Yoon

**Bureau Veritas ID:** ASVX80 Dup  
**Sample ID:** S15  
**Matrix:** Soil

**Collected:** 2025/07/09  
**Shipped:**  
**Received:** 2025/07/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	9971769	2025/07/17	2025/07/17	Sousan Besharatlou



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	15.7°C
-----------	--------

Sample ASVX80 [S15] : F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

**Results relate only to the items tested.**



Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9968842	JTS	RPD	Moisture	2025/07/14	3.3		%	20
9969480	ABS	Matrix Spike	o-Terphenyl	2025/07/15		91	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/15		95	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/07/15		97	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/07/15		95	%	60 - 140
9969480	ABS	Spiked Blank	o-Terphenyl	2025/07/15		90	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/15		90	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2025/07/15		94	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2025/07/15		91	%	80 - 120
9969480	ABS	Method Blank	o-Terphenyl	2025/07/15		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/15	ND, RDL=7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2025/07/15	ND, RDL=50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2025/07/15	ND, RDL=50		ug/g	
9969480	ABS	RPD	F2 (C10-C16 Hydrocarbons)	2025/07/15	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/07/15	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2025/07/15	NC		%	30
9970022	JYO	Matrix Spike	D10-Anthracene	2025/07/15		100	%	50 - 130
			D14-Terphenyl (FS)	2025/07/15		106	%	50 - 130
			D8-Acenaphthylene	2025/07/15		89	%	50 - 130
			Acenaphthene	2025/07/15		99	%	50 - 130
			Acenaphthylene	2025/07/15		92	%	50 - 130
			Anthracene	2025/07/15		111	%	50 - 130
			Benzo(a)anthracene	2025/07/15		103	%	50 - 130
			Benzo(a)pyrene	2025/07/15		102	%	50 - 130
			Benzo(b,j)fluoranthene	2025/07/15		103	%	50 - 130
			Benzo(g,h,i)perylene	2025/07/15		105	%	50 - 130
			Benzo(k)fluoranthene	2025/07/15		105	%	50 - 130
			Chrysene	2025/07/15		98	%	50 - 130
			Dibenzo(a,h)anthracene	2025/07/15		112	%	50 - 130
			Fluoranthene	2025/07/15		110	%	50 - 130
			Fluorene	2025/07/15		102	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/07/15		110	%	50 - 130
			1-Methylnaphthalene	2025/07/15		103	%	50 - 130
			2-Methylnaphthalene	2025/07/15		104	%	50 - 130
			Naphthalene	2025/07/15		95	%	50 - 130
			Phenanthrene	2025/07/15		97	%	50 - 130
			Pyrene	2025/07/15		106	%	50 - 130
9970022	JYO	Spiked Blank	D10-Anthracene	2025/07/15		101	%	50 - 130
			D14-Terphenyl (FS)	2025/07/15		107	%	50 - 130
			D8-Acenaphthylene	2025/07/15		92	%	50 - 130
			Acenaphthene	2025/07/15		99	%	50 - 130
			Acenaphthylene	2025/07/15		94	%	50 - 130
			Anthracene	2025/07/15		110	%	50 - 130
			Benzo(a)anthracene	2025/07/15		102	%	50 - 130
			Benzo(a)pyrene	2025/07/15		103	%	50 - 130
			Benzo(b,j)fluoranthene	2025/07/15		102	%	50 - 130
			Benzo(g,h,i)perylene	2025/07/15		105	%	50 - 130
			Benzo(k)fluoranthene	2025/07/15		112	%	50 - 130



Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9970022	JYO	Method Blank	Chrysene	2025/07/15		98	%	50 - 130
			Dibenzo(a,h)anthracene	2025/07/15		109	%	50 - 130
			Fluoranthene	2025/07/15		111	%	50 - 130
			Fluorene	2025/07/15		104	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/07/15		109	%	50 - 130
			1-Methylnaphthalene	2025/07/15		107	%	50 - 130
			2-Methylnaphthalene	2025/07/15		108	%	50 - 130
			Naphthalene	2025/07/15		100	%	50 - 130
			Phenanthrene	2025/07/15		97	%	50 - 130
			Pyrene	2025/07/15		110	%	50 - 130
			D10-Anthracene	2025/07/15		97	%	50 - 130
			D14-Terphenyl (FS)	2025/07/15		104	%	50 - 130
			D8-Acenaphthylene	2025/07/15		89	%	50 - 130
			Acenaphthene	2025/07/15	ND, RDL=0.0050		ug/g	
			Acenaphthylene	2025/07/15	ND, RDL=0.0050		ug/g	
			Anthracene	2025/07/15	ND, RDL=0.0050		ug/g	
			Benzo(a)anthracene	2025/07/15	ND, RDL=0.0050		ug/g	
			Benzo(a)pyrene	2025/07/15	ND, RDL=0.0050		ug/g	
			Benzo(b,j)fluoranthene	2025/07/15	ND, RDL=0.0050		ug/g	
			Benzo(g,h,i)perylene	2025/07/15	ND, RDL=0.0050		ug/g	
			Benzo(k)fluoranthene	2025/07/15	ND, RDL=0.0050		ug/g	
			Chrysene	2025/07/15	ND, RDL=0.0050		ug/g	
			Dibenzo(a,h)anthracene	2025/07/15	ND, RDL=0.0050		ug/g	
			Fluoranthene	2025/07/15	ND, RDL=0.0050		ug/g	
			Fluorene	2025/07/15	ND, RDL=0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2025/07/15	ND, RDL=0.0050		ug/g	
			1-Methylnaphthalene	2025/07/15	ND, RDL=0.0050		ug/g	
			2-Methylnaphthalene	2025/07/15	ND, RDL=0.0050		ug/g	
			Naphthalene	2025/07/15	ND, RDL=0.0050		ug/g	
			Phenanthrene	2025/07/15	ND, RDL=0.0050		ug/g	
			Pyrene	2025/07/15	ND, RDL=0.0050		ug/g	
9970022	JYO	RPD	Acenaphthene	2025/07/15	NC		%	40
			Acenaphthylene	2025/07/15	NC		%	40
			Anthracene	2025/07/15	NC		%	40



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9970470	AGA	Matrix Spike	Benzo(a)anthracene	2025/07/15	NC		%	40
			Benzo(a)pyrene	2025/07/15	NC		%	40
			Benzo(b,j)fluoranthene	2025/07/15	NC		%	40
			Benzo(g,h,i)perylene	2025/07/15	NC		%	40
			Benzo(k)fluoranthene	2025/07/15	NC		%	40
			Chrysene	2025/07/15	NC		%	40
			Dibenzo(a,h)anthracene	2025/07/15	NC		%	40
			Fluoranthene	2025/07/15	NC		%	40
			Fluorene	2025/07/15	NC		%	40
			Indeno(1,2,3-cd)pyrene	2025/07/15	NC		%	40
			1-Methylnaphthalene	2025/07/15	NC		%	40
			2-Methylnaphthalene	2025/07/15	NC		%	40
			Naphthalene	2025/07/15	NC		%	40
			Phenanthrene	2025/07/15	NC		%	40
			Pyrene	2025/07/15	NC		%	40
			1,4-Difluorobenzene	2025/07/16		101	%	60 - 140
			4-Bromofluorobenzene	2025/07/16		100	%	60 - 140
			D10-o-Xylene	2025/07/16		105	%	60 - 140
			D4-1,2-Dichloroethane	2025/07/16		100	%	60 - 140
			Benzene	2025/07/16		88	%	50 - 140
9970470	AGA	Spiked Blank	Toluene	2025/07/16		85	%	50 - 140
			Ethylbenzene	2025/07/16		97	%	50 - 140
			o-Xylene	2025/07/16		97	%	50 - 140
			p+m-Xylene	2025/07/16		93	%	50 - 140
			F1 (C6-C10)	2025/07/16		94	%	60 - 140
			1,4-Difluorobenzene	2025/07/16		98	%	60 - 140
			4-Bromofluorobenzene	2025/07/16		98	%	60 - 140
			D10-o-Xylene	2025/07/16		99	%	60 - 140
			D4-1,2-Dichloroethane	2025/07/16		99	%	60 - 140
			Benzene	2025/07/16		84	%	50 - 140
9970470	AGA	Method Blank	Toluene	2025/07/16		81	%	50 - 140
			Ethylbenzene	2025/07/16		93	%	50 - 140
			o-Xylene	2025/07/16		95	%	50 - 140
			p+m-Xylene	2025/07/16		88	%	50 - 140
			F1 (C6-C10)	2025/07/16		90	%	80 - 120
			1,4-Difluorobenzene	2025/07/16		102	%	60 - 140
			4-Bromofluorobenzene	2025/07/16		97	%	60 - 140
			D10-o-Xylene	2025/07/16		96	%	60 - 140
			D4-1,2-Dichloroethane	2025/07/16		102	%	60 - 140
			Benzene	2025/07/16	ND, RDL=0.020		ug/g	
			Toluene	2025/07/16	ND, RDL=0.020		ug/g	
			Ethylbenzene	2025/07/16	ND, RDL=0.020		ug/g	
			o-Xylene	2025/07/16	ND, RDL=0.020		ug/g	
			p+m-Xylene	2025/07/16	ND, RDL=0.040		ug/g	
			Total Xylenes	2025/07/16	ND, RDL=0.040		ug/g	



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980  
Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOST SITE  
Site Location: SMITHS FALLS  
Sampler Initials: GM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9970470	AGA	RPD	F1 (C6-C10)	2025/07/16	ND, RDL=10		ug/g	
			F1 (C6-C10) - BTEX	2025/07/16	ND, RDL=10		ug/g	
			Benzene	2025/07/16	NC		%	50
			Toluene	2025/07/16	NC		%	50
			Ethylbenzene	2025/07/16	NC		%	50
			o-Xylene	2025/07/16	NC		%	50
			p+m-Xylene	2025/07/16	NC		%	50
			Total Xylenes	2025/07/16	NC		%	50
			F1 (C6-C10)	2025/07/16	NC		%	30
			F1 (C6-C10) - BTEX	2025/07/16	NC		%	30
9971708	JOH	Matrix Spike	Hot Water Ext. Boron (B)	2025/07/18		101	%	75 - 125
9971708	JOH	Spiked Blank	Hot Water Ext. Boron (B)	2025/07/18		105	%	75 - 125
9971708	JOH	Method Blank	Hot Water Ext. Boron (B)	2025/07/18	ND, RDL=0.050		ug/g	
9971708	JOH	RPD	Hot Water Ext. Boron (B)	2025/07/18	0.061		%	40
9971715	GR1	Matrix Spike	Acid Extractable Antimony (Sb)	2025/07/17		83	%	75 - 125
			Acid Extractable Arsenic (As)	2025/07/17		95	%	75 - 125
			Acid Extractable Barium (Ba)	2025/07/17		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2025/07/17		96	%	75 - 125
			Acid Extractable Boron (B)	2025/07/17		83	%	75 - 125
			Acid Extractable Cadmium (Cd)	2025/07/17		94	%	75 - 125
			Acid Extractable Chromium (Cr)	2025/07/17		94	%	75 - 125
			Acid Extractable Cobalt (Co)	2025/07/17		95	%	75 - 125
			Acid Extractable Copper (Cu)	2025/07/17		91	%	75 - 125
			Acid Extractable Lead (Pb)	2025/07/17		93	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2025/07/17		90	%	75 - 125
			Acid Extractable Nickel (Ni)	2025/07/17		92	%	75 - 125
			Acid Extractable Selenium (Se)	2025/07/17		95	%	75 - 125
			Acid Extractable Silver (Ag)	2025/07/17		94	%	75 - 125
			Acid Extractable Thallium (Tl)	2025/07/17		96	%	75 - 125
			Acid Extractable Uranium (U)	2025/07/17		99	%	75 - 125
			Acid Extractable Vanadium (V)	2025/07/17		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2025/07/17		NC	%	75 - 125
9971715	GR1	Spiked Blank	Acid Extractable Mercury (Hg)	2025/07/17		94	%	75 - 125
			Acid Extractable Antimony (Sb)	2025/07/17		100	%	80 - 120
			Acid Extractable Arsenic (As)	2025/07/17		102	%	80 - 120
			Acid Extractable Barium (Ba)	2025/07/17		102	%	80 - 120
			Acid Extractable Beryllium (Be)	2025/07/17		101	%	80 - 120
			Acid Extractable Boron (B)	2025/07/17		99	%	80 - 120
			Acid Extractable Cadmium (Cd)	2025/07/17		99	%	80 - 120
			Acid Extractable Chromium (Cr)	2025/07/17		100	%	80 - 120
			Acid Extractable Cobalt (Co)	2025/07/17		101	%	80 - 120
			Acid Extractable Copper (Cu)	2025/07/17		99	%	80 - 120
			Acid Extractable Lead (Pb)	2025/07/17		99	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2025/07/17		94	%	80 - 120
			Acid Extractable Nickel (Ni)	2025/07/17		100	%	80 - 120
			Acid Extractable Selenium (Se)	2025/07/17		102	%	80 - 120
			Acid Extractable Silver (Ag)	2025/07/17		98	%	80 - 120
			Acid Extractable Thallium (Tl)	2025/07/17		101	%	80 - 120



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980

Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd

Client Project #: COMPOST SITE

Site Location: SMITHS FALLS

Sampler Initials: GM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9971715	GR1	Method Blank	Acid Extractable Uranium (U)	2025/07/17		103	%	80 - 120
			Acid Extractable Vanadium (V)	2025/07/17		99	%	80 - 120
			Acid Extractable Zinc (Zn)	2025/07/17		103	%	80 - 120
			Acid Extractable Mercury (Hg)	2025/07/17		101	%	80 - 120
			Acid Extractable Antimony (Sb)	2025/07/17	ND, RDL=0.20		ug/g	
			Acid Extractable Arsenic (As)	2025/07/17	ND, RDL=1.0		ug/g	
			Acid Extractable Barium (Ba)	2025/07/17	ND, RDL=0.50		ug/g	
			Acid Extractable Beryllium (Be)	2025/07/17	ND, RDL=0.20		ug/g	
			Acid Extractable Boron (B)	2025/07/17	ND, RDL=5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2025/07/17	ND, RDL=0.10		ug/g	
			Acid Extractable Chromium (Cr)	2025/07/17	ND, RDL=1.0		ug/g	
			Acid Extractable Cobalt (Co)	2025/07/17	ND, RDL=0.10		ug/g	
			Acid Extractable Copper (Cu)	2025/07/17	ND, RDL=0.50		ug/g	
			Acid Extractable Lead (Pb)	2025/07/17	ND, RDL=1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2025/07/17	ND, RDL=0.50		ug/g	
			Acid Extractable Nickel (Ni)	2025/07/17	ND, RDL=0.50		ug/g	
			Acid Extractable Selenium (Se)	2025/07/17	ND, RDL=0.50		ug/g	
			Acid Extractable Silver (Ag)	2025/07/17	ND, RDL=0.20		ug/g	
			Acid Extractable Thallium (Tl)	2025/07/17	ND, RDL=0.050		ug/g	
			Acid Extractable Uranium (U)	2025/07/17	ND, RDL=0.050		ug/g	
			Acid Extractable Vanadium (V)	2025/07/17	ND, RDL=5.0		ug/g	
			Acid Extractable Zinc (Zn)	2025/07/17	ND, RDL=5.0		ug/g	
			Acid Extractable Mercury (Hg)	2025/07/17	ND, RDL=0.050		ug/g	
		RPD	Acid Extractable Antimony (Sb)	2025/07/17	NC		%	30
			Acid Extractable Arsenic (As)	2025/07/17	2.4		%	30
			Acid Extractable Barium (Ba)	2025/07/17	1.3		%	30
			Acid Extractable Beryllium (Be)	2025/07/17	4.0		%	30
			Acid Extractable Boron (B)	2025/07/17	NC		%	30
			Acid Extractable Cadmium (Cd)	2025/07/17	NC		%	30
			Acid Extractable Chromium (Cr)	2025/07/17	1.4		%	30
			Acid Extractable Cobalt (Co)	2025/07/17	0.12		%	30
			Acid Extractable Copper (Cu)	2025/07/17	0.48		%	30
			Acid Extractable Lead (Pb)	2025/07/17	4.8		%	30



**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980

Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd

Client Project #: COMPOST SITE

Site Location: SMITHS FALLS

Sampler Initials: GM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Molybdenum (Mo)	2025/07/17	NC		%	30
			Acid Extractable Nickel (Ni)	2025/07/17	0.96		%	30
			Acid Extractable Selenium (Se)	2025/07/17	NC		%	30
			Acid Extractable Silver (Ag)	2025/07/17	NC		%	30
			Acid Extractable Thallium (Tl)	2025/07/17	12		%	30
			Acid Extractable Uranium (U)	2025/07/17	8.6		%	30
			Acid Extractable Vanadium (V)	2025/07/17	0.65		%	30
			Acid Extractable Zinc (Zn)	2025/07/17	1.6		%	30
9971769	SB5	Matrix Spike [ASVX80-03]	Chromium (VI)	2025/07/17		69 (1)	%	70 - 130
9971769	SB5	Spiked Blank	Chromium (VI)	2025/07/17		85	%	80 - 120
9971769	SB5	Method Blank	Chromium (VI)	2025/07/17	ND, RDL=0.18		ug/g	
9971769	SB5	RPD [ASVX80-03]	Chromium (VI)	2025/07/17	19		%	35

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference  $\leq 2 \times$  RDL).

(1) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.





**BUREAU  
VERITAS**

Bureau Veritas Job #: C582980

Report Date: 2025/07/18

St Lawrence Testing & Inspection Co Ltd

Client Project #: COMPOST SITE

Site Location: SMITHS FALLS

Sampler Initials: GM

### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

*Cristina Carriere*

---

Cristina Carriere, Senior Scientific Specialist

---

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Your Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Your C.O.C. #: N/A

**Attention: Gib McIntee**

St Lawrence Testing & Inspection Co Ltd

814 Second St W  
PO Box 997  
Cornwall, ON  
CANADA K6H 5V1

**Report Date: 2025/07/23**

Report #: R8581599

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C587882**

**Received: 2025/07/21, 14:05**

Sample Matrix: Water  
# Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum (1)	2	N/A	2025/07/23	CAM SOP-00301	EPA 8270D m
Chromium (VI) in Water (1)	2	N/A	2025/07/22	CAM SOP-00436	EPA 7199 m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	1	N/A	2025/07/22	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	1	N/A	2025/07/23	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	2	2025/07/22	2025/07/23	CAM SOP-00316	CCME PHC-CWS m
Mercury (1)	2	2025/07/22	2025/07/22	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS (1)	2	N/A	2025/07/22	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM) (1)	2	2025/07/22	2025/07/23	CAM SOP-00318	EPA 8270E

**Remarks:**

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd, Mississauga, ON, L5N 2L8

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the



Your Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Your C.O.C. #: N/A

**Attention: Gib McIntee**

St Lawrence Testing & Inspection Co Ltd

814 Second St W  
PO Box 997  
Cornwall, ON  
CANADA K6H 5V1

**Report Date: 2025/07/23**

Report #: R8581599

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C587882**

**Received: 2025/07/21, 14:05**

reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Jolanta Goralczyk  
Project Manager  
23 Jul 2025 18:29:00

Please direct all questions regarding this Certificate of Analysis to:

Jolanta Goralczyk, Project Manager

Email: Jolanta.Goralczyk@bureauveritas.com

Phone# (905)817-5751

=====

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### O.REG 153 METALS PACKAGE (WATER)

Bureau Veritas ID		ATFD43			ATFD43			ATFD44		
Sampling Date		2025/07/18 12:00			2025/07/18 12:00			2025/07/18 12:20		
COC Number		N/A			N/A			N/A		
	UNITS	MW 5	RDL	QC Batch	MW 5 Lab-Dup	RDL	QC Batch	MW 8	RDL	QC Batch
<b>Metals</b>										
Chromium (VI)	ug/L	ND	0.50	9974177				ND	0.50	9974177
Mercury (Hg)	ug/L	ND	0.10	9974284	ND	0.10	9974284	ND	0.10	9974284
Dissolved Antimony (Sb)	ug/L	ND	0.50	9974208	ND	0.50	9974208	ND	0.50	9974208
Dissolved Arsenic (As)	ug/L	1.2	1.0	9974208	1.2	1.0	9974208	1.2	1.0	9974208
Dissolved Barium (Ba)	ug/L	110	2.0	9974208	100	2.0	9974208	380	2.0	9974208
Dissolved Beryllium (Be)	ug/L	ND	0.40	9974208	ND	0.40	9974208	ND	0.40	9974208
Dissolved Boron (B)	ug/L	69	10	9974208	70	10	9974208	91	10	9974208
Dissolved Cadmium (Cd)	ug/L	ND	0.090	9974208	ND	0.090	9974208	ND	0.090	9974208
Dissolved Chromium (Cr)	ug/L	ND	5.0	9974208	ND	5.0	9974208	ND	5.0	9974208
Dissolved Cobalt (Co)	ug/L	0.87	0.50	9974208	0.88	0.50	9974208	7.3	0.50	9974208
Dissolved Copper (Cu)	ug/L	6.9	0.90	9974208	7.4	0.90	9974208	4.7	0.90	9974208
Dissolved Lead (Pb)	ug/L	ND	0.50	9974208	ND	0.50	9974208	ND	0.50	9974208
Dissolved Molybdenum (Mo)	ug/L	25	0.50	9974208	26	0.50	9974208	4.3	0.50	9974208
Dissolved Nickel (Ni)	ug/L	3.1	1.0	9974208	2.8	1.0	9974208	7.1	1.0	9974208
Dissolved Selenium (Se)	ug/L	ND	2.0	9974208	ND	2.0	9974208	ND	2.0	9974208
Dissolved Silver (Ag)	ug/L	ND	0.090	9974208	ND	0.090	9974208	ND	0.090	9974208
Dissolved Sodium (Na)	ug/L	120000	100	9974208	120000	100	9974208	190000	100	9974208
Dissolved Thallium (Tl)	ug/L	ND	0.050	9974208	ND	0.050	9974208	ND	0.050	9974208
Dissolved Uranium (U)	ug/L	4.3	0.10	9974208	4.2	0.10	9974208	3.0	0.10	9974208
Dissolved Vanadium (V)	ug/L	2.5	0.50	9974208	2.5	0.50	9974208	ND	0.50	9974208
Dissolved Zinc (Zn)	ug/L	ND	5.0	9974208	ND	5.0	9974208	10	5.0	9974208
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.										



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### O.REG 153 PAHS (WATER)

Bureau Veritas ID		ATFD43		ATFD44		
Sampling Date		2025/07/18 12:00		2025/07/18 12:20		
COC Number		N/A		N/A		
	<b>UNITS</b>	<b>MW 5</b>	<b>RDL</b>	<b>MW 8</b>	<b>RDL</b>	<b>QC Batch</b>

<b>Calculated Parameters</b>						
Methylnaphthalene, 2-(1-)	ug/L	ND	0.071	ND	0.071	9974153
<b>Polyaromatic Hydrocarbons</b>						
Acenaphthene	ug/L	ND	0.050	ND	0.050	9974678
Acenaphthylene	ug/L	ND	0.050	ND	0.050	9974678
Anthracene	ug/L	ND	0.050	ND	0.050	9974678
Benzo(a)anthracene	ug/L	ND	0.050	ND	0.050	9974678
Benzo(a)pyrene	ug/L	ND	0.0090	ND	0.0090	9974678
Benzo(b/j)fluoranthene	ug/L	ND	0.050	ND	0.050	9974678
Benzo(g,h,i)perylene	ug/L	ND	0.050	ND	0.050	9974678
Benzo(k)fluoranthene	ug/L	ND	0.050	ND	0.050	9974678
Chrysene	ug/L	ND	0.050	ND	0.050	9974678
Dibenzo(a,h)anthracene	ug/L	ND	0.050	ND	0.050	9974678
Fluoranthene	ug/L	ND	0.050	ND (1)	0.060	9974678
Fluorene	ug/L	ND	0.050	ND	0.050	9974678
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.050	ND	0.050	9974678
1-Methylnaphthalene	ug/L	ND	0.050	ND	0.050	9974678
2-Methylnaphthalene	ug/L	ND	0.050	ND	0.050	9974678
Naphthalene	ug/L	0.087	0.050	0.057	0.050	9974678
Phenanthrene	ug/L	0.038	0.030	0.12	0.030	9974678
Pyrene	ug/L	ND	0.050	0.053	0.050	9974678
<b>Surrogate Recovery (%)</b>						
D10-Anthracene	%	107		108		9974678
D14-Terphenyl (FS)	%	86		99		9974678
D8-Acenaphthylene	%	92		92		9974678
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.						
(1) Detection Limit was raised due to matrix interferences.						



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### O.REG 153 PHCS, BTEX/F1-F4 (WATER)

Bureau Veritas ID		ATFD43	ATFD44		
Sampling Date		2025/07/18 12:00	2025/07/18 12:20		
COC Number		N/A	N/A		
	UNITS	MW 5	MW 8	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>					
Benzene	ug/L	ND	ND	0.20	9974708
Toluene	ug/L	ND	ND	0.20	9974708
Ethylbenzene	ug/L	ND	ND	0.20	9974708
o-Xylene	ug/L	ND	ND	0.20	9974708
p+m-Xylene	ug/L	ND	ND	0.40	9974708
Total Xylenes	ug/L	ND	ND	0.40	9974708
F1 (C6-C10)	ug/L	ND	ND	25	9974708
F1 (C6-C10) - BTEX	ug/L	ND	ND	25	9974708
<b>F2-F4 Hydrocarbons</b>					
F2 (C10-C16 Hydrocarbons)	ug/L	ND	ND	90	9974693
F3 (C16-C34 Hydrocarbons)	ug/L	ND	ND	200	9974693
F4 (C34-C50 Hydrocarbons)	ug/L	ND	ND	200	9974693
Reached Baseline at C50	ug/L	Yes	Yes		9974693
<b>Surrogate Recovery (%)</b>					
1,4-Difluorobenzene	%	108	106		9974708
4-Bromofluorobenzene	%	95	98		9974708
D10-o-Xylene	%	97	98		9974708
D4-1,2-Dichloroethane	%	103	102		9974708
o-Terphenyl	%	105	104		9974693
RDL = Reportable Detection Limit QC Batch = Quality Control Batch ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.					



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

## TEST SUMMARY

**Bureau Veritas ID:** ATFD43  
**Sample ID:** MW 5  
**Matrix:** Water

**Collected:** 2025/07/18  
**Shipped:**  
**Received:** 2025/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9974153	N/A	2025/07/23	Automated Statchk
Chromium (VI) in Water	IC	9974177	N/A	2025/07/22	Rupinder Sihota
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	9974708	N/A	2025/07/22	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9974693	2025/07/22	2025/07/23	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9974284	2025/07/22	2025/07/22	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9974208	N/A	2025/07/22	Azita Fazaali
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9974678	2025/07/22	2025/07/23	Mitesh Raj

**Bureau Veritas ID:** ATFD43 Dup  
**Sample ID:** MW 5  
**Matrix:** Water

**Collected:** 2025/07/18  
**Shipped:**  
**Received:** 2025/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	9974284	2025/07/22	2025/07/22	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9974208	N/A	2025/07/22	Azita Fazaali

**Bureau Veritas ID:** ATFD44  
**Sample ID:** MW 8  
**Matrix:** Water

**Collected:** 2025/07/18  
**Shipped:**  
**Received:** 2025/07/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9974153	N/A	2025/07/23	Automated Statchk
Chromium (VI) in Water	IC	9974177	N/A	2025/07/22	Rupinder Sihota
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	9974708	N/A	2025/07/23	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9974693	2025/07/22	2025/07/23	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9974284	2025/07/22	2025/07/22	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9974208	N/A	2025/07/22	Azita Fazaali
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9974678	2025/07/22	2025/07/23	Mitesh Raj



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

#### GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	4.3°C
-----------	-------

Results relate only to the items tested.





**BUREAU  
VERITAS**

Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9974177	RSU	Matrix Spike	Chromium (VI)	2025/07/22		98	%	80 - 120
9974177	RSU	Spiked Blank	Chromium (VI)	2025/07/22		100	%	80 - 120
9974177	RSU	Method Blank	Chromium (VI)	2025/07/22	ND, RDL=0.50		ug/L	
9974177	RSU	RPD	Chromium (VI)	2025/07/22	NC		%	20
9974208	AFZ	Matrix Spike [ATFD43-01]	Dissolved Antimony (Sb)	2025/07/22		106	%	80 - 120
			Dissolved Arsenic (As)	2025/07/22		103	%	80 - 120
			Dissolved Barium (Ba)	2025/07/22		103	%	80 - 120
			Dissolved Beryllium (Be)	2025/07/22		99	%	80 - 120
			Dissolved Boron (B)	2025/07/22		99	%	80 - 120
			Dissolved Cadmium (Cd)	2025/07/22		100	%	80 - 120
			Dissolved Chromium (Cr)	2025/07/22		101	%	80 - 120
			Dissolved Cobalt (Co)	2025/07/22		99	%	80 - 120
			Dissolved Copper (Cu)	2025/07/22		104	%	80 - 120
			Dissolved Lead (Pb)	2025/07/22		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/07/22		103	%	80 - 120
			Dissolved Nickel (Ni)	2025/07/22		97	%	80 - 120
			Dissolved Selenium (Se)	2025/07/22		100	%	80 - 120
			Dissolved Silver (Ag)	2025/07/22		98	%	80 - 120
			Dissolved Sodium (Na)	2025/07/22		NC	%	80 - 120
			Dissolved Thallium (Tl)	2025/07/22		98	%	80 - 120
			Dissolved Uranium (U)	2025/07/22		101	%	80 - 120
			Dissolved Vanadium (V)	2025/07/22		101	%	80 - 120
			Dissolved Zinc (Zn)	2025/07/22		97	%	80 - 120
9974208	AFZ	Spiked Blank	Dissolved Antimony (Sb)	2025/07/22		103	%	80 - 120
			Dissolved Arsenic (As)	2025/07/22		101	%	80 - 120
			Dissolved Barium (Ba)	2025/07/22		103	%	80 - 120
			Dissolved Beryllium (Be)	2025/07/22		96	%	80 - 120
			Dissolved Boron (B)	2025/07/22		93	%	80 - 120
			Dissolved Cadmium (Cd)	2025/07/22		99	%	80 - 120
			Dissolved Chromium (Cr)	2025/07/22		98	%	80 - 120
			Dissolved Cobalt (Co)	2025/07/22		98	%	80 - 120
			Dissolved Copper (Cu)	2025/07/22		102	%	80 - 120
			Dissolved Lead (Pb)	2025/07/22		99	%	80 - 120
			Dissolved Molybdenum (Mo)	2025/07/22		98	%	80 - 120
			Dissolved Nickel (Ni)	2025/07/22		96	%	80 - 120
			Dissolved Selenium (Se)	2025/07/22		98	%	80 - 120
			Dissolved Silver (Ag)	2025/07/22		97	%	80 - 120
			Dissolved Sodium (Na)	2025/07/22		97	%	80 - 120
			Dissolved Thallium (Tl)	2025/07/22		97	%	80 - 120
			Dissolved Uranium (U)	2025/07/22		98	%	80 - 120
			Dissolved Vanadium (V)	2025/07/22		99	%	80 - 120
			Dissolved Zinc (Zn)	2025/07/22		96	%	80 - 120
9974208	AFZ	Method Blank	Dissolved Antimony (Sb)	2025/07/22	ND, RDL=0.50		ug/L	
			Dissolved Arsenic (As)	2025/07/22	ND, RDL=1.0		ug/L	
			Dissolved Barium (Ba)	2025/07/22	ND, RDL=2.0		ug/L	
			Dissolved Beryllium (Be)	2025/07/22	ND, RDL=0.40		ug/L	
			Dissolved Boron (B)	2025/07/22	ND, RDL=10		ug/L	



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Cadmium (Cd)	2025/07/22	ND, RDL=0.090		ug/L	
			Dissolved Chromium (Cr)	2025/07/22	ND, RDL=5.0		ug/L	
			Dissolved Cobalt (Co)	2025/07/22	ND, RDL=0.50		ug/L	
			Dissolved Copper (Cu)	2025/07/22	ND, RDL=0.90		ug/L	
			Dissolved Lead (Pb)	2025/07/22	ND, RDL=0.50		ug/L	
			Dissolved Molybdenum (Mo)	2025/07/22	ND, RDL=0.50		ug/L	
			Dissolved Nickel (Ni)	2025/07/22	ND, RDL=1.0		ug/L	
			Dissolved Selenium (Se)	2025/07/22	ND, RDL=2.0		ug/L	
			Dissolved Silver (Ag)	2025/07/22	ND, RDL=0.090		ug/L	
			Dissolved Sodium (Na)	2025/07/22	ND, RDL=100		ug/L	
			Dissolved Thallium (Tl)	2025/07/22	ND, RDL=0.050		ug/L	
			Dissolved Uranium (U)	2025/07/22	ND, RDL=0.10		ug/L	
			Dissolved Vanadium (V)	2025/07/22	ND, RDL=0.50		ug/L	
			Dissolved Zinc (Zn)	2025/07/22	ND, RDL=5.0		ug/L	
9974208	AFZ	RPD [ATFD43-01]	Dissolved Antimony (Sb)	2025/07/22	NC		%	20
			Dissolved Arsenic (As)	2025/07/22	5.2		%	20
			Dissolved Barium (Ba)	2025/07/22	3.3		%	20
			Dissolved Beryllium (Be)	2025/07/22	NC		%	20
			Dissolved Boron (B)	2025/07/22	1.3		%	20
			Dissolved Cadmium (Cd)	2025/07/22	NC		%	20
			Dissolved Chromium (Cr)	2025/07/22	NC		%	20
			Dissolved Cobalt (Co)	2025/07/22	0.91		%	20
			Dissolved Copper (Cu)	2025/07/22	6.5		%	20
			Dissolved Lead (Pb)	2025/07/22	NC		%	20
			Dissolved Molybdenum (Mo)	2025/07/22	1.3		%	20
			Dissolved Nickel (Ni)	2025/07/22	7.3		%	20
			Dissolved Selenium (Se)	2025/07/22	NC		%	20
			Dissolved Silver (Ag)	2025/07/22	NC		%	20
			Dissolved Sodium (Na)	2025/07/22	0.26		%	20
			Dissolved Thallium (Tl)	2025/07/22	NC		%	20
			Dissolved Uranium (U)	2025/07/22	1.9		%	20
			Dissolved Vanadium (V)	2025/07/22	2.1		%	20
			Dissolved Zinc (Zn)	2025/07/22	NC		%	20
9974284	MPJ	Matrix Spike [ATFD43-03]	Mercury (Hg)	2025/07/22		95	%	75 - 125
9974284	MPJ	Spiked Blank	Mercury (Hg)	2025/07/22		100	%	80 - 120
9974284	MPJ	Method Blank	Mercury (Hg)	2025/07/22	ND, RDL=0.10		ug/L	
9974284	MPJ	RPD [ATFD43-03]	Mercury (Hg)	2025/07/22	NC		%	20
9974678	RAJ	Matrix Spike	D10-Anthracene	2025/07/22		40 (1)	%	50 - 130
			D14-Terphenyl (FS)	2025/07/22		28 (1)	%	50 - 130



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9974678	RAJ	Spiked Blank	D8-Acenaphthylene	2025/07/22		35 (1)	%	50 - 130
			Acenaphthene	2025/07/22		79	%	50 - 130
			Acenaphthylene	2025/07/22		78	%	50 - 130
			Anthracene	2025/07/22		90	%	50 - 130
			Benzo(a)anthracene	2025/07/22		79	%	50 - 130
			Benzo(a)pyrene	2025/07/22		74	%	50 - 130
			Benzo(b/j)fluoranthene	2025/07/22		80	%	50 - 130
			Benzo(g,h,i)perylene	2025/07/22		80	%	50 - 130
			Benzo(k)fluoranthene	2025/07/22		75	%	50 - 130
			Chrysene	2025/07/22		81	%	50 - 130
			Dibenzo(a,h)anthracene	2025/07/22		62	%	50 - 130
			Fluoranthene	2025/07/22		94	%	50 - 130
			Fluorene	2025/07/22		82	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/07/22		80	%	50 - 130
			1-Methylnaphthalene	2025/07/22		80	%	50 - 130
			2-Methylnaphthalene	2025/07/22		78	%	50 - 130
			Naphthalene	2025/07/22		68	%	50 - 130
			Phenanthrene	2025/07/22		86	%	50 - 130
			Pyrene	2025/07/22		94	%	50 - 130
			D10-Anthracene	2025/07/22		100	%	50 - 130
			D14-Terphenyl (FS)	2025/07/22		93	%	50 - 130
			D8-Acenaphthylene	2025/07/22		88	%	50 - 130
			Acenaphthene	2025/07/22		78	%	50 - 130
			Acenaphthylene	2025/07/22		77	%	50 - 130
			Anthracene	2025/07/22		95	%	50 - 130
			Benzo(a)anthracene	2025/07/22		87	%	50 - 130
			Benzo(a)pyrene	2025/07/22		86	%	50 - 130
			Benzo(b/j)fluoranthene	2025/07/22		94	%	50 - 130
			Benzo(g,h,i)perylene	2025/07/22		90	%	50 - 130
			Benzo(k)fluoranthene	2025/07/22		87	%	50 - 130
			Chrysene	2025/07/22		91	%	50 - 130
			Dibenzo(a,h)anthracene	2025/07/22		78	%	50 - 130
			Fluoranthene	2025/07/22		101	%	50 - 130
			Fluorene	2025/07/22		82	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2025/07/22		90	%	50 - 130
			1-Methylnaphthalene	2025/07/22		72	%	50 - 130
			2-Methylnaphthalene	2025/07/22		69	%	50 - 130
9974678	RAJ	Method Blank	Naphthalene	2025/07/22		72	%	50 - 130
			Phenanthrene	2025/07/22		90	%	50 - 130
			Pyrene	2025/07/22		100	%	50 - 130
			D10-Anthracene	2025/07/22		98	%	50 - 130
			D14-Terphenyl (FS)	2025/07/22		93	%	50 - 130
			D8-Acenaphthylene	2025/07/22		83	%	50 - 130
			Acenaphthene	2025/07/22	ND, RDL=0.050		ug/L	
			Acenaphthylene	2025/07/22	ND, RDL=0.050		ug/L	
			Anthracene	2025/07/22	ND, RDL=0.050		ug/L	
			Benzo(a)anthracene	2025/07/22	ND, RDL=0.050		ug/L	
			Benzo(a)pyrene	2025/07/22	ND, RDL=0.0090		ug/L	



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzo(b/j)fluoranthene	2025/07/22	ND, RDL=0.050		ug/L	
			Benzo(g,h,i)perylene	2025/07/22	ND, RDL=0.050		ug/L	
			Benzo(k)fluoranthene	2025/07/22	ND, RDL=0.050		ug/L	
			Chrysene	2025/07/22	ND, RDL=0.050		ug/L	
			Dibenzo(a,h)anthracene	2025/07/22	ND, RDL=0.050		ug/L	
			Fluoranthene	2025/07/22	ND, RDL=0.050		ug/L	
			Fluorene	2025/07/22	ND, RDL=0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2025/07/22	ND, RDL=0.050		ug/L	
			1-Methylnaphthalene	2025/07/22	ND, RDL=0.050		ug/L	
			2-Methylnaphthalene	2025/07/22	ND, RDL=0.050		ug/L	
			Naphthalene	2025/07/22	ND, RDL=0.050		ug/L	
			Phenanthrene	2025/07/22	ND, RDL=0.030		ug/L	
			Pyrene	2025/07/22	ND, RDL=0.050		ug/L	
9974678	RAJ	RPD	1-Methylnaphthalene	2025/07/22	NC		%	30
9974693	MSZ	Matrix Spike	o-Terphenyl	2025/07/22		106	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/22		98	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/07/22		107	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/07/22		102	%	60 - 140
9974693	MSZ	Spiked Blank	o-Terphenyl	2025/07/22		109	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/22		100	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2025/07/22		110	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2025/07/22		104	%	60 - 140
9974693	MSZ	Method Blank	o-Terphenyl	2025/07/22		112	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2025/07/22	ND, RDL=90		ug/L	
			F3 (C16-C34 Hydrocarbons)	2025/07/22	ND, RDL=200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2025/07/22	ND, RDL=200		ug/L	
9974693	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2025/07/23	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2025/07/23	NC		%	30
9974708	GRU	Matrix Spike	1,4-Difluorobenzene	2025/07/22		98	%	70 - 130
			4-Bromofluorobenzene	2025/07/22		100	%	70 - 130
			D10-o-Xylene	2025/07/22		99	%	70 - 130
			D4-1,2-Dichloroethane	2025/07/22		98	%	70 - 130
			Benzene	2025/07/22		85	%	50 - 140
			Toluene	2025/07/22		83	%	50 - 140
			Ethylbenzene	2025/07/22		94	%	50 - 140
			o-Xylene	2025/07/22		93	%	50 - 140
			p+m-Xylene	2025/07/22		90	%	50 - 140
			F1 (C6-C10)	2025/07/22		88	%	60 - 140



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9974708	GRU	Spiked Blank	1,4-Difluorobenzene	2025/07/22		97	%	70 - 130
			4-Bromofluorobenzene	2025/07/22		99	%	70 - 130
			D10-o-Xylene	2025/07/22		102	%	70 - 130
			D4-1,2-Dichloroethane	2025/07/22		98	%	70 - 130
			Benzene	2025/07/22		93	%	50 - 140
			Toluene	2025/07/22		91	%	50 - 140
			Ethylbenzene	2025/07/22		104	%	50 - 140
			o-Xylene	2025/07/22		102	%	50 - 140
			p+m-Xylene	2025/07/22		98	%	50 - 140
			F1 (C6-C10)	2025/07/22		97	%	60 - 140
9974708	GRU	Method Blank	1,4-Difluorobenzene	2025/07/22		105	%	70 - 130
			4-Bromofluorobenzene	2025/07/22		100	%	70 - 130
			D10-o-Xylene	2025/07/22		101	%	70 - 130
			D4-1,2-Dichloroethane	2025/07/22		102	%	70 - 130
			Benzene	2025/07/22	ND, RDL=0.20		ug/L	
			Toluene	2025/07/22	ND, RDL=0.20		ug/L	
			Ethylbenzene	2025/07/22	ND, RDL=0.20		ug/L	
			o-Xylene	2025/07/22	ND, RDL=0.20		ug/L	
			p+m-Xylene	2025/07/22	ND, RDL=0.40		ug/L	
			Total Xylenes	2025/07/22	ND, RDL=0.40		ug/L	
			F1 (C6-C10)	2025/07/22	ND, RDL=25		ug/L	
			F1 (C6-C10) - BTEX	2025/07/22	ND, RDL=25		ug/L	
9974708	GRU	RPD	Benzene	2025/07/22	NC		%	30
			Toluene	2025/07/22	NC		%	30
			Ethylbenzene	2025/07/22	NC		%	30
			o-Xylene	2025/07/22	NC		%	30
			p+m-Xylene	2025/07/22	NC		%	30
			Total Xylenes	2025/07/22	NC		%	30
			F1 (C6-C10)	2025/07/22	NC		%	30
			F1 (C6-C10) - BTEX	2025/07/22	NC		%	30

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



Bureau Veritas Job #: C587882  
Report Date: 2025/07/23

St Lawrence Testing & Inspection Co Ltd  
Client Project #: COMPOSITE SITE  
Site Location: SMITHS FALLS  
Sampler Initials: SR

### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

A handwritten signature in cursive script, reading "Louise A. Harding".

Louise Harding, Scientific Specialist

---

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.