BOREHOLE LOCATION PLAN, BOREHOLE/MONITORING WELL RECORDS
from Geotechnical Data Report (Final), Stantec 2020

Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
3. Sewer Lines: Publics Works and Government Services Canada, Drawing - CEF_MA_2015-10-19.DWG, Date: 2015-11-09.
3. Orthoimagery: City of Ottawa, 2020. Imagery Date: 2017.

Legend

- Assumed Site Boundary
- Former Building Location (Demolished)
- High Voltage Electrical Manhole
- -SA- Sanitory Sewer Line
- -ST- Storm Water Sewer Line
- -UT- Underground High Voltage Line
- Borehole
- Monitoring Well
- Destroyed Monitoring Well
- Test Pit
- Manhole
- Water Sample Location

0 10 20 metres

1:1,000 (at original document size of 8.5x11)

Stantec

Project Location: Ottawa, ON
Project No.: 122170347

Client/Project
Public Services and Procurement Canada
Geotechnical Assessment
Sir John Carling West Annex Demolition
930 Carling Avenue, Ottawa ON

Drawing No.: 2

Title
Borehole Location Plan

SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

SOIL DESCRIPTION

Terminology describing common soil genesis:

Rootmat	- vegetation, roots and moss with organic matter and topsoil typically forming a mattress at the ground surface
Topsoil	- mixture of soil and humus capable of supporting vegetative growth
Peat	- mixture of visible and invisible fragments of decayed organic matter
Till	- unstratified glacial deposit which may range from clay to boulders
Fill	- material below the surface identified as placed by humans (excluding buried services)

Terminology describing soil structure:

Desiccated	- having visible signs of weathering by oxidization of clay minerals, shrinkage cracks, etc.
Fissured	- having cracks, and hence a blocky structure
Varved	- composed of regular alternating layers of silt and clay
Stratified	- composed of alternating successions of different soil types, e.g. silt and sand
Layer	- > 75 mm in thickness
Seam	- 2 mm to 75 mm in thickness
Parting	- < 2 mm in thickness

Terminology describing soil types:
The classification of soil types are made on the basis of grain size and plasticity in accordance with the Unified Soil Classification System (USCS) (ASTM D 2487 or D 2488) which excludes particles larger than 75 mm. For particles larger than 75 mm, and for defining percent clay fraction in hydrometer results, definitions proposed by Canadian Foundation Engineering Manual, 4th Edition are used. The USCS provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification.

Terminology describing cobbles, boulders, and non-matrix materials (organic matter or debris):
Terminology describing materials outside the USCS, (e.g. particles larger than 75 mm, visible organic matter, and construction debris) is based upon the proportion of these materials present:

Trace, or occasional	Less than 10%
Some	10-20%
Frequent	> 20%

Terminology describing compactness of cohesionless soils:
The standard terminology to describe cohesionless soils includes compactness (formerly "relative density"), as determined by the Standard Penetration Test (SPT) N-Value - also known as N-Index. The SPT N-Value is described further on page 3. A relationship between compactness condition and N-Value is shown in the following table.

Compactness Condition	SPT N-Value
Very Loose	<4
Loose	4-10
Compact	10-30
Dense	30-50
Very Dense	>50

Terminology describing consistency of cohesive soils:
The standard terminology to describe cohesive soils includes the consistency, which is based on undrained shear strength as measured by *in situ* vane tests, penetrometer tests, or unconfined compression tests. Consistency may be crudely estimated from SPT N-Value based on the correlation shown in the following table (Terzaghi and Peck, 1967). The correlation to SPT N-Value is used with caution as it is only very approximate.

Consistency	Undrained Shear Strength		Approximate SPT N-Value
	kips/sq.ft.	kPa	
Very Soft	<0.25	<12.5	<2
Soft	0.25 - 0.5	12.5 - 25	2-4
Firm	0.5 - 1.0	25 - 50	4-8
Stiff	1.0 - 2.0	50 – 100	8-15
Very Stiff	2.0 - 4.0	100 - 200	15-30
Hard	>4.0	>200	>30

ROCK DESCRIPTION

Except where specified below, terminology for describing rock is as defined by the International Society for Rock Mechanics (ISRM) 2007 publication "The Complete ISRM Suggested Methods for Rock Characterization, Testing and Monitoring: 1974-2006"

Terminology describing rock quality:

RQD	Rock Mass Quality
0-25	*Very Poor Quality*
25-50	*Poor Quality*
50-75	*Fair Quality*
75-90	*Good Quality*
90-100	*Excellent Quality*

Alternate (Colloquial) Rock Mass Quality	
Very Severely Fractured	*Crushed*
Severely Fractured	*Shattered or Very Blocky*
Fractured	*Blocky*
Moderately Jointed	*Sound*
Intact	*Very Sound*

RQD (Rock Quality Designation) denotes the percentage of intact and sound rock retrieved from a borehole of any orientation. All pieces of intact and sound rock core equal to or greater than 100 mm (4 in.) long are summed and divided by the total length of the core run. RQD is determined in accordance with ASTM D6032.

SCR (Solid Core Recovery) denotes the percentage of solid core (cylindrical) retrieved from a borehole of any orientation. All pieces of solid (cylindrical) core are summed and divided by the total length of the core run (It excludes all portions of core pieces that are not fully cylindrical as well as crushed or rubble zones).

Fracture Index (FI) is defined as the number of naturally occurring fractures within a given length of core. The Fracture Index is reported as a simple count of natural occurring fractures.

Terminology describing rock with respect to discontinuity and bedding spacing:

Spacing (mm)	Discontinuities	Bedding
>6000	*Extremely Wide*	-
2000-6000	*Very Wide*	*Very Thick*
600-2000	*Wide*	*Thick*
200-600	*Moderate*	*Medium*
60-200	*Close*	*Thin*
20-60	*Very Close*	*Very Thin*
<20	*Extremely Close*	*Laminated*
<6	-	*Thinly Laminated*

Terminology describing rock strength:

Strength Classification	Grade	Unconfined Compressive Strength (MPa)
Extremely Weak	R0	<1
Very Weak	R1	1 – 5
Weak	R2	5 – 25
Medium Strong	R3	25 – 50
Strong	R4	50 – 100
Very Strong	R5	100 – 250
Extremely Strong	R6	>250

Terminology describing rock weathering:

Term	Symbol	Description
Fresh	W1	No visible signs of rock weathering. Slight discoloration along major discontinuities
Slightly	W2	Discoloration indicates weathering of rock on discontinuity surfaces. All the rock material may be discolored.
Moderately	W3	Less than half the rock is decomposed and/or disintegrated into soil.
Highly	W4	More than half the rock is decomposed and/or disintegrated into soil.
Completely	W5	All the rock material is decomposed and/or disintegrated into soil. The original mass structure is still largely intact.
Residual Soil	W6	All the rock converted to soil. Structure and fabric destroyed.

STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols. The dimensions within the strata symbols are not indicative of the particle size, layer thickness, etc.

Boulders Cobbles Gravel | Sand | Silt | Clay | Organics | Asphalt | Concrete | Fill | Igneous Bedrock | Meta-morphic Bedrock | Sedi-mentary Bedrock

SAMPLE TYPE

SS	Split spoon sample (obtained by performing the Standard Penetration Test)
ST	Shelby tube or thin wall tube
DP	Direct-Push sample (small diameter tube sampler hydraulically advanced)
PS	Piston sample
BS	Bulk sample
HQ, NQ, BQ, etc.	Rock core samples obtained with the use of standard size diamond coring bits.

WATER LEVEL MEASUREMENT

measured in standpipe, piezometer, or well

inferred

RECOVERY

For soil samples, the recovery is recorded as the length of the soil sample recovered. For rock core, recovery is defined as the total cumulative length of all core recovered in the core barrel divided by the length drilled and is recorded as a percentage on a per run basis.

N-VALUE

Numbers in this column are the field results of the Standard Penetration Test: the number of blows of a 140 pound (63.5 kg) hammer falling 30 inches (760 mm), required to drive a 2 inch (50.8 mm) O.D. split spoon sampler one foot (300 mm) into the soil. In accordance with ASTM D1586, the N-Value equals the sum of the number of blows (N) required to drive the sampler over the interval of 6 to 18 in. (150 to 450 mm). However, when a 24 in. (610 mm) sampler is used, the number of blows (N) required to drive the sampler over the interval of 12 to 24 in. (300 to 610 mm) may be reported if this value is lower. For split spoon samples where insufficient penetration was achieved and N-Values cannot be presented, the number of blows are reported over sampler penetration in millimetres (e.g. 50/75). Some design methods make use of N-values corrected for various factors such as overburden pressure, energy ratio, borehole diameter, etc. No corrections have been applied to the N-values presented on the log.

DYNAMIC CONE PENETRATION TEST (DCPT)

Dynamic cone penetration tests are performed using a standard 60 degree apex cone connected to 'A' size drill rods with the same standard fall height and weight as the Standard Penetration Test. The DCPT value is the number of blows of the hammer required to drive the cone one foot (300 mm) into the soil. The DCPT is used as a probe to assess soil variability.

OTHER TESTS

S	Sieve analysis
H	Hydrometer analysis
k	Laboratory permeability
γ	Unit weight
G_s	Specific gravity of soil particles
CD	Consolidated drained triaxial
CU	Consolidated undrained triaxial with pore pressure measurements
UU	Unconsolidated undrained triaxial
DS	Direct Shear
C	Consolidation
Q_u	Unconfined compression
I_p	Point Load Index (I_p on Borehole Record equals $I_p(50)$ in which the index is corrected to a reference diameter of 50 mm)

	Single packer permeability test; test interval from depth shown to bottom of borehole
	Double packer permeability test; test interval as indicated
	Falling head permeability test using casing
	Falling head permeability test using well point or piezometer

Monitoring Well: MW20-15

Project:	The Proposed Sir John Carling West Annex Demolition	**Drilling method:**	Hollow Stem Auger / Split Spoon Sampler
Client:	Public Services and Procurement Canada	**Date started/completed:**	10-Feb-2020
Location:	930 Carling Ave., Ottawa, ON	**Ground surface elevation:**	79.71 m AMSL
Number:	122170347	**Top of casing elevation:**	79.61 m AMSL
Field investigator:	Tarek Ghadieh	**Easting:**	n/a
Contractor:	Downing Drilling	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Stratigraphic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	N Value	Diagram / Description
			Ground Surface	79.71					
			150 mm TOPSOIL	0.00					
			FILL: brown fine SAND, trace gravel, trace silt moist to frozen Contains coarse sand	79.55 0.15	1	SS	50%	7	Flush mount Concrete seal at surface
			trace organics 0.3 m thick layer of silt and sand at 0.9 m depth		2	SS	88%	13	
				78.18					
5			FILL: brown SILTY SAND, trace gravel, trace organics moist	1.52	3	SS	83%	8	
	2			77.42					
			FILL: brown fine SAND with silt, trace gravel moist rock piece at 2.7 m depth	2.29	4	SS	58%	22	
10			SS5 contains some light brown coarse sand		5	SS	42%	6	50 mm PVC pipe backfilled with holeplug
	4				6	SS	54%	5	
15					7	SS	38%	24	
			Auger refusal possibly on a boulder or cobble A new borehole was advanced at approximately 2 m offset SS8 contains rock fragments		8	SS	29%	58	Groundwater Level: 5.9 m depth on Feb 12, 2020
20	6		SS9 contains rock fragments		9	SS	75%	31	
			Loose to compact grey SILT, trace coarse sand moist	73.15 6.55	10	SS	19%	9	
25			moist to wet below 7.6 m depth		11	SS	79%	13	
	8			71.32					50 mm PVC slotted pipe backfilled with silica sand
			Compact grey SILTY SAND, trace gravel, trace clay TILL moist	8.38	12	SS	100%	10	
30					13	SS	42%	21	
				69.95					
	10		End of Borehole	9.75					

Screen Interval: 6.71 - 9.75 m BGS
Sand Pack Interval: 6.10 - 9.75 m BGS
Well Seal Interval: 0.91 - 6.10 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
SS - split-spoon sample
n/a - not available

Drawn By/Checked By: Ramin Ghassemi

Monitoring Well: MW20-16

Project:	The Proposed Sir John Carling West Annex Demolition	**Drilling method:**	Hollow Stem Auger / Split Spoon Sampler
Client:	Public Services and Procurement Canada	**Date started/completed:**	10-Feb-2020 / 11-Feb-2020
Location:	930 Carling Ave., Ottawa, ON	**Ground surface elevation:**	79.55 m AMSL
Number:	122170347	**Top of casing elevation:**	79.40 m AMSL
Field investigator:	Tarek Ghadieh	**Easting:**	n/a
Contractor:	Downing Drilling	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Stratigraphic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	N Value	Lab Analyses	Diagram / Description
			Ground Surface	79.55						
			FILL: brown SILTY SAND, some clay, some gravel moist	0.00						Flush mount
					1	SS	63%	9	MC=17%	Concrete seal at surface
				78.03						
5			FILL: brown to grey SILTY CLAY with sand moist	1.52	2	SS	29%	7		
	2			77.27						
			Loose grey SANDY SILTY to SILTY SAND with clay, trace gravel TILL moist to wet	2.29	3	SS	71%	0	MC=13%	
10					4	SS	79%	2	MC=17%, Grain Size Analysis	50 mm PVC pipe backfilled with holeplug
			Gravel= 6%, Sand=43%, Silt=36%, Clay=15% a 0.4 m thick black smear	75.90						
			Compact brown SILTY SAND with clay and gravel TILL moist	3.66	5	SS	63%	28	MC=21%	
	4									
15			grey below 4.6 m depth		6	SS	100%	23	MC=11%	
					7	SS	92%	25	MC=8%	
20	6				8	SS	67%	25	MC=8%, Grain Size Analysis	Groundwater Level: 6.1 m depth on Feb 12, 2020
			Gravel= 9%, Sand=54%, Silt=27%, Clay=10%		9	SS	54%	11	MC=9%	
				71.93						
25			Compact grey SANDY SILT to SILT with sand, trace gravel TILL moist	7.62	10	SS	67%	30	MC=9%, Atterberg Limits	
	8		Liquid Limit = 13%, Plastic Limit= 11%, Plastic Index= 2%							50 mm PVC slotted pipe backfilled with silica sand
					11	SS	58%	19	MC=9%	
30										
					12	SS	75%	10	MC=10%	
				69.80						
	10		End of Borehole	9.75						

Screen Interval: 6.71 - 9.75 m BGS
Sand Pack Interval: 6.10 - 9.75 m BGS
Well Seal Interval: 0.91 - 6.10 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
SS - split-spoon sample
n/a - not available

Drawn By/Checked By: Ramin Ghassemi

Monitoring Well: MW20-17

Project:	The Proposed Sir John Carling West Annex Demolition	**Drilling method:**	Hollow Stem Auger / Split Spoon Sampler
Client:	Public Services and Procurement Canada	**Date started/completed:**	11-Feb-2020
Location:	930 Carling Ave., Ottawa, ON	**Ground surface elevation:**	78.67 m AMSL
Number:	122170347	**Top of casing elevation:**	75.59 m AMSL
Field investigator:	Tarek Ghadieh	**Easting:**	n/a
Contractor:	Downing Drilling	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Stratigraphic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	N Value	Diagram / Description
			Ground Surface	78.67					
			FILL: brown sand and gravel moist	0.00	1	SS	29%	17	Flush mount Concrete seal at surface
					2	SS	42%	34	
5					3	SS	46%	19	
	2		auger grinding noted at 2.0 m depth	76.38					
			Possible FILL Stone in SPT split spoon shoe impeded sampling	2.29	4	SS	4%	26	
				75.62					Groundwater Level: 2.9 m depth on Feb 12, 2020
10			Compact to loose brown SILTY SAND with clay and gravel TILL wet	3.05	5	SS	21%	12	50 mm PVC pipe backfilled with holeplug
	4		moist below 3.8 m depth		6	SS	33%	9	
15			grey below 4.6 m depth		7	SS	92%	8	
					8	SS	46%	14	
20	6				9	SS	71%	24	
			occasional cobble from 6.7 to 7.6 m depth		10	SS	83%	13	
25			trace shale chips from 7.6 to 8.4 m depth		11	SS	71%	16	
	8								50 mm PVC slotted pipe backfilled with silica sand
					12	SS	83%	14	
30			wet below 9.1 m depth		13	SS	83%	9	
				68.92					
	10		End of Borehole	9.75					

Screen Interval: 6.71 - 9.75 m BGS
Sand Pack Interval: 6.10 - 9.75 m BGS
Well Seal Interval: 0.91 - 6.10 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
SS - split-spoon sample
n/a - not available

Drawn By/Checked By: Ramin Ghassemi

Monitoring Well: MW20-18

Project:	The Proposed Sir John Carling West Annex Demolition	**Drilling method:**	Hollow Stem Auger / Split Spoon Sampler
Client:	Public Services and Procurement Canada	**Date started/completed:**	11-Feb-2020
Location:	930 Carling Ave., Ottawa, ON	**Ground surface elevation:**	75.04 m AMSL
Number:	122170347	**Top of casing elevation:**	74.95 m AMSL
Field investigator:	Tarek Ghadieh	**Easting:**	n/a
Contractor:	Downing Drilling	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Stratigraphic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	N Value	Lab Analyses	Diagram / Description
			Ground Surface	75.04						
			FILL: brown SAND and GRAVEL, some clay moist	0.00						Flush mount Concrete seal at surface
					1	SS	50%	9		
5										
	2				2	SS	50%	6		
				72.76						
			Fill: brown fine to meduim SAND (SM) moist Gravel= 0, Sand=65%, Silt and Clay=35%	2.29	3	SS	83%	10	Grain Size Analysis	
10					4	SS	71%	11		50 mm PVC pipe backfilled with holeplug
				71.18						
	4		Stiff grey fat CLAY (CH) moist	3.86	5	SS	100%	4		
15					6	SS	100%	2		
			Field vane test results: Undrain shear strength = 66 kPa, intact remold strength = 7 kPa							
20	6		Liquid Limit = 58%, Plastic Limit= 21%, Plastic Index= 37%		7	SS	100%	2	MC=54%, Atterberg Limits	
				68.18						
			Compact grey SILTY SAND with clay and gravel TILL moist to wet	6.86	8	SS	50%	10		Groundwater Level: 6.9 m depth on Feb 12, 2020
25			trace rock chips below 7.6 m depth							
	8		Gravel= 12%, Sand=51%, Silt=27%, Clay=10%		9	SS	63%	22	Grain Size Analysis	
										50 mm PVC slotted pipe backfilled with silica sand
					10	SS	38%	24		
30			dense below 9.1 m depth							
				65.29	11	SS	4%	48		
	10		End of Borehole	9.75						

Screen Interval: 6.71 - 9.75 m BGS
Sand Pack Interval: 6.10 - 9.75 m BGS
Well Seal Interval: 0.91 - 6.10 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
SS - split-spoon sample
n/a - not available

Drawn By/Checked By: Ramin Ghassemi

Borehole: BH16-2

Project:	Environmental Site Assessment	**Drilling method:**	GM100 (Direct Push)
Client:	Public Services and Procurement Canada	**Date started/completed:**	14-Mar-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	79.20 m AMSL
Number:	122511246	**Top of casing elevation:**	n/a
Field investigator:	J. Urben / B. Chenier	**Easting:**	444365.8
Contractor:	Strata Drilling Group	**Northing:**	5026932.5

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 ppm OTOV Comb● 200 400 600 800	Diagram	Description
			Ground Surface	79.20							
			TOPSOIL	0.00							
			CLAYEY SILT brown with orange mottling, sand, gravel, dry	79.05 0.15	1	DP	21" 70%	Energetics, PAH, Metals	<5 <0.02		
					2a	DP	19" 63%		<5 <0.02		
5			SILTY SAND grey-brown, with gravel, moist	77.68 1.52							
	2				2b	DP	19" 32%		<5 <0.02		
10			- becomes grey, dry								
	4				3	DP	24" 40%		<5 <0.02		
15			- with silt, moist								Bentonite backfill
					4	DP	12" 20%	VOC, PHC	<5 <0.02		
20	6			73.11							
			No soil samples recovered	6.10							
25				71.58							
	8		CLAY grey, gravel, trace silt, wet	7.62							
					6	DP	12" 20%		<5 <0.02		
30				70.06							
			End of Borehole	9.14							

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-1

Project:	Environmental Site Assessment	**Drilling method:**	GM100 (Direct Push)
Client:	Public Services and Procurement Canada	**Date started/completed:**	14-Mar-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	77.34 m AMSL
Number:	122511246	**Top of casing elevation:**	77.25 m AMSL
Field investigator:	J. Urben / B. Chenier	**Easting:**	444332.2
Contractor:	Strata Drilling Group	**Northing:**	5026985.7

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 / ppm OTOV ● Comb 200 400 600 800	Diagram / Description
			Ground Surface	77.34						
			TOPSOIL moist to wet	0.00 77.27						Flushmount protective cover with concrete seal
			CRUSHED CONCRETE (FILL) grey, silt, trace clay, dry	0.08	1	DP	17" 28%	pH, Phenols	●<5 ○<0.02	
5				75.82						
	2		SANDY SILT (FILL) brown, trace gravel, trace concrete dust, dry	1.52	2	DP	47" 78%		●<5 ○1.0	Bentonite backfill 50 mm ID PVC pipe
10				74.30						
			SANDY SILT (FILL) grey, gravel, crushed concrete, brick fragments, dry	3.05	3	DP	31" 52%	Energetics	●<5 ○1.0	
	4									
15			- becomes grey		4	DP	26" 43%	Metals & Inorganics, Phenols	●<5 ○1.0	Groundwater Level: 5.29 m BGS 17-Mar-16
	6		- becomes moist to wet							
20				70.33	5	DP	30" 50%	PHC, VOC, PAH, Field Duplicate	●10 ○<0.02	Silica sand backfill 50 mm ID slotted PVC pipe
			CLAY grey, moist, black staining at 7.5 m BGS	7.01						
25	8		- becomes wet		6	DP	30" 50%		●<5 ○1.0	
30			End of Borehole	68.20 9.14						Slough
	10									

Screen Interval: 5.64 - 8.69 m BGS
Sand Pack Interval: 5.33 - 8.69 m BGS
Well Seal Interval: 0.23 - 5.33 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Field Duplicate - MW16-1A SS5

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-1A

Project:	Environmental Site Assessment	**Drilling method:**	Geoprobe 7822DT
Client:	Public Services and Procurement Canada	**Date started/completed:**	02-Aug-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	78.05 m AMSL
Number:	122511246	**Top of casing elevation:**	77.96 m AMSL
Field investigator:	R. Lee	**Easting:**	444332.2
Contractor:	Strata Drilling Group	**Northing:**	5026985.7

SUBSURFACE PROFILE					INSTALLATION DETAILS
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Diagram / Description
			Ground Surface	78.05	
			Refer to MW16-1 for stratigraphy	0.00	Flushmount protective cover with concrete seal
5	2				
10	4				Bentonite backfill
15					50 mm ID PVC pipe
20	6				
25	8				Silica sand backfill
30					50 mm ID slotted PVC pipe
	10				Groundwater Level: 9.25 m BGS 8-Aug-16
				67.69	Cave in
			End of Borehole	10.36	

Screen Interval: 7.32 - 10.06 m BGS
Sand Pack Interval: 7.01 - 10.06 m BGS
Well Seal Interval: 0.23 - 7.01 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Installed to replace MW16-1 (destroyed)

Stantec

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-3

Project:	Environmental Site Assessment	**Drilling method:**	GM100 (Direct Push)
Client:	Public Services and Procurement Canada	**Date started/completed:**	14-Mar-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	77.89 m AMSL
Number:	122511246	**Top of casing elevation:**	77.85 m AMSL
Field investigator:	J. Urben / B. Chenier	**Easting:**	444386.4
Contractor:	Strata Drilling Group	**Northing:**	5026952

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 / ppm OTOV ● Comb 200 400 600 800	Diagram / Description
			Ground Surface	77.89						
			TOPSOIL	0.00 77.63						Flushmount protective cover with concrete seal
			CRUSHED CONCRETE (FILL) with sand, gravel, dry	0.26	1	DP	9" 15%	Phenols	<5 ● ○ <0.02	Bentonite backfill
5			- brick fragments							50 mm ID PVC pipe
	2				2	DP	14" 23%	PAH, Metals & Inorganics	<5 ● ○ <0.02	
10				74.84						
			SAND (FILL) brown, gravel, dry	3.05	3	DP	10" 17%	Phenols, Energetics		Groundwater Level: 3.77 m BGS 17-Mar-16
	4			73.31						Silica sand backfill
15			GRAVEL (FILL) trace silt, moist	4.57	4	DP	11" 18%	VOC, pH, PHC		50 mm ID slotted PVC pipe
	6									
20			- with silt, trace clay, wet	71.48						
			CLAY grey, with gravel, wet	6.40	5	DP	31" 52%		<5 ● ○ <0.02	
25			- trace sand							Silica sand backfill
	8				6	DP	38" 63%		<5 ● ○ <0.02	
30				68.74						
			End of Borehole	9.14						

Screen Interval: 3.05 - 6.10 m BGS
Sand Pack Interval: 2.74 - 9.14 m BGS
Well Seal Interval: 0.23 - 2.74 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Stantec

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-7

Project:	Environmental Site Assessment	**Drilling method:**	GM100 (Direct Push)
Client:	Public Services and Procurement Canada	**Date started/completed:**	14-Mar-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	75.35 m AMSL
Number:	122511246	**Top of casing elevation:**	75.24 m AMSL
Field investigator:	J. Urben / B. Chenier	**Easting:**	444336.2
Contractor:	Strata Drilling Group	**Northing:**	5027014.9

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 / ppm OTOV / Comb ● 200 400 600 800	Diagram	Description
			Ground Surface	75.35							
			TOPSOIL with grass, sand, dry	0.00 75.05							
			SILTY CLAY brown, soft, dry	0.30	1	DP	24" 100%		● ○ <5 <0.02		Flushmount protective cover with concrete seal
					2	DP	24" 67%	Phenols, Metals, Energetics, PAH	● ○ <5 <0.02		Bentonite backfill
5	2				3	DP	36" 60%		● ○ <5 1.0		50 mm ID PVC pipe
				72.61							
			SILTY SAND brown, coarse grained sand, gravel - becomes wet	2.74	4	DP	24" 80%	PHC, VOC, Field Duplicate	● ○ 60 <0.02		
10	4		- grey		5	DP	30" 100%		● ○ <5 <0.02		
				70.78							
15			SILTY SAND grey, trace clay, gravel, moist	4.57	6	DP	36" 60%		● ○ <5 <0.02		Groundwater Level: 4.79 m BGS 17-Mar-16 Silica sand backfill 50 mm ID slotted PVC pipe
20	6				7	DP	30" 50%		● ○ <5 <0.02		
25	8				8	DP	28" 47%		● ○ <5 <0.02		Slough
30			End of Borehole	66.21 9.14							

Screen Interval: 3.66 - 6.71 m BGS
Sand Pack Interval: 3.35 - 6.71 m BGS
Well Seal Interval: 0.23 - 3.35 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Field Duplicate - MW16-2A SS4

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-7A

Project:	Environmental Site Assessment	**Drilling method:**	Geoprobe 7822DT
Client:	Public Services and Procurement Canada	**Date started/completed:**	03-Aug-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	75.19 m AMSL
Number:	122511246	**Top of casing elevation:**	75.11 m AMSL
Field investigator:	T. Ghadieh	**Easting:**	444336.2
Contractor:	Strata Drilling Group	**Northing:**	5027014.9

SUBSURFACE PROFILE				SAMPLE DETAILS		INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Diagram / Description
			Ground Surface	75.19			
			TOPSOIL	0.00 74.89			Flushmount protective cover with concrete seal
			SILTY CLAY brown, soft, dry	0.30	1	DP	
5							
	2				2	DP	Bentonite backfill 38 mm ID PVC pipe
				72.15			
10			SILTY SAND brown, trace gravel, wet	3.05	3	DP	
	4						
15			- grey, with gravel, moist		4	DP	Groundwater Level: 5.07 m BGS 8-Aug-16
	6			69.10			
20			SILTY CLAY with sand, trace gravel, wet	6.10	5	DP	Silica sand backfill 38 mm ID slotted PVC pipe
25							
	8				6	DP	
				66.66			
			End of Borehole	8.53			
30							

Screen Interval: 5.49 - 8.53 m BGS
Sand Pack Interval: 4.88 - 8.53 m BGS
Well Seal Interval: 0.23 - 4.88 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Installed to replace MW16-7 (destroyed)

Stantec

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-8

Project:	Environmental Site Assessment	**Drilling method:**	Geoprobe 7822DT
Client:	Public Services and Procurement Canada	**Date started/completed:**	03-Aug-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	74.87 m AMSL
Number:	122511246	**Top of casing elevation:**	74.83 m AMSL
Field investigator:	T. Ghadieh	**Easting:**	n/a
Contractor:	Strata Drilling Group	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 ppm OTOV Comb● 200 400 600 800	Diagram / Description
			Ground Surface	74.87						
			SILTY CLAY light brown, with sand, trace gravel	0.00	1	DP	30" 50%	Metals, PAH	5	Flushmount protective cover with concrete seal
5	2		- becomes moist - dark brown, no gravel		2	DP	30" 50%		20	Bentonite backfill 38 mm ID PVC pipe
10	4		- grey, with light brown sand, moist		3	DP	30" 100%	VOC, PHC F1-F4, pH, Phenols	20	
15			- wet		4	DP	30" 100%		15	Silica sand backfill
					5	DP	30" 100%		<5	38 mm ID slotted PVC pipe
20	6				6	DP	30" 100%		5	Groundwater Level: 5.27 m BGS 8-Aug-16
			End of Borehole	68.77 6.10						
25	8									
30										

Screen Interval: 3.05 - 6.10 m BGS
Sand Pack Interval: 2.44 - 6.10 m BGS
Well Seal Interval: 0.23 - 2.44 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-9

Project:	Environmental Site Assessment	**Drilling method:**	Geoprobe 7822DT
Client:	Public Services and Procurement Canada	**Date started/completed:**	03-Aug-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	73.79 m AMSL
Number:	122511246	**Top of casing elevation:**	73.78 m AMSL
Field investigator:	T. Ghadieh	**Easting:**	n/a
Contractor:	Strata Drilling Group	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Lab Analyses	%LEL Comb▲ 20 40 60 80 / ppm OTOV / Comb ● 200 400 600 800	Diagram	Description
			Ground Surface	73.79						
			SAND dark brown, with gravel, dry	0.00	1	DP	Phenols, pH, PAH	<5		Flushmount protective cover with concrete seal
					2	DP		<5		Bentonite backfill
				72.26						38 mm ID PVC pipe
5			SILTY CLAY light brown, with sand, dry	1.52	3	DP		<5		
	2				4	DP		<5		
			- brown, moist	70.74						
10			SILTY SAND brown, moist	3.05	5	DP		30		
				69.98						
	4		SILTY CLAY grey, with sand, wet	3.81	6	DP		5		Silica sand backfill
15										38 mm ID slotted PVC pipe
					7	DP		5		Groundwater Level: 5.16 m BGS 8-Aug-16
20	6			67.69						
			End of Borehole	6.10						
25										
	8									
30										

Screen Interval: 3.05 - 6.10 m BGS
Sand Pack Interval: 2.44 - 6.10 m BGS
Well Seal Interval: 0.23 - 2.44 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
DP - direct push sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Stantec

Drawn By/Checked By: M. Ford

Monitoring Well: MW16-14

Project:	Environmental Site Assessment	**Drilling method:**	Geoprobe 7822DT
Client:	Public Services and Procurement Canada	**Date started/completed:**	03-Aug-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	79.51 m AMSL
Number:	122511246	**Top of casing elevation:**	79.45 m AMSL
Field investigator:	T. Ghadieh	**Easting:**	n/a
Contractor:	Strata Drilling Group	**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS					INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Recovery	Lab Analyses	%LEL Comb▲ 20 40 60 80 / ppm OTOV ● Comb 200 400 600 800	Diagram / Description
			Ground Surface	79.51						
			SILTY CLAY (FILL) light brown, with gravel, moist	0.00	1	AS	18" 30%		<5	Flushmount protective cover with concrete seal
				77.98						
5			SILTY SAND (FILL) brown, with gravel, moist	1.52						Bentonite backfill
	2			77.22	2	AS	18" 30%	PAH	<5	38 mm ID PVC pipe
			SAND brown, poorly graded, wet	2.29						
10				76.46						
			SILTY CLAY grey-brown, with sand, trace gravel, wet	3.05	3	AS	20" 33%		<5	
	4									
15			- no gravel		4	AS	30" 100%		10	
					5	AS	30" 100%		10	
			- becomes grey, no sand							Silica sand backfill
20	6		- trace gravel		6	AS	30" 100%	Phenol, pH	20	38 mm ID slotted PVC pipe
					7	AS	30" 100%		5	Groundwater Level: 7.23 m BGS 8-Aug-16
25				71.89						
			End of Borehole	7.62						
	8									
30										

Screen Interval: 4.57 - 7.62 m BGS
Sand Pack Interval: 3.66 - 7.62 m BGS
Well Seal Interval: 0.23 - 3.66 m BGS

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
AS - auger sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds

Stantec

Drawn By/Checked By: M. Ford

STANTEC BOREHOLE AND WELL V2 122511246.GPJ STANTEC - DATA TEMPLATE.GDT 12/20/16 MIFORD

Test Pit: TP16-1

Project:	Environmental Site Assessment	**Drilling method:**	
Client:	Public Services and Procurement Canada	**Date started/completed:**	28-Jul-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	78.39 m AMSL
Number:	122511246	**Top of casing elevation:**	n/a
Field investigator:	B. Chenier	**Easting:**	n/a
Contractor:		**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Lab Analyses	%LEL Comb▲ 20 40 60 80 ppm OTOV Comb 200 400 600 800	Diagram / Description
			Ground Surface	78.39					
			SAND (FILL) trace silt, gravel, dry, brick, tile, and concrete debris	0.00	1	GS	Nitroglycerin, Phenol, pH	5	
					2	GS	PAH, Metals (D), Phenol, pH	<5	
5			- metal debris		3	GS	Nitroglycerin, PAH (D), Metals	<5	
	2				4	GS	Phenol (D), pH	10	
10					5	GS		15	Excavated material reinstated as backfill
	4				6	GS	VOC, Phenol (D), pH (D)	20	
15					7	GS	VOC, PAH, Nitroglycerin, Metals, Phenol, pH	20	
20	6			72.29					
			End of Test Pit	6.10					
25	8								
30									

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
GS - grab sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds
(D) - field duplicate submitted for laboratory analysis

Stantec

Drawn By/Checked By: M. Ford

Test Pit: TP16-3

Project:	Environmental Site Assessment	**Drilling method:**	
Client:	Public Services and Procurement Canada	**Date started/completed:**	28-Jul-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	79.98 m AMSL
Number:	122511246	**Top of casing elevation:**	n/a
Field investigator:	B. Chenier	**Easting:**	n/a
Contractor:		**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Lab Analyses	%LEL Comb▲ 20 40 60 80 ppm OTOV Comb ● 200 400 600 800	Diagram / Description
			Ground Surface	79.98					
			SAND (FILL) with gravel, trace clay, silt, dry	0.00	1	GS		<5	
			- concrete debris		2	GS		<5	
5				78.46					Excavated material reinstated as backfill
	2		SAND and GRAVEL (FILL) with silt, trace clay, dry	1.52	3	GS		<5	
				77.54					
			SAND (FILL) with silt, trace clay, gravel, moist, brick debris	2.44	4	GS	PCB	<5	
10				76.94					
			End of Test Pit	3.05					
	4								
15									
	6								
20									
25									
	8								
30									

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
GS - grab sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PCB - polychlorinated biphenyls
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds
(D) - field duplicate submitted for laboratory analysis

Stantec

Drawn By/Checked By: M. Ford

Test Pit: TP16-4

Project:	Environmental Site Assessment	**Drilling method:**	
Client:	Public Services and Procurement Canada	**Date started/completed:**	28-Jul-2016
Location:	Sir John Carling Building	**Ground surface elevation:**	79.15 m AMSL
Number:	122511246	**Top of casing elevation:**	n/a
Field investigator:	B. Chenier	**Easting:**	n/a
Contractor:		**Northing:**	n/a

SUBSURFACE PROFILE				SAMPLE DETAILS				INSTALLATION DETAILS	
Depth (ft)	Depth (m)	Graphic Log	Lithologic Description	Elevation (m AMSL) Depth (m BGS)	Sample Number	Sample Type	Lab Analyses	%LEL Comb▲ 20 40 60 80 ppm OTOV Comb 200 400 600 800	Diagram / Description
			Ground Surface	79.15					
			SAND (FILL) with clay, gravel, trace silt, dry to moist, brick debris	0.00 78.38	1	GS		<5	
			SILT (FILL) with sand, trace clay, moist, brick and concrete debris	0.76	2	GS		10	
5	2				3	GS		10	
			- with black sand		4	GS	PCB (D), PHC (D), VOC (D), PAH, Metals, Phenol (D)	5	Excavated material reinstated as backfill
10			SAND (FILL) with silt, trace clay, gravel, moist, brick and concrete debris	3.05 75.34	5	GS			
	4		SILT (FILL) with clay, trace sand, gravel, moist, brick and concrete debris	3.81	6	GS			
15			- with sand, trace clay, moist to wet	73.96	7	GS			
			End of Test Pit	5.18					
20	6								
25	8								
30									

Notes:
m AMSL - metres above mean sea level
m BGS - metres below ground surface
GS - grab sample
ppm - parts per million by volume
n/a - not available

PAH - polycyclic aromatic hydrocarbons
PCB - polychlorinated biphenyls
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4
VOC - volatile organic compounds
(D) - field duplicate submitted for laboratory analysis

Stantec

Drawn By/Checked By: M. Ford

SOIL ANALYTICAL RESULTS from Phase II Environmental Assessment, Former Sir John Carling Building, 930 Carling Avenue, Ottawa, Ontario (Final). Stantec 2017

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									DMH-138		EMH-6	MW16-1							
Sample Date									4-Aug-16	4-Aug-16	4-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									DMH-138	DMH-138 Lab-Dup	EMH-6	MW16-1-SS1	MW16-1-SS3	MW16-1-SS4	MW16-1-SS4 Lab-Dup	MW16-1-SS5	MW16-1-SS5 Lab-Dup	MW16-1A-SS5	
Sample Depth												0 - 1.5 m	3 - 4.6 m	4.6 - 6.1 m	4.6 - 6.1 m	6.1 - 7.6 m	6.1 - 7.6 m	6.1 - 7.6 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B6G4868	B6G4868	B6G4868	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CVI522	CVI522	CVI521	CAH380	CAH381	CAH382	CAH382	CAH383	CAH383	CAH543	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate					Lab Replicate		Lab Replicate	Field Duplicate	(%)
General Chemistry																			
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	17	-	37	17	14	9.5	-	8.3	-	8.3	0%
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 $_{s12}$	n/v	7.83	-	-	**10.7**[ABF]	-	**12.3**[ABF]	-	-	-	-	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 $_{s12}$	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	<0.04	<0.04	-	1.11	-	-	-	-	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	<0.01	<0.01	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	**6.8**[ABEFG]	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	<5	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	1.9	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																			
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	s7	b,s7	s7	s7	s7	-	-	-	-	-	-	-	<10	<10	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 $_{b}$	25 $_{s7}$	55 $_{s7}$	55 $_{s7}$	-	-	-	-	-	-	-	<10	<10	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 $_{s15}$	230 $_{s15}$	98 $_{s15}$	-	-	-	-	-	-	-	<10	<10	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 $_{s8}$	1,700 $_{s8}$	300 $_{s8}$	-	-	-	-	-	-	-	<50	<50	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 $_{s10}$	3,300 $_{s10}$	2,800 $_{s10}$	-	-	-	-	-	-	-	<50	<50	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 $_{s10}$	3,300 $_{s10}$	2,800 $_{s10}$	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	YES	YES	-	-
Glycols																			
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Metals																			
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	-	-	-	-	0.22	-	-	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	-	-	-	-	2.7	-	-	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	-	-	-	-	68	-	-	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	-	-	-	-	0.31	-	-	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 $_{s16}$	1.5 $_{s16}$	-	-	-	-	-	0.29	-	-	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	-	-	-	-	0.50	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	-	-	-	-	19	-	-	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	-	-	-	-	0.3	0.3	-	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	-	-	-	-	3.9	-	-	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	-	-	-	-	18	-	-	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	-	-	-	-	28	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	-	-	-	-	<0.050	-	-	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	-	-	-	-	3.5[E]	-	-	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	-	-	-	-	9.9	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									DMH-138		EMH-6	MW16-1							
Sample Date									4-Aug-16	4-Aug-16	4-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									DMH-138	DMH-138 Lab-Dup	EMH-6	MW16-1-SS1	MW16-1-SS3	MW16-1-SS4	MW16-1-SS4 Lab-Dup	MW16-1-SS5	MW16-1-SS5 Lab-Dup	MW16-1A-SS5	
Sample Depth												0 - 1.5 m	3 - 4.6 m	4.6 - 6.1 m	4.6 - 6.1 m	6.1 - 7.6 m	6.1 - 7.6 m	6.1 - 7.6 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B6G4868	B6G4868	B6G4868	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CVI522	CVI522	CVI521	CAH380	CAH381	CAH382	CAH382	CAH383	CAH383	CAH543	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate					Lab Replicate		Lab Replicate	Field Duplicate	(%)
Metals (Contd.))																			
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	-	-	-	-	<0.50	-	-	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	-	-	-	-	<0.20	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	3,500	-	-	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	-	-	-	-	0.076	-	-	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	8.0	-	-	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	-	-	-	-	0.63	-	-	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	-	-	-	-	20	-	-	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	-	-	-	-	140	-	-	-	-	-
Polychlorinated Biphenyls																			
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	<20	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	<20	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	<20	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	250	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	**250**[ABEFG]	-	-	-	-	-	-	-	-
Phenols																			
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	***<0.3***	***<0.3***	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	***<0.3***	***<0.3***	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	***<0.5***	***<0.5***	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	<0.5	<0.5	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	***<0.3***	***<0.3***	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	***<0.3***	***<0.3***	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.3	<0.3	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									DMH-138		EMH-6	MW16-1							
Sample Date									4-Aug-16	4-Aug-16	4-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									DMH-138	DMH-138 Lab-Dup	EMH-6	MW16-1-SS1	MW16-1-SS3	MW16-1-SS4	MW16-1-SS4 Lab-Dup	MW16-1-SS5	MW16-1-SS5 Lab-Dup	MW16-1A-SS5	
Sample Depth												0 - 1.5 m	3 - 4.6 m	4.6 - 6.1 m	4.6 - 6.1 m	6.1 - 7.6 m	6.1 - 7.6 m	6.1 - 7.6 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B6G4868	B6G4868	B6G4868	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CVI522	CVI522	CVI521	CAH380	CAH381	CAH382	CAH382	CAH383	CAH383	CAH543	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate					Lab Replicate		Lab Replicate	Field Duplicate	(%)
Volatile Organic Compounds																			
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	-	-	-	<0.50	-	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	-	-	-	<0.0060	-	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	-	-	-	<0.050	-	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	-	-	-	<0.050	-	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	-	-	-	<0.050	-	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	-	-	-	<0.050	-	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	-	-	-	<0.050	-	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	-	-	-	<0.050	-	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	-	-	-	<0.050	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	<0.050	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	<0.030	-	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	<0.040	-	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	-	-	-	<0.010	-	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	-	-	-	<0.050	-	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	-	-	-	<0.50	-	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	-	-	-	<0.50	-	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	-	-	-	<0.050	-	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	-	-	-	<0.050	-	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	-	-	-	<0.050	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	-	-	-	<0.050	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	-	-	-	<0.050	-	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	-	-	-	<0.020	-	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	-	-	-	<0.050	-	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	<0.050	-	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	-	-	-	<0.010	-	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	-	-	-	<0.050	-	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	-	-	-	<0.020	-	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	<0.020	-	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	<0.020	-	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	-	-	-	<0.020	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									DMH-138		EMH-6	MW16-1							
Sample Date									4-Aug-16	4-Aug-16	4-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									DMH-138	DMH-138 Lab-Dup	EMH-6	MW16-1-SS1	MW16-1-SS3	MW16-1-SS4	MW16-1-SS4 Lab-Dup	MW16-1-SS5	MW16-1-SS5 Lab-Dup	MW16-1A-SS5	
Sample Depth												0 - 1.5 m	3 - 4.6 m	4.6 - 6.1 m	4.6 - 6.1 m	6.1 - 7.6 m	6.1 - 7.6 m	6.1 - 7.6 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B6G4868	B6G4868	B6G4868	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CVI522	CVI522	CVI521	CAH380	CAH381	CAH382	CAH382	CAH383	CAH383	CAH543	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate					Lab Replicate		Lab Replicate	Field Duplicate	(%)
Energetics																			
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	<0.5	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	<0.5	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<2	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<1	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<2	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<1	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<1	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<0.5	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-3					MW16-5						
Sample Date									14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16
Sample ID									MW16-3-SS1	MW16-3-SS2	MW16-3-SS2 Lab-Dup	MW16-3-SS3	MW16-3-SS4	MW16-5-SS1	MW16-5-SS1 Lab-Dup	MW16-5-SS2	MW16-5-SS2A		MW16-5-SS2A Lab-Dup	MW16-5-SS4
Sample Depth									0 - 1.5 m	1.5 - 3 m	1.5 - 3 m	3 - 4.6 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m	1.5 - 3 m	1.5 - 3 m		1.5 - 3 m	4.6 - 6.1 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164		B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CAH386	CAH387	CAH387	CAH388	CAH389	CAH500	CAH500	CAH501	CBW565	RPD	CBW565	CAH502
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate		Field Duplicate	(%)	Lab Replicate	
General Chemistry																				
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	11	12	-	8.3	17	17	-	11	22	67%	19	9.0
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11$_{s12}$	n/v	-	12.4^{ABF}	-	-	12.3^{ABF}	11.9^{ABF}	-	-	-	-	-	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9$_{s12}$	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	0.09	-	-	0.30	-	<0.04	-	-	-	-	-	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	<0.01	-	-	-	<0.01	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	7.4^{ABEFG}	-	-	-	1.3^{EG}	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	<5	-	-	-	<5	<5	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	1.4	-	-	-	0.83	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																				
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	$_{s7}$	$_{b,s7}$	$_{s7}$	$_{s7}$	$_{s7}$	-	-	-	-	<10	<10	<10	-	-	-	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30$_{b}$	25$_{s7}$	55$_{s7}$	55$_{s7}$	-	-	-	-	<10	<10	<10	-	-	-	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10$_{s15}$	230$_{s15}$	98$_{s15}$	-	-	-	-	<10	<10	<10	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240$_{s8}$	1,700$_{s8}$	300$_{s8}$	-	-	-	-	<50	65	64	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	<50	100	95	-	-	-	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	-	410^{E}	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	YES	NO	NO	-	-	-	-	-
Glycols																				
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	<10	<10	nc	<10	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	<10	<10	nc	<10	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	<10	<10	nc	<10	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	<10	<10	nc	<10	-
Metals																				
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	<0.20	0.38	-	-	<0.20	-	-	-	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	2.0	2.2	-	-	1.9	-	-	-	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	73	70	-	-	56	-	-	-	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	0.32	0.31	-	-	0.42	-	-	-	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2$_{s16}$	1.5$_{s16}$	-	0.31	-	-	-	0.42	-	-	-	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	0.20	0.16	-	-	0.52	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	18	17	-	-	16	-	-	-	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	<0.2	-	-	-	<0.2	-	-	-	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	3.9	3.8	-	-	4.1	-	-	-	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	15	13	-	-	12	-	-	-	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	25	26	-	-	11	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	<0.050	<0.050	-	-	<0.050	-	-	-	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	2.7^{E}	2.8^{E}	-	-	1.3	-	-	-	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	10	9.5	-	-	10	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-3					MW16-5						
Sample Date									14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16
Sample ID									MW16-3-SS1	MW16-3-SS2	MW16-3-SS2 Lab-Dup	MW16-3-SS3	MW16-3-SS4	MW16-5-SS1	MW16-5-SS1 Lab-Dup	MW16-5-SS2	MW16-5-SS2A		MW16-5-SS2A Lab-Dup	MW16-5-SS4
Sample Depth									0 - 1.5 m	1.5 - 3 m	1.5 - 3 m	3 - 4.6 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m	1.5 - 3 m	1.5 - 3 m		1.5 - 3 m	4.6 - 6.1 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164		B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CAH386	CAH387	CAH387	CAH388	CAH389	CAH500	CAH500	CAH501	CBW565	RPD	CBW565	CAH502
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate		Field Duplicate	(%)	Lab Replicate	
Metals (Contd.))																				
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	<0.50	<0.50	-	-	<0.50	-	-	-	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	<0.20	<0.20	-	-	<0.20	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	3,400	3,400	-	-	2,500	-	-	-	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	0.067	0.072	-	-	0.12	-	-	-	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	<5.0	<5.0	-	-	<5.0	-	-	-	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	0.58	0.59	-	-	0.63	-	-	-	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	21	21	-	-	22	-	-	-	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	92	78	-	-	65	-	-	-	-	-	-
Polychlorinated Biphenyls																				
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-3					MW16-5							
Sample Date									14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16
Sample ID									MW16-3-SS1	MW16-3-SS2	MW16-3-SS2 Lab-Dup	MW16-3-SS3	MW16-3-SS4	MW16-5-SS1	MW16-5-SS1 Lab-Dup	MW16-5-SS2	MW16-5-SS2A		MW16-5-SS2A Lab-Dup	MW16-5-SS4
Sample Depth									0 - 1.5 m	1.5 - 3 m	1.5 - 3 m	3 - 4.6 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m	1.5 - 3 m	1.5 - 3 m		1.5 - 3 m	4.6 - 6.1 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164		B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CAH386	CAH387	CAH387	CAH388	CAH389	CAH500	CAH500	CAH501	CBW565	RPD	CBW565	CAH502
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate		Field Duplicate	(%)	Lab Replicate	
Volatile Organic Compounds																				
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	<0.50	<0.50	<0.50	-	-	-	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	0.0075	<0.0060	<0.0060	-	-	-	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	<0.050	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	<0.030	<0.030	<0.030	-	-	-	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	<0.040	<0.040	<0.040	-	-	-	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	<0.010	<0.010	<0.010	-	-	-	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	<0.50	<0.50	<0.50	-	-	-	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	0.72[E]	<0.50	<0.50	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	<0.050	0.061[E]	0.061[E]	-	-	-	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	1.8[ABE]	<0.020	<0.020	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	<0.050	<0.050	<0.050	-	-	-	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	<0.010	<0.010	<0.010	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	0.075	<0.050	<0.050	-	-	-	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	<0.020	<0.020	<0.020	-	-	-	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	0.021	<0.020	<0.020	-	-	-	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	<0.020	<0.020	<0.020	-	-	-	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	0.021	<0.020	<0.020	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-3					MW16-5						
Sample Date									14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16
Sample ID									MW16-3-SS1	MW16-3-SS2	MW16-3-SS2 Lab-Dup	MW16-3-SS3	MW16-3-SS4	MW16-5-SS1	MW16-5-SS1 Lab-Dup	MW16-5-SS2	MW16-5-SS2A		MW16-5-SS2A Lab-Dup	MW16-5-SS4
Sample Depth									0 - 1.5 m	1.5 - 3 m	1.5 - 3 m	3 - 4.6 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m	1.5 - 3 m	1.5 - 3 m		1.5 - 3 m	4.6 - 6.1 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164		B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CAH386	CAH387	CAH387	CAH388	CAH389	CAH500	CAH500	CAH501	CBW565	RPD	CBW565	CAH502
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate		Field Duplicate	(%)	Lab Replicate	
Energetics																				
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<2	-	<2	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<1	-	<1	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<2	-	<2	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<1	-	<1	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<1	-	<1	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.5	-	<0.5	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-6						MW16-7				
Sample Date									17-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									MW16-6 1A	MW16-6 1A Lab-Dup	MW16-6-SS2	MW16-6-SS3	MW16-6-SS7	MW16-6-SS7 Lab-Dup	MW16-7-SS2	MW16-7-SS2 Lab-Dup	MW16-7-SS4	MW16-2A-SS4	
Sample Depth									0 - 0.7 m	0 - 0.7 m	1.5 - 2.1 m	2.1 - 3 m	6.1 - 7.3 m	6.1 - 7.3 m	0.6 - 1.5 m	0.6 - 1.5 m	3 - 3.8 m	3 - 3.8 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B654802	B654802	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CAU912	CAU912	CAH505	CAH504	CAH539	CAH539	CAH540	CAH540	CAH541	CAH542	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate				Lab Replicate		Lab Replicate		Field Duplicate	(%)
General Chemistry																			
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	18	-	-	22	12	-	15	-	12	15	22%
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 [s12]	n/v	7.53	-	-	7.40	-	-	-	-	-	-	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 [s12]	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	<0.04	<0.04	-	<0.04	-	-	<0.04	<0.04	-	-	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	<0.01	<0.01	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	0.26	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	6	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	0.57	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																			
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	[s7]	[b,s7]	[s7]	[s7]	[s7]	-	-	-	-	<10	<10	-	-	<10	<10	nc
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 [b]	25 [s7]	55 [s7]	55 [s7]	-	-	-	-	<10	<10	-	-	<10	<10	nc
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 [s15]	230 [s15]	98 [s15]	-	-	-	-	<10	-	-	-	<10	<10	nc
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 [s8]	1,700 [s8]	300 [s8]	-	-	-	-	<50	-	-	-	<50	<50	nc
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	<50	-	-	-	<50	<50	nc
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	YES	-	-	-	YES	YES	nc
Glycols																			
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Metals																			
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	0.64	-	-	-	-	-	<0.20	-	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	1.3	-	-	-	-	-	<1.0	-	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	140	-	-	-	-	-	150	-	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	0.44	-	-	-	-	-	0.40	-	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 [s16]	1.5 [s16]	0.22	-	-	-	-	-	0.15	-	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	0.11	-	-	-	-	-	<0.10	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	29.8	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	35	-	-	-	-	-	37	-	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	<0.2	<0.2	-	-	-	-	<0.2	-	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	9.4	-	-	-	-	-	9.6	-	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	20	-	-	-	-	-	20	-	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	8.5	-	-	-	-	-	6.0	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	3.7	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	<0.050	-	-	-	-	-	<0.050	-	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	<0.50	-	-	-	-	-	<0.50	-	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	23	-	-	-	-	-	22	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-6						MW16-7				
Sample Date									17-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									MW16-6 1A	MW16-6 1A Lab-Dup	MW16-6-SS2	MW16-6-SS3	MW16-6-SS7	MW16-6-SS7 Lab-Dup	MW16-7-SS2	MW16-7-SS2 Lab-Dup	MW16-7-SS4	MW16-2A-SS4	
Sample Depth									0 - 0.7 m	0 - 0.7 m	1.5 - 2.1 m	2.1 - 3 m	6.1 - 7.3 m	6.1 - 7.3 m	0.6 - 1.5 m	0.6 - 1.5 m	3 - 3.8 m	3 - 3.8 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B654802	B654802	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CAU912	CAU912	CAH505	CAH504	CAH539	CAH539	CAH540	CAH540	CAH541	CAH542	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate				Lab Replicate		Lab Replicate		Field Duplicate	(%)
Metals (Contd.))																			
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	<0.50	-	-	-	-	-	<0.50	-	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	<0.20	-	-	-	-	-	<0.20	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	12	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	340	-	-	-	-	-	150	-	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	0.19	-	-	-	-	-	0.18	-	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	<5.0	-	-	-	-	-	<5.0	-	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	0.59	-	-	-	-	-	0.55	-	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	40	-	-	-	-	-	45	-	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	58	-	-	-	-	-	51	-	-	-	-
Polychlorinated Biphenyls																			
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-
Phenols																			
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-6						MW16-7				
Sample Date									17-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									MW16-6 1A	MW16-6 1A Lab-Dup	MW16-6-SS2	MW16-6-SS3	MW16-6-SS7	MW16-6-SS7 Lab-Dup	MW16-7-SS2	MW16-7-SS2 Lab-Dup	MW16-7-SS4	MW16-2A-SS4	
Sample Depth									0 - 0.7 m	0 - 0.7 m	1.5 - 2.1 m	2.1 - 3 m	6.1 - 7.3 m	6.1 - 7.3 m	0.6 - 1.5 m	0.6 - 1.5 m	3 - 3.8 m	3 - 3.8 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B654802	B654802	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CAU912	CAU912	CAH505	CAH504	CAH539	CAH539	CAH540	CAH540	CAH541	CAH542	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate				Lab Replicate		Lab Replicate		Field Duplicate	(%)
Volatile Organic Compounds																			
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	<0.50	-	-	-	-	<0.50	<0.50	nc
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	<0.0060	<0.005	<0.005	-	-	<0.0060	<0.0060	nc
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	<0.030	-	-	-	-	<0.030	<0.030	nc
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	<0.040	-	-	-	-	<0.040	<0.040	nc
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	<0.010	<0.01	<0.01	-	-	<0.010	<0.010	nc
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	<0.050	-	-	-	-	<0.050	0.14[E]	nc
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	<0.50	-	-	-	-	<0.50	<0.50	nc
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	<0.50	-	-	-	-	<0.50	<0.50	nc
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	<0.020	<0.02	<0.02	-	-	<0.020	0.020	nc
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	<0.010	-	-	-	-	<0.010	<0.010	nc
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	<0.050	-	-	-	-	<0.050	<0.050	nc
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	<0.020	-	-	-	-	<0.020	<0.020	nc
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	<0.020	<0.04	<0.04	-	-	<0.020	0.040	nc
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	<0.020	<0.02	<0.02	-	-	<0.020	<0.020	nc
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	<0.020	<0.04	<0.04	-	-	<0.020	0.040	nc

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-6						MW16-7				
Sample Date									17-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	
Sample ID									MW16-6 1A	MW16-6 1A Lab-Dup	MW16-6-SS2	MW16-6-SS3	MW16-6-SS7	MW16-6-SS7 Lab-Dup	MW16-7-SS2	MW16-7-SS2 Lab-Dup	MW16-7-SS4	MW16-2A-SS4	
Sample Depth									0 - 0.7 m	0 - 0.7 m	1.5 - 2.1 m	2.1 - 3 m	6.1 - 7.3 m	6.1 - 7.3 m	0.6 - 1.5 m	0.6 - 1.5 m	3 - 3.8 m	3 - 3.8 m	
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	
Laboratory Work Order		CCME				Ontario			B654802	B654802	B652164	B652164	B652164	B652164	B652164	B652164	B652164	B652164	
Laboratory Sample ID		A	B	C	D	E	F	G	CAU912	CAU912	CAH505	CAH504	CAH539	CAH539	CAH540	CAH540	CAH541	CAH542	RPD
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate				Lab Replicate		Lab Replicate		Field Duplicate	(%)
Energetics																			
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<2	<2	<2	-	-	-	<2	<2	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<1	<1	<1	-	-	-	<1	<1	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<2	<2	<2	-	-	-	<2	<2	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<1	<1	<1	-	-	-	<1	<1	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<1	<1	<1	-	-	-	<1	<1	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-8			MW16-9	MW16-10			MW16-11	MW16-12		MW16-13	
Sample Date									3-Aug-16	3-Aug-16	3-Aug-16	3-Aug-16	2-Aug-16	2-Aug-16	2-Aug-16	4-Aug-16	4-Aug-16	4-Aug-16	3-Aug-16	3-Aug-16
Sample ID									MW16-8 SS1	MW16-8 SS3	MW16-8 SS3 Lab-Dup	MW16-9 SS1	MW16-10 SS2	MW16-10 SS4	MW16-10 SS4 Lab-Dup	MW16-11 SS1	MW16-12 SS2	MW16-12 SS4	MW16-13 SS1	MW16-13 SS3
Sample Depth									0 - 1.5 m	3 - 3.8 m	3 - 3.8 m	0 - 0.8 m	0.8 - 1.5 m	2.4 - 3 m	2.4 - 3 m	0 - 1.5 m	0.8 - 1.5 m	3 - 4.6 m	0 - 1.5 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID		A	B	C	D	E	F	G	CVH382	CVH383	CVH383	CVH381	CVH379	CVH380	CVH380	CVH378	CVH376	CVH377	CVH374	CVH375
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate					
General Chemistry																				
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	14	29	-	20	12	19	-	25	22	11	15	11
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 [s12]	n/v	-	7.42	-	7.42	-	7.35	-	7.43	-	7.75	-	7.93
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 [s12]	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.04	-	<0.04	<0.04	<0.04	-	<0.04	-	<0.04
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																				
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	[s7]	[b,s7]	[s7]	[s7]	[s7]	-	<10	-	-	-	-	-	-	-	-	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 [b]	25 [s7]	55 [s7]	55 [s7]	-	<10	-	-	-	-	-	-	-	-	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 [s15]	230 [s15]	98 [s15]	-	<10	-	-	-	-	-	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 [s8]	1,700 [s8]	300 [s8]	-	<50	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	<50	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	<10	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	YES	-	-	-	-	-	-	-	-	-	-
Glycols																				
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Metals																				
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	<0.20	-	-	-	-	-	-	-	-	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	1.4	-	-	-	-	-	-	-	-	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	170	-	-	-	-	-	-	-	-	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	0.41	-	-	-	-	-	-	-	-	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 [s16]	1.5 [s16]	0.24	-	-	-	-	-	-	-	-	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	0.12	-	-	-	-	-	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	37	-	-	-	-	-	-	-	-	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	<0.2	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	9.3	-	-	-	-	-	-	-	-	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	20	-	-	-	-	-	-	-	-	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	9.1	-	-	-	-	-	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	<0.050	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	0.68	-	-	-	-	-	-	-	-	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	22	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-8			MW16-9	MW16-10			MW16-11	MW16-12		MW16-13	
Sample Date									3-Aug-16	3-Aug-16	3-Aug-16	3-Aug-16	2-Aug-16	2-Aug-16	2-Aug-16	4-Aug-16	4-Aug-16	4-Aug-16	3-Aug-16	3-Aug-16
Sample ID									MW16-8 SS1	MW16-8 SS3	MW16-8 SS3 Lab-Dup	MW16-9 SS1	MW16-10 SS2	MW16-10 SS4	MW16-10 SS4 Lab-Dup	MW16-11 SS1	MW16-12 SS2	MW16-12 SS4	MW16-13 SS1	MW16-13 SS3
Sample Depth									0 - 1.5 m	3 - 3.8 m	3 - 3.8 m	0 - 0.8 m	0.8 - 1.5 m	2.4 - 3 m	2.4 - 3 m	0 - 1.5 m	0.8 - 1.5 m	3 - 4.6 m	0 - 1.5 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID		A	B	C	D	E	F	G	CVH382	CVH383	CVH383	CVH381	CVH379	CVH380	CVH380	CVH378	CVH376	CVH377	CVH374	CVH375
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate					
Metals (Contd.))																				
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	<0.50	-	-	-	-	-	-	-	-	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	<0.20	-	-	-	-	-	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	320	-	-	-	-	-	-	-	-	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	0.18	-	-	-	-	-	-	-	-	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	<1.0	-	-	-	-	-	-	-	-	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	0.77	-	-	-	-	-	-	-	-	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	43	-	-	-	-	-	-	-	-	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	53	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls																				
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-8			MW16-9	MW16-10			MW16-11	MW16-12		MW16-13	
Sample Date									3-Aug-16	3-Aug-16	3-Aug-16	3-Aug-16	2-Aug-16	2-Aug-16	2-Aug-16	4-Aug-16	4-Aug-16	4-Aug-16	3-Aug-16	3-Aug-16
Sample ID									MW16-8 SS1	MW16-8 SS3	MW16-8 SS3 Lab-Dup	MW16-9 SS1	MW16-10 SS2	MW16-10 SS4	MW16-10 SS4 Lab-Dup	MW16-11 SS1	MW16-12 SS2	MW16-12 SS4	MW16-13 SS1	MW16-13 SS3
Sample Depth									0 - 1.5 m	3 - 3.8 m	3 - 3.8 m	0 - 0.8 m	0.8 - 1.5 m	2.4 - 3 m	2.4 - 3 m	0 - 1.5 m	0.8 - 1.5 m	3 - 4.6 m	0 - 1.5 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID		A	B	C	D	E	F	G	CVH382	CVH383	CVH383	CVH381	CVH379	CVH380	CVH380	CVH378	CVH376	CVH377	CVH374	CVH375
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate					
Volatile Organic Compounds																				
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	<0.50	-	-	-	-	-	-	-	-	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	<0.020	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	<0.050	-	-	-	-	-	-	-	-	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	<0.050	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	<0.050	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	<0.20	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	<0.40	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	<0.030	-	-	-	-	-	-	-	-	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	<0.040	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	<0.020	-	-	-	-	-	-	-	-	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	<0.050	-	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	<0.50	-	-	-	-	-	-	-	-	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	<0.50	-	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	<0.050	-	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	<0.050	-	-	-	-	-	-	-	-	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	<0.050	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	<0.050	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	<0.050	-	-	-	-	-	-	-	-	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	<0.020	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	<0.050	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	<0.050	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	***<0.050***	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	<0.050	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	<0.020	-	-	-	-	-	-	-	-	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	<0.020	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	<0.020	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	<0.020	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-8			MW16-9	MW16-10			MW16-11	MW16-12		MW16-13	
Sample Date									3-Aug-16	3-Aug-16	3-Aug-16	3-Aug-16	2-Aug-16	2-Aug-16	2-Aug-16	4-Aug-16	4-Aug-16	4-Aug-16	3-Aug-16	3-Aug-16
Sample ID									MW16-8 SS1	MW16-8 SS3	MW16-8 SS3 Lab-Dup	MW16-9 SS1	MW16-10 SS2	MW16-10 SS4	MW16-10 SS4 Lab-Dup	MW16-11 SS1	MW16-12 SS2	MW16-12 SS4	MW16-13 SS1	MW16-13 SS3
Sample Depth									0 - 1.5 m	3 - 3.8 m	3 - 3.8 m	0 - 0.8 m	0.8 - 1.5 m	2.4 - 3 m	2.4 - 3 m	0 - 1.5 m	0.8 - 1.5 m	3 - 4.6 m	0 - 1.5 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID		A	B	C	D	E	F	G	CVH382	CVH383	CVH383	CVH381	CVH379	CVH380	CVH380	CVH378	CVH376	CVH377	CVH374	CVH375
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate				Lab Replicate					
Energetics																				
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-14		BH16-2			BH16-4					
Sample Date									3-Aug-16	3-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	14-Mar-16
Sample ID									MW16-14 SS2	MW16-14 SS6	BH16-2-SS1	BH16-2-SS4	BH16-2-SS4 Lab-Dup	BH16-4-SS1	BH16-4-SS7		MW16-4-SS7 Lab-Dup	BH16-4-SS2	BH16-4-SS3
Sample Depth									1.5 - 3 m	6.1 - 6.9 m	0 - 0.9 m	4.6 - 6.1 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m		0 - 1.5 m	1.5 - 3 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B652164	B652164	B652164	B652164	B652164		B652164	B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CVH372	CVH373	CAH384	CAH385	CAH385	CAH496	CAH499/CAH503	RPD	CAH503	CAH497	CAH498
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI					Lab Replicate		Field Duplicate	(%)	Lab Replicate		
General Chemistry																			
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	13	8.5	19	13	16	22	11 / 9.5	**67% / 79%**	9.3	13	11
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 [s12]	n/v	-	7.77	-	-	-	-	-	-	-	7.82	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 [s12]	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	<0.04	<0.04	<0.04	<0.04	-	-	-	-	<0.04	<0.04
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																			
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	[s7]	[b,s7]	[s7]	[s7]	[s7]	-	-	-	<10	-	-	-	-	-	-	<10
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 [b]	25 [s7]	55 [s7]	55 [s7]	-	-	-	<10	-	-	-	-	-	-	<10
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 [s15]	230 [s15]	98 [s15]	-	-	-	<10	-	-	-	-	-	-	<10
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 [s8]	1,700 [s8]	300 [s8]	-	-	-	62	-	-	-	-	-	-	<50
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	<50	-	-	-	-	-	-	<50
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	YES	-	-	-	-	-	-	YES
Glycols																			
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<10	-	-	<10	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<10	-	-	<10	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<10	-	-	<10	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<10	-	-	<10	-
Metals																			
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	-	<0.20	-	-	<0.20	<0.20	nc	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	-	2.2	-	-	<1.0	<1.0	nc	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	-	84	-	-	170	72	**81%**	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	-	0.34	-	-	0.44	0.25	nc	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 [s16]	1.5 [s16]	-	-	0.45	-	-	0.19	<0.050	nc	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	-	0.14	-	-	<0.10	<0.10	nc	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	nc	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	-	24	-	-	35	13	**92%**	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	-	<0.2	-	-	<0.2	<0.2	nc	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	-	6.2	-	-	9.4	5.7	49%	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	-	14	-	-	20	10	**67%**	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	-	11	-	-	5.1	3.7	nc	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	nc	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	-	<0.050	-	-	<0.050	<0.050	nc	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	-	<0.50	-	-	<0.50	<0.50	nc	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	-	14	-	-	20	9.9	**68%**	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-14		BH16-2			BH16-4					
Sample Date									3-Aug-16	3-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	14-Mar-16
Sample ID									MW16-14 SS2	MW16-14 SS6	BH16-2-SS1	BH16-2-SS4	BH16-2-SS4 Lab-Dup	BH16-4-SS1	BH16-4-SS7		MW16-4-SS7 Lab-Dup	BH16-4-SS2	BH16-4-SS3
Sample Depth									1.5 - 3 m	6.1 - 6.9 m	0 - 0.9 m	4.6 - 6.1 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m		0 - 1.5 m	1.5 - 3 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B652164	B652164	B652164	B652164	B652164		B652164	B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CVH372	CVH373	CAH384	CAH385	CAH385	CAH496	CAH499/CAH503	RPD	CAH503	CAH497	CAH498
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI					Lab Replicate		Field Duplicate	(%)	Lab Replicate		
Metals (Contd.))																			
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	-	<0.50	-	-	<0.50	<0.50	nc	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	-	<0.20	-	-	<0.20	<0.20	nc	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	nc	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	280	-	-	130	210	nc	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	-	0.11	-	-	0.20	0.12	nc	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	-	<5.0	-	-	<5.0	<5.0	nc	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	-	0.64	-	-	0.66	0.43	42%	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	-	31	-	-	51	23	nc	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	-	38	-	-	61	21	nc	-	-	-
Polychlorinated Biphenyls																			
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-
Phenols																			
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-14		BH16-2			BH16-4					
Sample Date									3-Aug-16	3-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	14-Mar-16
Sample ID									MW16-14 SS2	MW16-14 SS6	BH16-2-SS1	BH16-2-SS4	BH16-2-SS4 Lab-Dup	BH16-4-SS1	BH16-4-SS7		MW16-4-SS7 Lab-Dup	BH16-4-SS2	BH16-4-SS3
Sample Depth									1.5 - 3 m	6.1 - 6.9 m	0 - 0.9 m	4.6 - 6.1 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m		0 - 1.5 m	1.5 - 3 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B652164	B652164	B652164	B652164	B652164		B652164	B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CVH372	CVH373	CAH384	CAH385	CAH385	CAH496	CAH499/CAH503	RPD	CAH503	CAH497	CAH498
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI					Lab Replicate		Field Duplicate	(%)	Lab Replicate		
Volatile Organic Compounds																			
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	<0.50	-	-	-	-	-	-	<0.50
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	<0.0060	-	-	-	-	-	-	<0.0060
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05 s11	0.18 s11	0.05 s11	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	s11	s11	s11	-	-	-	<0.030	-	-	-	-	-	-	<0.030
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	s11	s11	s11	-	-	-	<0.040	-	-	-	-	-	-	<0.040
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	<0.010	-	-	-	-	-	-	<0.010
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	<0.50	-	-	-	-	-	-	<0.50
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	<0.50	-	-	-	-	-	-	<0.50
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	<0.020	-	-	-	-	-	-	<0.020
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	<0.010	-	-	-	-	-	-	<0.010
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	<0.050	-	-	-	-	-	-	<0.050
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	<0.020	-	-	-	-	-	-	<0.020
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	s1	s1	s1	-	-	-	<0.020	-	-	-	-	-	-	<0.020
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	s1	s1	s1	-	-	-	<0.020	-	-	-	-	-	-	<0.020
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05 s1	26 s1	3.1 s1	-	-	-	<0.020	-	-	-	-	-	-	<0.020

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									MW16-14		BH16-2			BH16-4					
Sample Date									3-Aug-16	3-Aug-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	14-Mar-16
Sample ID									MW16-14 SS2	MW16-14 SS6	BH16-2-SS1	BH16-2-SS4	BH16-2-SS4 Lab-Dup	BH16-4-SS1	BH16-4-SS7		MW16-4-SS7 Lab-Dup	BH16-4-SS2	BH16-4-SS3
Sample Depth									1.5 - 3 m	6.1 - 6.9 m	0 - 0.9 m	4.6 - 6.1 m	4.6 - 6.1 m	0 - 1.5 m	0 - 1.5 m		0 - 1.5 m	1.5 - 3 m	3 - 4.6 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G4522	B6G4522	B652164	B652164	B652164	B652164	B652164		B652164	B652164	B652164
Laboratory Sample ID		A	B	C	D	E	F	G	CVH372	CVH373	CAH384	CAH385	CAH385	CAH496	CAH499/CAH503	RPD	CAH503	CAH497	CAH498
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI					Lab Replicate		Field Duplicate	(%)	Lab Replicate		
Energetics																			
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<2	-	-	<2	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<1	-	-	<1	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<2	-	-	<2	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<1	-	-	<1	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<1	-	-	<1	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.5	-	-	<0.5	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1											
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN913-02R\TP16-1-SS1	TP16-1-SS2	TP16-1-SS2 Lab-Dup	TP16-1-SS2A		TP16-1-SS2A Lab-Dup	TP16-1 SS2A	TP16-1 SS2B	TP16-1 SS2B Lab-Dup	TP16-1 SS2C	TP16-1 SS2C Lab-Dup	DUP-2
Sample Depth									0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m		0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376
Laboratory Sample ID		A	B	C	D	E	F	G	CT3980	CUN914	CUN914	CUN915	RPD	CUN915	CUN871	CUN872	CUN872	CUN873	CUN873	CUN874
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate	Field Duplicate	(%)	Lab Replicate			Lab Replicate		Lab Replicate	
General Chemistry																				
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	10	-	12	18%	-	5.5	11	-	13	13	12
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11$_{s12}$	n/v	-	-	-	-	-	-	**12.5**^{ABFG}	**11.9**^{ABFG}	-	**12.0**^{ABFG}	-	**12.2**^{ABFG}
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9$_{s12}$	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	0.36	0.14	0.11	0.19	0.19	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																				
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	$_{s7}$	$_{b,s7}$	$_{s7}$	$_{s7}$	$_{s7}$	-	-	-	-	-	-	-	-	-	-	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30$_{b}$	25$_{s7}$	55$_{s7}$	55$_{s7}$	-	-	-	-	-	-	-	-	-	-	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10$_{s15}$	230$_{s15}$	98$_{s15}$	-	-	-	-	-	-	-	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240$_{s8}$	1,700$_{s8}$	300$_{s8}$	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Glycols																				
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Metals																				
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	0.81	-	1.0	nc	1.1	-	-	-	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	2.2	-	2.3	nc	2.2	-	-	-	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	85	-	87	2%	87	-	-	-	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	0.30	-	0.30	nc	0.32	-	-	-	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2$_{s16}$	1.5$_{s16}$	-	0.23	-	0.18	nc	-	-	-	-	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	1.1	-	0.66	50%	0.75	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	20	-	20	0%	19	-	-	-	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	0.3	0.4	0.4	nc	-	-	-	-	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	4.9	-	4.6	6%	4.8	-	-	-	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	24	-	19	23%	25	-	-	-	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	44	-	50	13%	48	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	<0.050	-	<0.050	nc	<0.050	-	-	-	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	**2.1**^{E}	-	**2.4**^{E}	nc	**3.1**^{E}	-	-	-	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	12	-	11	9%	12	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1											
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN913-02R\TP16-1-SS1	TP16-1-SS2	TP16-1-SS2 Lab-Dup	TP16-1-SS2A		TP16-1-SS2A Lab-Dup	TP16-1 SS2A	TP16-1 SS2B	TP16-1 SS2B Lab-Dup	TP16-1 SS2C	TP16-1 SS2C Lab-Dup	DUP-2
Sample Depth									0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m		0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376
Laboratory Sample ID		A	B	C	D	E	F	G	CT3980	CUN914	CUN914	CUN915	RPD	CUN915	CUN871	CUN872	CUN872	CUN873	CUN873	CUN874
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate	Field Duplicate	(%)	Lab Replicate			Lab Replicate		Lab Replicate	
Metals (Contd.))																				
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	<0.50	-	<0.50	nc	<0.50	-	-	-	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	<0.20	-	<0.20	nc	<0.20	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	3,100	-	3,200	3%	-	-	-	-	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	0.097	-	0.098	nc	0.081	-	-	-	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	2.0	-	1.6	nc	1.2	-	-	-	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	0.69	-	0.60	14%	0.65	-	-	-	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	25	-	23	nc	24	-	-	-	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	**270[8]**	-	**290[8]**	7%	**220[8]**	-	-	-	-	-	-
Polychlorinated Biphenyls																				
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																				
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	***<1***	-	***<1***	-	***<1***
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	-	-	-	-	-	<0.05	***<0.5***	-	***<0.5***	-	***<0.5***
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	-	-	-	-	-	<0.05	***<0.5***	-	***<0.5***	-	***<0.5***
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	-	-	-	-	-	<0.1	***<1***	-	***<1***	-	***<1***
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.1	<1	-	<1	-	<1
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	-	-	-	-	-	<0.1	***<1***	-	***<1***	-	***<1***
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	-	-	-	-	-	<0.05	***<0.5***	-	***<0.5***	-	***<0.5***
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	-	-	-	-	-	<0.05	***<0.5***	-	***<0.5***	-	***<0.5***
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.05	<0.5	-	<0.5	-	<0.5

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1											
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN913-02R\TP16-1-SS1	TP16-1-SS2	TP16-1-SS2 Lab-Dup	TP16-1-SS2A		TP16-1-SS2A Lab-Dup	TP16-1 SS2A	TP16-1 SS2B	TP16-1 SS2B Lab-Dup	TP16-1 SS2C	TP16-1 SS2C Lab-Dup	DUP-2
Sample Depth									0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m		0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376
Laboratory Sample ID		A	B	C	D	E	F	G	CT3980	CUN914	CUN914	CUN915	RPD	CUN915	CUN871	CUN872	CUN872	CUN873	CUN873	CUN874
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate	Field Duplicate	(%)	Lab Replicate			Lab Replicate		Lab Replicate	
Volatile Organic Compounds																				
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	-	-	-	-	-	-	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	-	-	-	-	-	-	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	-	-	-	-	-	-	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	-	-	-	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1											
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN913-02R\TP16-1-SS1	TP16-1-SS2	TP16-1-SS2 Lab-Dup	TP16-1-SS2A		TP16-1-SS2A Lab-Dup	TP16-1 SS2A	TP16-1 SS2B	TP16-1 SS2B Lab-Dup	TP16-1 SS2C	TP16-1 SS2C Lab-Dup	DUP-2
Sample Depth									0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m		0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m	0.8 - 1.5 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376	B6G0376
Laboratory Sample ID		A	B	C	D	E	F	G	CT3980	CUN914	CUN914	CUN915	RPD	CUN915	CUN871	CUN872	CUN872	CUN873	CUN873	CUN874
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI			Lab Replicate	Field Duplicate	(%)	Lab Replicate			Lab Replicate		Lab Replicate	
Energetics																				
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.1	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 (Contd.)															
Sample Date									28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN916-02R\TP16-1-SS3	CUN917-01R\TP16-1-SS3A		TP16-1-SS3	TP16-1-SS3A		TP16-1-SS4	TP16-1-SS4 Lab-Dup	TP16-1-SS6	TP16-1 SS6C	DUP-1A		TP16-1 SS7AB	CUN919-02R\TP16-1-SS7	TP16-1-SS7
Sample Depth									1.5 - 2.4 m	1.5 - 2.4 m		1.5 - 2.4 m	1.5 - 2.4 m		2.4 - 3 m	2.4 - 3 m	3.8 - 4.7 m	3.8 - 4.7 m	3.8 - 4.7 m		4.7 - 5.8 m	4.7 - 5.8 m	4.7 - 5.8 m
Sampling Company									STANTEC	STANTEC		STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX		MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B651551		B6G0385	B6G0385		B6G0385	B6G0385	B6G0385	B6G0376	B6G0376		B6G0376	B651551	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CT3981	CT3982	RPD	CUN916	CUN917	RPD	CUN928	CUN928	CUN918	CUN867	CUN868	RPD	CUN870	CT3983	CUN919
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Field Duplicate	(%)		Field Duplicate	(%)		Lab Replicate			Field Duplicate	(%)			
General Chemistry																							
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	100	100	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	12	12	0%	10	-	11	12	11	9%	8.0	-	11
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 [s12]	n/v	-	-	-	-	-	-	**12.2 [ABFG]**	-	-	**12.2 [ABFG]**	**12.3 [ABFG]**	1%	**11.7 [ABFG]**	-	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 [s12]	-	-	-	-	-	-	**11.8 [BG]**	**11.7 [BG]**	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	0.61	-	-	-	-	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																							
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	[s7]	[b,s7]	[s7]	[s7]	[s7]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 [b]	25 [s7]	55 [s7]	55 [s7]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 [s15]	230 [s15]	98 [s15]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 [s8]	1,700 [s8]	300 [s8]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycols																							
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals																							
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	-	-	0.69	-	-	-	-	-	-	-	-	-	-	0.57
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	-	-	2.4	-	-	-	-	-	-	-	-	-	-	2.2
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	-	-	89	-	-	-	-	-	-	-	-	-	-	77
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	-	-	0.32	-	-	-	-	-	-	-	-	-	-	0.33
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 [s16]	1.5 [s16]	-	-	-	0.34	-	-	-	-	-	-	-	-	-	-	0.18
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	-	-	0.72	-	-	-	-	-	-	-	-	-	-	0.99
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	-	-	21	-	-	-	-	-	-	-	-	-	-	19
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	-	-	<0.2	-	-	-	-	-	-	-	-	-	-	0.4
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	-	-	4.8	-	-	-	-	-	-	-	-	-	-	4.4
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	-	-	20	-	-	-	-	-	-	-	-	-	-	44
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	-	-	52	-	-	-	-	-	-	-	-	-	-	65
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	-	-	<0.050	-	-	-	-	-	-	-	-	-	-	0.053
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	**2.2 [E]**
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	-	-	11	-	-	-	-	-	-	-	-	-	-	11

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 (Contd.)														
Sample Date									28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN916-02R\TP16-1-SS3	CUN917-01R\TP16-1-SS3A		TP16-1-SS3	TP16-1-SS3A		TP16-1-SS4	TP16-1-SS4 Lab-Dup	TP16-1-SS6	TP16-1 SS6C	DUP-1A		TP16-1 SS7AB	CUN919-02R\TP16-1-SS7	TP16-1-SS7
Sample Depth									1.5 - 2.4 m	1.5 - 2.4 m		1.5 - 2.4 m	1.5 - 2.4 m		2.4 - 3 m	2.4 - 3 m	3.8 - 4.7 m	3.8 - 4.7 m	3.8 - 4.7 m		4.7 - 5.8 m	4.7 - 5.8 m	4.7 - 5.8 m
Sampling Company									STANTEC	STANTEC		STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX		MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B651551		B6G0385	B6G0385		B6G0385	B6G0385	B6G0385	B6G0376	B6G0376		B6G0376	B651551	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CT3981	CT3982	RPD	CUN916	CUN917	RPD	CUN928	CUN928	CUN918	CUN867	CUN868	RPD	CUN870	CT3983	CUN919
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Field Duplicate	(%)		Field Duplicate	(%)		Lab Replicate			Field Duplicate	(%)			
Metals (Contd.))																							
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	-	-	<0.50	-	-	-	-	-	-	-	-	-	-	<0.50
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	-	-	<0.20	-	-	-	-	-	-	-	-	-	-	<0.20
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	2,400	-	-	-	-	-	-	-	-	-	-	3,400
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	-	-	0.10	-	-	-	-	-	-	-	-	-	-	0.090
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	2.3
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	-	-	0.70	-	-	-	-	-	-	-	-	-	-	0.71
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	-	-	24	-	-	-	-	-	-	-	-	-	-	23
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	-	-	**210**[B]	-	-	-	-	-	-	-	-	-	-	**240**[B]
Polychlorinated Biphenyls																							
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																							
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	**<1**	-	-	**<1**	**<1**	nc	<0.1	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	-	-	-	-	-	-	**<0.5**	-	-	**<0.5**	**<0.5**	nc	<0.05	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	-	<1	<1	nc	0.2	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	-	<1	<1	nc	<0.1	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	-	-	-	-	-	-	**<0.5**	-	-	**<0.5**	**<0.5**	nc	<0.05	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	-	-	-	-	-	-	**<1**	-	-	**<1**	**<1**	nc	<0.1	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	-	<1	<1	nc	<0.1	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	-	-	-	-	-	-	<1	-	-	<1	<1	nc	<0.1	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	-	<1	<1	nc	<0.1	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	-	<1	<1	nc	<0.1	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	-	-	-	-	-	-	**<1**	-	-	**<1**	**<1**	nc	0.2	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	-	-	-	-	-	-	**<0.5**	-	-	**<0.5**	**<0.5**	nc	<0.05	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	-	-	-	-	-	-	**<0.5**	-	-	**<0.5**	**<0.5**	nc	<0.05	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	<0.5	-	-	<0.5	<0.5	nc	<0.05	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 (Contd.)													
Sample Date									28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN916-02R\TP16-1-SS3	CUN917-01R\TP16-1-SS3A		TP16-1-SS3	TP16-1-SS3A		TP16-1-SS4	TP16-1-SS4 Lab-Dup	TP16-1-SS6	TP16-1 SS6C	DUP-1A		TP16-1 SS7AB	CUN919-02R\TP16-1-SS7	TP16-1-SS7
Sample Depth									1.5 - 2.4 m	1.5 - 2.4 m		1.5 - 2.4 m	1.5 - 2.4 m		2.4 - 3 m	2.4 - 3 m	3.8 - 4.7 m	3.8 - 4.7 m	3.8 - 4.7 m		4.7 - 5.8 m	4.7 - 5.8 m	4.7 - 5.8 m
Sampling Company									STANTEC	STANTEC		STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX		MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B651551		B6G0385	B6G0385		B6G0385	B6G0385	B6G0385	B6G0376	B6G0376		B6G0376	B651551	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CT3981	CT3982	RPD	CUN916	CUN917	RPD	CUN928	CUN928	CUN918	CUN867	CUN868	RPD	CUN870	CT3983	CUN919
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Field Duplicate	(%)		Field Duplicate	(%)		Lab Replicate			Field Duplicate	(%)			
Volatile Organic Compounds																							
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.50
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	-	-	-	-	<0.0060	-	-	-	-	-	<0.0060
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	-	<0.030	-	-	-	-	-	<0.030
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	-	-	<0.040	-	-	-	-	-	<0.040
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	-	-	-	-	0.028	-	-	-	-	-	0.050
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.50
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	-	-	-	-	<0.50	-	-	-	-	-	<0.50
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	-	-	-	-	0.031	-	-	-	-	-	0.032
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	<0.050
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	-	-	-	-	<0.010	-	-	-	-	-	<0.010
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	-	-	-	-	0.45[5]	-	-	-	-	-	0.74[5]
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	-	-	-	-	<0.020	-	-	-	-	-	<0.020
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	-	<0.020	-	-	-	-	-	<0.020
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	-	-	<0.020	-	-	-	-	-	<0.020
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	-	-	-	-	<0.020	-	-	-	-	-	<0.020

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 (Contd.)														
Sample Date									28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									CUN916-02R\TP16-1-SS3	CUN917-01R\TP16-1-SS3A		TP16-1-SS3	TP16-1-SS3A		TP16-1-SS4	TP16-1-SS4 Lab-Dup	TP16-1-SS6	TP16-1 SS6C	DUP-1A		TP16-1 SS7AB	CUN919-02R\TP16-1-SS7	TP16-1-SS7
Sample Depth									1.5 - 2.4 m	1.5 - 2.4 m		1.5 - 2.4 m	1.5 - 2.4 m		2.4 - 3 m	2.4 - 3 m	3.8 - 4.7 m	3.8 - 4.7 m	3.8 - 4.7 m		4.7 - 5.8 m	4.7 - 5.8 m	4.7 - 5.8 m
Sampling Company									STANTEC	STANTEC		STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX		MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B651551	B651551		B6G0385	B6G0385		B6G0385	B6G0385	B6G0385	B6G0376	B6G0376		B6G0376	B651551	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CT3981	CT3982	RPD	CUN916	CUN917	RPD	CUN928	CUN928	CUN918	CUN867	CUN868	RPD	CUN870	CT3983	CUN919
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Field Duplicate	(%)		Field Duplicate	(%)		Lab Replicate			Field Duplicate	(%)			
Energetics																							
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	<0.1	<0.1	nc	-	-	-	-	-	-	-	-	-	-	<0.1	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 TILE	TP16-2											
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									TP16-1 TILE	CUN875-02R\TP-16-2-SS1	TP16-2-SS1A	TP16-2-SS2	TP16-2-SS2C	TP16-2-SS3	TP16-2-SS3C	TP16-2-SS3C Lab-Dup	CUN878-02R\TP-16-2-SS4	TP16-2-SS4	TP16-2-SS4 Lab-Dup	TP16-2-SS4A	TP16-2-SS4B
Sample Depth										0 - 0.8 m	0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	1.5 - 2.3 m	1.5 - 2.3 m	1.5 - 2.3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G0376	B651540	B6G0385	B6G0376	B6G0385	B6G0376	B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN865	CT3931	CUN924	CUN876	CUN925	CUN877	CUN923	CUN923	CT3932	CUN878	CUN878	CUN920	CUN921
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI								Lab Replicate			Lab Replicate		
General Chemistry																					
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	5.6	-	6.3	11	15	8.1	10	10	-	11	-	6.7	9.0
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11 [s12]	n/v	**12.5 [ABFG]**	-	**12.5 [ABFG]**	-	**12.4 [ABFG]**	-	**12.3 [ABFG]**	-	-	-	-	**12.3 [ABFG]**	**12.0 [ABFG]**
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9 [s12]	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																					
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	[s7]	[b,s7]	[s7]	[s7]	[s7]	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30 [b]	25 [s7]	55 [s7]	55 [s7]	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10 [s15]	230 [s15]	98 [s15]	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240 [s8]	1,700 [s8]	300 [s8]	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120 [s10]	3,300 [s10]	2,800 [s10]	-	-	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Glycols																					
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals																					
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	-	-	0.83	-	-	-	-	-	0.89	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	-	-	2.8	-	-	-	-	-	2.7	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	-	-	80	-	-	-	-	-	97	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	-	-	0.34	-	-	-	-	-	0.36	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2 [s16]	1.5 [s16]	-	-	-	0.46	-	-	-	-	-	0.45	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	-	-	1.2	-	-	-	-	-	1.1	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	-	-	18	-	-	-	-	-	22	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	-	-	**0.7 [BE]**	-	-	-	-	-	0.3	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	-	-	3.9	-	-	-	-	-	5.1	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	-	-	23	-	-	-	-	-	23	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	-	-	110	-	-	-	-	-	93	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	-	-	0.11	-	-	-	-	-	0.082	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	-	-	5.9 [E]	-	-	-	-	-	2.8 [E]	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	-	-	11	-	-	-	-	-	12	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 TILE	TP16-2										
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									TP16-1 TILE	CUN875-02R\TP-16-2-SS1	TP16-2-SS1A	TP16-2-SS2	TP16-2-SS2C	TP16-2-SS3	TP16-2-SS3C	TP16-2-SS3C Lab-Dup	CUN878-02R\TP-16-2-SS4	TP16-2-SS4	TP16-2-SS4 Lab-Dup	TP16-2-SS4A	TP16-2-SS4B
Sample Depth										0 - 0.8 m	0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	1.5 - 2.3 m	1.5 - 2.3 m	1.5 - 2.3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G0376	B651540	B6G0385	B6G0376	B6G0385	B6G0376	B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN865	CT3931	CUN924	CUN876	CUN925	CUN877	CUN923	CUN923	CT3932	CUN878	CUN878	CUN920	CUN921
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI								Lab Replicate			Lab Replicate		
Metals (Contd.))																					
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	-	-	<0.50	-	-	-	-	-	<0.50	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	-	-	<0.20	-	-	-	-	-	<0.20	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	5,200	-	-	-	-	-	3,700	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	-	-	0.064	-	-	-	-	-	0.093	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	-	-	3.8	-	-	-	-	-	2.7	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	-	-	0.64	-	-	-	-	-	0.67	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	-	-	20	-	-	-	-	-	27	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	-	-	**240[5]**	-	-	-	-	-	**220[5]**	-	-	-
Polychlorinated Biphenyls																					
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																					
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	***<1***	-	***<1***	-	-	-	-	<0.1	***<1***
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	<0.05	-	<0.1	-	***<0.5***	-	***<0.5***	-	-	-	-	<0.05	***<0.5***
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	<0.05	-	<0.1	-	***<0.5***	-	***<0.5***	-	-	-	-	<0.05	***<0.5***
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	<0.1	-	<0.2	-	***<1***	-	***<1***	-	-	-	-	<0.1	***<1***
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<0.1	-	<0.2	-	<1	-	<1	-	-	-	-	<0.1	<1
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	<0.1	-	<0.2	-	***<1***	-	***<1***	-	-	-	-	<0.1	***<1***
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	<0.05	-	<0.1	-	***<0.5***	-	***<0.5***	-	-	-	-	<0.05	***<0.5***
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	<0.05	-	<0.1	-	***<0.5***	-	***<0.5***	-	-	-	-	<0.05	***<0.5***
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.05	-	<0.1	-	<0.5	-	<0.5	-	-	-	-	<0.05	<0.5

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 TILE	TP16-2									
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									TP16-1 TILE	CUN875-02R\TP-16-2-SS1	TP16-2-SS1A	TP16-2-SS2	TP16-2-SS2C	TP16-2-SS3	TP16-2-SS3C	TP16-2-SS3C Lab-Dup	CUN878-02R\TP-16-2-SS4	TP16-2-SS4	TP16-2-SS4 Lab-Dup	TP16-2-SS4A	TP16-2-SS4B
Sample Depth										0 - 0.8 m	0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	1.5 - 2.3 m	1.5 - 2.3 m	1.5 - 2.3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G0376	B651540	B6G0385	B6G0376	B6G0385	B6G0376	B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN865	CT3931	CUN924	CUN876	CUN925	CUN877	CUN923	CUN923	CT3932	CUN878	CUN878	CUN920	CUN921
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI								Lab Replicate			Lab Replicate		
Volatile Organic Compounds																					
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	-	<0.0060	-	-	-	<0.0060	<0.0060	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	-	0.051[E]	-	-	-	<0.050	<0.050	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	<0.030	-	-	-	<0.030	<0.030	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	<0.040	-	-	-	<0.040	<0.040	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	-	**0.45[ABE]**	-	-	-	0.033	0.033	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	-	0.21[E]	-	-	-	<0.050	<0.050	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	-	0.059[E]	-	-	-	<0.050	<0.050	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	-	<0.010	-	-	-	<0.010	<0.010	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	-	0.32[E]	-	-	-	0.57[E]	0.57[E]	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	0.027	-	-	-	<0.020	<0.020	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	-	0.027	-	-	-	<0.020	<0.020	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-1 TILE	TP16-2										
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID									TP16-1 TILE	CUN875-02R\TP-16-2-SS1	TP16-2-SS1A	TP16-2-SS2	TP16-2-SS2C	TP16-2-SS3	TP16-2-SS3C	TP16-2-SS3C Lab-Dup	CUN878-02R\TP-16-2-SS4	TP16-2-SS4	TP16-2-SS4 Lab-Dup	TP16-2-SS4A	TP16-2-SS4B
Sample Depth										0 - 0.8 m	0 - 0.8 m	0.8 - 1.5 m	0.8 - 1.5 m	1.5 - 2.3 m	1.5 - 2.3 m	1.5 - 2.3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m	2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order		CCME				Ontario			B6G0376	B651540	B6G0385	B6G0376	B6G0385	B6G0376	B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN865	CT3931	CUN924	CUN876	CUN925	CUN877	CUN923	CUN923	CT3932	CUN878	CUN878	CUN920	CUN921
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI								Lab Replicate			Lab Replicate		
Energetics																					
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	<0.1	-	-	-	-	-	-	<0.1	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-2 (Contd.)								TP16-2 TILE+BRICK	TP16-3	TP16-4			
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16
Sample ID									TP16-2-SS4C	TP16-2-SS4C Lab-Dup	CUN880-02R\TP-16-2-SS6	TP16-2 SS6AB	TP16-2-SS6 Lab-Dup	TP16-2-SS6B	TP16-2-SS5	TP16-2-SS6	TP16-2 TILE+BRICK	TP16-3-SS4	TP16-4-SS4	TP16-4-SS4A		TP16-4-SS4A Lab-Dup
Sample Depth									2.3 - 3 m	2.3 - 3 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	3 - 3.8 m	4.1 - 5.2 m		2.3 - 2.9 m	2.3 - 3 m	2.3 - 3 m		2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX
Laboratory Work Order		CCME				Ontario			B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0376	B6G0376	B6G0376	B6G0385	B6G0385	B6G0385		B6G0385
Laboratory Sample ID	A	B	C	D	E	F	G		CUN922	CUN922	CT3933	CUN869	CUN880	CUN926	CUN879	CUN880	CUN866	CUN910	CUN911	CUN912	RPD	CUN912
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate			Lab Replicate							Field Duplicate	(%)	Lab Replicate
General Chemistry																						
Dry Weight	g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moisture Content	%	n/v	n/v	n/v	n/v	n/v	n/v	n/v	12	-	-	4.4	-	8.3	11	17	5.8	19	13	15	14%	-
Available (CaCl2) pH	S.U.	6-8	6-8	n/v	n/v	n/v	5-9/5-11$_{s12}$	n/v	**12.0**[ABFG]	-	-	**11.6**[ABFG]	-	**11.4**[ABFG]	-	-	**12.3**[ABFG]	-	-	-	-	-
pH Final	S.U.	n/v	6-8	n/v	n/v	n/v	n/v	5-9$_{s12}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols (Phenolics)	µg/g	3.8	3.8	n/v	n/v	n/v	n/v	n/v	-	-	-	<0.04	-	-	-	-	0.12	-	<0.04	<0.04	nc	<0.04
Cyanide (Free)	µg/g	8	0.9	n/v	n/v	0.051	0.051	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical Conductivity, Lab	mS/cm	4	2	n/v	n/v	0.57	1.4	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	µg/g	2,000	400	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (SAR)	none	12	5	n/v	n/v	2.4	12	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BTEX and Petroleum Hydrocarbons																						
PHC F1 (C6-C10 range)	µg/g	n/v	n/v	s7	b,s7	s7	s7	s7	-	-	-	-	-	-	-	-	-	-	<10	<10	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/g	n/v	n/v	320	30$_b$	25$_{s7}$	55$_{s7}$	55$_{s7}$	-	-	-	-	-	-	-	-	-	-	<10	<10	-	-
PHC F2 (>C10-C16 range)	µg/g	n/v	n/v	260	150	10$_{s15}$	230$_{s15}$	98$_{s15}$	-	-	-	-	-	-	-	-	-	-	<10	<10	-	-
PHC F3 (>C16-C34 range)	µg/g	n/v	n/v	1,700	300	240$_{s8}$	1,700$_{s8}$	300$_{s8}$	-	-	-	-	-	-	-	-	-	-	72	69	-	-
PHC F4 (>C34-C50 range)	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	-	-	-	-	-	-	<50	<50	-	-
PHC F4 (>C34) Gravimetric	µg/g	n/v	n/v	3,300	2,800	120$_{s10}$	3,300$_{s10}$	2,800$_{s10}$	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gasoline	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	YES	YES	-	-
Glycols																						
Diethylene Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/kg	960	960	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene glycol, 1,2-	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Metals																						
Antimony	µg/g	40	20	n/v	n/v	1.3	40	7.5	-	-	-	-	<0.20	-	-	<0.20	-	-	<0.20	-	-	-
Arsenic	µg/g	12	12	n/v	n/v	18	18	18	-	-	-	-	1.1	-	-	1.2	-	-	1.7	-	-	-
Barium	µg/g	2,000	500	n/v	n/v	220	670	390	-	-	-	-	110	-	-	130	-	-	170	-	-	-
Beryllium	µg/g	8	4	n/v	n/v	2.5	8	4	-	-	-	-	0.36	-	-	0.42	-	-	0.48	-	-	-
Boron (Available)	µg/g	n/v	n/v	n/v	n/v	n/a	2$_{s16}$	1.5$_{s16}$	-	-	-	-	-	-	-	0.68	-	-	0.56	-	-	-
Cadmium	µg/g	22	10	n/v	n/v	1.2	1.9	1.2	-	-	-	-	0.16	-	-	<0.10	-	-	0.11	-	-	-
Calcium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/g	87	64	n/v	n/v	70	160	160	-	-	-	-	27	-	-	28	-	-	46	-	-	-
Chromium (Hexavalent)	µg/g	1.4	0.4	n/v	n/v	0.66	8	8	-	-	-	-	-	-	-	<0.2	-	-	<0.2	-	-	-
Cobalt	µg/g	300	50	n/v	n/v	21	80	22	-	-	-	-	7.3	-	-	7.6	-	-	11	-	-	-
Copper	µg/g	91	63	n/v	n/v	92	230	140	-	-	-	-	17	-	-	18	-	-	23	-	-	-
Lead	µg/g	260	140	n/v	n/v	120	120	120	-	-	-	-	12	-	-	13	-	-	13	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/g	24	6.6	n/v	n/v	0.27	3.9	0.27	-	-	-	-	<0.050	-	-	<0.050	-	-	<0.050	-	-	-
Molybdenum	µg/g	40	10	n/v	n/v	2	40	6.9	-	-	-	-	0.51	-	-	0.52	-	-	0.55	-	-	-
Nickel	µg/g	89	45	n/v	n/v	82	270	100	-	-	-	-	16	-	-	17	-	-	26	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-2 (Contd.)								TP16-2 TILE+BRICK	TP16-3	TP16-4			
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16
Sample ID									TP16-2-SS4C	TP16-2-SS4C Lab-Dup	CUN880-02R\TP-16-2-SS6	TP16-2 SS6AB	TP16-2-SS6 Lab-Dup	TP16-2-SS6B	TP16-2-SS5	TP16-2-SS6	TP16-2 TILE+BRICK	TP16-3-SS4	TP16-4-SS4	TP16-4-SS4A		TP16-4-SS4A Lab-Dup
Sample Depth									2.3 - 3 m	2.3 - 3 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	3 - 3.8 m	4.1 - 5.2 m		2.3 - 2.9 m	2.3 - 3 m	2.3 - 3 m		2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX
Laboratory Work Order		CCME				Ontario			B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0376	B6G0376	B6G0376	B6G0385	B6G0385	B6G0385		B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN922	CUN922	CT3933	CUN869	CUN880	CUN926	CUN879	CUN880	CUN866	CUN910	CUN911	CUN912	RPD	CUN912
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate			Lab Replicate							Field Duplicate	(%)	Lab Replicate
Metals (Contd.))																						
Selenium	µg/g	2.9	1	n/v	n/v	1.5	5.5	2.4	-	-	-	-	<0.50	-	-	<0.50	-	-	<0.50	-	-	-
Silver	µg/g	40	20	n/v	n/v	0.5	40	20	-	-	-	-	<0.20	-	-	<0.20	-	-	<0.20	-	-	-
Sodium	mg/L	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	540	-	-	580	-	-	460	-	-	-
Thallium	µg/g	1	1	n/v	n/v	1	3.3	1	-	-	-	-	0.16	-	-	0.16	-	-	0.24	-	-	-
Tin	µg/g	300	50	n/v	n/v	n/v	n/v	n/v	-	-	-	-	<1.0	-	-	<1.0	-	-	<1.0	-	-	-
Uranium	µg/g	33	23	n/v	n/v	2.5	33	23	-	-	-	-	0.55	-	-	0.65	-	-	0.67	-	-	-
Vanadium	µg/g	130	130	n/v	n/v	86	86	86	-	-	-	-	36	-	-	39	-	-	53	-	-	-
Zinc	µg/g	360	200	n/v	n/v	290	340	340	-	-	-	-	58	-	-	60	-	-	65	-	-	-
Polychlorinated Biphenyls																						
Aroclor 1242	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	-
Aroclor 1248	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	-
Aroclor 1254	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	-
Aroclor 1260	µg/g	n/v	n/v	n/v	n/v	s14	s14	s14	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	-
Polychlorinated Biphenyls (PCBs)	µg/g	33	1.3	n/v	n/v	0.3_{s14}	1.1_{s14}	0.35_{s14}	-	-	-	-	-	-	-	-	-	<0.010	<0.010	<0.010	-	-
Phenols																						
Chloro-3-methyl phenol, 4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	***<1***	***<1***	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/g	5	0.5	n/v	n/v	0.1	3.1	1.6	***<0.5***	***<0.5***	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/g	5	n/v	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 2,3-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dichlorophenol, 2,4-	µg/g	5	0.5	n/v	n/v	0.1	3.4	1.7	***<0.5***	***<0.5***	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dichlorophenol, 2,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dichlorophenol, 2,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dichlorophenol, 3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dichlorophenol, 3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Dimethylphenol, 2,4-	µg/g	10	0.5	n/v	n/v	0.2	390	390	***<1***	***<1***	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Dinitrophenol, 2,4-	µg/g	10	1	n/v	n/v	2	59	38	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Nitrophenol, 2-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Nitrophenol, 4-	µg/g	10	1	n/v	n/v	n/v	n/v	n/v	<1	<1	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Phenol	µg/g	3.8	3.8	n/v	n/v	0.5	9.4	9.4	***<1***	***<1***	-	<0.1	-	<0.2	-	-	<0.1	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/g	5	0.5	n/v	n/v	0.1	10	4.4	***<0.5***	***<0.5***	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/g	5	0.5	n/v	n/v	0.1	3.8	3.8	***<0.5***	***<0.5***	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/g	5	0.5	n/v	n/v	n/v	n/v	n/v	<0.5	<0.5	-	<0.05	-	<0.1	-	-	<0.05	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-2 (Contd.)								TP16-2 TILE+BRICK	TP16-3	TP16-4			
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16
Sample ID									TP16-2-SS4C	TP16-2-SS4C Lab-Dup	CUN880-02R\TP-16-2-SS6	TP16-2 SS6AB	TP16-2-SS6 Lab-Dup	TP16-2-SS6B	TP16-2-SS5	TP16-2-SS6	TP16-2 TILE+BRICK	TP16-3-SS4	TP16-4-SS4	TP16-4-SS4A		TP16-4-SS4A Lab-Dup
Sample Depth									2.3 - 3 m	2.3 - 3 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	3 - 3.8 m	4.1 - 5.2 m		2.3 - 2.9 m	2.3 - 3 m	2.3 - 3 m		2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX
Laboratory Work Order		CCME				Ontario			B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0376	B6G0376	B6G0376	B6G0385	B6G0385	B6G0385		B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN922	CUN922	CT3933	CUN869	CUN880	CUN926	CUN879	CUN880	CUN866	CUN910	CUN911	CUN912	RPD	CUN912
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate			Lab Replicate							Field Duplicate	(%)	Lab Replicate
Volatile Organic Compounds																						
Acetone	µg/g	n/v	n/v	n/v	n/v	0.5	16	16	-	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Benzene	µg/g	0.03	0.03	n/v	n/v	0.02	0.32	0.21	-	-	-	-	-	-	<0.0060	-	-	-	<0.0060	<0.0060	-	-
Bromodichloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	18	13	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Bromoform (Tribromomethane)	µg/g	n/v	n/v	n/v	n/v	0.05	0.61	0.27	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Bromomethane (Methyl bromide)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/g	50	5	n/v	n/v	0.05	0.21	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chlorobenzene (Monochlorobenzene)	µg/g	10	1	n/v	n/v	0.05	2.4	2.4	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chloroethane (Ethyl Chloride)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/g	50	5	n/v	n/v	0.05	0.47	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Chloromethane	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	µg/g	n/v	n/v	n/v	n/v	0.05	13	9.4	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,2-	µg/g	10	1	n/v	n/v	0.05	6.8	3.4	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,3-	µg/g	10	1	n/v	n/v	0.05	9.6	4.8	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorobenzene, 1,4-	µg/g	10	1	n/v	n/v	0.05	0.2	0.083	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichlorodifluoromethane (Freon 12)	µg/g	n/v	n/v	n/v	n/v	0.05	16	16	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethane, 1,1-	µg/g	50	5	n/v	n/v	0.05	17	3.5	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, 1,1-	µg/g	50	5	n/v	n/v	0.05	0.064	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, cis-1,2-	µg/g	50	5	n/v	n/v	0.05	55	3.4	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloroethene, trans-1,2-	µg/g	50	5	n/v	n/v	0.05	1.3	0.084	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloropropane, 1,2-	µg/g	50	5	n/v	n/v	0.05	0.16	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/g	n/v	n/v	n/v	n/v	0.05[s11]	0.18[s11]	0.05[s11]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichloropropene, cis-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	<0.030	-	-	-	<0.030	<0.030	-	-
Dichloropropene, trans-1,3-	µg/g	n/v	n/v	n/v	n/v	[s11]	[s11]	[s11]	-	-	-	-	-	-	<0.040	-	-	-	<0.040	<0.040	-	-
Ethylbenzene	µg/g	0.082	0.082	n/v	n/v	0.05	9.5	2	-	-	-	-	-	-	0.011	-	-	-	<0.010	<0.010	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/g	n/v	n/v	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Hexane (n-Hexane)	µg/g	6.5	0.49	n/v	n/v	0.05	46	2.8	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/g	n/v	n/v	n/v	n/v	0.5	70	16	-	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Methyl Isobutyl Ketone (MIBK)	µg/g	n/v	n/v	n/v	n/v	0.5	31	1.7	-	-	-	-	-	-	<0.50	-	-	-	<0.50	<0.50	-	-
Methyl tert-butyl ether (MTBE)	µg/g	n/v	n/v	n/v	n/v	0.05	11	0.75	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Methylene Chloride (Dichloromethane)	µg/g	50	5	n/v	n/v	0.05	1.6	0.1	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Styrene	µg/g	50	5	n/v	n/v	0.05	34	0.7	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Tetrachloroethane, 1,1,1,2-	µg/g	n/v	n/v	n/v	n/v	0.05	0.087	0.058	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Tetrachloroethane, 1,1,2,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Tetrachloroethene (PCE)	µg/g	0.5	0.2	n/v	n/v	0.05	4.5	0.28	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Toluene	µg/g	0.37	0.37	n/v	n/v	0.2	68	2.3	-	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Trichloroethane, 1,1,1-	µg/g	50	5	n/v	n/v	0.05	6.1	0.38	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Trichloroethane, 1,1,2-	µg/g	50	5	n/v	n/v	0.05	0.05	0.05	-	-	-	-	-	-	<0.050	-	-	-	<0.050	<0.050	-	-
Trichloroethene (TCE)	µg/g	0.01	0.01	n/v	n/v	0.05	0.91	0.061	-	-	-	-	-	-	<0.010	-	-	-	<0.010	<0.010	-	-
Trichlorofluoromethane (Freon 11)	µg/g	n/v	n/v	n/v	n/v	0.25	4	4	-	-	-	-	-	-	0.084	-	-	-	<0.050	<0.050	-	-
Vinyl chloride	µg/g	n/v	n/v	n/v	n/v	0.02	0.032	0.02	-	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Xylene, m & p-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Xylene, o-	µg/g	n/v	n/v	n/v	n/v	[s1]	[s1]	[s1]	-	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-
Xylenes, Total	µg/g	11	11	n/v	n/v	0.05[s1]	26[s1]	3.1[s1]	-	-	-	-	-	-	<0.020	-	-	-	<0.020	<0.020	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location									TP16-2 (Contd.)								TP16-2 TILE+BRICK	TP16-3	TP16-4			
Sample Date									28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16
Sample ID									TP16-2-SS4C	TP16-2-SS4C Lab-Dup	CUN880-02R\TP-16-2-SS6	TP16-2 SS6AB	TP16-2-SS6 Lab-Dup	TP16-2-SS6B	TP16-2-SS5	TP16-2-SS6	TP16-2 TILE+BRICK	TP16-3-SS4	TP16-4-SS4	TP16-4-SS4A		TP16-4-SS4A Lab-Dup
Sample Depth									2.3 - 3 m	2.3 - 3 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	4.1 - 5.2 m	3 - 3.8 m	4.1 - 5.2 m		2.3 - 2.9 m	2.3 - 3 m	2.3 - 3 m		2.3 - 3 m
Sampling Company									STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC
Laboratory									MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX
Laboratory Work Order		CCME				Ontario			B6G0385	B6G0385	B651540	B6G0376	B6G0376	B6G0385	B6G0376	B6G0376	B6G0376	B6G0385	B6G0385	B6G0385		B6G0385
Laboratory Sample ID		A	B	C	D	E	F	G	CUN922	CUN922	CT3933	CUN869	CUN880	CUN926	CUN879	CUN880	CUN866	CUN910	CUN911	CUN912	RPD	CUN912
Sample Type	Units	Commercial	Residential	Commercial-PHC	Residential-PHC	Table 1	Table 3- ICC	Table 3-RPI		Lab Replicate			Lab Replicate							Field Duplicate	(%)	Lab Replicate
Energetics																						
Dinitrotoluene, 2,4-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/g	n/v	n/v	n/v	n/v	0.5_{s13}	1.2_{s13}	0.92_{s13}	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,2-Amino-4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene,4-Amino-2,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m-Dinitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitroglycerin	mg/kg	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/g	n/v	n/v	n/v	n/v	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Soil Analytical Results
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Works Government Services Canada

Notes:

CCME	Canadian Council of Ministers of the Environment
A	Canadian Environmental Quality Guidelines, Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, on-line summary table, for commercial land use and coarse grained soil
B	Canadian Environmental Quality Guidelines, Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health, on-line summary table, for Residential/Parkland land use and coarse grained soil
C	Canada Wide Standards for PHC in Soil - Commercial land use - Coarse-grained Surface Soil, Tier 1 (Revised Jan 2008, Table 3), lowest guideline of all pathways
D	Canada Wide Standards for PHC in Soil - Residential/Parkland land use - Coarse-grained Surface Soil, Tier 1 (Revised Jan 2008, Table 3), lowest guideline of all pathways
Ontario SCS	Soil, Ground Water and Sediment Standards for Use under Part XV.I of the Environmental Protection Act (MOE, 2011)
E	Table 1 - Residential / Parkland / Institutional / Industrial / Commercial / Community Property Use
F	Table 3 - Industrial / Commercial / Community Property Use - Coarse Textured Soils
G	Table 3 - Residential / Parkland / Institutional Property Use - Coarse Textured Soils
6.5 [A]	Concentration exceeds the federal CCME standard.
6.5 [A]	Concentration exceeds the ontario provincial standard.
6.5 [A]	Concentration exceeds both federal and provincial standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
b	Assumes contamination near residence.
n/a	Not applicable.
s1 [EFG]	Standard is applicable to total xylenes, and m & p-xylenes and o-xylenes should be summed for comparison.
s7 [CEFG]	Standard is applicable to PHC in the F1 range minus BTEX.
s8 [EFG]	Standard is applicable to PHC in the F3 range, minus PAHs (other than naphthalene). If PAHs were not analyzed, the standard is applied to F3.
s10 [EFG]	If baseline is not reached during F4 analysis, then gravimetric analysis is to be performed, and the standard is applied to the higher of the two results.
s11 [EFG]	Standard is applicable to 1,3-Dichloropropene, and the individual isomers (cis + trans) should be added for comparison.
s12 [FG]	The criteria for pH in surface soils (0 to 1.5 m) is 5 - 9, whereas the criteria for pH in sub-surface soils (> 1.5 m depth) is 5 - 11.
s13 [EFG]	The criterion is applicable to the total sum of 2,4 & 2,6-Dinitrotoluene, and the individual isomers (2,4 & 2,6) should be added for comparison.
s14 [EFG]	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
s15 [EFG]	Standard is applicable to PHC in the F2 range minus naphthalene. If naphthalene was not analyzed, the standard is applied to F2.
s16 [FG]	For surface soil, the boron standard is for hot water soluble extract. For subsurface soil, the standard is for total boron (mixed strong acid digest), as ecological criteria are not considered.
RPD	Relative Percent Difference
nc	RPD is not calculated if one or more values is non detect or if one or more values is less than five times the reportable detection limit.
65%	RPD exceeds data quality objective 60% of soil: (source: Maxxam CCME QAQC Guide revised summer 2016)

Summary of Soil Analytical Results-PAHs-Commercial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location				BH16-4	BH16-2	MW16-1			MW16-3	MW16-5	MW16-6	MW16-7		MW16-8	MW16-9	MW16-10	MW16-11
Sample Date				14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	3-Aug-16	3-Aug-16	2-Aug-16	4-Aug-16
Sample ID				BH16-4-SS1	BH16-2-SS1	MW16-1-SS5	MW16-1A-SS5		MW16-3-SS2	MW16-5-SS1	MW16-6 1A	MW16-7-SS2	MW16-7-SS2 Lab Dup	MW16-8 SS1	MW16-9 SS1	MW16-10 SS2	MW16-11 SS1
Sample Depth				0 - 1.5 m	0 - 0.9 m	6.1 - 7.6 m	6.1 - 7.6 m		1.5 - 3 m	0 - 1.5 m	0 - 0.7 m	0.6 - 1.5 m	0.6 - 1.5 m	0 - 1.5 m	0 - 0.8 m	0.8 - 1.5 m	0 - 1.5 m
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order				B652164	B652164	B652164	B652164		B652164	B652164	B654802	B652164	B652164	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID				CAH496	CAH384	CAH383	CAH543	RPD	CAH387	CAH500	CAU912	CAH540	CAH540	CVH382	CVH381	CVH379	CVH378
Sample Type	Units	CCME	Ontario SCS				Field Duplicate	(%)					Lab Replicate				
Carcinogenic Polycyclic Aromatic Hydrocarbons																	
Benzo(a)anthracene	µg/g	10[BD]	0.36[H] 0.96[I]	0.0094	0.063	<0.0050	0.0051	nc	0.051	0.060	0.13	0.027	0.027	0.047	0.0076	**18[BDHI]**	0.23
Benzo(a)pyrene	µg/g	72[BEG] 8,800[F]	0.3[HI]	0.0081	0.064	<0.0050	<0.0050	nc	0.038	0.047	0.11	0.026	0.025	0.031	0.0083	12[HI]	0.15
Benzo(a)pyrene Total Potency Equivalents	µg/g	5.3[a,b,c A]	n/v	0.013	0.097	0.006	0.007	nc	0.06	0.073	0.168	0.038	-	0.049	0.014	**19.087[A]**	0.241
Benzo(b/j)fluoranthene	µg/g	10[BD]	0.47[t2 H] 0.96[t2 I]	0.0075	0.086	<0.0050	0.0055	nc	0.043	0.054	0.14	0.033	0.032	0.038	0.013	**15[BDHI]**	0.18
Benzo(g,h,i)perylene	µg/g	n/v	0.68[H] 9.6[I]	<0.0050	0.039	<0.0050	<0.0050	nc	0.027	0.035	0.056	0.014	0.014	0.018	0.0078	6.7[HI]	0.097
Benzo(k)fluoranthene	µg/g	10[BD]	0.48[H] 0.96[I]	<0.0050	0.031	<0.0050	<0.0050	nc	0.016	0.017	0.051	0.012	0.012	0.012	<0.0050	6.0[HI]	0.071
Chrysene	µg/g	n/v	2.8[H] 9.6[I]	0.0074	0.055	<0.0050	0.0063	nc	0.051	0.060	0.089	0.024	0.021	0.032	0.0072	14[HI]	0.16
Dibenzo(a,h)anthracene	µg/g	10[BD]	0.1[HI]	<0.0050	0.0092	<0.0050	<0.0050	nc	0.0068	0.0088	0.017	<0.0050	<0.0050	0.0051	<0.0050	2.2[HI]	0.027
Indeno(1,2,3-cd)pyrene	µg/g	10[BD]	0.23[H] 0.76[I]	<0.0050	0.047	<0.0050	<0.0050	nc	0.031	0.032	0.070	0.016	0.016	0.023	0.0072	7.8[HI]	0.13
Non-Carcinogenic Polycyclic Aromatic Hydrocarbons																	
Acenaphthene	µg/g	0.28[F]	0.072[H] 96[I]	<0.0050	0.0052	<0.0050	<0.0050	nc	0.0092	0.017	0.010	<0.0050	<0.0050	0.0060	<0.0050	**2.0[FH]**	0.0058
Acenaphthylene	µg/g	320[F]	0.093[H] 0.15[I]	<0.0050	0.0099	<0.0050	<0.0050	nc	0.0096	<0.0050	0.010	<0.0050	<0.0050	0.011	<0.0050	1.1[HI]	0.034
Anthracene	µg/g	32[BEG]	0.16[H] 0.67[I]	<0.0050	0.020	<0.0050	<0.0050	nc	0.020	0.021	0.045	0.0090	0.0079	0.015	<0.0050	11[HI]	0.052
Fluoranthene	µg/g	180[BEG]	0.56[H] 9.6[I]	0.017	0.14	<0.0050	0.011	nc	0.13	0.14	0.25	0.054	0.054	0.086	0.014	45[HI]	0.40
Fluorene	µg/g	0.25[F]	0.12[H] 62[I]	<0.0050	0.0084	<0.0050	<0.0050	nc	0.012	0.017	0.011	<0.0050	<0.0050	0.0079	<0.0050	**8.6[FH]**	0.015
Methylnaphthalene (Total)	µg/g	n/v	0.59[s3 H] 76[s3 I]	<0.0071	<0.0071	<0.0071	<0.0071	nc	0.028	0.045	-	<0.0071	-	-	-	-	-
Methylnaphthalene, 1-	µg/g	n/v	[s3 H] [s3 I]	<0.0050	<0.0050	<0.0050	<0.0050	nc	0.010	0.022	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.6	<0.0050
Methylnaphthalene, 2-	µg/g	n/v	[s3 H] [s3 I]	<0.0050	<0.0050	0.0070	<0.0050	nc	0.017	0.024	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.7	<0.0050
Naphthalene	µg/g	0.013[a B] 22[D] 0.013[F]	0.09[H] 9.6[I]	<0.0050	<0.0050	<0.0050	<0.0050	nc	**0.034[BF]**	**0.015[BF]**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.83[BFH]**	<0.0050
Phenanthrene	µg/g	0.046[a B] 50[D] 0.046[F]	0.69[H] 12[I]	0.0093	**0.074[BF]**	0.0096	0.011	nc	**0.090[BF]**	**0.12[BF]**	**0.12[BF]**	0.029	0.024	**0.048[BF]**	0.0051	**49[BFHI]**	**0.15[BF]**
Pyrene	µg/g	100[BD]	1[H] 96[I]	0.014	0.12	<0.0050	0.0091	nc	0.11	0.11	0.20	0.047	0.045	0.068	0.014	33[H]	0.30

Summary of Soil Analytical Results-PAHs-Commercial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location				MW16-12	MW16-13	MW16-14	TP16-1						TP16-2			TP16-4
Sample Date				4-Aug-16	3-Aug-16	3-Aug-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID				MW16-12 SS2	MW16-13 SS1	MW16-14 SS2	TP16-1-SS2	TP16-1-SS3	TP16-1-SS3 Lab-Dup	TP16-1-SS3A		TP16-1-SS7	TP16-2-SS2	TP16-2-SS4	TP16-2-SS6	TP16-4-SS4
Sample Depth				0.8 - 1.5 m	0 - 1.5 m	1.5 - 3 m	0.8 - 1.5 m	1.5 - 2.4 m	1.5 - 2.4 m	1.5 - 2.4 m		4.7 - 5.8 m	0.8 - 1.5 m	2.3 - 3 m	4.1 - 5.2 m	2.3 - 3 m
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order				B6G4522	B6G4522	B6G4522	B6G0385	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0385
Laboratory Sample ID				CVH376	CVH374	CVH372	CUN914	CUN916	CUN916	CUN917	RPD	CUN919	CUN876	CUN878	CUN880	CUN911
Sample Type	Units	CCME	Ontario SCS						Lab Replicate	Field Duplicate	(%)					
Carcinogenic Polycyclic Aromatic Hydrocarbons																
Benzo(a)anthracene	µg/g	10[BD]	0.36[H] 0.96[I]	<0.0050	0.015	<0.0050	0.025	0.082	0.053 DHA	0.041	**67%**	0.46[H]	0.017	0.026	0.32	3.1[HI]
Benzo(a)pyrene	µg/g	72[BEG] 8,800[F]	0.3[HI]	<0.0050	0.013	<0.0050	0.022	0.071	0.047 DHA	0.035	**68%**	0.35[HI]	0.014	0.024	0.26	2.1[HI]
Benzo(a)pyrene Total Potency Equivalents	µg/g	$5.3_{a,b,c}$[A]	n/v	0.006	0.021	0.006	0.033	0.109	-	0.055	**66%**	0.549	0.022	0.035	0.395	3.302
Benzo(b/j)fluoranthene	µg/g	10[BD]	0.47_{t2}[H] 0.96_{t2}[I]	<0.0050	0.018	<0.0050	0.028	0.090	0.060	0.049	59%	0.44	0.020	0.033	0.33	2.4[HI]
Benzo(g,h,i)perylene	µg/g	n/v	0.68[H] 9.6[I]	<0.0050	0.010	<0.0050	0.021	0.059	0.045	0.041	36%	0.21	0.028	0.023	0.14	0.96[H]
Benzo(k)fluoranthene	µg/g	10[BD]	0.48[H] 0.96[I]	<0.0050	0.0067	<0.0050	0.0089	0.032	0.020	0.015	nc	0.16	0.0052	0.0094	0.11	0.99[HI]
Chrysene	µg/g	n/v	2.8[H] 9.6[I]	<0.0050	0.014	<0.0050	0.024	0.069	0.047	0.041	51%	0.36	0.019	0.026	0.25	2.3
Dibenzo(a,h)anthracene	µg/g	10[BD]	0.1[HI]	<0.0050	<0.0050	<0.0050	<0.0050	0.011	0.0077	0.0058	nc	0.063	<0.0050	<0.0050	0.039	0.40[HI]
Indeno(1,2,3-cd)pyrene	µg/g	10[BD]	0.23[H] 0.76[I]	<0.0050	0.013	<0.0050	0.015	0.055	0.037	0.026	**72%**	0.24[H]	0.0089	0.015	0.16	1.2[HI]
Non-Carcinogenic Polycyclic Aromatic Hydrocarbons																
Acenaphthene	µg/g	0.28[F]	0.072[H] 96[I]	<0.0050	<0.0050	<0.0050	<0.0050	0.0068	0.0060	0.0058	nc	0.080[H]	<0.0050	<0.0050	0.11[H]	**0.74[FH]**
Acenaphthylene	µg/g	320[F]	0.093[H] 0.15[I]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	nc	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
Anthracene	µg/g	32[BEG]	0.16[H] 0.67[I]	<0.0050	<0.0050	<0.0050	0.0083	0.023	0.016	0.016	nc	0.15	0.0068	0.0072	0.19[H]	2.3[HI]
Fluoranthene	µg/g	180[BEG]	0.56[H] 9.6[I]	<0.0050	0.028	<0.0050	0.050	0.15	0.10 DHA	0.079	**62%**	0.91[H]	0.035	0.046	0.82[H]	6.2[H]
Fluorene	µg/g	0.25[F]	0.12[H] 62[I]	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	0.0053	0.0061	nc	0.054	<0.0050	<0.0050	0.091	**0.92[FH]**
Methylnaphthalene (Total)	µg/g	n/v	0.59_{s3}[H] 76_{s3}[I]	-	-	-	<0.0071	0.017	-	0.035	nc	0.062	0.013	0.012	0.029	0.13
Methylnaphthalene, 1-	µg/g	n/v	$_{s3}$[H] $_{s3}$[I]	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	0.0068	0.016	nc	0.021	0.0057	0.0052	0.011	0.078
Methylnaphthalene, 2-	µg/g	n/v	$_{s3}$[H] $_{s3}$[I]	<0.0050	<0.0050	<0.0050	0.0052	0.010	0.0090	0.020	nc	0.041	0.0075	0.0072	0.018	0.056
Naphthalene	µg/g	0.013_{e}[B] 22[D] 0.013[F]	0.09[H] 9.6[I]	<0.0050	<0.0050	<0.0050	0.0053	0.012	0.0068	**0.015[BF]**	nc	**0.11[BFH]**	0.0051	<0.0050	**0.071[BF]**	***<0.050***
Phenanthrene	µg/g	0.046_{e}[B] 50[D] 0.046[F]	0.69[H] 12[I]	<0.0050	0.0099	<0.0050	0.036	**0.084[BF]**	**0.065[BF]**	**0.068[BF]**	21%	**0.51[BF]**	0.036	0.032	**0.71[BFH]**	**6.2[BFH]**
Pyrene	µg/g	100[BD]	1[H] 96[I]	<0.0050	0.024	<0.0050	0.042	0.12	0.084	0.067	57%	0.70	0.032	0.043	0.63	4.7[H]

Summary of Soil Analytical Results-PAHs-Commercial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Works Government Services Canada

Notes:

CCME	Canadian Council of Ministers of the Environment
A	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 1 - Direct contact)
B	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 1 - Environmental health guidelines based on non-carcinogenic effects of PAHs)
C	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 1 - Protection of potable water)
D	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 2 - Interim/Provisional Soil Quality Critera, CCME 1991)
E	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 2 - Soil Quality Guideline for Environmental Health)
F	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 2 - Soil Quality Guideline for Protection of freshwater life)
G	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for a Commercial land use (Table 2 - Soil Quality Guideline for Soil Contact)
Ontario SCS	Soil, Ground Water and Sediment Standards for Use under Part XV.I of the Environmental Protection Act (MOE, 2011)
H	Table 1 - Residential / Parkland / Institutional / Industrial / Commercial / Community Property Use
I	Table 3 - Industrial / Commercial / Community Property Use - Coarse Textured Soils
6.5[A]	Concentration exceeds the federal CCME standard.
6.5[A]	Concentration exceeds the ontario provincial standard.
6.5[A]	Concentration exceeds both federal and provincial standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a,b,c	SQG based on an incremental lifetime cancer risk (ILCR) of 1 in 100,000 (10e-5). B[a]P TPE = Benzo[a]pyrene Total Potency Equivalents, which is the sum of estimated cancer potency relative to B[a]P for all potentially carcinogenic unsubstituted PAHs. The B[a]P TPE for a soil sample is calculated by multiplying the concentration of each PAH in the sample by its B[a]P Potency Equivalence Factor (PEF), given below, and summing the products: Benz[a]anthracene = 0.1, Benzo[a]pyrene = 1, Benzo[b+j+k]fluoranthene = 0.1, Benzo[g,h,i]perylene = 0.01, Chrysene = 0.01, Dibenz[a,h]anthracene =1, Indeno[1,2,3-cd]pyrene = 0.1.
d	The Index of Additive Cancer Risk (IACR) assesses potential threats to potable groundwater quality from leaching of carcinogenic PAH mixtures from soil. The IACR is calculated by dividing the soil concentration (numerator) of each carcinogenic PAH by its soil quality guideline for protection of potable water component value (denominator) to calculate a hazard index for each PAH, and then summing the hazard indices for the entire PAH mixture, as follows: IACR = (Benzo[a]anthracene/0.33)+(Benzo[b+j+k]fluoranthene/0.16)+(Benzo[g,h,i]perylene/6.8)+(Benzo[a]pyrene/0.37)+(Chrysene/2.1)+(Dibenzo[a,h])anthracene/0.23)+(Indeno[1,2,3-cd]pyrene/2.7)
e	This value is the Soil Quality Guideline for the Protection of Freshwater Life. Users may wish to consider the application, on a site-specific basis, of this value where potential impacts to nearby surface waters are a concern (the value may be less than the common limit of detection in some jurisdictions; and the 1991 Interim Soil Quality Criteria for phenanthrene).
s2	Standard is for benzo(b)fluoranthene; however, the analytical laboratory can not distinguish between benzo(b)fluoranthene and benzo(j)fluoranthene, and therefore, the result is a combination of the two isomers, against which the standard has been compared.
s3	Standard is applicable to both 1-methylnaphthalene and 2-methylnaphthalene, with the provision that if both are detected the sum of the two must not exceed the standard.
DHA	Duplicate results exceeded RPD acceptance criteria. The variability in the results for this analyte may be more pronounced.
RPD	Relative Percent Difference
nc	RPD is not calculated if one or more values is non detect or if one or more values is less than five times the reportable detection limit.
65%	RPD exceeds data quality objective 60% of Soil: (source: Maxxam CCME QAQC Guide revised summer 2016)

Summary of Soil Analytical Results-PAHs-Industrial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location				BH16-4	BH16-2	MW16-1			MW16-3	MW16-5	MW16-6	MW16-7		MW16-8	MW16-9	MW16-10	MW16-11
Sample Date				14-Mar-16	14-Mar-16	14-Mar-16	14-Mar-16		14-Mar-16	14-Mar-16	17-Mar-16	14-Mar-16	14-Mar-16	3-Aug-16	3-Aug-16	2-Aug-16	4-Aug-16
Sample ID				BH16-4-SS1	BH16-2-SS1	MW16-1-SS5	MW16-1A-SS5		MW16-3-SS2	MW16-5-SS1	MW16-6 1A	MW16-7-SS2	MW16-7-SS2 Lab Dup	MW16-8 SS1	MW16-9 SS1	MW16-10 SS2	MW16-11 SS1
Sample Depth				0 - 1.5 m	0 - 0.9 m	6.1 - 7.6 m	6.1 - 7.6 m		1.5 - 3 m	0 - 1.5 m	0 - 0.7 m	0.6 - 1.5 m	0.6 - 1.5 m	0 - 1.5 m	0 - 0.8 m	0.8 - 1.5 m	0 - 1.5 m
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order				B652164	B652164	B652164	B652164		B652164	B652164	B654802	B652164	B652164	B6G4522	B6G4522	B6G4522	B6G4522
Laboratory Sample ID				CAH496	CAH384	CAH383	CAH543	RPD	CAH387	CAH500	CAU912	CAH540	CAH540	CVH382	CVH381	CVH379	CVH378
Sample Type	Units	CCME	Ontario SCS				Field Duplicate	(%)					Lab Replicate				
Carcinogenic Polycyclic Aromatic Hydrocarbons																	
Benzo(a)anthracene	µg/g	10[BD]	0.36[I] 0.96[J]	0.0094	0.063	<0.0050	0.0051	nc	0.051	0.060	0.13	0.027	0.027	0.047	0.0076	**18[BDIJ]**	0.23
Benzo(a)pyrene	µg/g	72[BEH] 8,800[F]	0.3[IJ]	0.0081	0.064	<0.0050	<0.0050	nc	0.038	0.047	0.11	0.026	0.025	0.031	0.0083	12[IJ]	0.15
Benzo(a)pyrene Total Potency Equivalents	µg/g	5.3[a,b,c A]	n/v	0.013	0.097	0.006	0.007	nc	0.06	0.073	0.168	0.038	-	0.049	0.014	**19.087[A]**	0.241
Benzo(b/j)fluoranthene	µg/g	10[BD]	0.47[cI] 0.96[cJ]	0.0075	0.086	<0.0050	0.0055	nc	0.043	0.054	0.14	0.033	0.032	0.038	0.013	**15[BDIJ]**	0.18
Benzo(g,h,i)perylene	µg/g	n/v	0.68[I] 9.6[J]	<0.0050	0.039	<0.0050	<0.0050	nc	0.027	0.035	0.056	0.014	0.014	0.018	0.0078	6.7[I]	0.097
Benzo(k)fluoranthene	µg/g	10[BD]	0.48[I] 0.96[J]	<0.0050	0.031	<0.0050	<0.0050	nc	0.016	0.017	0.051	0.012	0.012	0.012	<0.0050	6.0[IJ]	0.071
Chrysene	µg/g	n/v	2.8[I] 9.6[J]	0.0074	0.055	<0.0050	0.0063	nc	0.051	0.060	0.089	0.024	0.021	0.032	0.0072	14[IJ]	0.16
Dibenzo(a,h)anthracene	µg/g	10[BD]	0.1[IJ]	<0.0050	0.0092	<0.0050	<0.0050	nc	0.0068	0.0088	0.017	<0.0050	<0.0050	0.0051	<0.0050	2.2[IJ]	0.027
Indeno(1,2,3-cd)pyrene	µg/g	10[BD]	0.23[I] 0.76[J]	<0.0050	0.047	<0.0050	<0.0050	nc	0.031	0.032	0.070	0.016	0.016	0.023	0.0072	7.8[IJ]	0.13
Non-Carcinogenic Polycyclic Aromatic Hydrocarbons																	
Acenaphthene	µg/g	0.28[F]	0.072[I] 96[J]	<0.0050	0.0052	<0.0050	<0.0050	nc	0.0092	0.017	0.010	<0.0050	<0.0050	0.0060	<0.0050	**2.0[FI]**	0.0058
Acenaphthylene	µg/g	320[F]	0.093[I] 0.15[J]	<0.0050	0.0099	<0.0050	<0.0050	nc	0.0096	<0.0050	0.010	<0.0050	<0.0050	0.011	<0.0050	1.1[IJ]	0.034
Anthracene	µg/g	32[BEH]	0.16[I] 0.67[J]	<0.0050	0.020	<0.0050	<0.0050	nc	0.020	0.021	0.045	0.0090	0.0079	0.015	<0.0050	11[IJ]	0.052
Fluoranthene	µg/g	180[BEH]	0.56[I] 9.6[J]	0.017	0.14	<0.0050	0.011	nc	0.13	0.14	0.25	0.054	0.054	0.086	0.014	45[IJ]	0.40
Fluorene	µg/g	0.25[F]	0.12[I] 62[J]	<0.0050	0.0084	<0.0050	<0.0050	nc	0.012	0.017	0.011	<0.0050	<0.0050	0.0079	<0.0050	**8.6[FI]**	0.015
Methylnaphthalene (Total)	µg/g	n/v	0.59[s3I] 76[s3J]	<0.0071	<0.0071	<0.0071	<0.0071	nc	0.028	0.045	-	<0.0071	-	-	-	-	-
Methylnaphthalene, 1-	µg/g	n/v	[s3I s3J]	<0.0050	<0.0050	<0.0050	<0.0050	nc	0.010	0.022	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.6	<0.0050
Methylnaphthalene, 2-	µg/g	n/v	[s3I s3J]	<0.0050	<0.0050	0.0070	<0.0050	nc	0.017	0.024	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	1.7	<0.0050
Naphthalene	µg/g	0.013[a B] 22[D] 0.013[F]	0.09[I] 9.6[J]	<0.0050	<0.0050	<0.0050	<0.0050	nc	**0.034[BF]**	**0.015[BF]**	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	**0.83[BFI]**	<0.0050
Phenanthrene	µg/g	0.046[a B] 50[D] 0.046[F]	0.69[I] 12[J]	0.0093	**0.074[BF]**	0.0096	0.011	nc	**0.090[BF]**	**0.12[BF]**	**0.12[BF]**	0.029	0.024	**0.048[BF]**	0.0051	**49[BFIJ]**	**0.15[BF]**
Pyrene	µg/g	100[BD]	1[I] 96[J]	0.014	0.12	<0.0050	0.0091	nc	0.11	0.11	0.20	0.047	0.045	0.068	0.014	33[I]	0.30

See notes on last page

Summary of Soil Analytical Results-PAHs-Industrial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Services and Procurement Canada

Sample Location				MW16-12	MW16-13	MW16-14	TP16-1						TP16-2			TP16-4
Sample Date				4-Aug-16	3-Aug-16	3-Aug-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16		28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16	28-Jul-16
Sample ID				MW16-12 SS2	MW16-13 SS1	MW16-14 SS2	TP16-1-SS2	TP16-1-SS3	TP16-1-SS3 Lab-Dup	TP16-1-SS3A		TP16-1-SS7	TP16-2-SS2	TP16-2-SS4	TP16-2-SS6	TP16-4-SS4
Sample Depth				0.8 - 1.5 m	0 - 1.5 m	1.5 - 3 m	0.8 - 1.5 m	1.5 - 2.4 m	1.5 - 2.4 m	1.5 - 2.4 m		4.7 - 5.8 m	0.8 - 1.5 m	2.3 - 3 m	4.1 - 5.2 m	2.3 - 3 m
Sampling Company				STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory				MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX		MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order				B6G4522	B6G4522	B6G4522	B6G0385	B6G0385	B6G0385	B6G0385		B6G0385	B6G0376	B6G0376	B6G0376	B6G0385
Laboratory Sample ID				CVH376	CVH374	CVH372	CUN914	CUN916	CUN916	CUN917	RPD	CUN919	CUN876	CUN878	CUN880	CUN911
Sample Type	Units	CCME	Ontario SCS						Lab Replicate	Field Duplicate	(%)					
Carcinogenic Polycyclic Aromatic Hydrocarbons																
Benzo(a)anthracene	µg/g	10[BD]	0.36[I] 0.96[J]	<0.0050	0.015	<0.0050	0.025	0.082	0.053 DHA	0.041	67%	0.46[I]	0.017	0.026	0.32	3.1[IJ]
Benzo(a)pyrene	µg/g	72[BEH] 8,800[F]	0.3[IJ]	<0.0050	0.013	<0.0050	0.022	0.071	0.047 DHA	0.035	68%	0.35[IJ]	0.014	0.024	0.26	2.1[IJ]
Benzo(a)pyrene Total Potency Equivalents	µg/g	$5.3_{a,b,c}$[A]	n/v	0.006	0.021	0.006	0.033	0.109	-	0.055	66%	0.549	0.022	0.035	0.395	3.302
Benzo(b/j)fluoranthene	µg/g	10[BD]	0.47_{j2}[I] 0.96_{j2}[J]	<0.0050	0.018	<0.0050	0.028	0.090	0.060	0.049	59%	0.44	0.020	0.033	0.33	2.4[IJ]
Benzo(g,h,i)perylene	µg/g	n/v	0.68[I] 9.6[J]	<0.0050	0.010	<0.0050	0.021	0.059	0.045	0.041	36%	0.21	0.028	0.023	0.14	0.96[I]
Benzo(k)fluoranthene	µg/g	10[BD]	0.48[I] 0.96[J]	<0.0050	0.0067	<0.0050	0.0089	0.032	0.020	0.015	nc	0.16	0.0052	0.0094	0.11	0.99[IJ]
Chrysene	µg/g	n/v	2.8[I] 9.6[J]	<0.0050	0.014	<0.0050	0.024	0.069	0.047	0.041	51%	0.36	0.019	0.026	0.25	2.3
Dibenzo(a,h)anthracene	µg/g	10[BD]	0.1[IJ]	<0.0050	<0.0050	<0.0050	<0.0050	0.011	0.0077	0.0058	nc	0.063	<0.0050	<0.0050	0.039	0.40[IJ]
Indeno(1,2,3-cd)pyrene	µg/g	10[BD]	0.23[I] 0.76[J]	<0.0050	0.013	<0.0050	0.015	0.055	0.037	0.026	72%	0.24[J]	0.0089	0.015	0.16	1.2[IJ]
Non-Carcinogenic Polycyclic Aromatic Hydrocarbons																
Acenaphthene	µg/g	0.28[F]	0.072[I] 96[J]	<0.0050	<0.0050	<0.0050	<0.0050	0.0068	0.0060	0.0058	nc	0.080[I]	<0.0050	<0.0050	0.11[I]	**0.74[FI]**
Acenaphthylene	µg/g	320[F]	0.093[I] 0.15[J]	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	nc	<0.0050	<0.0050	<0.0050	<0.0050	<0.050
Anthracene	µg/g	32[BEH]	0.16[I] 0.67[J]	<0.0050	<0.0050	<0.0050	0.0083	0.023	0.016	0.016	nc	0.15	0.0068	0.0072	0.19[I]	2.3[IJ]
Fluoranthene	µg/g	180[BEH]	0.56[I] 9.6[J]	<0.0050	0.028	<0.0050	0.050	0.15	0.10 DHA	0.079	62%	0.91[I]	0.035	0.046	0.82[I]	6.2[I]
Fluorene	µg/g	0.25[F]	0.12[I] 62[J]	<0.0050	<0.0050	<0.0050	<0.0050	0.0062	0.0053	0.0061	nc	0.054	<0.0050	<0.0050	0.091	**0.92[FI]**
Methylnaphthalene (Total)	µg/g	n/v	0.59_{s3}[I] 76_{s3}[J]	-	-	-	<0.0071	0.017	-	0.035	nc	0.062	0.013	0.012	0.029	0.13
Methylnaphthalene, 1-	µg/g	n/v	[I] [J] $_{s3\,s3}$	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	0.0068	0.016	nc	0.021	0.0057	0.0052	0.011	0.078
Methylnaphthalene, 2-	µg/g	n/v	[I] [J] $_{s3\,s3}$	<0.0050	<0.0050	<0.0050	0.0052	0.010	0.0090	0.020	nc	0.041	0.0075	0.0072	0.018	0.056
Naphthalene	µg/g	0.013_{e}[B] 22[D] 0.013[F]	0.09[I] 9.6[J]	<0.0050	<0.0050	<0.0050	0.0053	0.012	0.0068	**0.015[BF]**	nc	**0.11[BFI]**	0.0051	<0.0050	**0.071[BF]**	***<0.050***
Phenanthrene	µg/g	0.046_{e}[B] 50[D] 0.046[F]	0.69[I] 12[J]	<0.0050	0.0099	<0.0050	0.036	**0.084[BF]**	**0.065[BF]**	**0.068[BF]**	21%	**0.51[BF]**	0.036	0.032	**0.71[BFI]**	**6.2[BFI]**
Pyrene	µg/g	100[BD]	1[I] 96[J]	<0.0050	0.024	<0.0050	0.042	0.12	0.084	0.067	57%	0.70	0.032	0.043	0.63	4.7[I]

See notes on last page

Table E-3
Summary of Soil Analytical Results-PAHs-Industrial Land Use
Phase III ESA - 930 Carling Avenue, Ottawa, ON
Public Works Government Services Canada

Notes:

CCME	Canadian Council of Ministers of the Environment
A	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 1 - Direct contact)
B	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 1 - Environmental health guidelines based on non-carcinogenic effects of PAHs)
C	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 1 - Protection of potable water)
D	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 2 - Interim/Provisional Soil Quality Critera, CCME 1991)
E	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 2 - Soil Quality Guideline for Environmental Health)
F	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 2 - Soil Quality Guideline for Protection of freshwater life)
G	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 2 - Soil Quality Guideline for Soil and food ingestion)
H	Canadian Soil Quality Guideline for the Protection of Environmental and Human Health, PAH, 2008. revised 2010, for an Industrial land use (Table 2 - Soil Quality Guideline for Soil Contact)
Ontario SCS	Soil, Ground Water and Sediment Standards for Use under Part XV.I of the Environmental Protection Act (MOE, 2011)
I	Table 1 - Residential / Parkland / Institutional / Industrial / Commercial / Community Property Use
J	Table 3 - Industrial / Commercial / Community Property Use - Coarse Textured Soils
6.5[A]	Concentration exceeds the federal CCME standard.
6.5[A]	Concentration exceeds the ontario provincial standard.
6.5 [A]	Concentration exceeds both federal and provincial standard.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a,b,c	SQG based on an incremental lifetime cancer risk (ILCR) of 1 in 100,000 (10e-5). B[a]P TPE = Benzo[a]pyrene Total Potency Equivalents, which is the sum of estimated cancer potency relative to B[a]P for all potentially carcinogenic unsubstituted PAHs. The B[a]P TPE for a soil sample is calculated by multiplying the concentration of each PAH in the sample by its B[a]P Potency Equivalence Factor (PEF), given below, and summing the products: Benz[a]anthracene = 0.1, Benzo[a]pyrene = 1, Benzo[b+j+k]fluoranthene = 0.1, Benzo[g,h,i]perylene = 0.01, Chrysene = 0.01, Dibenz[a,h]anthracene =1, Indeno[1,2,3-cd]pyrene = 0.1.
d	The Index of Additive Cancer Risk (IACR) assesses potential threats to potable groundwater quality from leaching of carcinogenic PAH mixtures from soil. The IACR is calculated by dividing the soil concentration (numerator) of each carcinogenic PAH by its soil quality guideline for protection of potable water component value (denominator) to calculate a hazard index for each PAH, and then summing the hazard indices for the entire PAH mixture, as follows: IACR = (Benzo[a]anthracene/0.33)+(Benzo[b+j+k]fluoranthene/0.16)+(Benzo[g,h,i]perylene/6.8)+(Benzo[a]pyrene/0.37)+(Chrysene/2.1)+(Dibenzo[a,h])anthracene/0.23)+(Indeno[1,2,3-cd]pyrene/2.7)
e	This value is the Soil Quality Guideline for the Protection of Freshwater Life. Users may wish to consider the application, on a site-specific basis, of this value where potential impacts to nearby surface waters are a concern (the value may be less than the common limit of detection in some jurisdictions; and the 1991 Interim Soil Quality Criteria for phenanthrene).
s2	Standard is for benzo(b)fluoranthene; however, the analytical laboratory can not distinguish between benzo(b)fluoranthene and benzo(j)fluoranthene, and therefore, the result is a combination of the two isomers, against which the standard has been compared.
s3	Standard is applicable to both 1-methylnaphthalene and 2-methylnaphthalene, with the provision that if both are detected the sum of the two must not exceed the standard.
DHA	Duplicate results exceeded RPD acceptance criteria. The variability in the results for this analyte may be more pronounced.
RPD	Relative Percent Difference
nc	RPD is not calculated if one or more values is non detect or if one or more values is less than five times the reportable detection limit.
65%	RPD exceeds data quality objective 60% of Soil: (source: Maxxam CCME QAQC Guide revised summer 2016)

GROUNDWATER ANALYTICAL RESULTS, GROUNDWATER ELEVATION DATA, SINGLE WELL RESPONSE TEST RESULTS, CERTIFICATES OF ANALYSIS from Hydrogeological Assessment Report, Sir John Carling West Annex Demolition, 930 Carling Avenue, Ottawa, Ontario (Final). Stantec 2020

Summary of Groundwater/Water Analytical Results
Sir John Carling West Annex Demolition
Public Services and Procurement Canada

Sample Location					1 OBSERVATORY		MW16-1		MW16-3					MW16-5				MW16-6		MW16-7		MW16-7A
Sample Date					7-Feb-20	7-Feb-20	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16		6-Feb-20	18-Mar-16	18-Mar-16	10-Aug-16	10-Aug-16	17-Mar-16	10-Aug-16	17-Mar-16	17-Mar-16	10-Aug-16
Sample ID					1 OBSERVATORY	1 OBSERVATORY Lab-Dup	MW16-1	MW16-1 Lab-Dup	MW16-3	MW16-3 Lab-Dup	DUP-1		MW16-3	MW16-5	MW16-5 Lab-Dup	MW16-5	MW16-5 Lab-Dup	MW16-6	MW16-6	MW16-7	MW16-7 Lab-Dup	MW16-7A
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					BV	BV	MAXX	MAXX	MAXX	MAXX	MAXX		BV	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order					C035567	C035567	B655361/B620743/B620802	B620743/B655361	B655361/B620743/B620802	B655361	B655361		C034481	B655361/B620743/B620802	B655361	B6H0159/B668006/B668100	B6H0159	B655361/B620743/B620802	B6H0159/B668006/B668100	B655361/B620802	B655361	B6H0159/B668006/B668100
Laboratory Sample ID					LYY061	LYY061	CAX628/OH7552/OH7910	OH7552/CAX628	CAX629/OH7553/OH7911	CAX629	CAX633	RPD	LYS004	CAX630/OH7912/OH7554	CAX630	CWI943/PG2907/PG3438/PG3439	CWI943	CAX631/OH7555/OH7913	CWI944/PG2908/PG3440/PG3441	CAX632/OH7914	CAX632	CWI945/PG2909/PG3442/PG3443
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate				Lab Replicate	
General Chemistry																						
Ammonia	mg/L	n/v	$_{TBC}$[C]	n/v	0.27	-	-	-	-	-	-	-	0.78	-	-	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	n/v	$_{TBC2}$[C]	n/v	0.22	-	4.5	-	0.98	-	-	-	0.64	0.48	-	0.19	0.18	<0.050	0.072	-	-	<0.050
Chloride	mg/L	n/v	120[C] 640[D]	n/v	-	-	**250**[C]	-	**290**[C]	-	-	-	-	110	-	**140**[C]	-	33	32	-	-	**160**[C]
Chloride, Dissolved	mg/L	n/v	120[C] 640[D]	n/v	7.1	-	-	-	-	-	-	-	**490**[C]	-	-	-	-	-	-	-	-	-
Cyanide (Free)	mg/L	2[A] 0.02[B]	0.005[C]	0.005[E]	<0.0010	-	-	-	-	-	-	-	<0.0010	-	-	-	-	-	-	-	-	-
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	-	<0.0020	-	-	<0.0020
Cyanide (Weak Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	**0.0054 ABC**[C]	**0.0056**[C]	0.0012 ABC	-	-	-	-	0.0017 ABC	-	-	-	<0.0010	-	-	-	-
Filter and HNO3 Preservation	none	n/v	n/v	n/v	-	-	FIELD	-	FIELD	-	-	-	-	FIELD	-	FIELD	-	FIELD	FIELD	FIELD	-	FIELD
Fluoride	mg/L	10[A]	0.12[C]	n/v	**0.66**[C]	**0.65**[C]	**0.17**[C]	-	<0.10	-	-	-	<0.10	**0.40**[C]	-	**0.38**[C]	-	<0.10	0.12	-	-	**0.30**[C]
Hardness (as CaCO3)	mg/L	n/v	n/v	n/v	-	-	804	-	223	-	-	-	-	285	-	307	-	478	498	1,620	-	346
Hardness (as CaCO3), Total	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardness (Dissolved Metals)	mg/L	n/v	n/v	n/v	31.6	-	-	-	-	-	-	-	356	-	-	-	-	-	-	-	-	-
Hydrogen Sulfide	mg/L	n/v	n/v	n/v	-	-	<0.0020	-	0.010	-	-	-	-	0.015	-	0.050	-	<0.0020	<0.0020	-	-	0.010
Nitrate	mg/L	n/v	13[C] 550[D]	n/v	0.8	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	n/v	3.0[C] 124[D]	n/v	0.17	-	1.67	-	1.86	-	-	-	0.76	0.25	-	<0.10	-	**8.76**[C]	2.65	-	-	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	n/v	n/v	0.17	-	2.42	-	2.03	-	-	-	1.20	0.33	-	<0.10	-	8.76	2.73	-	-	<0.10
Nitrite (as N)	mg/L	n/v	0.06[C]	n/v	<0.010	-	**0.746**[C]	-	**0.175**[C]	-	-	-	**0.438**[C]	**0.074**[C]	-	0.023	-	<0.010	**0.080**[C]	-	-	<0.010
pH, lab	S.U.	5.5-11[A] 6-9[B]	6.5-9.0[C]	6.5-8.5[E]	**8.61**[E]	**8.64**[E]	**12.2**[ABCE]	-	**10.4**[BCE]	-	-	-	**11.3**[ABCE]	8.30	-	8.08	-	7.63	7.63	-	-	7.83
Phenols (Phenolics)	mg/L	1[A] 0.008[B]	0.004[C]	0.001[E]	-	-	**0.31**[BCE]	-	**0.078**[BCE]	-	**0.079**[BCE]	1%	-	<0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	<0.0010	-	<0.0010
Phenols-4AAP	mg/L	1[A] 0.008[B]	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide	mg/L	2[A]	n/v	n/v	-	-	<0.0019	-	0.0093	-	-	-	-	0.014	-	0.047 MI	-	<0.0019	<0.0019	-	-	0.0094
Sulfide, Total	mg/L	2[A]	n/v	n/v	<0.0018	<0.0018	-	-	-	-	-	-	<0.0018	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	1,500[A]	n/v	n/v	28	-	71	-	140	-	-	-	110	360	-	170	-	97	100	-	-	43
Sulfide (as H2S)	mg/L	n/v	n/v	n/v	<0.0020	-	-	-	-	-	-	-	<0.0020	-	-	-	-	-	-	-	-	-
Total Suspended Solids	mg/L	350[A] 15[B]	$_{SN}$[C]	n/v	-	-	11	-	**200**[B]	-	**180**[B]	11%	**250**[B]	**110**[B]	-	-	-	**47**[B]	-	**20**[B]	**20**[B]	-
Total Kjeldahl Nitrogen	mg/L	100[A]	n/v	n/v	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-	-	-	-	-
Volatile Suspended Solids (VSS)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	34	-	-	-	-	-	-	-	-	-
Petroleum Hydrocarbons																						
PHC F1 (C6-C10 range)	µg/L	n/v	n/v	n/v	<25	-	<25	<25	<25	-	<25	nc	<25	<25	-	-	-	<25	-	<25	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/L	n/v	n/v	n/v	<25	-	<25	<25	<25	-	<25	nc	<25	<25	-	-	-	<25	-	<25	-	-
PHC F2 (>C10-C16 range)	µg/L	n/v	n/v	n/v	<100	-	<100	-	<100	-	<100	nc	<100	<100	-	-	-	<100	-	<100	-	-
PHC F3 (>C16-C34 range)	µg/L	n/v	n/v	n/v	<200	-	<200	-	<200	-	<200	nc	<200	<200	-	-	-	<200	-	<200	-	-
PHC F4 (>C34-C50 range)	µg/L	n/v	n/v	n/v	<200	-	<200	-	<200	-	<200	nc	<200	<200	-	-	-	<200	-	<200	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	YES	-	YES	-	YES	-	YES	nc	YES	YES	-	-	-	YES	-	YES	-	-
Metals, Dissolved																						
Aluminum	µg/L	50,000[A]	100_{VAR1}[C]	n/v	**104**[C]	-	**315**[C]	-	3.57	-	-	-	<3.0	20.4	-	5.73	-	4.90	7.33	7.96	-	4.49
Antimony	µg/L	5,000[A]	n/v	20^{G}	<0.50	-	0.216	-	0.195	-	-	-	<0.50	0.342	-	0.422	-	0.127	0.231	0.451	-	0.315
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100^{E} 5^{G}	0.14	-	1.23	-	0.347	-	-	-	0.18	0.689	-	0.869	-	0.313	0.181	0.444	-	0.236
Barium	µg/L	n/v	n/v	n/v	11.8	-	174	-	37.4	-	-	-	132	52.4	-	70.4	-	73.9	92.3	325	-	140
Beryllium	µg/L	n/v	n/v	$1{,}100_{s3}$[E]	<0.10	-	<0.010	-	<0.010	-	-	-	<0.10	<0.010	-	<0.010	-	<0.010	<0.010	<0.010	-	<0.010
Bismuth	µg/L	5,000[A]	n/v	n/v	<1.0	-	0.0090	-	<0.0050	-	-	-	<1.0	0.0070	-	<0.0050	-	<0.0050	<0.0050	0.0080	-	<0.0050
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200_{a}[G]	<50	-	<10	-	20	-	-	-	<50	89	-	58	-	59	85	107	-	26
Cadmium	µg/L	20[A] 8[B]	0.37_{LTG}[C] 7.7_{STB}[D]	0.2^{E} 0.5_{s12}[G]	<0.010	-	<0.0050	-	<0.0050	-	-	-	<0.010	<0.0050	-	<0.0050	-	0.0090	0.0080	0.0300	-	<0.0050
Calcium	mg/L	n/v	n/v	n/v	9.03	-	322	-	60.2	-	-	-	139	78.5	-	70.3	-	144	143	294	-	66.5
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	<1.0	-	14.5	-	3.43	-	-	-	<1.0	0.36	-	0.15	-	6.00	<0.10	0.52	-	<0.10
Chromium (Hexavalent)	µg/L	n/v	1[C]	1^{E}	-	-	**14**[CE]	-	**3.4**[CE]	**3.3**[CE]	-	-	-	0.53	-	-	-	<0.50	-	<0.50	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9^{G}	<0.20	-	**7.84**[G]	-	**1.55**[G]	-	-	-	0.33	0.612	-	0.779	-	0.324	0.558	**3.45**[G]	-	0.413
Copper	µg/L	3,000[A] 40[B]	4_{TBC1}[C]	5^{E} 5_{s13}[G]	1.64	-	**177**[BCEG]	-	**27.9**[CEG]	-	-	-	**4.33**[C]	**8.08**[CEG]	-	0.773	-	**6.47**[CEG]	0.832	**5.98**[CEG]	-	0.235
Iron	µg/L	n/v	300[C]	300^{E}	42.0	-	43.8	-	5.8	-	-	-	<5.0	10.9	-	36.0	-	20.3	7.3	5.2	-	4.6
Lead	µg/L	5,000[A] 120[B]	7_{TBC1}[C]	25_{s14}[E] 5_{s15}[G]	<0.20	-	**44.9**[CEG]	-	0.225	-	-	-	0.58	0.0150	-	0.0090	-	0.0710	0.0160	0.0630	-	0.0150
Lithium	µg/L	n/v	n/v	n/v	<2.0	-	14.3	-	6.86	-	-	-	13.5	7.08	-	4.05	-	4.11	2.82	32.3	-	9.30
Magnesium	mg/L	n/v	n/v	n/v	2.20	-	<0.050	-	17.7	-	-	-	1.98	21.6	-	31.9	-	29.1	34.4	215	-	43.7
Manganese	µg/L	5,000[A] 50[B]	430_{EO4}[C] $3{,}600_{EO3}$[D]	n/v	3.4	-	0.210	-	<0.050	-	-	-	<1.0	**96.2**[B]	-	**298**[B]	-	45.1	**183**[B]	**251**[B]	-	12.6
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2^{E}	-	-	0.02	-	<0.01	-	-	-	-	0.01	-	<0.01	-	<0.01	<0.01	<0.01	-	<0.01
Molybdenum	µg/L	5,000[A]	73[C]	40^{G}	<1.0	-	24.4	-	6.79	-	-	-	11.3	**112**[CG]	-	**130**[CG]	-	2.29	2.58	5.39	-	28.6
Nickel	µg/L	3,000[A] 80[B]	150_{TBC1}[C]	25^{E}	<1.0	-	**28.5**[E]	-	5.71	-	-	-	2.1	3.00	-	5.17	-	4.02	1.81	14.7	-	2.93
Potassium	mg/L	n/v	n/v	n/v	0.636	-	263	-	65.1	-	-	-	42.4	14.5	-	7.18	-	1.97	2.65	13.7	-	4.43
Selenium	µg/L	5,000[A] 20[B]	1[C]	100^{E}	<0.10	-	0.601	-	0.322	-	-	-	0.19	0.207	-	0.074	-	0.307	0.108	0.341	-	0.110
Silicon	µg/L	n/v	n/v	n/v	2,430	-	1,530	-	5,340	-	-	-	2,130	5,530	-	5,300	-	8,150	8,790	11,700	-	10,800
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1^{E}	<0.020	-	<0.0050	-	<0.0050	-	-	-	<0.020	0.0100	-	0.0110	-	<0.0050	<0.0050	**0.140**[E]	-	0.0250
Sodium	mg/L	n/v	n/v	n/v	17.6	-	316	-	188	-	-	-	270	127	-	72.5	-	23.3	34.2	519	-	13.6
Strontium	µg/L	n/v	n/v	n/v	37.5	-	6,600	-	1,500	-	-	-	5,500	7,450	-	15,300	-	2,780	6,080	102,000	-	29,800
Sulfur	mg/L	n/v	n/v	n/v	9.1	-	30.6	-	47.3	-	-	-	32.5	125	-	59.8	-	33.0	33.0	67.3	-	11.8
Thallium	µg/L	n/v	0.8[C]	0.3_{s}[G]	<0.010	-	0.0380	-	0.0290	-	-	-	0.048	0.0140	-	0.0250	-	0.0020	0.0110	0.0440	-	0.0110
Tin	µg/L	5,000[A]	n/v	n/v	<5.0	-	<0.20	-	<0.20	-	-	-	<5.0	<0.20	-	<0.20	-	0.76	<0.20	0.85	-	0.25
Titanium	µg/L	5,000[A]	n/v	n/v	<5.0	-	<0.50	-	<0.50	-	-	-	<5.0	0.57	-	<0.50	-	<0.50	0.61	<0.50	-	<0.50
Uranium	µg/L	n/v	15[C] 33[D]	5_{a}[G]	<0.10	-	0.0050	-	0.492	-	-	-	<0.10	1.72	-	1.83	-	1.43	3.24	3.92	-	0.265
Vanadium	µg/L	5,000[A]	n/v	6^{G}	<5.0	-	0.38	-	0.65	-	-	-	<5.0	0.43	-	0.93	-	1.18	1.15	<0.20	-	0.60
Zinc	µg/L	3,000[A] 40[B]	7.0_{EO2}[C] 37_{EO1}[D]	30^{E} 20^{G}	<5.0	-	3.04	-	0.99	-	-	-	<5.0	0.69	-	0.45	-	3.48	1.44	3.78	-	1.28
Zirconium	µg/L	n/v	n/v	4_{a}[G]	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	<0.10	-	<0.10	-	<0.10	<0.10	<0.10	-	<0.10

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					1 OBSERVATORY		MW16-1		MW16-3					MW16-5				MW16-6		MW16-7		MW16-7A
Sample Date					7-Feb-20	7-Feb-20	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16		6-Feb-20	18-Mar-16	18-Mar-16	10-Aug-16	10-Aug-16	17-Mar-16	10-Aug-16	17-Mar-16	17-Mar-16	10-Aug-16
Sample ID					1 OBSERVATORY	1 OBSERVATORY Lab-Dup	MW16-1	MW16-1 Lab-Dup	MW16-3	MW16-3 Lab-Dup	DUP-1		MW16-3	MW16-5	MW16-5 Lab-Dup	MW16-5	MW16-5 Lab-Dup	MW16-6	MW16-6	MW16-7	MW16-7 Lab-Dup	MW16-7A
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					BV	BV	MAXX	MAXX	MAXX	MAXX	MAXX		BV	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order					C035567	C035567	B655361/B620743/B620802	B620743/B655361	B655361/B620743/B620802	B655361	B655361		C034481	B655361/B620743/B620802	B655361	B6H0159/B668006/B668100	B6H0159	B655361/B620743/B620802	B6H0159/B668006/B668100	B655361/B620802	B655361	B6H0159/B668006/B668100
Laboratory Sample ID					LYY061	LYY061	CAX628/OH7552/OH7910	OH7552/CAX628	CAX629/OH7553/OH7911	CAX629	CAX633	RPD	LYS004	CAX630/OH7912/OH7554	CAX630	CWI943/PG2907/PG3438/PG3439	CWI943	CAX631/OH7555/OH7913	CWI944/PG2908/PG3440/PG3441	CAX632/OH7914	CAX632	CWI945/PG2909/PG3442/PG3443
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate				Lab Replicate	
Metals, Total																						
Aluminum	µg/L	50,000[A]	100$_{VAR1}$[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium	µg/L	n/v	n/v	1,100$_{s3}$[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	µg/L	20[A] 8[B]	0.37$_{LTG}$[C] 7.7$_{STB}$[D]	0.2[E] 0.5$_{s12}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	µg/L	3,000[A] 40[B]	4$_{TBC1}$[C]	5[E] 5$_{s13}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	µg/L	n/v	300[C]	300[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	µg/L	5,000[A] 120[B]	7$_{TBC1}$[C]	25$_{s14}$[E] 5$_{s15}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	µg/L	5,000[A] 50[B]	430$_{EO4}$[C] 3,600$_{EO3}$[D]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	<0.01	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	µg/L	3,000[A] 80[B]	150$_{TBC1}$[C]	25[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicon	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Strontium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thallium	µg/L	n/v	0.8[C]	0.3$_b$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0$_{EO2}$[C] 37$_{EQ1}$[D]	30[E] 20[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zirconium	µg/L	n/v	n/v	4$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons																						
Acenaphthene	µg/L	n/v	5.8[C]	n/v	-	-	0.054	-	0.044	0.039	0.022	nc	<0.10	<0.010	-	-	-	<0.010	-	<0.010	-	-
Acenaphthylene	µg/L	n/v	n/v	n/v	-	-	<0.010	-	<0.010	<0.010	<0.010	nc	<0.10	<0.010	-	-	-	<0.010	-	<0.010	-	-
Acridine	µg/L	n/v	4.4[C]	n/v	-	-	-	-	-	-	-	-	<0.040	-	-	-	-	-	-	-	-	-
Anthracene	µg/L	n/v	0.012[CD]	0.0008$_a$[G]	-	-	***<0.010***	-	***<0.010***	**0.012[G]**	***<0.010***	nc	***<0.010***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Benzo(a)anthracene	µg/L	n/v	0.018[C]	0.0004$_a$[G]	-	-	***<0.010***	-	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Benzo(a)pyrene	µg/L	n/v	0.015[C]	n/v	-	-	<0.010	-	<0.010	<0.010	<0.010	nc	<0.0075	<0.010	-	-	-	<0.010	-	<0.010	-	-
Benzo(b)pyridine (Quinoline)	µg/L	n/v	3.4[C]	10$_a$[G]	-	-	-	-	-	-	-	-	<0.20	-	-	-	-	-	-	-	-	-
Benzo(b/j)fluoranthene	µg/L	n/v	n/v	n/v	-	-	<0.010	-	<0.010	<0.010	<0.010	nc	<0.0085	<0.010	-	-	-	<0.010	-	<0.010	-	-
Benzo(c)phenanthrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	-	-	-	-
Benzo(e)pyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.050	-	-	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	n/v	n/v	0.00002$_a$[G]	-	-	***<0.010***	-	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Benzo(k)fluoranthene	µg/L	n/v	n/v	0.0002$_a$[G]	-	-	***<0.010***	-	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Chrysene	µg/L	n/v	n/v	0.0001$_a$[G]	-	-	***<0.010***	-	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Dibenzo(a,h)anthracene	µg/L	n/v	n/v	0.002$_a$[G]	-	-	***<0.010***	-	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0075***	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	-	-
Fluoranthene	µg/L	n/v	0.04[C]	0.0008$_a$[G]	-	-	**0.017[G]**	-	**0.034[G]**	**0.029[G]**	***<0.010***	nc	**0.012[G]**	**0.018[G]**	-	-	-	***<0.010***	-	***<0.010***	-	-
Fluorene	µg/L	59[A]	3[C]	0.2$_a$[G]	-	-	<0.020 MI	-	0.026	0.031	0.019	nc	<0.050	<0.010	-	-	-	<0.010	-	<0.010	-	-
Indeno(1,2,3-cd)pyrene	µg/L	n/v	n/v	n/v	-	-	<0.010	-	<0.010	<0.010	<0.010	nc	<0.0085	<0.010	-	-	-	<0.010	-	<0.010	-	-
Methylnaphthalene (Total)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/L	32[A]	n/v	2$_b$[G]	-	-	0.039	-	0.018	0.025	0.022	nc	<0.10	<0.010	-	-	-	<0.010	-	<0.010	-	-
Methylnaphthalene, 2-	µg/L	22[A]	n/v	2$_b$[G]	-	-	0.047	-	0.028	0.029	0.023	nc	<0.10	<0.010	-	-	-	<0.010	-	<0.010	-	-
Naphthalene	µg/L	59[A] 6.4[B]	1.1[C]	7$_a$[G]	-	-	0.16	-	0.14	0.12	0.10	33%	0.22	<0.020 MI	-	-	-	<0.020 MI	-	<0.020 MI	-	-
Perylene	µg/L	n/v	n/v	0.00007$_a$[G]	-	-	-	-	-	-	-	-	***<0.050***	-	-	-	-	-	-	-	-	-
Phenanthrene	µg/L	n/v	0.4[C]	0.03$_a$[G]	-	-	**0.068[G]**	-	**0.12[G]**	**0.11[G]**	**0.057[G]**	71%	**0.056[G]**	0.021	-	-	-	<0.010	-	<0.010	-	-
Pyrene	µg/L	n/v	0.025[C]	n/v	-	-	0.017	-	0.024	0.013	<0.010	nc	<0.020	0.014	-	-	-	<0.010	-	<0.010	-	-
Benzo(a)pyrene Total Potency Equivalents	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.010	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls																						
Aroclor 1016	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1221	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1232	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1242	µg/L	n/v	n/v	s7[E]	-	-	0.01	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/L	n/v	n/v	s7[E]	-	-	0.02	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/L	n/v	n/v	s7[E]	-	-	0.02	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-
Aroclor 1262	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1268	µg/L	n/v	n/v	s7[E]	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/L	0.4[B]	n/v	0.001$_{s7}$[E]	-	-	**0.04[E]**	-	-	-	-	-	***<0.05***	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					1 OBSERVATORY		MW16-1		MW16-3					MW16-5				MW16-6		MW16-7		MW16-7A
Sample Date					7-Feb-20	7-Feb-20	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16		6-Feb-20	18-Mar-16	18-Mar-16	10-Aug-16	10-Aug-16	17-Mar-16	10-Aug-16	17-Mar-16	17-Mar-16	10-Aug-16
Sample ID					1 OBSERVATORY	1 OBSERVATORY Lab-Dup	MW16-1	MW16-1 Lab-Dup	MW16-3	MW16-3 Lab-Dup	DUP-1		MW16-3	MW16-5	MW16-5 Lab-Dup	MW16-5	MW16-5 Lab-Dup	MW16-6	MW16-6	MW16-7	MW16-7 Lab-Dup	MW16-7A
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					BV	BV	MAXX	MAXX	MAXX	MAXX	MAXX		BV	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order					C035567	C035567	B655361/B620743/B620802	B620743/B655361	B655361/B620743/B620802	B655361	B655361		C034481	B655361/B620743/B620802	B655361	B6H0159/B668006/B668100	B6H0159	B655361/B620743/B620802	B6H0159/B668006/B668100	B655361/B620802	B655361	B6H0159/B668006/B668100
Laboratory Sample ID					LYY061	LYY061	CAX628/OH7552/OH7910	OH7552/CAX628	CAX629/OH7553/OH7911	CAX629	CAX633	RPD	LYS004	CAX630/OH7912/OH7554	CAX630	CWI943/PG2907/PG3438/PG3439	CWI943	CAX631/OH7555/OH7913	CWI944/PG2908/PG3440/PG3441	CAX632/OH7914	CAX632	CWI945/PG2909/PG3442/PG3443
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate				Lab Replicate	
Volatile Organic Compounds																						
Acetone	µg/L	n/v	n/v	n/v	<10	-	130	140	<10	-	<10	nc	<10	<10	-	-	-	<10	-	<10	-	-
Benzene	µg/L	10[A] 2[B]	370[C]	100[b,G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Bromodichloromethane	µg/L	350[A]	n/v	200[a,G]	3.8	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.50	<0.10	-	-	-	<0.10	-	<0.10	-	-
Bromoform (Tribromomethane)	µg/L	630[A]	n/v	60[a,G]	<1.0	-	<0.20	<0.20	<0.20	-	<0.20	nc	<1.0	<0.20	-	-	-	<0.20	-	<0.20	-	-
Bromomethane (Methyl bromide)	µg/L	110[A]	n/v	0.9[a,G]	<0.50	-	<0.50	<0.50	<0.50	-	<0.50	nc	<0.50	<0.50	-	-	-	<0.50	-	<0.50	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/L	57[A]	13.3[C]	n/v	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Chlorobenzene (Monochlorobenzene)	µg/L	57[A]	1.3[C]	15[E]	<0.20	-	0.22	0.28	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Chloroform (Trichloromethane)	µg/L	80[A] 2[B]	1.8[C]	n/v	**23[BC]**	-	0.71	0.54	0.46	-	0.51	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dibromochloromethane	µg/L	57[A]	n/v	40[a,G]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichlorobenzene, 1,2-	µg/L	88[A] 5.6[B]	0.7[C]	2.5[E]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichlorobenzene, 1,3-	µg/L	36[A]	150[C]	2.5[E]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichlorobenzene, 1,4-	µg/L	17[A] 6.8[B]	26[C]	4[E]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichlorodifluoromethane (Freon 12)	µg/L	n/v	n/v	n/v	<1.0	-	<0.50	<0.50	<0.50	-	<0.50	nc	<1.0	<0.50	-	-	-	<0.50	-	<0.50	-	-
Dichloroethane, 1,1-	µg/L	200[A]	n/v	200[G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dichloroethane, 1,2-	µg/L	210[A]	100[C]	100[G]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichloroethene, 1,1-	µg/L	40[A]	n/v	40[G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dichloroethene, cis-1,2-	µg/L	200[A] 5.6[B]	n/v	200[G]	<0.50	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.50	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dichloroethene, trans-1,2-	µg/L	200[A]	n/v	200[G]	<0.50	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.50	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dichloropropane, 1,2-	µg/L	850[A]	n/v	0.7[a,G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/L	n/v	n/v	n/v	<0.50	-	<0.28	-	<0.28	-	<0.28	nc	<0.50	<0.28	-	-	-	<0.28	-	<0.28	-	-
Dichloropropene, cis-1,3-	µg/L	70[A]	n/v	n/v	<0.30	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.30	<0.20	-	-	-	<0.20	-	<0.20	-	-
Dichloropropene, trans-1,3-	µg/L	70[A] 5.6[B]	n/v	7[a,G]	<0.40	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.40	<0.20	-	-	-	<0.20	-	<0.20	-	-
Ethylbenzene	µg/L	57[A] 2[B]	90[C]	8[G]	<0.20	-	0.52	0.56	0.13	-	0.16	nc	0.21	<0.10	-	-	-	<0.10	-	<0.10	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	28[A]	n/v	5[a,G]	<0.20	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.20	<0.20	-	-	-	<0.20	-	<0.20	-	-
Hexane (n-Hexane)	µg/L	n/v	n/v	n/v	<1.0	-	<0.50	<0.50	<0.50	-	<0.50	nc	<1.0	<0.50	-	-	-	<0.50	-	<0.50	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/L	n/v	n/v	400[a,G]	<10	-	8.2	8.6	<5.0	-	<5.0	nc	<10	<5.0	-	-	-	<5.0	-	<5.0	-	-
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	n/v	n/v	<5.0	-	<5.0	<5.0	<5.0	-	<5.0	nc	<5.0	<5.0	-	-	-	<5.0	-	<5.0	-	-
Methyl tert-butyl ether (MTBE)	µg/L	n/v	10,000[C]	200[a,G]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Methylene Chloride (Dichloromethane)	µg/L	211[A] 5.2[B]	98.1[C]	100[a,G]	<2.0	-	<0.50	<0.50	<0.50	-	<0.50	nc	<2.0	<0.50	-	-	-	<0.50	-	<0.50	-	-
Styrene	µg/L	40[A]	72[C]	4[G]	<0.50	-	0.24	0.27	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	n/v	n/v	20[a,G]	<0.50	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.50	<0.10	-	-	-	<0.10	-	<0.10	-	-
Tetrachloroethane, 1,1,2,2-	µg/L	40[A] 17[B]	n/v	70[G]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Tetrachloroethene (PCE)	µg/L	50[A] 4.4[B]	110[C]	50[G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Toluene	µg/L	80[A] 2[B]	2[C]	0.8[G]	<0.20	-	0.69	**0.81[G]**	0.25	-	0.26	nc	0.70	<0.20	-	-	-	<0.20	-	0.23	-	-
Trichloroethane, 1,1,1-	µg/L	54[A]	n/v	10[a,G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Trichloroethane, 1,1,2-	µg/L	800[A]	n/v	800[G]	<0.50	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.50	<0.20	-	-	-	<0.20	-	<0.20	-	-
Trichloroethene (TCE)	µg/L	54[A] 7.6[B]	21[C]	20[G]	<0.20	-	<0.10	<0.10	<0.10	-	<0.10	nc	<0.20	<0.10	-	-	-	<0.10	-	<0.10	-	-
Trichlorofluoromethane (Freon 11)	µg/L	20[A]	n/v	n/v	<0.50	-	8.3	8.1	3.0	-	3.5	15%	5.4	<0.20	-	-	-	<0.20	-	<0.20	-	-
Vinyl Chloride	µg/L	400[A]	n/v	600[a,G]	<0.20	-	<0.20	<0.20	<0.20	-	<0.20	nc	<0.20	<0.20	-	-	-	<0.20	-	<0.20	-	-
Xylene, m & p-	µg/L	n/v	n/v	32[a,G,F]	<0.20	-	0.34	0.29	0.11	-	<0.10	nc	0.48	<0.10	-	-	-	<0.10	-	0.12	-	-
Xylene, o-	µg/L	n/v	n/v	40[b,G]	<0.20	-	0.20	0.20	<0.10	-	<0.10	nc	0.51	<0.10	-	-	-	<0.10	-	<0.10	-	-
Xylenes, Total	µg/L	320[A] 4.4[B]	n/v	72[a,b,F]	<0.20	-	0.53	0.49	0.11	-	<0.10	nc	0.98	<0.10	-	-	-	<0.10	-	0.12	-	-
Glycols																						
Diethylene Glycol	mg/L	n/v	n/v	11[a,G]	-	-	<5	-	<5	-	<5	nc	-	<5	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/L	n/v	192[C]	2[a,G]	-	-	***<5***	-	***<5***	-	***<5***	nc	-	***<5***	-	-	-	-	-	-	-	-
Propylene Glycol, 1,2-	mg/L	n/v	500[C]	44[a,G]	-	-	<5	-	<5	-	<5	nc	-	<5	-	-	-	-	-	-	-	-
Total Glycol	mg/L	n/v	n/v	n/v	-	-	<5	-	<5	-	<5	nc	-	<5	-	-	-	-	-	-	-	-
Herbicides and Pesticides																						
1,3-Dinitrobenzene (m-Dinitrobenzene)	µg/L	n/v	n/v	1[b,G]	-	-	***<50***	-	***<5***	***<5***	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
2-Amino-4,6-dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
4-Amino-2,6-Dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Aldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Aldrin + Dieldrin	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-
BHC, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
BHC, beta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
BHC, delta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Camphechlor (Toxaphene)	µg/L	n/v	n/v	0.008[E]	-	-	-	-	-	-	-	-	***<0.2***	-	-	-	-	-	-	-	-	-
Chlordane (Total)	µg/L	n/v	n/v	0.06[E]	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Chlordane, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Chlordane, gamma-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDD (p,p'-DDD)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDD, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDD, o,p'- + DDD, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDE (p,p'-DDE)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDE, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDE, o,p'- + DDE, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDT (p,p'-DDT)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDT, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDT, o,p'- + DDT, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
DDT+ Metabolites	µg/L	n/v	n/v	0.003[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					1 OBSERVATORY		MW16-1		MW16-3					MW16-5				MW16-6		MW16-7		MW16-7A
Sample Date					7-Feb-20	7-Feb-20	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16	17-Mar-16		6-Feb-20	18-Mar-16	18-Mar-16	10-Aug-16	10-Aug-16	17-Mar-16	10-Aug-16	17-Mar-16	17-Mar-16	10-Aug-16
Sample ID					1 OBSERVATORY	1 OBSERVATORY Lab-Dup	MW16-1	MW16-1 Lab-Dup	MW16-3	MW16-3 Lab-Dup	DUP-1		MW16-3	MW16-5	MW16-5 Lab-Dup	MW16-5	MW16-5 Lab-Dup	MW16-6	MW16-6	MW16-7	MW16-7 Lab-Dup	MW16-7A
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					BV	BV	MAXX	MAXX	MAXX	MAXX	MAXX		BV	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX
Laboratory Work Order					C035567	C035567	B655361/B620743/B620802	B620743/B655361	B655361/B620743/B620802	B655361	B655361		C034481	B655361/B620743/B620802	B655361	B6H0159/B668006/B668100	B6H0159	B655361/B620743/B620802	B6H0159/B668006/B668100	B655361/B620802	B655361	B6H0159/B668006/B668100
Laboratory Sample ID					LYY061	LYY061	CAX628/OH7552/OH7910	OH7552/CAX628	CAX629/OH7553/OH7911	CAX629	CAX633	RPD	LYS004	CAX630/OH7912/OH7554	CAX630	CWI943/PG2907/PG3438/PG3439	CWI943	CAX631/OH7555/OH7913	CWI944/PG2908/PG3440/PG3441	CAX632/OH7914	CAX632	CWI945/PG2909/PG3442/PG3443
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate				Lab Replicate	
Herbicides and Pesticides																						
Dieldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/L	n/v	n/v	4[G]	-	-	***<50***	-	***<5***	***<5***	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Dinitrotoluene, 2,6-	µg/L	n/v	n/v	6[G]	-	-	***<50***	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Endosulfan	µg/L	n/v	0.003[C] 0.06[D]	0.003[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-
Endosulfan I	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Endosulfan II	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Endosulfan Sulfate	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Endrin	µg/L	n/v	n/v	0.002[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-
Endrin Aldehyde	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Endrin Ketone	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Heptachlor	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Heptachlor + Heptachlor Epoxide	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-
Heptachlor Epoxide	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/L	0.1[A] 0.04[B]	n/v	0.0065[E]	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/L	n/v	n/v	n/v	-	-	<100	-	<10	<10	-	-	-	<1	-	-	-	<1	-	<1	-	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	n/v	n/v	0.01[E]	-	-	-	-	-	-	-	-	<0.003	-	-	-	-	-	-	-	-	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	n/v	n/v	0.04[E]	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-
Mirex	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/L	n/v	n/v	0.02$_9$[G]	-	-	***<50***	-	***<5***	***<5***	-	-	-	***<0.5***	-	-	-	***<0.5***	-	***<0.5***	-	-
Nitrotoluene, 2-	µg/L	n/v	n/v	n/v	-	-	<200	-	<20	<20	-	-	-	<2	-	-	-	<2	-	<2	-	-
Nitrotoluene, 3-	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Nitrotoluene, 4-	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Octachlorostyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/L	n/v	n/v	n/v	-	-	<100	-	<10	<10	-	-	-	<1	-	-	-	<1	-	<1	-	-
Oxychlordane	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/L	n/v	n/v	n/v	-	-	<200	-	<20	<20	-	-	-	<2	-	-	-	<2	-	<2	-	-
Trinitrobenzene, 1,3,5-	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Trinitrotoluene, 2,4,6-	µg/L	n/v	n/v	n/v	-	-	<50	-	<5	<5	-	-	-	<0.5	-	-	-	<0.5	-	<0.5	-	-
Phenols																						
Chloro-3-methyl phenol, 4-	µg/L	n/v	n/v	3$_a$[G]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	n/v	4[C]	1$_b$[G]	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	4[C]	1$_b$[G]	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/L	44[A]	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	**0.3**[CE]	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/L	n/v	n/v	10$_b$[G]	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/L	n/v	n/v	0.2$_s$[G]	-	-	-	-	-	-	-	-	***<1***	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/L	n/v	n/v	0.5$_b$[G]	-	-	-	-	-	-	-	-	***<1***	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/L	n/v	n/v	50$_b$[G]	-	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/L	n/v	0.5[C]	0.5[E]	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Phenol	µg/L	n/v	4[C]	5$_b$[G]	-	-	-	-	-	-	-	-	3.8	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-
Explosives																						
Nitroglycerin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-8												MW16-9								MW16-12
Sample Date					10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	29-Aug-16	29-Aug-16	16-Sep-16	24-Oct-19	24-Oct-19	24-Oct-19		1-Nov-19	6-Feb-20	10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	24-Oct-19	24-Oct-19	1-Nov-19	6-Feb-20	10-Aug-16
Sample ID					MW16-8	MW16-8-2016.08.11	MW16-8-2016.08.12	MW16-8-2016.08.15 (CWS457)	MW16-8(2016.08.29)	MW16-8(2016.08.29) Lab-Dup	MW16-8	MW16-8	MW16-8 Lab-Dup	DUP-02		MW16-8	MW16-8	MW16-9 2016.08.10 07:55	MW16-9 2016.08.11 08:10	MW16-9 (CW1951-02)	MW16-9	MW16-9	MW16-9 Lab-Dup	MW16-9	MW16-9	MW16-12
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	BV	BV	BV		BV	BV	MAXX	MAXX	MAXX	MAXX	BV	BV	BV	BV	MAXX
Laboratory Work Order					B6H0159	B6H2160	B668730/B6H2160	B668714/B6H2160	B6I6789	B6I6789	B6J8970	B9U0312	B9U0312	B9U0312		B9U7912	C034481	B6H0159	B6H0159/B668100	B668006/B6H0159	B6H2160	B9U0312	B9U0312	B9U7912	C034481	B6H0159/B668006/B668100
Laboratory Sample ID					CWI948	CWS458	PG6817/CWS456	PG6714/CWS457	CZM192	CZM192	DBU839	LDB876	LDB876	LDB880	RPD	LET602	LYS002	CWI949	CWI950/PG3448/PG3449	PG2912/CWI951	CWS455	LDB877	LDB877	LET603	LYS003	CWI946/PG2910/PG3444/PG3445
Sample Type	Units	Ottawa	CCME	PWQO						Lab Replicate			Lab Replicate	Field Duplicate	(%)								Lab Replicate			
General Chemistry																										
Ammonia	mg/L	n/v	$_{TBC}^{C}$	n/v	-	-	-	-	-	-	-	0.15	-	0.21	nc	-	0.27	-	-	-	-	<0.061	-	-	<0.061	-
Ammonia (as N)	mg/L	n/v	$_{TBC2}^{C}$	n/v	-	-	0.26	-	-	-	-	0.12	-	0.17	nc	-	0.22	-	<0.050	-	-	<0.050	-	-	<0.050	0.15
Chloride	mg/L	n/v	120[C] 640[D]	n/v	-	92	-	-	-	-	-	-	-	-	-	-	-	-	**360[C]**	-	-	-	-	-	-	**1,200[CD]**
Chloride, Dissolved	mg/L	n/v	120[C] 640[D]	n/v	-	-	-	-	-	-	-	**150[C]**	-	**150[C]**	0%	-	**140[C]**	-	-	-	-	94	-	-	35	-
Cyanide (Free)	mg/L	2[A] 0.02[B]	0.005[C]	0.005[E]	-	-	-	-	-	-	-	<0.0010	<0.0010	<0.0010	nc	-	<0.0010	-	-	-	-	<0.0010	-	-	<0.0010	-
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	<0.0020	-	-	-	-	-	-	-	-	-	-	-	<0.0020	-	-	-	-	-	-	<0.0020
Cyanide (Weak Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Filter and HNO3 Preservation	none	n/v	n/v	n/v	-	-	-	FIELD	-	-	-	-	-	-	-	-	-	-	-	FIELD	-	-	-	-	-	FIELD
Fluoride	mg/L	10[A]	0.12[C]	n/v	-	**0.13[C]**	-	-	-	-	-	**0.15[C]**	-	**0.15[C]**	nc	-	**0.17[C]**	-	**0.16[C]**	-	-	<0.10	-	-	<0.10	**0.16[C]**
Hardness (as CaCO3)	mg/L	n/v	n/v	n/v	-	-	-	736	-	-	-	-	-	-	-	-	-	-	-	976	-	-	-	-	-	1,340
Hardness (as CaCO3), Total	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	754	-	792	5%	-	-	-	-	-	-	747	-	-	-	-
Hardness (Dissolved Metals)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	637	-	638	0%	-	523	-	-	-	-	714	-	-	640	-
Hydrogen Sulfide	mg/L	n/v	n/v	n/v	-	-	<0.0020	-	-	-	-	-	-	-	-	-	-	-	<0.010	-	-	-	-	-	-	<0.0020
Nitrate	mg/L	n/v	13[C] 550[D]	n/v	-	-	-	-	-	-	-	<0.4	-	<0.4	nc	-	<0.4	-	-	-	-	<0.4	-	-	<0.4	-
Nitrate (as N)	mg/L	n/v	3.0[C] 124[D]	n/v	-	1.43	-	-	-	-	-	<0.10	-	<0.10	nc	-	<0.10	-	<0.10	-	-	<0.10	-	-	<0.10	<0.10
Nitrate + Nitrite (as N)	mg/L	n/v	n/v	n/v	-	1.46	-	-	-	-	-	<0.10	-	<0.10	nc	-	<0.10	-	<0.10	-	-	<0.10	-	-	<0.10	<0.10
Nitrite (as N)	mg/L	n/v	0.06[C]	n/v	-	0.028	-	-	-	-	-	0.016	-	0.018	nc	-	<0.010	-	<0.010	-	-	<0.010	-	-	<0.010	<0.010
pH, lab	S.U.	5.5-11[A] 6-9[B]	6.5-9.0[C]	6.5-8.5[E]	-	7.48	-	-	-	-	-	7.46	-	7.58	nc	-	7.62	-	7.81	-	-	7.55	-	-	7.59	7.68
Phenols (Phenolics)	mg/L	1[A] 0.008[B]	0.004[C]	0.001[E]	-	-	-	-	-	-	<0.0010	-	-	-	-	-	-	-	**0.021[BCE]**	-	-	-	-	-	-	<0.0010
Phenols-4AAP	mg/L	1[A] 0.008[B]	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	<0.0010	-	-	-	-	-	-	-	<0.0010	-	-
Sulfide	mg/L	2[A]	n/v	n/v	-	-	<0.0019	-	-	-	-	-	-	-	-	-	-	-	<0.0095 MI	-	-	-	-	-	-	<0.0019
Sulfide, Total	mg/L	2[A]	n/v	n/v	-	-	-	-	-	-	-	0.0032 YE	-	0.0040 YE	nc	-	<0.0018 YE	-	-	-	-	<0.0018 YE	-	-	<0.018 DSM YE	-
Sulfate	mg/L	1,500[A]	n/v	n/v	-	170	-	-	-	-	-	120	-	130	8%	-	140	-	260	-	-	150	-	-	130	120
Sulfide (as H2S)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	0.0030	-	0.0040	nc	-	<0.0020	-	-	-	-	<0.0020	-	-	<0.019	-
Total Suspended Solids	mg/L	350[A] 15[B]	$_{SN}^{C}$	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	100[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Suspended Solids (VSS)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Petroleum Hydrocarbons																										
PHC F1 (C6-C10 range)	µg/L	n/v	n/v	n/v	<25	-	-	-	-	-	-	<25	-	<25	nc	-	<25	-	-	-	-	<25	<25	-	<25	<25
PHC F1 (C6-C10 range) minus BTEX	µg/L	n/v	n/v	n/v	<25	-	-	-	-	-	-	<25	-	<25	nc	-	<25	-	-	-	-	<25	<25	-	<25	<25
PHC F2 (>C10-C16 range)	µg/L	n/v	n/v	n/v	<100	-	-	-	-	-	-	<100	-	<100	nc	-	<100	-	-	-	-	<100	-	-	<100	<100
PHC F3 (>C16-C34 range)	µg/L	n/v	n/v	n/v	<200	-	-	-	-	-	-	<200	-	<200	nc	-	<200	-	-	-	-	<200	-	-	<200	<200
PHC F4 (>C34-C50 range)	µg/L	n/v	n/v	n/v	<200	-	-	-	-	-	-	<200	-	<200	nc	-	<200	-	-	-	-	<200	-	-	<200	<200
Chromatogram to baseline at C50	none	n/v	n/v	n/v	YES	-	-	-	-	-	-	YES	-	YES	nc	-	YES	-	-	-	-	YES	-	-	YES	YES
Metals, Dissolved																										
Aluminum	µg/L	50,000[A]	100_{VAR1}^{C}	n/v	-	-	-	9.88	-	-	-	<6.0	-	<6.0	nc	-	<6.0	-	-	15.5	-	<15	-	-	<6.0	8.0
Antimony	µg/L	5,000[A]	n/v	20^{G}	-	-	-	0.188	-	-	-	<1.0	-	<1.0	nc	-	<1.0	-	-	0.513	-	<2.5	-	-	<1.0	0.18
Arsenic	µg/L	1,000[A] 20[B]	5^{C}	100^{E} 5^{G}	-	-	-	0.422	-	-	-	0.37	-	0.38	nc	-	0.24	-	-	1.59	-	<0.50	-	-	<0.20	0.24
Barium	µg/L	n/v	n/v	n/v	-	-	-	189	-	-	-	128	-	127	1%	-	105	-	-	196	-	65.4	-	-	61.9	108
Beryllium	µg/L	n/v	n/v	$1{,}100_{s3}^{E}$	-	-	-	<0.010	-	-	-	<0.20	-	<0.20	nc	-	<0.20	-	-	<0.010	-	<0.50	-	-	<0.20	<0.050
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	<0.0050	-	-	-	<2.0	-	<2.0	nc	-	<2.0	-	-	<0.0050	-	<5.0	-	-	<2.0	<0.025
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200_{a}^{G}	-	-	-	50	-	-	-	<100	-	<100	nc	-	<100	-	-	36	-	***<250***	-	-	<100	<50
Cadmium	µg/L	20[A] 8[B]	0.37_{LTG}^{C} 7.7_{STB}^{D}	0.2^{E} 0.5_{s12}^{G}	-	-	-	0.0270	-	-	-	0.031	-	0.020	nc	-	0.034	-	-	0.0340	-	<0.050	-	-	<0.020	<0.025
Calcium	mg/L	n/v	n/v	n/v	-	-	-	190	-	-	-	179	-	178	1%	-	145	-	-	188	-	159	-	-	153	203
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	0.17	-	-	-	<2.0	-	<2.0	nc	-	<2.0	-	-	0.32	-	<5.0	-	-	<2.0	<0.50
Chromium (Hexavalent)	µg/L	n/v	1^{C}	1^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9^{G}	-	-	-	0.100	-	-	-	0.72	-	0.73	nc	-	0.63	-	-	**3.27[G]**	-	***<1.0***	-	-	<0.40	0.697
Copper	µg/L	3,000[A] 40[B]	4_{TBC1}^{C}	5^{E} 5_{s13}^{G}	-	-	-	2.04	-	-	-	0.78	-	0.73	nc	-	1.11	-	-	0.877	-	1.0	-	-	0.77	0.38
Iron	µg/L	n/v	300^{C}	300^{E}	-	-	-	11.3	-	-	-	<10	-	<10	nc	-	15	-	-	77.2	-	<25	-	-	<10	**405[CE]**
Lead	µg/L	5,000[A] 120[B]	7_{TBC1}^{C}	25_{s14}^{E} 5_{s15}^{G}	-	-	-	0.0190	-	-	-	<0.40	-	<0.40	nc	-	<0.40	-	-	0.0400	-	<1.0	-	-	<0.40	<0.025
Lithium	µg/L	n/v	n/v	n/v	-	-	-	7.83	-	-	-	6.2	-	6.4	nc	-	4.9	-	-	16.0	-	<10	-	-	5.1	20.6
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	63.5	-	-	-	46.2	-	47.0	2%	-	39.2	-	-	123	-	77.2	-	-	62.5	202
Manganese	µg/L	5,000[A] 50[B]	430_{EO4}^{C} $3{,}600_{EO3}^{D}$	n/v	-	-	-	26.6	-	-	-	**175[B]**	-	**188[B]**	7%	-	**279[B]**	-	-	**446[BC]**	-	19.9	-	-	<2.0	**289[B]**
Mercury	µg/L	1[A] 0.4[B]	0.026^{C}	0.2^{E}	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01
Molybdenum	µg/L	5,000[A]	73^{C}	40^{G}	-	-	-	3.61	-	-	-	<2.0	-	<2.0	nc	-	<2.0	-	-	39.6	-	8.1	-	-	3.3	4.09
Nickel	µg/L	3,000[A] 80[B]	150_{TBC1}^{C}	25^{E}	-	-	-	2.17	-	-	-	<2.0	-	<2.0	nc	-	<2.0	-	-	3.70	-	<5.0	-	-	2.8	1.38
Potassium	mg/L	n/v	n/v	n/v	-	-	-	7.21	-	-	-	3.99	-	4.01	1%	-	3.44	-	-	17.1	-	5.44	-	-	3.81	8.49
Selenium	µg/L	5,000[A] 20[B]	1^{C}	100^{E}	-	-	-	0.576	-	-	-	<0.20	-	<0.20	nc	-	<0.20	-	-	0.591	-	0.50	-	-	<0.20	<0.20
Silicon	µg/L	n/v	n/v	n/v	-	-	-	10,900	-	-	-	9,250	-	9,330	1%	-	9,160	-	-	13,100	-	9,560	-	-	8,120	22,800
Silver	µg/L	5,000[A] 120[B]	0.25^{C}	0.1^{E}	-	-	-	0.0140	-	-	-	<0.040	-	<0.040	nc	-	<0.040	-	-	0.0460	-	<0.10	-	-	<0.040	0.045
Sodium	mg/L	n/v	n/v	n/v	-	-	-	18.6	-	-	-	26.1	-	25.5	2%	-	49.4	-	-	93.4	-	38.9	-	-	30.8	310
Strontium	µg/L	n/v	n/v	n/v	-	-	-	24,100	-	-	-	13,100	-	13,300	2%	-	10,400	-	-	50,900	-	29,100	-	-	10,800	84,700
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	55.3	-	-	-	37.8	-	38.1	1%	-	38.8	-	-	86.9	-	51	-	-	45.9	48
Thallium	µg/L	n/v	0.8^{C}	0.3_{s}^{G}	-	-	-	0.0070	-	-	-	<0.020	-	<0.020	nc	-	<0.020	-	-	0.0230	-	<0.050	-	-	<0.020	<0.010
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	0.50	-	-	-	<10	-	<10	nc	-	<10	-	-	0.42	-	<25	-	-	<10	<1.0
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	0.74	-	-	-	<10	-	<10	nc	-	<10	-	-	0.94	-	<25	-	-	<10	<2.5
Uranium	µg/L	n/v	15^{C} 33^{D}	5_{a}^{G}	-	-	-	2.75	-	-	-	**6.67[G]**	-	2.84	3%	-	1.43	-	-	3.90	-	4.25	-	-	3.24	0.158
Vanadium	µg/L	5,000[A]	n/v	6^{G}	-	-	-	2.59	-	-	-	***<10***	-	***<10***	nc	-	***<10***	-	-	1.30	-	***<25***	-	-	***<10***	<1.0
Zinc	µg/L	3,000[A] 40[B]	7.0_{EO2}^{C} 37_{EO1}^{D}	30^{E} 20^{G}	-	-	-	2.29	-	-	-	***<10***	-	***<10***	nc	-	***<10***	-	-	3.60	-	***<25***	-	-	***<10***	1.61
Zirconium	µg/L	n/v	n/v	4_{a}^{G}	-	-	-	0.14	-	-	-	<0.20	-	<0.20	nc	-	<0.20	-	-	0.12	-	<0.50	-	-	<0.20	<0.50

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-8												MW16-9								MW16-12
Sample Date					10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	29-Aug-16	29-Aug-16	16-Sep-16	24-Oct-19	24-Oct-19	24-Oct-19		1-Nov-19	6-Feb-20	10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	24-Oct-19	24-Oct-19	1-Nov-19	6-Feb-20	10-Aug-16
Sample ID					MW16-8	MW16-8-2016.08.11	MW16-8-2016.08.12	MW16-8-2016.08.15 (CWS457)	MW16-8(2016.08.29)	MW16-8(2016.08.29) Lab-Dup	MW16-8	MW16-8	MW16-8 Lab-Dup	DUP-02		MW16-8	MW16-8	MW16-9 2016.08.10 07:55	MW16-9 2016.08.11 08:10	MW16-9 (CW1951-02)	MW16-9	MW16-9	MW16-9 Lab-Dup	MW16-9	MW16-9	MW16-12
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	MAXX	BV	BV	BV		BV	BV	MAXX	MAXX	MAXX	MAXX	BV	BV	BV	BV	MAXX
Laboratory Work Order					B6H0159	B6H2160	B668730/B6H2160	B668714/B6H2160	B6I6789	B6I6789	B6J8970	B9U0312	B9U0312	B9U0312		B9U7912	C034481	B6H0159	B6H0159/B668100	B668006/B6H0159	B6H2160	B9U0312	B9U0312	B9U7912	C034481	B6H0159/B668006/B668100
Laboratory Sample ID					CWI948	CWS458	PG6817/CWS456	PG6714/CWS457	CZM192	CZM192	DBU839	LDB876	LDB876	LDB880	RPD	LET602	LYS002	CWI949	CWI950/PG3448/PG3449	PG2912/CWI951	CWS455	LDB877	LDB877	LET603	LYS003	CWI946/PG2910/PG3444/PG3445
Sample Type	Units	Ottawa	CCME	PWQO						Lab Replicate			Lab Replicate	Field Duplicate	(%)								Lab Replicate			
Metals, Total																										
Aluminum	µg/L	50,000[A]	100$_{VAR1}$[C]	n/v	-	-	-	-	-	-	-	**1,780**[C]	-	**1,560**[C]	13%	-	-	-	-	-	-	**333**[C]	-	-	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	-	-	-	-	-	-	-	<2.5	-	<2.5	nc	-	-	-	-	-	-	<2.5	-	-	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	-	-	-	-	-	-	-	1.28	-	1.15	nc	-	-	-	-	-	-	0.53	-	-	-	-
Barium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	167	-	175	5%	-	-	-	-	-	-	70.5	-	-	-	-
Beryllium	µg/L	n/v	n/v	1,100$_{s3}$[E]	-	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	-	-	-	-	-	<0.50	-	-	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	<5.0	-	<5.0	nc	-	-	-	-	-	-	<5.0	-	-	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200$_a$[G]	-	-	-	-	-	-	-	***<250***| -	***<250***	nc	-	-	-	-	-	-	***<250***	-	-	-	-
Cadmium	µg/L	20[A] 8[B]	0.37$_{LTG}$[C] 7.7$_{STB}$[D]	0.2[E] 0.5$_{s12}$[G]	-	-	-	-	-	-	-	<0.050	-	<0.050	nc	-	-	-	-	-	-	<0.050	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	195	-	204	5%	-	-	-	-	-	-	168	-	-	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	-	-	-	-	<5.0	-	<5.0	nc	-	-	-	-	-	-	<5.0	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	-	-	-	-	-	-	-	**1.9**[G]	-	**2.0**[G]	nc	-	-	-	-	-	-	***<1.0***	-	-	-	-
Copper	µg/L	3,000[A] 40[B]	4$_{TBC1}$[C]	5[E] 5$_{s13}$[G]	-	-	-	-	-	-	-	2.7	-	2.8	nc	-	-	-	-	-	-	<2.5	-	-	-	-
Iron	µg/L	n/v	300[C]	300[E]	-	-	-	-	-	-	-	**2,340**[CE]	-	**2,170**[CE]	8%	-	-	-	-	-	-	**550**[CE]	-	-	-	-
Lead	µg/L	5,000[A] 120[B]	7$_{TBC1}$[C]	25$_{s14}$[E] 5$_{s15}$[G]	-	-	-	-	-	-	-	1.1	-	1.2	nc	-	-	-	-	-	-	<1.0	-	-	-	-
Lithium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	13	-	13	nc	-	-	-	-	-	-	<10	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	64.8	-	68.4	5%	-	-	-	-	-	-	79.5	-	-	-	-
Manganese	µg/L	5,000[A] 50[B]	430$_{EO4}$[C] 3,600$_{EO3}$[D]	n/v	-	-	-	-	-	-	-	**508**[BC]	-	**544**[BC]	7%	-	-	-	-	-	-	39.2	-	-	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	-	-	-	-	-	-	-	<0.01	-	<0.01	nc	-	<0.01	-	-	-	-	<0.01	-	-	<0.01	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	-	-	-	-	-	-	-	<5.0	-	<5.0	nc	-	-	-	-	-	-	8.1	-	-	-	-
Nickel	µg/L	3,000[A] 80[B]	150$_{TBC1}$[C]	25[E]	-	-	-	-	-	-	-	<5.0	-	<5.0	nc	-	-	-	-	-	-	<5.0	-	-	-	-
Potassium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	6.51	-	6.91	6%	-	-	-	-	-	-	5.60	-	-	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	-	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	-	-	-	-	-	<0.50	-	-	-	-
Silicon	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	14,500	-	15,000	3%	-	-	-	-	-	-	11,100	-	-	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	-	-	-	-	-	-	-	<0.10	-	<0.10	nc	-	-	-	-	-	-	<0.10	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	23.0	-	22.4	3%	-	-	-	-	-	-	39.2	-	-	-	-
Strontium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	21,400	-	23,000	7%	-	-	-	-	-	-	31,200	-	-	-	-
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	50	-	53	nc	-	-	-	-	-	-	52	-	-	-	-
Thallium	µg/L	n/v	0.8[C]	0.3$_b$[G]	-	-	-	-	-	-	-	<0.050	-	<0.050	nc	-	-	-	-	-	-	<0.050	-	-	-	-
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	<25	-	<25	nc	-	-	-	-	-	-	<25	-	-	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	164	-	141	15%	-	-	-	-	-	-	<25	-	-	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5$_a$[G]	-	-	-	-	-	-	-	4.63	-	4.94	6%	-	-	-	-	-	-	4.41	-	-	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	-	-	-	-	-	-	-	***<25***	-	***<25***	nc	-	-	-	-	-	-	***<25***	-	-	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0$_{EQ2}$[C] 37$_{EQ1}$[D]	30[E] 20[G]	-	-	-	-	-	-	-	***<25***	-	***<25***	nc	-	-	-	-	-	-	***<25***	-	-	-	-
Zirconium	µg/L	n/v	n/v	4$_a$[G]	-	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	-	-	-	-	-	<0.50	-	-	-	-
Polycyclic Aromatic Hydrocarbons																										
Acenaphthene	µg/L	n/v	5.8[C]	n/v	-	-	-	<0.010	-	-	-	<0.10	<0.10	<0.10	nc	-	<0.10	<0.010	-	-	-	<0.10	-	-	<0.10	<0.010
Acenaphthylene	µg/L	n/v	n/v	n/v	-	-	-	<0.010	-	-	-	<0.10	<0.10	<0.10	nc	-	<0.10	<0.010	-	-	-	<0.10	-	-	<0.10	<0.010
Acridine	µg/L	n/v	4.4[C]	n/v	-	-	-	-	-	-	-	<0.040	<0.040	<0.040	nc	-	<0.040	-	-	-	-	<0.040	-	-	<0.040	-
Anthracene	µg/L	n/v	0.012[CD]	0.0008$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.010***	***<0.010***	***<0.010***	nc	-	***<0.010***	***<0.010***	-	-	-	***<0.010***	-	-	***<0.010***	***<0.010***
Benzo(a)anthracene	µg/L	n/v	0.018[C]	0.0004$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.0085***	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.010***	-	-	-	***<0.0085***	-	-	***<0.0085***	***<0.010***
Benzo(a)pyrene	µg/L	n/v	0.015[C]	n/v	-	-	-	<0.010	-	-	-	<0.0075	<0.0075	<0.0075	nc	-	<0.0075	<0.010	-	-	-	<0.0075	-	-	<0.0075	<0.010
Benzo(b)pyridine (Quinoline)	µg/L	n/v	3.4[C]	10$_a$[G]	-	-	-	-	-	-	-	<0.20	<0.20	<0.20	nc	-	<0.20	-	-	-	-	<0.20	-	-	<0.20	-
Benzo(b/j)fluoranthene	µg/L	n/v	n/v	n/v	-	-	-	<0.010	-	-	-	<0.0085	<0.0085	<0.0085	nc	-	<0.0085	<0.010	-	-	-	<0.0085	-	-	<0.0085	<0.010
Benzo(c)phenanthrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	<0.050	<0.050	<0.050	nc	-	<0.050	-	-	-	-	<0.050	-	-	<0.050	-
Benzo(e)pyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	<0.050	<0.050	<0.050	nc	-	<0.050	-	-	-	-	<0.050	-	-	<0.050	-
Benzo(g,h,i)perylene	µg/L	n/v	n/v	0.00002$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.0085***	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.010***	-	-	-	***<0.0085***	-	-	***<0.0085***	***<0.010***
Benzo(k)fluoranthene	µg/L	n/v	n/v	0.0002$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.0085***	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.010***	-	-	-	***<0.0085***	-	-	***<0.0085***	***<0.010***
Chrysene	µg/L	n/v	n/v	0.0001$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.0085***	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.010***	-	-	-	***<0.0085***	-	-	***<0.0085***	***<0.010***
Dibenzo(a,h)anthracene	µg/L	n/v	n/v	0.002$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.0075***	***<0.0075***	***<0.0075***	nc	-	***<0.0075***	***<0.010***	-	-	-	***<0.0075***	-	-	***<0.0075***	***<0.010***
Fluoranthene	µg/L	n/v	0.04[C]	0.0008$_a$[G]	-	-	-	***<0.010***	-	-	-	***<0.010***	***<0.010***	**0.012**[G]	nc	-	***<0.010***	***<0.010***	-	-	-	***<0.010***	-	-	**0.011**[G]	***<0.010***
Fluorene	µg/L	59[A]	3[C]	0.2$_a$[G]	-	-	-	<0.010	-	-	-	<0.050	<0.050	<0.050	nc	-	<0.050	<0.010	-	-	-	<0.050	-	-	<0.050	<0.010
Indeno(1,2,3-cd)pyrene	µg/L	n/v	n/v	n/v	-	-	-	<0.010	-	-	-	<0.0085	<0.0085	<0.0085	nc	-	<0.0085	<0.010	-	-	-	<0.0085	-	-	<0.0085	<0.010
Methylnaphthalene (Total)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.071	-	-	-	-	-	-	-	<0.071
Methylnaphthalene, 1-	µg/L	32[A]	n/v	2$_b$[G]	-	-	-	<0.010	-	-	-	<0.10	<0.10	<0.10	nc	-	<0.10	<0.010	-	-	-	<0.10	-	-	<0.10	<0.010
Methylnaphthalene, 2-	µg/L	22[A]	n/v	2$_b$[G]	-	-	-	<0.010	-	-	-	<0.10	<0.10	<0.10	nc	-	<0.10	<0.010	-	-	-	<0.10	-	-	<0.10	<0.010
Naphthalene	µg/L	59[A] 6.4[B]	1.1[C]	7$_a$[G]	-	-	-	<0.010	-	-	-	<0.10	<0.10	<0.10	nc	-	<0.10	<0.010	-	-	-	<0.10	-	-	<0.10	<0.010
Perylene	µg/L	n/v	n/v	0.00007$_a$[G]	-	-	-	-	-	-	-	***<0.050***	***<0.050***	***<0.050***	nc	-	***<0.050***	-	-	-	-	***<0.050***	-	-	***<0.050***	-
Phenanthrene	µg/L	n/v	0.4[C]	0.03$_a$[G]	-	-	-	<0.010	-	-	-	***<0.050***	***<0.050***	***<0.050***	nc	-	***<0.050***	<0.010	-	-	-	***<0.050***	-	-	***<0.050***	<0.010
Pyrene	µg/L	n/v	0.025[C]	n/v	-	-	-	<0.010	-	-	-	<0.020	<0.020	<0.020	nc	-	<0.020	<0.010	-	-	-	<0.020	-	-	<0.020	<0.010
Benzo(a)pyrene Total Potency Equivalents	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	<0.010	-	<0.010	nc	-	<0.010	-	-	-	-	<0.010	-	-	<0.010	-
Polychlorinated Biphenyls																										
Aroclor 1016	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1221	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1232	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1242	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	<0.05	-	<0.05	nc	-	-	-	-	-	-	<0.05	<0.05	-	-	-
Aroclor 1248	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	<0.05	-	<0.05	nc	-	-	-	-	-	-	<0.05	<0.05	-	-	-
Aroclor 1254	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	<0.05	-	<0.05	nc	-	-	-	-	-	-	<0.05	<0.05	-	-	-
Aroclor 1260	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	<0.05	-	<0.05	nc	-	-	-	-	-	-	<0.05	<0.05	-	-	-
Aroclor 1262	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1268	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/L	0.4[B]	n/v	0.001$_{s7}$[E]	-	-	-	-	-	-	-	***<0.05***	-	***<0.05***	nc	-	-	-	-	-	-	***<0.05***	***<0.05***	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-8												MW16-9								MW16-12
Sample Date					10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	29-Aug-16	29-Aug-16	16-Sep-16	24-Oct-19	24-Oct-19	24-Oct-19		1-Nov-19	6-Feb-20	10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	24-Oct-19	24-Oct-19	1-Nov-19	6-Feb-20	10-Aug-16
Sample ID					MW16-8	MW16-8-2016.08.11	MW16-8-2016.08.12	MW16-8-2016.08.15 (CWS457)	MW16-8(2016.08.29)	MW16-8(2016.08.29) Lab-Dup	MW16-8	MW16-8	MW16-8 Lab-Dup	DUP-02		MW16-8	MW16-8	MW16-9 2016.08.10 07:55	MW16-9 2016.08.11 08:10	MW16-9 (CW1951-02)	MW16-9	MW16-9	MW16-9 Lab-Dup	MW16-9	MW16-9	MW16-12
Sampling Company					STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC MAXX
Laboratory Work Order					B6H0159	B6H2160	B668730/B6H2160	B668714/B6H2160	B6I6789	B6I6789	B6J8970	B9U0312	B9U0312	B9U0312		B9U7912	C034481	B6H0159	B6H0159/B668100	B668006/B6H0159	B6H2160	B9U0312	B9U0312	B9U7912	C034481	B6H0159/B668006/B668100
Laboratory Sample ID					CWI948	CWS458	PG6817/CWS456	PG6714/CWS457	CZM192	CZM192	DBU839	LDB876	LDB876	LDB880	RPD	LET602	LYS002	CWI949	CWI950/PG3448/PG3449	PG2912/CWI951	CWS455	LDB877	LDB877	LET603	LYS003	CWI946/PG2910/PG3444/PG3445
Sample Type	Units	Ottawa	CCME	PWQO						Lab Replicate			Lab Replicate	Field Duplicate	(%)								Lab Replicate			
Volatile Organic Compounds																										
Acetone	µg/L	n/v	n/v	n/v	<10	-	-	-	-	-	-	<10	-	<10	nc	-	<10	<10	-	-	-	<10	<10	-	<10	<10
Benzene	µg/L	10[A] 2[B]	370[C]	100[b,G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Bromodichloromethane	µg/L	350[A]	n/v	200[a,G]	<0.10	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.10	-	-	-	<0.50	<0.50	-	<0.50	<0.10
Bromoform (Tribromomethane)	µg/L	630[A]	n/v	60[a,G]	<0.20	-	-	-	-	-	-	<1.0	-	<1.0	nc	-	<1.0	<0.20	-	-	-	<1.0	<1.0	-	<1.0	<0.20
Bromomethane (Methyl bromide)	µg/L	110[A]	n/v	0.9[a,G]	<0.50	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.50	-	-	-	<0.50	<0.50	-	<0.50	<0.50
Carbon Tetrachloride (Tetrachloromethane)	µg/L	57[A]	13.3[C]	n/v	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Chlorobenzene (Monochlorobenzene)	µg/L	57[A]	1.3[C]	15[E]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Chloroform (Trichloromethane)	µg/L	80[A] 2[B]	1.8[C]	n/v	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Dibromochloromethane	µg/L	57[A]	n/v	40[a,G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Dichlorobenzene, 1,2-	µg/L	88[A] 5.6[B]	0.7[C]	2.5[E]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Dichlorobenzene, 1,3-	µg/L	36[A]	150[C]	2.5[E]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Dichlorobenzene, 1,4-	µg/L	17[A] 6.8[B]	26[C]	4[E]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Dichlorodifluoromethane (Freon 12)	µg/L	n/v	n/v	n/v	<0.50	-	-	-	-	-	-	<1.0	-	<1.0	nc	-	<1.0	<0.50	-	-	-	<1.0	<1.0	-	<1.0	<0.50
Dichloroethane, 1,1-	µg/L	200[A]	n/v	200[G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Dichloroethane, 1,2-	µg/L	210[A]	100[C]	100[G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Dichloroethene, 1,1-	µg/L	40[A]	n/v	40[G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Dichloroethene, cis-1,2-	µg/L	200[A] 5.6[B]	n/v	200[G]	<0.10	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.10	-	-	-	<0.50	<0.50	-	<0.50	<0.10
Dichloroethene, trans-1,2-	µg/L	200[A]	n/v	200[G]	<0.10	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.10	-	-	-	<0.50	<0.50	-	<0.50	<0.10
Dichloropropane, 1,2-	µg/L	850[A]	n/v	0.7[a,G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/L	n/v	n/v	n/v	<0.28	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.28	-	-	-	<0.50	-	-	<0.50	<0.28
Dichloropropene, cis-1,3-	µg/L	70[A]	n/v	n/v	<0.20	-	-	-	-	-	-	<0.30	-	<0.30	nc	-	<0.30	<0.20	-	-	-	<0.30	<0.30	-	<0.30	<0.20
Dichloropropene, trans-1,3-	µg/L	70[A] 5.6[B]	n/v	7[a,G]	<0.20	-	-	-	-	-	-	<0.40	-	<0.40	nc	-	<0.40	<0.20	-	-	-	<0.40	<0.40	-	<0.40	<0.20
Ethylbenzene	µg/L	57[A] 2[B]	90[C]	8[G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	28[A]	n/v	5[a,G]	<0.20	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.20	-	-	-	<0.20	<0.20	-	<0.20	<0.20
Hexane (n-Hexane)	µg/L	n/v	n/v	n/v	<0.50	-	-	-	-	-	-	<1.0	-	<1.0	nc	-	<1.0	<0.50	-	-	-	<1.0	<1.0	-	<1.0	<0.50
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/L	n/v	n/v	400[a,G]	<5.0	-	-	-	-	-	-	<10	-	<10	nc	-	<10	<5.0	-	-	-	<10	<10	-	<10	<5.0
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	n/v	n/v	<5.0	-	-	-	-	-	-	<5.0	-	<5.0	nc	-	<5.0	<5.0	-	-	-	<5.0	<5.0	-	<5.0	<5.0
Methyl tert-butyl ether (MTBE)	µg/L	n/v	10,000[C]	200[a,G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Methylene Chloride (Dichloromethane)	µg/L	211[A] 5.2[B]	98.1[C]	100[a,G]	<0.50	-	-	-	-	-	-	<2.0	-	<2.0	nc	-	<2.0	<0.50	-	-	-	<2.0	<2.0	-	<2.0	<0.50
Styrene	µg/L	40[A]	72[C]	4[b,G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Tetrachloroethane, 1,1,1,2-	µg/L	n/v	n/v	20[a,G]	<0.10	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.10	-	-	-	<0.50	<0.50	-	<0.50	<0.10
Tetrachloroethane, 1,1,2,2-	µg/L	40[A] 17[B]	n/v	70[G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Tetrachloroethene (PCE)	µg/L	50[A] 4.4[B]	110[C]	50[G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Toluene	µg/L	80[A] 2[B]	2[C]	0.8[G]	<0.20	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.20	-	-	-	<0.20	<0.20	-	<0.20	<0.20
Trichloroethane, 1,1,1-	µg/L	54[A]	n/v	10[a,G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Trichloroethane, 1,1,2-	µg/L	800[A]	n/v	800[G]	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Trichloroethene (TCE)	µg/L	54[A] 7.6[B]	21[C]	20[G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Trichlorofluoromethane (Freon 11)	µg/L	20[A]	n/v	n/v	<0.20	-	-	-	-	-	-	<0.50	-	<0.50	nc	-	<0.50	<0.20	-	-	-	<0.50	<0.50	-	<0.50	<0.20
Vinyl Chloride	µg/L	400[A]	n/v	600[a,G]	<0.20	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.20	-	-	-	<0.20	<0.20	-	<0.20	<0.20
Xylene, m & p-	µg/L	n/v	n/v	32[a,17,F]	0.11	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Xylene, o-	µg/L	n/v	n/v	40[b,G]	<0.10	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Xylenes, Total	µg/L	320[A] 4.4[B]	n/v	72[a,10,F]	0.11	-	-	-	-	-	-	<0.20	-	<0.20	nc	-	<0.20	<0.10	-	-	-	<0.20	<0.20	-	<0.20	<0.10
Glycols																										
Diethylene Glycol	mg/L	n/v	n/v	11[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/L	n/v	192[C]	2[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene Glycol, 1,2-	mg/L	n/v	500[C]	44[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides and Pesticides																										
1,3-Dinitrobenzene (m-Dinitrobenzene)	µg/L	n/v	n/v	1[b,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Amino-4,6-dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Amino-2,6-Dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin + Dieldrin	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, beta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, delta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphechlor (Toxaphene)	µg/L	n/v	n/v	0.008[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane (Total)	µg/L	n/v	n/v	0.06[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane, gamma-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD (p,p'-DDD)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'- + DDD, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE (p,p'-DDE)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'- + DDE, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT (p,p'-DDT)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'- + DDT, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT+ Metabolites	µg/L	n/v	n/v	0.003[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-8													MW16-9								MW16-12
Sample Date					10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	29-Aug-16	29-Aug-16	16-Sep-16	24-Oct-19	24-Oct-19	24-Oct-19		1-Nov-19	6-Feb-20	10-Aug-16	11-Aug-16	12-Aug-16	15-Aug-16	24-Oct-19	24-Oct-19	1-Nov-19	6-Feb-20	10-Aug-16
Sample ID					MW16-8	MW16-8-2016.08.11	MW16-8-2016.08.12	MW16-8-2016.08.15 (CWS457)	MW16-8(2016.08.29)	MW16-8(2016.08.29) Lab-Dup	MW16-8	MW16-8	MW16-8 Lab-Dup	DUP-02		MW16-8	MW16-8	MW16-9 2016.08.10 07:55	MW16-9 2016.08.11 08:10	MW16-9 (CW1951-02)	MW16-9	MW16-9	MW16-9 Lab-Dup	MW16-9	MW16-9	MW16-12
Sampling Company					STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC MAXX
Laboratory Work Order					B6H0159	B6H2160	B668730/B6H2160	B668714/B6H2160	B6I6789	B6I6789	B6J8970	B9U0312	B9U0312	B9U0312		B9U7912	C034481	B6H0159	B6H0159/B668100	B668006/B6H0159	B6H2160	B9U0312	B9U0312	B9U7912	C034481	B6H0159/B668006/B668100
Laboratory Sample ID					CWI948	CWS458	PG6817/CWS456	PG6714/CWS457	CZM192	CZM192	DBU839	LDB876	LDB876	LDB880	RPD	LET602	LYS002	CWI949	CWI950/PG3448/PG3449	PG2912/CWI951	CWS455	LDB877	LDB877	LET603	LYS003	CWI946/PG2910/PG3444/PG3445
Sample Type	Units	Ottawa	CCME	PWQO						Lab Replicate			Lab Replicate	Field Duplicate	(%)								Lab Replicate			
Herbicides and Pesticides																										
Dieldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/L	n/v	n/v	4^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/L	n/v	n/v	6^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan	µg/L	n/v	0.003^{C} 0.06^{D}	0.003^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan I	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan II	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan Sulfate	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	µg/L	n/v	n/v	0.002^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin Aldehyde	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin Ketone	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor + Heptachlor Epoxide	µg/L	n/v	n/v	0.001^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor Epoxide	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/L	0.1^{A} 0.04^{B}	n/v	0.0065^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	n/v	n/v	0.01^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	n/v	n/v	0.04^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	µg/L	n/v	n/v	0.001^{E}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/L	n/v	n/v	0.02_9^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octachlorostyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxychlordane	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																										
Chloro-3-methyl phenol, 4-	µg/L	n/v	n/v	3_a^{G}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	7^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/L	n/v	7^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	n/v	4^{C}	1_b^{G}	-	-	-	-	<0.5	<1	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	4^{C}	1_b^{G}	-	-	-	-	<0.5	<1	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-
Dichlorophenol, 2,3-	µg/L	n/v	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 2,4-	µg/L	44^{A}	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 2,5-	µg/L	n/v	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 2,6-	µg/L	n/v	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 3,4-	µg/L	n/v	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dichlorophenol, 3,5-	µg/L	n/v	0.2^{C}	0.2^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Dimethylphenol, 2,4-	µg/L	n/v	n/v	10_b^{G}	-	-	-	-	<1	<2	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/L	n/v	n/v	0.2_s^{G}	-	-	-	-	***<1***	***<2***	-	-	-	-	-	-	-	-	-	-	***<1***	-	-	-	-	-
Dinitrophenol, 2,4-	µg/L	n/v	n/v	n/v	-	-	-	-	<1	<2	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-
Nitrophenol, 2-	µg/L	n/v	n/v	0.5_b^{G}	-	-	-	-	***<1***	***<2***	-	-	-	-	-	-	-	-	-	-	***<1***	-	-	-	-	-
Nitrophenol, 4-	µg/L	n/v	n/v	50_b^{G}	-	-	-	-	<1	<2	-	-	-	-	-	-	-	-	-	-	<1	-	-	-	-	-
Pentachlorophenol	µg/L	n/v	0.5^{C}	0.5^{E}	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Phenol	µg/L	n/v	4^{C}	5_b^{G}	-	-	-	-	<0.5	<1	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/L	n/v	1^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/L	n/v	1^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/L	n/v	1^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/L	n/v	18^{C}	n/v	-	-	-	-	<0.1	<0.2	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-
Explosives																										
Nitroglycerin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-13				MW16-14		MW16-1A					MW20-15		MW20-16		MW20-17				MW20-18	
Sample Date					10-Aug-16	10-Aug-16	11-Aug-16		7-Feb-20	7-Feb-20	9-Aug-16	9-Aug-16	11-Aug-16		16-Sep-16	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20		13-Feb-20	13-Feb-20	13-Feb-20
Sample ID					MW16-13	MW16-13 Lab-Dup	DUP-2		MW16-14	MW16-14 Lab-Dup	CWI942-07R\ MW16-1A	MW16-1A Lab-Dup	CWI956-07R\ DUP-1		MW16-1A	MW20-15	MW20-15 Lab-Dup	MW20-16	MW20-16 Lab-Dup	MW20-17	DUP2		DUP2 Lab-Dup	MW20-18	MW20-18 Lab-Dup
Sampling Company					STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	MAXX		BV	BV	MAXX	MAXX	MAXX		MAXX	BV	BV	BV	BV	BV	BV		BV	BV	BV
Laboratory Work Order					B6H0159	B6H0159	B6H0159		C035567	C035567	B655693/B6H0159/B668006/B668100	B6H0159	B655693/B6H0159/B668006/B668100		B6J8970	C041330	C041330	C041330	C041330	C041330	C041330		C041330	C041330	C041330
Laboratory Sample ID					CWI947	CWI947	CWI957		LYY062	LYY062	CV1255/CWI942/PG2906/PG3436/PG3437	CWI942	CV1256/CWI956/PG2913/PG3450/PG3451		DBU841	MAD678	MAD678	MAD679	MAD679	MAD680	MAD683		MAD683	MAD681	MAD681
Sample Type	**Units**	**Ottawa**	**CCME**	**PWQO**		Lab Replicate	Field Duplicate	RPD (%)		Lab Replicate		Lab Replicate	Field Duplicate	RPD (%)			Lab Replicate		Lab Replicate		Field Duplicate	RPD (%)	Lab Replicate		Lab Replicate
General Chemistry																									
Ammonia	mg/L	n/v	$_{TBC}$[C]	n/v	-	-	-	-	<0.061	-	-	-	-	-	-	0.066	-	0.23	-	0.064	0.12	nc	-	0.19	-
Ammonia (as N)	mg/L	n/v	$_{TBC2}$[C]	n/v	<0.050	-	-	-	<0.050	-	0.065	-	<0.050	nc	-	0.055	-	0.19	-	0.053	0.10	nc	-	0.15	-
Chloride	mg/L	n/v	120[C] 640[D]	n/v	**250**[C]	-	-	-	-	-	**230**[C]	-	**320**[C]	33%	-	-	-	-	-	-	-	-	-	-	-
Chloride, Dissolved	mg/L	n/v	120[C] 640[D]	n/v	-	-	-	-	12	-	-	-	-	-	-	**160**[C]	-	**650**[CD]	-	**360**[C]	**350**[C]	3%	-	43	43
Cyanide (Free)	mg/L	2[A] 0.02[B]	0.005[C]	0.005[E]	-	-	-	-	<0.0010	-	-	-	-	-	-	<0.0010	-	<0.0010	<0.0010	<0.0010	<0.0010	nc	<0.0010	<0.0010	-
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	<0.0020	-	-	-	-	-	<0.0020	-	<0.0020	nc	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Weak Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Filter and HNO3 Preservation	none	n/v	n/v	n/v	FIELD	-	-	-	-	-	FIELD	-	FIELD	nc	-	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	10[A]	0.12[C]	n/v	**0.15**[C]	-	-	-	**0.22**[C]	-	**0.21**[C]	-	**0.18**[C]	nc	-	**0.20**[C]	-	**0.37**[C]	-	**0.22**[C]	**0.24**[C]	nc	-	**0.54**[C]	-
Hardness (as CaCO3)	mg/L	n/v	n/v	n/v	853	-	-	-	-	-	603	-	587	3%	-	-	-	-	-	-	-	-	-	-	-
Hardness (as CaCO3), Total	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardness (Dissolved Metals)	mg/L	n/v	n/v	n/v	-	-	-	-	295	-	-	-	-	-	-	755	-	1,310	-	643	652	1%	-	201	-
Hydrogen Sulfide	mg/L	n/v	n/v	n/v	<0.0020	-	-	-	-	-	<0.0020	-	<0.0020	nc	-	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	n/v	13[C] 550[D]	n/v	-	-	-	-	**21**[C]	-	-	-	-	-	-	<0.4	-	<0.4	-	<0.4	<0.4	nc	-	<0.4	-
Nitrate (as N)	mg/L	n/v	3.0[C] 124[D]	n/v	0.14	-	-	-	**4.71**[C]	**4.66**[C]	<0.10	-	<0.10	nc	-	<0.10	-	<0.10	-	<0.10	<0.10	nc	-	<0.10	-
Nitrate + Nitrite (as N)	mg/L	n/v	n/v	n/v	0.16	-	-	-	4.71	4.66	<0.10	-	<0.10	nc	-	<0.10	-	<0.10	-	<0.10	<0.10	nc	-	<0.10	-
Nitrite (as N)	mg/L	n/v	0.06[C]	n/v	0.012	-	-	-	<0.010	<0.010	0.010	-	<0.010	nc	-	<0.010	-	<0.010	-	<0.010	<0.010	nc	-	<0.010	-
pH, lab	S.U.	5.5-11[A] 6-9[B]	6.5-9.0[C]	6.5-8.5[E]	7.78	-	-	-	7.72	-	7.89	-	7.88	nc	-	7.41	-	7.51	-	7.63	7.78	nc	-	8.19	-
Phenols (Phenolics)	mg/L	1[A] 0.008[B]	0.004[C]	0.001[E]	<0.0010	-	<0.0010	nc	-	-	-	-	-	-	**0.0030**[E]	-	-	-	-	-	-	-	-	-	-
Phenols-4AAP	mg/L	1[A] 0.008[B]	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide	mg/L	2[A]	n/v	n/v	<0.0019	-	-	-	-	-	<0.0019	-	<0.0019	nc	-	-	-	-	-	-	-	-	-	-	-
Sulfide, Total	mg/L	2[A]	n/v	n/v	-	-	-	-	<0.0018 MS	-	-	-	-	-	-	0.0061 YE	-	<0.0018 YE	-	<0.0018 YE	0.0080 YE	nc	-	0.0019	-
Sulfate	mg/L	1,500[A]	n/v	n/v	61	-	-	-	71	-	91	-	130	35%	-	260	-	96	-	170	170	0%	-	38	38
Sulfide (as H2S)	mg/L	n/v	n/v	n/v	-	-	-	-	<0.0020	-	-	-	-	-	-	0.0065	-	<0.0020	-	<0.0020	0.0085	nc	-	0.0020	-
Total Suspended Solids	mg/L	350[A] 15[B]	$_{SN}$[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	100[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Suspended Solids (VSS)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Petroleum Hydrocarbons																									
PHC F1 (C6-C10 range)	µg/L	n/v	n/v	n/v	<25	-	<25	nc	<25	-	-	-	-	-	-	<25	<25	<25	-	<25	<25	nc	-	<25	-
PHC F1 (C6-C10 range) minus BTEX	µg/L	n/v	n/v	n/v	<25	-	<25	nc	<25	-	-	-	-	-	-	<25	<25	<25	-	<25	<25	nc	-	<25	-
PHC F2 (>C10-C16 range)	µg/L	n/v	n/v	n/v	<100	-	<100	nc	<100	-	-	-	-	-	-	<100	-	<100	<100	<100	<100	nc	-	<100	-
PHC F3 (>C16-C34 range)	µg/L	n/v	n/v	n/v	<200	-	<200	nc	<200	-	-	-	-	-	-	<200	-	<200	<200	<200	<200	nc	-	<200	-
PHC F4 (>C34-C50 range)	µg/L	n/v	n/v	n/v	<200	-	<200	nc	<200	-	-	-	-	-	-	<200	-	<200	<200	<200	<200	nc	-	<200	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	YES	-	YES	nc	YES	-	-	-	-	-	-	YES	-	YES	YES	YES	YES	nc	-	YES	-
Metals, Dissolved																									
Aluminum	µg/L	50,000[A]	100_{VAR1}[C]	n/v	4.12	-	-	-	<3.0	<3.0	8.57	-	6.67	25%	-	<15	-	<30	-	<15	<30	nc	-	8.3	-
Antimony	µg/L	5,000[A]	n/v	20_{G}	0.286	-	-	-	<0.50	<0.50	0.412	-	0.511	21%	-	<2.5	-	<5.0	-	<2.5	<5.0	nc	-	<1.0	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100_{E} 5_{G}	0.443	-	-	-	0.16	0.20	0.392	-	0.378	4%	-	<0.50	-	<1.0	-	<0.50	<1.0	nc	-	0.89	-
Barium	µg/L	n/v	n/v	n/v	125	-	-	-	57.3	55.7	135	-	166	21%	-	79.6	-	104	-	134	136	1%	-	92.1	-
Beryllium	µg/L	n/v	n/v	$1{,}100_{43}$[E]	<0.010	-	-	-	<0.10	<0.10	<0.010	-	<0.010	nc	-	<0.50	-	<1.0	-	<0.50	<1.0	nc	-	<0.20	-
Bismuth	µg/L	5,000[A]	n/v	n/v	<0.0050	-	-	-	<1.0	<1.0	<0.0050	-	<0.0050	nc	-	<5.0	-	<10	-	<5.0	<10	nc	-	<2.0	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200_{a}[G]	19	-	-	-	<50	<50	32	-	34	nc	-	***<250***	-	***<500***	-	***<250***	***<500***	nc	-	<100	-
Cadmium	µg/L	20[A] 8[B]	0.37_{LTG}[C] 7.7_{STB}[D]	0.2_{E} 0.5_{s12}[G]	0.0190	-	-	-	<0.010	0.024	0.0120	-	0.0090	nc	-	<0.050	-	***<0.10***	-	<0.050	***<0.10***	nc	-	<0.020	-
Calcium	mg/L	n/v	n/v	n/v	215	-	-	-	76.4	-	125	-	119	5%	-	150	-	80.9	-	121	121	0%	-	31.5	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	0.12	-	-	-	<1.0	<1.0	0.46	-	0.48	nc	-	<5.0	-	<10	-	<5.0	<10	nc	-	<2.0	-
Chromium (Hexavalent)	µg/L	n/v	1[C]	1[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	0.243	-	-	-	<0.20	<0.20	**0.995**[G]	-	0.725	31%	-	**1.4**[G]	-	***<2.0***	-	**1.0**[G]	***<2.0***	nc	-	<0.40	-
Copper	µg/L	3,000[A] 40[B]	4_{TBC1}[C]	5_{E} 5_{s13}[G]	0.882	-	-	-	0.70	0.78	0.774	-	0.440	**55%**	-	<1.0	-	***<2.0***	-	<1.0	***<2.0***	nc	-	0.49	-
Iron	µg/L	n/v	300[C]	300_{E}	1.6	-	-	-	<5.0	<5.0	7.0	-	7.3	4%	-	253	-	238	-	<25	<50	nc	-	<10	-
Lead	µg/L	5,000[A] 120[B]	7_{TBC1}[C]	25_{s14}[E] 5_{s15}[G]	0.0100	-	-	-	<0.20	<0.20	0.0250	-	0.0190	nc	-	<1.0	-	***<2.0***	-	<1.0	***<2.0***	nc	-	<0.40	-
Lithium	µg/L	n/v	n/v	n/v	1.89	-	-	-	7.2	7.0	11.2	-	11.0	2%	-	14	-	59	-	15	<20	nc	-	8.9	-
Magnesium	mg/L	n/v	n/v	n/v	76.8	-	-	-	25.3	-	70.9	-	70.5	1%	-	92.4	-	269	-	82.8	84.7	2%	-	29.8	-
Manganese	µg/L	5,000[A] 50[B]	430_{EO4}[C] $3{,}600_{EO3}$[D]	n/v	**82.7**[B]	-	-	-	<1.0	<1.0	**190**[B]	-	**202**[B]	6%	-	**215**[B]	-	**88**[B]	-	**139**[B]	**140**[B]	1%	-	48.0	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2_{E}	<0.01	-	-	-	-	-	<0.01	<0.01	<0.01	nc	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	37.3	-	-	-	1.9	1.9	4.83	-	7.65	**45%**	-	<5.0	-	<10	-	<5.0	<10	nc	-	3.8	-
Nickel	µg/L	3,000[A] 80[B]	150_{TBC1}[C]	25_{E}	0.927	-	-	-	1.9	1.9	2.75	-	1.83	**40%**	-	<5.0	-	<10	-	<5.0	<10	nc	-	<2.0	-
Potassium	mg/L	n/v	n/v	n/v	6.59	-	-	-	4.17	-	9.56	-	10.2	6%	-	4.36	-	7.82	-	5.35	5.44	2%	-	7.00	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100_{E}	0.136	-	-	-	0.48	0.49	0.428	-	0.553	25%	-	<0.50	-	<1.0	-	<0.50	<1.0	nc	-	<0.20	-
Silicon	µg/L	n/v	n/v	n/v	6,160	-	-	-	7,640	7,760	9,530	-	8,870	7%	-	17,100	-	28,800	-	13,600	13,600	0%	-	10,700	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1_{E}	<0.0050	-	-	-	<0.020	<0.020	0.0270	-	0.0250	8%	-	<0.10	-	***<0.20***	-	<0.10	***<0.20***	nc	-	<0.040	-
Sodium	mg/L	n/v	n/v	n/v	33.5	-	-	-	144	-	45.8	-	41.8	9%	-	33.3	-	76.1	-	91.9	92.5	1%	-	11.1	-
Strontium	µg/L	n/v	n/v	n/v	3,580	-	-	-	1,280	1,290	29,600	-	30,200	2%	-	30,700	-	50,000	-	38,100	35,800	6%	-	12,700	-
Sulfur	mg/L	n/v	n/v	n/v	41.7	-	-	-	25.8	-	48.3	-	46.3	4%	-	87	-	35	-	54	50	nc	-	14.0	-
Thallium	µg/L	n/v	0.8[C]	0.3_{s}[G]	0.0090	-	-	-	0.023	0.026	0.0250	-	0.0270	8%	-	<0.050	-	<0.10	-	<0.050	<0.10	nc	-	<0.020	-
Tin	µg/L	5,000[A]	n/v	n/v	0.28	-	-	-	<5.0	<5.0	0.79	-	0.24	nc	-	<25	-	<50	-	<25	<50	nc	-	<10	-
Titanium	µg/L	5,000[A]	n/v	n/v	<0.50	-	-	-	<5.0	<5.0	<0.50	-	<0.50	nc	-	<25	-	<50	-	<25	<50	nc	-	<10	-
Uranium	µg/L	n/v	15[C] 33[D]	5_{a}[G]	3.79	-	-	-	4.61	4.53	2.09	-	3.15	**40%**	-	0.54	-	<1.0	-	0.75	<1.0	nc	-	0.61	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	1.26	-	-	-	<5.0	<5.0	0.59	-	0.49	nc	-	***<25***	-	***<50***	-	***<25***	***<50***	nc	-	***<10***	-
Zinc	µg/L	3,000[A] 40[B]	7.0_{EO2}[C] 37_{EO1}[D]	30_{E} 20_{G}	1.35	-	-	-	<5.0	<5.0	2.84	-	2.04	33%	-	***<25***	-	***<50***	-	***<25***	***<50***	nc	-	***<10***	-
Zirconium	µg/L	n/v	n/v	4_{a}[G]	<0.10	-	-	-	<0.10	<0.10	<0.10	-	<0.10	nc	-	<0.50	-	<1.0	-	<0.50	<1.0	nc	-	<0.20	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public Services and Procurement Canada

Sample Location					MW16-13				MW16-14		MW16-1A					MW20-15		MW20-16		MW20-17				MW20-18	
Sample Date					10-Aug-16	10-Aug-16	11-Aug-16		7-Feb-20	7-Feb-20	9-Aug-16	9-Aug-16	11-Aug-16		16-Sep-16	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20		13-Feb-20	13-Feb-20	13-Feb-20
Sample ID					MW16-13	MW16-13 Lab-Dup	DUP-2		MW16-14	MW16-14 Lab-Dup	CWI942-07R\ MW16-1A	MW16-1A Lab-Dup	CWI956-07R\ DUP-1		MW16-1A	MW20-15	MW20-15 Lab-Dup	MW20-16	MW20-16 Lab-Dup	MW20-17	DUP2		DUP2 Lab-Dup	MW20-18	MW20-18 Lab-Dup
Sampling Company					STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	MAXX		BV	BV	MAXX	MAXX	MAXX		MAXX	BV	BV	BV	BV	BV	BV		BV	BV	BV
Laboratory Work Order					B6H0159	B6H0159	B6H0159		C035567	C035567	B655693/B6H0159/B668006/B668100	B6H0159	B655693/B6H0159/B668006/B668100		B6J8970	C041330	C041330	C041330	C041330	C041330	C041330		C041330	C041330	C041330
Laboratory Sample ID					CWI947	CWI947	CWI957	RPD	LYY062	LYY062	CV1255/CWI942/PG2906/PG3436/PG3437	CWI942	CV1256/CWI956/PG2913/PG3450/PG3451	RPD	DBU841	MAD678	MAD678	MAD679	MAD679	MAD680	MAD683	RPD	MAD683	MAD681	MAD681
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate		Field Duplicate	(%)	Lab Replicate		Lab Replicate
Metals, Total																									
Aluminum	µg/L	50,000[A]	100$_{VAR1}$[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Barium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Beryllium	µg/L	n/v	n/v	1,100$_{s3}$[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cadmium	µg/L	20[A] 8[B]	0.37$_{LTG}$[C] 7.7$_{STB}$[D]	0.2[E] 0.5$_{s12}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Copper	µg/L	3,000[A] 40[B]	4$_{TBC1}$[C]	5[E] 5$_{s13}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	µg/L	n/v	300[C]	300[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	µg/L	5,000[A] 120[B]	7$_{TBC1}$[C]	25$_{s14}$[E] 5$_{s15}$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lithium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manganese	µg/L	5,000[A] 50[B]	430$_{EO4}$[C] 3,600$_{EO3}$[D]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	-	-	-	-	<0.01	-	-	-	-	-	-	<0.01	-	<0.01	-	<0.01	<0.01	nc	<0.01	<0.01	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nickel	µg/L	3,000[A] 80[B]	150$_{TBC1}$[C]	25[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potassium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicon	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Strontium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thallium	µg/L	n/v	0.8[C]	0.3$_b$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0$_{EQ2}$[C] 37$_{EQ1}$[D]	30[E] 20[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zirconium	µg/L	n/v	n/v	4$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons																									
Acenaphthene	µg/L	n/v	5.8[C]	n/v	<0.010	<0.010	<0.010	nc	<0.10	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.10	<0.10	nc	-	<0.10	<0.10
Acenaphthylene	µg/L	n/v	n/v	n/v	<0.010	<0.010	<0.010	nc	<0.10	-	-	-	-	-	-	<0.10	-	<0.10	-	<0.10	<0.10	nc	-	<0.10	<0.10
Acridine	µg/L	n/v	4.4[C]	n/v	-	-	-	-	<0.040	-	-	-	-	-	-	<0.040	-	<0.040	-	<0.040	<0.040	nc	-	<0.040	<0.040
Anthracene	µg/L	n/v	0.012[CD]	0.0008$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.010***	-	-	-	-	-	-	***<0.010***	-	***<0.010***	-	***<0.010***	***<0.010***	nc	-	***<0.010***	***<0.010***
Benzo(a)anthracene	µg/L	n/v	0.018[C]	0.0004$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	-	-	-	-	-	-	***<0.0085***	-	***<0.0085***	-	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.0085***
Benzo(a)pyrene	µg/L	n/v	0.015[C]	n/v	<0.010	<0.010	<0.010	nc	<0.0075	-	-	-	-	-	-	<0.0075	-	<0.0075	-	<0.0075	<0.0075	nc	-	<0.0075	<0.0075
Benzo(b)pyridine (Quinoline)	µg/L	n/v	3.4[C]	10$_a$[G]	-	-	-	-	<0.20	-	-	-	-	-	-	<0.20	-	<0.20	-	<0.20	<0.20	nc	-	<0.20	<0.20
Benzo(b/j)fluoranthene	µg/L	n/v	n/v	n/v	<0.010	<0.010	<0.010	nc	<0.0085	-	-	-	-	-	-	<0.0085	-	<0.0085	-	<0.0085	<0.0085	nc	-	<0.0085	<0.0085
Benzo(c)phenanthrene	µg/L	n/v	n/v	n/v	-	-	-	-	<0.050	-	-	-	-	-	-	<0.050	-	<0.050	-	<0.050	<0.050	nc	-	<0.050	<0.050
Benzo(e)pyrene	µg/L	n/v	n/v	n/v	-	-	-	-	<0.050	-	-	-	-	-	-	<0.050	-	<0.050	-	<0.050	<0.050	nc	-	<0.050	<0.050
Benzo(g,h,i)perylene	µg/L	n/v	n/v	0.00002$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	-	-	-	-	-	-	***<0.0085***	-	***<0.0085***	-	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.0085***
Benzo(k)fluoranthene	µg/L	n/v	n/v	0.0002$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	-	-	-	-	-	-	***<0.0085***	-	***<0.0085***	-	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.0085***
Chrysene	µg/L	n/v	n/v	0.0001$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0085***	-	-	-	-	-	-	**0.015[G]**	-	***<0.0085***	-	***<0.0085***	***<0.0085***	nc	-	***<0.0085***	***<0.0085***
Dibenzo(a,h)anthracene	µg/L	n/v	n/v	0.002$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.0075***	-	-	-	-	-	-	***<0.0075***	-	***<0.0075***	-	***<0.0075***	***<0.0075***	nc	-	***<0.0075***	***<0.0075***
Fluoranthene	µg/L	n/v	0.04[C]	0.0008$_a$[G]	***<0.010***	***<0.010***	***<0.010***	nc	***<0.010***	-	-	-	-	-	-	**0.28[CG]**	-	**0.093[CG]**	-	**0.081[CG]**	**0.079[CG]**	3%	-	**0.11[CG]**	**0.14[CG]**
Fluorene	µg/L	59[A]	3[C]	0.2$_a$[G]	<0.010	<0.010	<0.010	nc	<0.050	-	-	-	-	-	-	<0.050	-	<0.050	-	<0.050	<0.050	nc	-	0.083	0.079
Indeno(1,2,3-cd)pyrene	µg/L	n/v	n/v	n/v	<0.010	<0.010	<0.010	nc	<0.0085	-	-	-	-	-	-	<0.0085	-	<0.0085	-	<0.0085	<0.0085	nc	-	<0.0085	<0.0085
Methylnaphthalene (Total)	µg/L	n/v	n/v	n/v	<0.071	-	<0.071	nc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/L	32[A]	n/v	2$_b$[G]	<0.010	<0.010	<0.010	nc	<0.10	-	-	-	-	-	-	<0.10	-	0.12	-	<0.10	<0.10	nc	-	<0.10	<0.10
Methylnaphthalene, 2-	µg/L	22[A]	n/v	2$_b$[G]	<0.010	<0.010	<0.010	nc	<0.10	-	-	-	-	-	-	<0.10	-	0.19	-	<0.10	<0.10	nc	-	<0.10	<0.10
Naphthalene	µg/L	59[A] 6.4[B]	1.1[C]	7$_a$[G]	<0.010	<0.010	<0.010	nc	<0.10	-	-	-	-	-	-	<0.10	-	0.24	-	<0.10	<0.10	nc	-	<0.10	<0.10
Perylene	µg/L	n/v	n/v	0.00007$_a$[G]	-	-	-	-	***<0.050***	-	-	-	-	-	-	***<0.050***	-	***<0.050***	-	***<0.050***	***<0.050***	nc	-	***<0.050***	***<0.050***
Phenanthrene	µg/L	n/v	0.4[C]	0.03$_a$[G]	<0.010	<0.010	<0.010	nc	***<0.050***	-	-	-	-	-	-	**0.40[G]**	-	**0.18[G]**	-	**0.32[G]**	**0.29[G]**	10%	-	**0.49[CG]**	**0.55[CG]**
Pyrene	µg/L	n/v	0.025[C]	n/v	<0.010	<0.010	<0.010	nc	<0.020	-	-	-	-	-	-	**0.25[C]**	-	**0.14[C]**	-	**0.073[C]**	**0.067[C]**	nc	-	**0.12[C]**	**0.15[C]**
Benzo(a)pyrene Total Potency Equivalents	µg/L	n/v	n/v	n/v	-	-	-	-	<0.010	-	-	-	-	-	-	<0.010	-	<0.010	-	<0.010	<0.010	nc	-	<0.010	-
Polychlorinated Biphenyls																									
Aroclor 1016	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1221	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1232	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1242	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1262	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1268	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/L	0.4[B]	n/v	0.001$_{s7}$[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-13				MW16-14		MW16-1A					MW20-15		MW20-16		MW20-17				MW20-18	
Sample Date					10-Aug-16	10-Aug-16	11-Aug-16		7-Feb-20	7-Feb-20	9-Aug-16	9-Aug-16	11-Aug-16		16-Sep-16	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20		13-Feb-20	13-Feb-20	13-Feb-20
Sample ID					MW16-13	MW16-13 Lab-Dup	DUP-2		MW16-14	MW16-14 Lab-Dup	CWI942-07R\ MW16-1A	MW16-1A Lab-Dup	CWI956-07R\ DUP-1		MW16-1A	MW20-15	MW20-15 Lab-Dup	MW20-16	MW20-16 Lab-Dup	MW20-17	DUP2		DUP2 Lab-Dup	MW20-18	MW20-18 Lab-Dup
Sampling Company					STANTEC MAXX	STANTEC MAXX	STANTEC MAXX		STANTEC BV	STANTEC BV	STANTEC MAXX	STANTEC MAXX	STANTEC MAXX		STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV	STANTEC BV
Laboratory											B655693/B6H0159/B668006/B668100														
Laboratory Work Order					B6H0159	B6H0159	B6H0159		C035567	C035567		B6H0159	B655693/B6H0159/B668006/B668100		B6J8970	C041330	C041330	C041330	C041330	C041330	C041330		C041330	C041330	C041330
Laboratory Sample ID					CWI947	CWI947	CWI957		LYY062	LYY062	CV1255/CWI942/PG2906/PG3436/PG3437	CWI942	CV1256/CWI956/PG2913/PG3450/PG3451		DBU841	MAD678	MAD678	MAD679	MAD679	MAD680	MAD683		MAD683	MAD681	MAD681
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	RPD (%)		Lab Replicate		Lab Replicate	Field Duplicate	RPD (%)			Lab Replicate		Lab Replicate		Field Duplicate	RPD (%)	Lab Replicate		Lab Replicate
Volatile Organic Compounds																									
Acetone	µg/L	n/v	n/v	n/v	<10	-	<10	nc	<10	-	-	-	-	-	-	<10	<10	<10	-	20	19	nc	-	16	-
Benzene	µg/L	10[A] 2[B]	370[C]	100[a,G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	0.54	-	<0.20	<0.20	nc	-	<0.20	-
Bromodichloromethane	µg/L	350[A]	n/v	200[a,G]	<0.10	-	<0.10	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Bromoform (Tribromomethane)	µg/L	630[A]	n/v	60[a,G]	<0.20	-	<0.20	nc	<1.0	-	-	-	-	-	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	nc	-	<1.0	-
Bromomethane (Methyl bromide)	µg/L	110[A]	n/v	0.9[a,G]	<0.50	-	<0.50	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Carbon Tetrachloride (Tetrachloromethane)	µg/L	57[A]	13.3[C]	n/v	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Chlorobenzene (Monochlorobenzene)	µg/L	57[A]	1.3[C]	15[E]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Chloroform (Trichloromethane)	µg/L	80[A] 2[B]	1.8[C]	n/v	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Dibromochloromethane	µg/L	57[A]	n/v	40[a,G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichlorobenzene, 1,2-	µg/L	88[A] 5.6[B]	0.7[C]	2.5[E]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichlorobenzene, 1,3-	µg/L	36[A]	150[C]	2.5[E]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichlorobenzene, 1,4-	µg/L	17[A] 6.8[B]	26[C]	4[E]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichlorodifluoromethane (Freon 12)	µg/L	n/v	n/v	n/v	<0.50	-	<0.50	nc	<1.0	-	-	-	-	-	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	nc	-	<1.0	-
Dichloroethane, 1,1-	µg/L	200[A]	n/v	200[G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Dichloroethane, 1,2-	µg/L	210[A]	100[C]	100[G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichloroethene, 1,1-	µg/L	40[A]	n/v	40[G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Dichloroethene, cis-1,2-	µg/L	200[A] 5.6[B]	n/v	200[G]	<0.10	-	<0.10	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichloroethene, trans-1,2-	µg/L	200[A]	n/v	200[G]	<0.10	-	<0.10	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichloropropane, 1,2-	µg/L	850[A]	n/v	0.7[a,G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/L	n/v	n/v	n/v	<0.28	-	<0.28	nc	<0.50	-	-	-	-	-	-	<0.50	-	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Dichloropropene, cis-1,3-	µg/L	70[A]	n/v	n/v	<0.20	-	<0.20	nc	<0.30	-	-	-	-	-	-	<0.30	<0.30	<0.30	-	<0.30	<0.30	nc	-	<0.30	-
Dichloropropene, trans-1,3-	µg/L	70[A] 5.6[B]	n/v	7[a,G]	<0.20	-	<0.20	nc	<0.40	-	-	-	-	-	-	<0.40	<0.40	<0.40	-	<0.40	<0.40	nc	-	<0.40	-
Ethylbenzene	µg/L	57[A] 2[B]	90[C]	8[G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	28[A]	n/v	5[a,G]	<0.20	-	<0.20	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Hexane (n-Hexane)	µg/L	n/v	n/v	n/v	<0.50	-	<0.50	nc	<1.0	-	-	-	-	-	-	<1.0	<1.0	<1.0	-	<1.0	<1.0	nc	-	<1.0	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/L	n/v	n/v	400[a,G]	<5.0	-	<5.0	nc	<10	-	-	-	-	-	-	<10	<10	<10	-	<10	<10	nc	-	<10	-
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	n/v	n/v	<5.0	-	<5.0	nc	<5.0	-	-	-	-	-	-	<5.0	<5.0	<5.0	-	<5.0	<5.0	nc	-	<5.0	-
Methyl tert-butyl ether (MTBE)	µg/L	n/v	10,000[C]	200[a,G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Methylene Chloride (Dichloromethane)	µg/L	211[A] 5.2[B]	98.1[C]	100[a,G]	<0.50	-	<0.50	nc	<2.0	-	-	-	-	-	-	<2.0	<2.0	<2.0	-	<2.0	<2.0	nc	-	<2.0	-
Styrene	µg/L	40[A]	72[C]	4[a,G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Tetrachloroethane, 1,1,1,2-	µg/L	n/v	n/v	20[a,G]	<0.10	-	<0.10	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Tetrachloroethane, 1,1,2,2-	µg/L	40[A] 17[B]	n/v	70[G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Tetrachloroethene (PCE)	µg/L	50[A] 4.4[B]	110[C]	50[G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	**11[B]**	-
Toluene	µg/L	80[A] 2[B]	2[C]	0.8[G]	<0.20	-	<0.20	nc	<0.20	-	-	-	-	-	-	0.52	0.49	**2.4[BCG]**	-	0.23	<0.20	nc	-	<0.20	-
Trichloroethane, 1,1,1-	µg/L	54[A]	n/v	10[a,G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Trichloroethane, 1,1,2-	µg/L	800[A]	n/v	800[G]	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Trichloroethene (TCE)	µg/L	54[A] 7.6[B]	21[C]	20[G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Trichlorofluoromethane (Freon 11)	µg/L	20[A]	n/v	n/v	<0.20	-	<0.20	nc	<0.50	-	-	-	-	-	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	nc	-	<0.50	-
Vinyl Chloride	µg/L	400[A]	n/v	600[a,G]	<0.20	-	<0.20	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	<0.20	-	<0.20	<0.20	nc	-	<0.20	-
Xylene, m & p-	µg/L	n/v	n/v	32[a,17,F]	0.12	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	0.51	-	<0.20	<0.20	nc	-	<0.20	-
Xylene, o-	µg/L	n/v	n/v	40[b,G]	<0.10	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	0.33	-	<0.20	<0.20	nc	-	<0.20	-
Xylenes, Total	µg/L	320[A] 4.4[B]	n/v	72[a,18,F]	0.12	-	<0.10	nc	<0.20	-	-	-	-	-	-	<0.20	<0.20	0.83	-	<0.20	<0.20	nc	-	<0.20	-
Glycols																									
Diethylene Glycol	mg/L	n/v	n/v	11[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/L	n/v	192[C]	2[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene Glycol, 1,2-	mg/L	n/v	500[C]	44[a,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides and Pesticides																									
1,3-Dinitrobenzene (m-Dinitrobenzene)	µg/L	n/v	n/v	1[b,G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Amino-4,6-dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Amino-2,6-Dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin + Dieldrin	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, beta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BHC, delta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Camphechlor (Toxaphene)	µg/L	n/v	n/v	0.008[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane (Total)	µg/L	n/v	n/v	0.06[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane, gamma-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD (p,p'-DDD)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'- + DDD, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE (p,p'-DDE)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'- + DDE, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT (p,p'-DDT)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'- + DDT, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DDT+ Metabolites	µg/L	n/v	n/v	0.003[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					MW16-13				MW16-14		MW16-1A					MW20-15		MW20-16		MW20-17				MW20-18	
Sample Date					10-Aug-16	10-Aug-16	11-Aug-16		7-Feb-20	7-Feb-20	9-Aug-16	9-Aug-16	11-Aug-16		16-Sep-16	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20	13-Feb-20		13-Feb-20	13-Feb-20	13-Feb-20
Sample ID					MW16-13	MW16-13 Lab-Dup	DUP-2		MW16-14	MW16-14 Lab-Dup	CWI942-07R\ MW16-1A	MW16-1A Lab-Dup	CWI956-07R\ DUP-1		MW16-1A	MW20-15	MW20-15 Lab-Dup	MW20-16	MW20-16 Lab-Dup	MW20-17	DUP2		DUP2 Lab-Dup	MW20-18	MW20-18 Lab-Dup
Sampling Company					STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	MAXX		BV	BV	MAXX	MAXX	MAXX		MAXX	BV	BV	BV	BV	BV	BV		BV	BV	BV
Laboratory Work Order					B6H0159	B6H0159	B6H0159		C035567	C035567	B655693/B6H0159/B668006/B668100	B6H0159	B655693/B6H0159/B668006/B668100		B6J8970	C041330	C041330	C041330	C041330	C041330	C041330		C041330	C041330	C041330
Laboratory Sample ID					CWI947	CWI947	CWI957	RPD	LYY062	LYY062	CV1255/CWI942/PG2906/PG3436/PG3437	CWI942	CV1256/CWI956/PG2913/PG3450/PG3451	RPD	DBU841	MAD678	MAD678	MAD679	MAD679	MAD680	MAD683	RPD	MAD683	MAD681	MAD681
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate	Field Duplicate	(%)			Lab Replicate		Lab Replicate		Field Duplicate	(%)	Lab Replicate		Lab Replicate
Herbicides and Pesticides																									
Dieldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/L	n/v	n/v	4[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/L	n/v	n/v	6[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan	µg/L	n/v	0.003[C] 0.06[D]	0.003[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan I	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan II	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan Sulfate	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin	µg/L	n/v	n/v	0.002[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin Aldehyde	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin Ketone	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor + Heptachlor Epoxide	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptachlor Epoxide	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/L	0.1[A] 0.04[B]	n/v	0.0065[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	n/v	n/v	0.01[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	n/v	n/v	0.04[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mirex	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/L	n/v	n/v	0.02$_9$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octachlorostyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxychlordane	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																									
Chloro-3-methyl phenol, 4-	µg/L	n/v	n/v	3$_a$[G]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	n/v	4[C]	1$_b$[G]	-	-	-	-	-	-	<0.5	-	<0.5	nc	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	4[C]	1$_b$[G]	-	-	-	-	-	-	<0.5	-	<0.5	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/L	44[A]	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/L	n/v	n/v	10$_b$[G]	-	-	-	-	-	-	<1	-	<1	nc	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/L	n/v	n/v	0.2$_s$[G]	-	-	-	-	-	-	***<1***	-	***<1***	nc	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	<1	-	<1	nc	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/L	n/v	n/v	0.5$_b$[G]	-	-	-	-	-	-	***<1***	-	***<1***	nc	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/L	n/v	n/v	50$_b$[G]	-	-	-	-	-	-	3	-	1	nc	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/L	n/v	0.5[C]	0.5[E]	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/L	n/v	4[C]	5$_b$[G]	-	-	-	-	-	-	<0.5	-	<0.5	nc	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	<0.1	-	<0.1	nc	-	-	-	-	-	-	-	-	-	-	-
Explosives																									
Nitroglycerin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	<0.2	-	<0.2	nc	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					N-1S				N-2D		S-1S		S-2D		ST-137		STAIRWELL-01					
Sample Date					6-Feb-20	6-Feb-20	6-Feb-20		6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	24-Oct-16	16-Nov-16	22-Oct-19	22-Oct-19	22-Oct-19		4-Nov-19	4-Nov-19
Sample ID					N-1S	N-1S Lab-Dup	DUP-1		N-2D	N-2D Lab-Dup	S-1S	S-1S Lab-Dup	S-2D	S-2D Lab-Dup	ST-137	ST-137	STAIRWELL-01	STAIRWELL-01 Lab-Dup	DUP-01		STAIRWELL-01	STAIRWELL-01 Lab-Dup
Sampling Company					STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory					BV	BV	BV		BV	BV	BV	BV	BV	BV	MAXX	MAXX	BV	BV	BV		BV	BV
Laboratory Work Order					C034481	C034481	C034481		C034481	C034481	C034481	C034481	C034481	C034481	B6M9950	B6O8992	B9T7657	B9T7657	B9T7657		B9U9078	B9U9078
Laboratory Sample ID					LYR999	LYR999	LYS001	RPD	LYS000	LYS000	LYR997	LYR997	LYR998	LYR998	DHR064	DLO531	LCN595	LCN595	LCN596	RPD	LFA699	LFA699
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate		Lab Replicate				Lab Replicate	Field Duplicate	(%)		Lab Replicate
General Chemistry																						
Ammonia	mg/L	n/v	TBC[C]	n/v	<0.061	-	<0.061	nc	<0.061	-	<0.061	-	<0.061	-	-	-	0.097	-	0.17	nc	-	-
Ammonia (as N)	mg/L	n/v	TBC2[C]	n/v	<0.050	-	<0.050	nc	<0.050	-	<0.050	-	<0.050	-	-	-	0.080	-	0.14	nc	-	-
Chloride	mg/L	n/v	120[C] 640[D]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloride, Dissolved	mg/L	n/v	120[C] 640[D]	n/v	**160**[C]	-	**150**[C]	6%	**150**[C]	-	**160**[C]	-	**150**[C]	-	-	-	**170**[C]	-	**170**[C]	0%	-	-
Cyanide (Free)	mg/L	2[A] 0.02[B]	0.005[C]	0.005[E]	<0.0010	-	<0.0010	nc	<0.0010	<0.0010	0.0011	-	<0.0010	-	-	-	0.0019	-	0.0011	nc	-	-
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyanide (Weak Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Filter and HNO3 Preservation	none	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	10[A]	0.12[C]	n/v	0.10	-	0.10	nc	0.10	-	0.11	-	0.11	-	-	-	0.12	-	0.11	nc	-	-
Hardness (as CaCO3)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hardness (as CaCO3), Total	mg/L	n/v	n/v	n/v	34.4	-	33.8	-	33.8	-	76.1	-	45.3	-	-	-	27.4	-	27.6	1%	-	-
Hardness (Dissolved Metals)	mg/L	n/v	n/v	n/v	33.9	-	34.7	2%	33.8	-	34.6	-	34.7	-	-	-	33.0	-	25.9	24%	-	-
Hydrogen Sulfide	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	n/v	13[C] 550[D]	n/v	11	-	11	0%	12	-	11	-	12	-	-	-	13	-	13	0%	-	-
Nitrate (as N)	mg/L	n/v	3.0[C] 124[D]	n/v	2.57	-	2.58	0%	2.60	-	2.57	-	2.60	-	-	-	2.88	-	2.86	1%	-	-
Nitrate + Nitrite (as N)	mg/L	n/v	n/v	n/v	2.57	-	2.58	0%	2.60	-	2.57	-	2.60	-	-	-	2.88	-	2.86	1%	-	-
Nitrite (as N)	mg/L	n/v	0.06[C]	n/v	<0.010	-	<0.010	nc	<0.010	-	<0.010	-	<0.010	-	-	-	<0.010	-	<0.010	nc	-	-
pH, lab	S.U.	5.5-11[A] 6-9[B]	6.5-9.0[C]	6.5-8.5[E]	8.42	-	8.42	nc	8.45	-	8.32	-	8.39	-	-	-	**9.56**[BCE]	-	**9.63**[BCE]	nc	-	-
Phenols (Phenolics)	mg/L	1[A] 0.008[B]	0.004[C]	0.001[E]	-	-	-	-	-	-	-	-	-	-	<0.0010	-	-	-	-	-	-	-
Phenols-4AAP	mg/L	1[A] 0.008[B]	n/v	0.001[E]	-	-	-	-	-	-	-	-	-	-	-	**0.0028**[E]	-	-	-	-	**0.0012**[E]	0.0010
Sulfide	mg/L	2[A]	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfide, Total	mg/L	2[A]	n/v	n/v	<0.0018	-	<0.0018	nc	0.0038	-	<0.0018	-	0.0024	-	-	-	0.012	-	0.012	0%	-	-
Sulfate	mg/L	1,500[A]	n/v	n/v	85	-	86	1%	85	-	88	-	87	-	-	-	98	-	97	1%	-	-
Sulfide (as H2S)	mg/L	n/v	n/v	n/v	<0.0020	-	<0.0020	nc	0.0040	-	<0.0020	-	0.0025	-	-	-	0.013	-	0.013	0%	-	-
Total Suspended Solids	mg/L	350[A] 15[B]	SN[C]	n/v	<10	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	100[A]	n/v	n/v	0.88	-	-	-	-	-	0.93	-	-	-	-	-	-	-	-	-	-	-
Volatile Suspended Solids (VSS)	mg/L	n/v	n/v	n/v	<10	-	-	-	-	-	<10	-	-	-	-	-	-	-	-	-	-	-
Petroleum Hydrocarbons																						
PHC F1 (C6-C10 range)	µg/L	n/v	n/v	n/v	<25	-	<25	nc	<25	-	<25	<25	<25	-	-	-	<25	<25	<25	nc	-	-
PHC F1 (C6-C10 range) minus BTEX	µg/L	n/v	n/v	n/v	<25	-	<25	nc	<25	-	<25	<25	<25	-	-	-	<25	<25	<25	nc	-	-
PHC F2 (>C10-C16 range)	µg/L	n/v	n/v	n/v	<100	-	<100	nc	<100	-	<100	-	<100	<100	-	-	<100	-	<100	nc	-	-
PHC F3 (>C16-C34 range)	µg/L	n/v	n/v	n/v	<200	-	<200	nc	<200	-	<200	-	<200	<200	-	-	<200	-	<200	nc	-	-
PHC F4 (>C34-C50 range)	µg/L	n/v	n/v	n/v	<200	-	<200	nc	<200	-	<200	-	<200	<200	-	-	<200	-	<200	nc	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	YES	-	YES	nc	YES	-	YES	-	YES	YES	-	-	YES	-	YES	nc	-	-
Metals, Dissolved																						
Aluminum	µg/L	50,000[A]	100[VAR1][C]	n/v	**304**[C]	-	**317**[C]	4%	**307**[C]	-	**298**[C]	**302**[C]	**307**[C]	-	-	-	**1,070**[C]	-	**989**[C]	8%	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	3.28	-	3.29	0%	3.19	-	3.27	3.22	3.27	-	-	-	3.34	-	3.30	1%	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	0.72	-	0.68	6%	0.70	-	0.66	0.69	0.73	-	-	-	0.73	-	0.74	1%	-	-
Barium	µg/L	n/v	n/v	n/v	12.4	-	12.6	2%	12.3	-	12.4	12.6	12.8	-	-	-	17.4	-	15.7	10%	-	-
Beryllium	µg/L	n/v	n/v	1,100[a3][E]	<0.10	-	<0.10	nc	<0.10	-	<0.10	<0.10	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	<1.0	-	<1.0	nc	<1.0	-	<1.0	<1.0	<1.0	-	-	-	<1.0	-	<1.0	nc	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200[a][G]	73	-	73	nc	74	-	73	74	75	-	-	-	68	-	67	nc	-	-
Cadmium	µg/L	20[A] 8[B]	0.37[LTG][C] 7.7[STB][D]	0.2[E] 0.5[s12][G]	**0.261**[E]	-	**0.295**[E]	12%	**0.277**[E]	-	**0.327**[E]	**0.330**[E]	**0.317**[E]	-	-	-	0.190 RD	-	0.165 RD	14%	-	-
Calcium	mg/L	n/v	n/v	n/v	13.1	-	13.4	2%	13.1	-	13.4	-	13.4	-	-	-	12.9	-	10.2	23%	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	<1.0	-	<1.0	nc	<1.0	-	1.5	1.5	1.2	-	-	-	1.0	-	<1.0	nc	-	-
Chromium (Hexavalent)	µg/L	n/v	1[C]	1[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	**1.33**[G]	-	**1.36**[G]	2%	**1.38**[G]	-	**1.35**[G]	**1.37**[G]	**1.36**[G]	-	-	-	**1.48**[G]	-	**1.45**[G]	2%	-	-
Copper	µg/L	3,000[A] 40[B]	4[TBC1][C]	5[E] 5[s13][G]	**10.1**[CEG]	-	**10.2**[CEG]	1%	**10.2**[CEG]	-	**9.43**[CEG]	**9.68**[CEG]	**9.57**[CEG]	-	-	-	**11.6**[CEG]	-	**10.4**[CEG]	11%	-	-
Iron	µg/L	n/v	300[C]	300[E]	97.8	-	95.9	2%	97.4	-	98.2	97.0	98.0	-	-	-	86.8 RD	-	54.1 RD	**46%**	-	-
Lead	µg/L	5,000[A] 120[B]	7[TBC1][C]	25[s14][E] 5[s15][G]	0.69	-	0.73	nc	0.73	-	0.66	0.69	0.70	-	-	-	2.04 RD	-	1.31 RD	**44%**	-	-
Lithium	µg/L	n/v	n/v	n/v	3.9	-	3.9	nc	3.8	-	3.9	3.9	3.9	-	-	-	4.4	-	4.3	nc	-	-
Magnesium	mg/L	n/v	n/v	n/v	0.272	-	0.277	2%	0.273	-	0.269	-	0.274	-	-	-	0.191	-	0.136	nc	-	-
Manganese	µg/L	5,000[A] 50[B]	430[EO4][C] 3,600[EO3][D]	n/v	7.3	-	7.5	3%	7.6	-	7.6	7.6	7.7	-	-	-	3.3	-	1.7	nc	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	10.4	-	10.1	3%	10.4	-	10.1	10.3	10.3	-	-	-	10.8	-	10.9	1%	-	-
Nickel	µg/L	3,000[A] 80[B]	150[TBC1][C]	25[E]	4.6	-	4.7	nc	4.9	-	4.6	4.8	4.7	-	-	-	6.2	-	6.1	2%	-	-
Potassium	mg/L	n/v	n/v	n/v	69.0	-	70.0	1%	69.3	-	69.1	-	70.4	-	-	-	73.8	-	72.3	2%	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	0.25	-	0.26	nc	0.27	-	0.26	0.22	0.23	-	-	-	0.26	-	0.25	nc	-	-
Silicon	µg/L	n/v	n/v	n/v	3,550	-	3,630	2%	3,450	-	3,500	3,510	3,570	-	-	-	4,900	-	4,730	4%	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	<0.020	-	<0.020	nc	<0.020	-	<0.020	<0.020	<0.020	-	-	-	<0.020	-	<0.020	nc	-	-
Sodium	mg/L	n/v	n/v	n/v	134	-	139	4%	137	-	134	-	138	-	-	-	145	-	142	2%	-	-
Strontium	µg/L	n/v	n/v	n/v	1,170	-	1,180	1%	1,170	-	1,150	1,150	1,200	-	-	-	1,250	-	1,210	3%	-	-
Sulfur	mg/L	n/v	n/v	n/v	31.7	-	32.3	2%	31.8	-	30.3	-	31.7	-	-	-	34.6	-	34.2	1%	-	-
Thallium	µg/L	n/v	0.8[C]	0.3[s][G]	0.012	-	0.012	nc	0.011	-	0.013	0.012	0.012	-	-	-	<0.010	-	<0.010	nc	-	-
Tin	µg/L	5,000[A]	n/v	n/v	<5.0	-	<5.0	nc	<5.0	-	<5.0	<5.0	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	<5.0	-	<5.0	nc	<5.0	-	<5.0	<5.0	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5[a][G]	<0.10	-	<0.10	nc	<0.10	-	<0.10	<0.10	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	<5.0	-	<5.0	nc	<5.0	-	<5.0	<5.0	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0[EO2][C] 37[EO1][D]	30[E] 20[G]	**205**[BCDEG]	-	**210**[BCDEG]	2%	**206**[BCDEG]	-	**209**[BCDEG]	**214**[BCDEG]	**219**[BCDEG]	-	-	-	**133 RD**[BCDEG]	-	**83.4 RD**[BCDEG]	**46%**	-	-
Zirconium	µg/L	n/v	n/v	4[a][G]	<0.10	-	<0.10	nc	<0.10	-	<0.10	<0.10	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					N-1S				N-2D		S-1S		S-2D		ST-137		STAIRWELL-01					
Sample Date					6-Feb-20	6-Feb-20	6-Feb-20		6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	24-Oct-16	16-Nov-16	22-Oct-19	22-Oct-19	22-Oct-19		4-Nov-19	4-Nov-19
Sample ID					N-1S	N-1S Lab-Dup	DUP-1		N-2D	N-2D Lab-Dup	S-1S	S-1S Lab-Dup	S-2D	S-2D Lab-Dup	ST-137	ST-137	STAIRWELL-01	STAIRWELL-01 Lab-Dup	DUP-01		STAIRWELL-01	STAIRWELL-01 Lab-Dup
Sampling Company					STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV
Laboratory Work Order					C034481	C034481	C034481		C034481	C034481	C034481	C034481	C034481	C034481	B6M9950	B6O8992	B9T7657	B9T7657	B9T7657		B9U9078	B9U9078
Laboratory Sample ID					LYR999	LYR999	LYS001	RPD	LYS000	LYS000	LYR997	LYR997	LYR998	LYR998	DHR064	DLO531	LCN595	LCN595	LCN596	RPD	LFA699	LFA699
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate		Lab Replicate				Lab Replicate	Field Duplicate	(%)		Lab Replicate
Metals, Total																						
Aluminum	µg/L	50,000[A]	100$_{VAR1}$[C]	n/v	**362**[C]	-	-	-	**367**[C]	-	**415**[C]	-	**388**[C]	-	-	-	**1,050**[C]	-	**1,040**[C]	1%	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	3.24	-	-	-	3.14	-	3.27	-	3.24	-	-	-	3.48	-	3.49	0%	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	0.68	-	-	-	0.67	-	0.75	-	0.67	-	-	-	0.79	-	0.77	3%	-	-
Barium	µg/L	n/v	n/v	n/v	13.6	-	-	-	13.5	-	20.2	-	15.6	-	-	-	16.3	-	16.4	1%	-	-
Beryllium	µg/L	n/v	n/v	1,100$_{s3}$[E]	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	<1.0	-	-	-	<1.0	-	<1.0	-	<1.0	-	-	-	<1.0	-	<1.0	nc	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200$_a$[G]	67	-	-	-	67	-	69	-	68	-	-	-	69	-	69	nc	-	-
Cadmium	µg/L	20[A] 8[B]	0.37$_{LTG}$[C] 7.7$_{STB}$[D]	0.2[E] 0.5$_{s12}$[G]	**0.367**[E]	-	-	-	**0.352**[E]	-	**0.485**[CE]	-	**0.454**[CE]	-	-	-	0.073	-	0.067	9%	-	-
Calcium	mg/L	n/v	n/v	n/v	13.3	-	-	-	13.1	-	29.9	-	17.7	-	-	-	10.8	-	10.8	0%	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	<1.0	-	-	-	<1.0	-	1.4	-	1.4	-	-	-	<1.0	-	<1.0	nc	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	**1.33**[G]	-	-	-	**1.34**[G]	-	**1.47**[G]	-	**1.37**[G]	-	-	-	**1.42**[G]	-	**1.47**[G]	3%	-	-
Copper	µg/L	3,000[A] 40[B]	4$_{TBC1}$[C]	5[E] 5$_{s13}$[G]	**11.6**[CEG]	-	-	-	**11.0**[CEG]	-	**11.1**[CEG]	-	**10.5**[CEG]	-	-	-	**9.47**[CEG]	-	**9.52**[CEG]	1%	-	-
Iron	µg/L	n/v	300[C]	300[E]	194	-	-	-	189	-	223	-	214	-	-	-	17	-	16	nc	-	-
Lead	µg/L	5,000[A] 120[B]	7$_{TBC1}$[C]	25$_{s14}$[E] 5$_{s15}$[G]	1.41	-	-	-	1.40	-	**8.29**[CG]	-	3.54	-	-	-	0.42	-	0.41	nc	-	-
Lithium	µg/L	n/v	n/v	n/v	4.0	-	-	-	3.9	-	4.1	-	4.0	-	-	-	4.4	-	4.5	nc	-	-
Magnesium	mg/L	n/v	n/v	n/v	0.268	-	-	-	0.271	-	0.327	-	0.286	-	-	-	0.146	-	0.148	nc	-	-
Manganese	µg/L	5,000[A] 50[B]	430$_{EO4}$[C] 3,600$_{EO3}$[D]	n/v	9.4	-	-	-	9.3	-	12.6	-	10.6	-	-	-	1.2	-	1.2	nc	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	<0.01	-	<0.01	nc	<0.01	-	<0.01	<0.01	<0.01	-	-	-	<0.01	<0.01	<0.01	nc	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	9.8	-	-	-	9.6	-	9.9	-	9.7	-	-	-	11.7	-	11.7	0%	-	-
Nickel	µg/L	3,000[A] 80[B]	150$_{TBC1}$[C]	25[E]	4.7	-	-	-	4.6	-	4.7	-	4.5	-	-	-	6.0	-	6.1	2%	-	-
Potassium	mg/L	n/v	n/v	n/v	67.3	-	-	-	68.2	-	68.6	-	67.6	-	-	-	79.6	-	79.9	0%	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	0.22	-	-	-	0.22	-	0.22	-	0.24	-	-	-	0.26	-	0.27	nc	-	-
Silicon	µg/L	n/v	n/v	n/v	3,780	-	-	-	3,630	-	3,780	-	3,780	-	-	-	5,000	-	5,010	0%	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	<0.020	-	-	-	<0.020	-	<0.020	-	<0.020	-	-	-	<0.020	-	<0.020	nc	-	-
Sodium	mg/L	n/v	n/v	n/v	131	-	-	-	132	-	134	-	131	-	-	-	155	-	155	0%	-	-
Strontium	µg/L	n/v	n/v	n/v	1,180	-	-	-	1,160	-	1,640	-	1,290	-	-	-	1,280	-	1,300	2%	-	-
Sulfur	mg/L	n/v	n/v	n/v	30.6	-	-	-	30.5	-	31.9	-	30.5	-	-	-	36.6	-	36.4	1%	-	-
Thallium	µg/L	n/v	0.8[C]	0.3$_b$[G]	<0.010	-	-	-	<0.010	-	<0.010	-	<0.010	-	-	-	<0.010	-	<0.010	nc	-	-
Tin	µg/L	5,000[A]	n/v	n/v	<5.0	-	-	-	<5.0	-	<5.0	-	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	<5.0	-	-	-	<5.0	-	<5.0	-	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5$_a$[G]	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	<5.0	-	-	-	<5.0	-	<5.0	-	<5.0	-	-	-	<5.0	-	<5.0	nc	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0$_{EQ2}$[C] 37$_{EQ1}$[D]	30[E] 20[G]	**264**[BCDEG]	-	-	-	**261**[BCDEG]	-	**359**[BCDEG]	-	**298**[BCDEG]	-	-	-	**33.8**[CEG]	-	**32.9**[CEG]	3%	-	-
Zirconium	µg/L	n/v	n/v	4$_a$[G]	<0.10	-	-	-	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Polycyclic Aromatic Hydrocarbons																						
Acenaphthene	µg/L	n/v	5.8[C]	n/v	<0.10	-	<0.10	nc	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Acenaphthylene	µg/L	n/v	n/v	n/v	<0.10	-	<0.10	nc	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Acridine	µg/L	n/v	4.4[C]	n/v	<0.040	-	<0.040	nc	<0.040	-	<0.040	-	<0.040	-	-	-	<0.040	-	<0.040	nc	-	-
Anthracene	µg/L	n/v	0.012[CD]	0.0008$_a$[G]	***<0.010***	-	***<0.010***	nc	***<0.010***	-	***<0.010***	-	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	nc	-	-
Benzo(a)anthracene	µg/L	n/v	0.018[C]	0.0004$_a$[G]	***<0.0085***	-	***<0.0085***	nc	***<0.0085***	-	***<0.0085***	-	***<0.0085***	-	-	-	***<0.0085***	-	***<0.0085***	nc	-	-
Benzo(a)pyrene	µg/L	n/v	0.015[C]	n/v	<0.0075	-	<0.0075	nc	<0.0075	-	<0.0075	-	<0.0075	-	-	-	<0.0075	-	<0.0075	nc	-	-
Benzo(b)pyridine (Quinoline)	µg/L	n/v	3.4[C]	10$_a$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	-	<0.20	-	-	-	<0.20	-	<0.20	nc	-	-
Benzo(b/j)fluoranthene	µg/L	n/v	n/v	n/v	<0.0085	-	<0.0085	nc	<0.0085	-	<0.0085	-	<0.0085	-	-	-	<0.0085	-	<0.0085	nc	-	-
Benzo(c)phenanthrene	µg/L	n/v	n/v	n/v	<0.050	-	<0.050	nc	<0.050	-	<0.050	-	<0.050	-	-	-	<0.050	-	<0.050	nc	-	-
Benzo(e)pyrene	µg/L	n/v	n/v	n/v	<0.050	-	<0.050	nc	<0.050	-	<0.050	-	<0.050	-	-	-	<0.050	-	<0.050	nc	-	-
Benzo(g,h,i)perylene	µg/L	n/v	n/v	0.00002$_a$[G]	***<0.0085***	-	***<0.0085***	nc	***<0.0085***	-	***<0.0085***	-	***<0.0085***	-	-	-	***<0.0085***	-	***<0.0085***	nc	-	-
Benzo(k)fluoranthene	µg/L	n/v	n/v	0.0002$_a$[G]	***<0.0085***	-	***<0.0085***	nc	***<0.0085***	-	***<0.0085***	-	***<0.0085***	-	-	-	***<0.0085***	-	***<0.0085***	nc	-	-
Chrysene	µg/L	n/v	n/v	0.0001$_a$[G]	***<0.0085***	-	***<0.0085***	nc	***<0.0085***	-	***<0.0085***	-	***<0.0085***	-	-	-	***<0.0085***	-	***<0.0085***	nc	-	-
Dibenzo(a,h)anthracene	µg/L	n/v	n/v	0.002$_a$[G]	***<0.0075***	-	***<0.0075***	nc	***<0.0075***	-	***<0.0075***	-	***<0.0075***	-	-	-	***<0.0075***	-	***<0.0075***	nc	-	-
Fluoranthene	µg/L	n/v	0.04[C]	0.0008$_a$[G]	***<0.010***	-	***<0.010***	nc	***<0.010***	-	***<0.010***	-	***<0.010***	-	-	-	***<0.010***	-	***<0.010***	nc	-	-
Fluorene	µg/L	59[A]	3[C]	0.2$_a$[G]	<0.050	-	<0.050	nc	<0.050	-	<0.050	-	<0.050	-	-	-	<0.050	-	<0.050	nc	-	-
Indeno(1,2,3-cd)pyrene	µg/L	n/v	n/v	n/v	<0.0085	-	<0.0085	nc	<0.0085	-	<0.0085	-	<0.0085	-	-	-	<0.0085	-	<0.0085	nc	-	-
Methylnaphthalene (Total)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/L	32[A]	n/v	2$_b$[G]	<0.10	-	<0.10	nc	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Methylnaphthalene, 2-	µg/L	22[A]	n/v	2$_b$[G]	<0.10	-	<0.10	nc	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Naphthalene	µg/L	59[A] 6.4[B]	1.1[C]	7$_a$[G]	<0.10	-	<0.10	nc	<0.10	-	<0.10	-	<0.10	-	-	-	<0.10	-	<0.10	nc	-	-
Perylene	µg/L	n/v	n/v	0.00007$_a$[G]	***<0.050***	-	***<0.050***	nc	***<0.050***	-	***<0.050***	-	***<0.050***	-	-	-	***<0.050***	-	***<0.050***	nc	-	-
Phenanthrene	µg/L	n/v	0.4[C]	0.03$_a$[G]	***<0.050***	-	***<0.050***	nc	***<0.050***	-	***<0.050***	-	***<0.050***	-	-	-	***<0.050***	-	***<0.050***	nc	-	-
Pyrene	µg/L	n/v	0.025[C]	n/v	<0.020	-	<0.020	nc	<0.020	-	<0.020	-	<0.020	-	-	-	<0.020	-	<0.020	nc	-	-
Benzo(a)pyrene Total Potency Equivalents	µg/L	n/v	n/v	n/v	<0.010	-	<0.010	nc	<0.010	-	<0.010	-	<0.010	-	-	-	<0.010	-	<0.010	nc	-	-
Polychlorinated Biphenyls																						
Aroclor 1016	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1221	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1232	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1242	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	<0.05	-	0.05	nc	-	-
Aroclor 1248	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	<0.05	-	<0.05	nc	-	-
Aroclor 1254	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	<0.05	-	<0.05	nc	-	-
Aroclor 1260	µg/L	n/v	n/v	s7[E]	<0.05	-	-	-	-	-	<0.05	-	-	-	-	-	<0.05	-	<0.05	nc	-	-
Aroclor 1262	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aroclor 1268	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/L	0.4[B]	n/v	0.001$_{s7}$[E]	***<0.05***	-	-	-	-	-	***<0.05***	-	-	-	-	-	***<0.05***	-	**0.05**[E]	nc	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					N-1S				N-2D		S-1S		S-2D		ST-137		STAIRWELL-01					
Sample Date					6-Feb-20	6-Feb-20	6-Feb-20		6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	24-Oct-16	16-Nov-16	22-Oct-19	22-Oct-19	22-Oct-19		4-Nov-19	4-Nov-19
Sample ID					N-1S	N-1S Lab-Dup	DUP-1		N-2D	N-2D Lab-Dup	S-1S	S-1S Lab-Dup	S-2D	S-2D Lab-Dup	ST-137	ST-137	STAIRWELL-01	STAIRWELL-01 Lab-Dup	DUP-01		STAIRWELL-01	STAIRWELL-01 Lab-Dup
Sampling Company					STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC BV	STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV		STANTEC BV	STANTEC BV
Laboratory Work Order					C034481	C034481	C034481		C034481	C034481	C034481	C034481	C034481	C034481	B6M9950	B6O8992	B9T7657	B9T7657	B9T7657		B9U9078	B9U9078
Laboratory Sample ID					LYR999	LYR999	LYS001	RPD	LYS000	LYS000	LYR997	LYR997	LYR998	LYR998	DHR064	DLO531	LCN595	LCN595	LCN596	RPD	LFA699	LFA699
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate		Lab Replicate				Lab Replicate	Field Duplicate	(%)		Lab Replicate
Volatile Organic Compounds																						
Acetone	µg/L	n/v	n/v	n/v	<10	-	<10	nc	<10	-	<10	<10	<10	-	-	-	<10	<10	<10	nc	-	-
Benzene	µg/L	10[A] 2[B]	370[C]	100$_b$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Bromodichloromethane	µg/L	350[A]	n/v	200$_a$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Bromoform (Tribromomethane)	µg/L	630[A]	n/v	60$_a$[G]	<1.0	-	<1.0	nc	<1.0	-	<1.0	<1.0	<1.0	-	-	-	<1.0	<1.0	<1.0	nc	-	-
Bromomethane (Methyl bromide)	µg/L	110[A]	n/v	0.9$_a$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/L	57[A]	13.3[C]	n/v	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Chlorobenzene (Monochlorobenzene)	µg/L	57[A]	1.3[C]	15[E]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Chloroform (Trichloromethane)	µg/L	80[A] 2[B]	1.8[C]	n/v	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Dibromochloromethane	µg/L	57[A]	n/v	40$_a$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichlorobenzene, 1,2-	µg/L	88[A] 5.6[B]	0.7[C]	2.5[E]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichlorobenzene, 1,3-	µg/L	36[A]	150[C]	2.5[E]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichlorobenzene, 1,4-	µg/L	17[A] 6.8[B]	26[C]	4[E]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichlorodifluoromethane (Freon 12)	µg/L	n/v	n/v	n/v	<1.0	-	<1.0	nc	<1.0	-	<1.0	<1.0	<1.0	-	-	-	<1.0	<1.0	<1.0	nc	-	-
Dichloroethane, 1,1-	µg/L	200[A]	n/v	200[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Dichloroethane, 1,2-	µg/L	210[A]	100[C]	100[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichloroethene, 1,1-	µg/L	40[A]	n/v	40[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Dichloroethene, cis-1,2-	µg/L	200[A] 5.6[B]	n/v	200[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichloroethene, trans-1,2-	µg/L	200[A]	n/v	200[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Dichloropropane, 1,2-	µg/L	850[A]	n/v	0.7$_a$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/L	n/v	n/v	n/v	<0.50	-	<0.50	nc	<0.50	-	<0.50	-	<0.50	-	-	-	<0.50	-	<0.50	nc	-	-
Dichloropropene, cis-1,3-	µg/L	70[A]	n/v	n/v	<0.30	-	<0.30	nc	<0.30	-	<0.30	<0.30	<0.30	-	-	-	<0.30	<0.30	<0.30	nc	-	-
Dichloropropene, trans-1,3-	µg/L	70[A] 5.6[B]	n/v	7$_a$[G]	<0.40	-	<0.40	nc	<0.40	-	<0.40	<0.40	<0.40	-	-	-	<0.40	<0.40	<0.40	nc	-	-
Ethylbenzene	µg/L	57[A] 2[B]	90[C]	8[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	28[A]	n/v	5$_a$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Hexane (n-Hexane)	µg/L	n/v	n/v	n/v	<1.0	-	<1.0	nc	<1.0	-	<1.0	<1.0	<1.0	-	-	-	<1.0	<1.0	<1.0	nc	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/L	n/v	n/v	400$_a$[G]	<10	-	<10	nc	<10	-	<10	<10	<10	-	-	-	<10	<10	<10	nc	-	-
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	n/v	n/v	<5.0	-	<5.0	nc	<5.0	-	<5.0	<5.0	<5.0	-	-	-	<5.0	<5.0	<5.0	nc	-	-
Methyl tert-butyl ether (MTBE)	µg/L	n/v	10,000[C]	200$_a$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Methylene Chloride (Dichloromethane)	µg/L	211[A] 5.2[B]	98.1[C]	100$_a$[G]	<2.0	-	<2.0	nc	<2.0	-	<2.0	<2.0	<2.0	-	-	-	<2.0	<2.0	<2.0	nc	-	-
Styrene	µg/L	40[A]	72[C]	4$_b$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	n/v	n/v	20$_a$[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Tetrachloroethane, 1,1,2,2-	µg/L	40[A] 17[B]	n/v	70[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Tetrachloroethene (PCE)	µg/L	50[A] 4.4[B]	110[C]	50[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Toluene	µg/L	80[A] 2[B]	2[C]	0.8[E]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Trichloroethane, 1,1,1-	µg/L	54[A]	n/v	10$_a$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Trichloroethane, 1,1,2-	µg/L	800[A]	n/v	800[G]	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Trichloroethene (TCE)	µg/L	54[A] 7.6[B]	21[C]	20[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Trichlorofluoromethane (Freon 11)	µg/L	20[A]	n/v	n/v	<0.50	-	<0.50	nc	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	<0.50	nc	-	-
Vinyl Chloride	µg/L	400[A]	n/v	600$_a$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Xylene, m & p-	µg/L	n/v	n/v	32$_{a\,t7}$[F]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Xylene, o-	µg/L	n/v	n/v	40$_b$[G]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Xylenes, Total	µg/L	320[A] 4.4[B]	n/v	72$_{a\,t7}$[F]	<0.20	-	<0.20	nc	<0.20	-	<0.20	<0.20	<0.20	-	-	-	<0.20	<0.20	<0.20	nc	-	-
Glycols																						
Diethylene Glycol	mg/L	n/v	n/v	11$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylene Glycol	mg/L	n/v	192[C]	2$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propylene Glycol, 1,2-	mg/L	n/v	500[C]	44$_a$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Glycol	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Herbicides and Pesticides																						
1,3-Dinitrobenzene (m-Dinitrobenzene)	µg/L	n/v	n/v	1$_b$[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Amino-4,6-dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Amino-2,6-Dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aldrin	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Aldrin + Dieldrin	µg/L	n/v	n/v	0.001[E]	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-
BHC, alpha-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
BHC, beta-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
BHC, delta-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Camphechlor (Toxaphene)	µg/L	n/v	n/v	0.008[E]	***<0.2***	-	-	-	-	-	***<0.2***	-	-	-	-	-	-	-	-	-	-	-
Chlordane (Total)	µg/L	n/v	n/v	0.06[E]	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Chlordane, alpha-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Chlordane, gamma-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDD (p,p'-DDD)	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDD, o,p'- + DDD, p,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDE (p,p'-DDE)	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDE, o,p'- + DDE, p,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDT (p,p'-DDT)	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDT, o,p'- + DDT, p,p'-	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
DDT+ Metabolites	µg/L	n/v	n/v	0.003[E]	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					N-1S				N-2D		S-1S		S-2D		ST-137		STAIRWELL-01					
Sample Date					6-Feb-20	6-Feb-20	6-Feb-20		6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	6-Feb-20	24-Oct-16	16-Nov-16	22-Oct-19	22-Oct-19	22-Oct-19		4-Nov-19	4-Nov-19
Sample ID					N-1S	N-1S Lab-Dup	DUP-1		N-2D	N-2D Lab-Dup	S-1S	S-1S Lab-Dup	S-2D	S-2D Lab-Dup	ST-137	ST-137	STAIRWELL-01	STAIRWELL-01 Lab-Dup	DUP-01		STAIRWELL-01	STAIRWELL-01 Lab-Dup
Sampling Company					STANTEC	STANTEC	STANTEC		STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC		STANTEC	STANTEC
Laboratory					BV	BV	BV		BV	BV	BV	BV	BV	BV	MAXX	MAXX	BV	BV	BV		BV	BV
Laboratory Work Order					C034481	C034481	C034481		C034481	C034481	C034481	C034481	C034481	C034481	B6M9950	B6O8992	B9T7657	B9T7657	B9T7657		B9U9078	B9U9078
Laboratory Sample ID					LYR999	LYR999	LYS001	RPD	LYS000	LYS000	LYR997	LYR997	LYR998	LYR998	DHR064	DLO531	LCN595	LCN595	LCN596	RPD	LFA699	LFA699
Sample Type	Units	Ottawa	CCME	PWQO		Lab Replicate	Field Duplicate	(%)		Lab Replicate		Lab Replicate		Lab Replicate				Lab Replicate	Field Duplicate	(%)		Lab Replicate
Herbicides and Pesticides																						
Dieldrin	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/L	n/v	n/v	4^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/L	n/v	n/v	6^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan	µg/L	n/v	0.003^{C} 0.06^{D}	0.003^{E}	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-
Endosulfan I	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Endosulfan II	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Endosulfan Sulfate	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Endrin	µg/L	n/v	n/v	0.002^{E}	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-
Endrin Aldehyde	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Endrin Ketone	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Heptachlor	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Heptachlor + Heptachlor Epoxide	µg/L	n/v	n/v	0.001^{E}	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-
Heptachlor Epoxide	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	µg/L	0.1^{A} 0.04^{B}	n/v	0.0065^{E}	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	n/v	n/v	0.01^{E}	<0.003	-	-	-	-	-	<0.003	-	-	-	-	-	-	-	-	-	-	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	n/v	n/v	0.04^{E}	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-
Mirex	µg/L	n/v	n/v	0.001^{E}	***<0.005***	-	-	-	-	-	***<0.005***	-	-	-	-	-	-	-	-	-	-	-
Nitrobenzene	µg/L	n/v	n/v	0.02_{s}^{G}	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octachlorostyrene	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oxychlordane	µg/L	n/v	n/v	n/v	<0.005	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																						
Chloro-3-methyl phenol, 4-	µg/L	n/v	n/v	3_{a}^{G}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	7^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/L	n/v	7^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	n/v	4^{C}	1_{b}^{G}	<0.5	<0.5	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	4^{C}	1_{b}^{G}	<0.5	<0.5	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/L	n/v	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/L	44^{A}	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/L	n/v	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/L	n/v	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/L	n/v	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/L	n/v	0.2^{C}	0.2^{E}	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/L	n/v	n/v	10_{b}^{G}	<1	<1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/L	n/v	n/v	0.2_{s}^{G}	***<1***	***<1***	-	-	-	-	***<1***	-	-	-	-	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/L	n/v	n/v	n/v	<1	<1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/L	n/v	n/v	0.5_{b}^{G}	***<1***	***<1***	-	-	-	-	***<1***	-	-	-	-	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/L	n/v	n/v	50_{b}^{G}	<1	<1	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	µg/L	n/v	0.5^{C}	0.5^{E}	**0.8^{CE}**	**0.8^{CE}**	-	-	-	-	**0.8^{CE}**	-	-	-	-	-	-	-	-	-	-	-
Phenol	µg/L	n/v	4^{C}	5_{b}^{G}	<0.5	<0.5	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/L	n/v	1^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/L	n/v	1^{C}	n/v	0.3	0.3	-	-	-	-	0.3	-	-	-	-	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/L	n/v	1^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/L	n/v	18^{C}	n/v	<0.1	<0.1	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	-
Explosives																						
Nitroglycerin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public Services and Procurement Canada

Sample Location					FIELD_BLANK			TRIP_BLANK			
Sample Date					18-Mar-16	12-Aug-16	24-Oct-19	18-Mar-16	24-Oct-19	6-Feb-20	13-Feb-20
Sample ID					FIELD BLANK	FIELD BLANK	FB-01	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	BV	MAXX	BV	BV	BV
Laboratory Work Order					B655361	B6H0159	B9U0312	B655361	B9U0312	C034481	C041330
Laboratory Sample ID					CAX634	CWI955	LDB879	CAX635	LDB878	LYS005	MAD682
Sample Type	Units	Ottawa	CCME	PWQO	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
General Chemistry											
Ammonia	mg/L	n/v	$_{TBC}$[C]	n/v	-	-	-	-	-	-	-
Ammonia (as N)	mg/L	n/v	$_{TBC2}$[C]	n/v	-	-	-	-	-	-	-
Chloride	mg/L	n/v	120[C] 640[D]	n/v	-	-	-	-	-	-	-
Chloride, Dissolved	mg/L	n/v	120[C] 640[D]	n/v	-	-	-	-	-	-	-
Cyanide (Free)	mg/L	2[A] 0.02[B]	0.005[C]	0.005[E]	-	-	-	-	-	-	-
Cyanide (Strong Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-
Cyanide (Weak Acid Dissociable)	mg/L	n/v	0.005[C]	n/v	-	-	-	-	-	-	-
Filter and HNO3 Preservation	none	n/v	n/v	n/v	-	-	-	-	-	-	-
Fluoride	mg/L	10[A]	0.12[C]	n/v	-	-	-	-	-	-	-
Hardness (as CaCO3)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Hardness (as CaCO3), Total	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Hardness (Dissolved Metals)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Hydrogen Sulfide	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Nitrate	mg/L	n/v	13[C] 550[D]	n/v	-	-	-	-	-	-	-
Nitrate (as N)	mg/L	n/v	3.0[C] 124[D]	n/v	-	-	-	-	-	-	-
Nitrate + Nitrite (as N)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Nitrite (as N)	mg/L	n/v	0.06[C]	n/v	-	-	-	-	-	-	-
pH, lab	S.U.	5.5-11[A] 6-9[B]	6.5-9.0[C]	6.5-8.5[E]	-	-	-	-	-	-	-
Phenols (Phenolics)	mg/L	1[A] 0.008[B]	0.004[C]	0.001[E]	-	-	-	-	-	-	-
Phenols-4AAP	mg/L	1[A] 0.008[B]	n/v	0.001[E]	-	-	-	-	-	-	-
Sulfide	mg/L	2[A]	n/v	n/v	-	-	-	-	-	-	-
Sulfide, Total	mg/L	2[A]	n/v	n/v	-	-	-	-	-	-	-
Sulfate	mg/L	1,500[A]	n/v	n/v	-	-	-	-	-	-	-
Sulfide (as H2S)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Total Suspended Solids	mg/L	350[A] 15[B]	$_{SN}$[C]	n/v	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	100[A]	n/v	n/v	-	-	-	-	-	-	-
Volatile Suspended Solids (VSS)	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Petroleum Hydrocarbons											
PHC F1 (C6-C10 range)	µg/L	n/v	n/v	n/v	-	-	<25	-	<25	<25	<25
PHC F1 (C6-C10 range) minus BTEX	µg/L	n/v	n/v	n/v	-	-	<25	-	<25	<25	<25
PHC F2 (>C10-C16 range)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
PHC F3 (>C16-C34 range)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
PHC F4 (>C34-C50 range)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Chromatogram to baseline at C50	none	n/v	n/v	n/v	-	-	-	-	-	-	-
Metals, Dissolved											
Aluminum	µg/L	50,000[A]	100_{VAR1}[C]	n/v	-	-	-	-	-	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	-	-	-	-	-	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	-	-	-	-	-	-	-
Barium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Beryllium	µg/L	n/v	n/v	$1{,}100_{s3}$[E]	-	-	-	-	-	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200_{a}[G]	-	-	-	-	-	-	-
Cadmium	µg/L	20[A] 8[B]	0.37_{LTG}[C] 7.7_{STB}[D]	0.2[E] 0.5_{s12}[G]	-	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	-	-	-	-
Chromium (Hexavalent)	µg/L	n/v	1[C]	1[E]	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	-	-	-	-	-	-	-
Copper	µg/L	3,000[A] 40[B]	4_{TBC1}[C]	5[E] 5_{s13}[G]	-	-	-	-	-	-	-
Iron	µg/L	n/v	300[C]	300[E]	-	-	-	-	-	-	-
Lead	µg/L	5,000[A] 120[B]	7_{TBC1}[C]	25_{s14}[E] 5_{s15}[G]	-	-	-	-	-	-	-
Lithium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Manganese	µg/L	5,000[A] 50[B]	430_{EQ4}[C] $3{,}600_{EQ3}$[D]	n/v	-	-	-	-	-	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	-	-	-	-	-	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	-	-	-	-	-	-	-
Nickel	µg/L	3,000[A] 80[B]	150_{TBC1}[C]	25[E]	-	-	-	-	-	-	-
Potassium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	-	-	-	-	-	-	-
Silicon	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	-	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Strontium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Thallium	µg/L	n/v	0.8[C]	0.3_{s}[G]	-	-	-	-	-	-	-
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5_{a}[G]	-	-	-	-	-	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	-	-	-	-	-	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0_{EQ2}[C] 37_{EQ1}[D]	30[E] 20[G]	-	-	-	-	-	-	-
Zirconium	µg/L	n/v	n/v	4_{a}[G]	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public Services and Procurement Canada

Sample Location					FIELD_BLANK			TRIP_BLANK			
Sample Date					18-Mar-16	12-Aug-16	24-Oct-19	18-Mar-16	24-Oct-19	6-Feb-20	13-Feb-20
Sample ID					FIELD BLANK	FIELD BLANK	FB-01	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	BV	MAXX	BV	BV	BV
Laboratory Work Order					B655361	B6H0159	B9U0312	B655361	B9U0312	C034481	C041330
Laboratory Sample ID					CAX634	CWI955	LDB879	CAX635	LDB878	LYS005	MAD682
Sample Type	Units	Ottawa	CCME	PWQO	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Metals, Total											
Aluminum	µg/L	50,000[A]	100$_{VAR1}$[C]	n/v	-	-	-	-	-	-	-
Antimony	µg/L	5,000[A]	n/v	20[G]	-	-	-	-	-	-	-
Arsenic	µg/L	1,000[A] 20[B]	5[C]	100[E] 5[G]	-	-	-	-	-	-	-
Barium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Beryllium	µg/L	n/v	n/v	1,100$_{s3}$[E]	-	-	-	-	-	-	-
Bismuth	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Boron	µg/L	25,000[A]	1,500[C] 29,000[D]	200$_a$[G]	-	-	-	-	-	-	-
Cadmium	µg/L	20[A] 8[B]	0.37$_{LTG}$[C] 7.7$_{STB}$[D]	0.2[E] 0.5$_{s12}$[G]	-	-	-	-	-	-	-
Calcium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Chromium	µg/L	5,000[A] 80[B]	n/v	n/v	-	-	-	-	-	-	-
Cobalt	µg/L	5,000[A]	n/v	0.9[G]	-	-	-	-	-	-	-
Copper	µg/L	3,000[A] 40[B]	4$_{TBC1}$[C]	5[E] 5$_{s13}$[G]	-	-	-	-	-	-	-
Iron	µg/L	n/v	300[C]	300[E]	-	-	-	-	-	-	-
Lead	µg/L	5,000[A] 120[B]	7$_{TBC1}$[C]	25$_{s14}$[E] 5$_{s15}$[G]	-	-	-	-	-	-	-
Lithium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Magnesium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Manganese	µg/L	5,000[A] 50[B]	430$_{EQ4}$[C] 3,600$_{EQ3}$[D]	n/v	-	-	-	-	-	-	-
Mercury	µg/L	1[A] 0.4[B]	0.026[C]	0.2[E]	-	-	-	-	-	-	-
Molybdenum	µg/L	5,000[A]	73[C]	40[G]	-	-	-	-	-	-	-
Nickel	µg/L	3,000[A] 80[B]	150$_{TBC1}$[C]	25[E]	-	-	-	-	-	-	-
Potassium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Selenium	µg/L	5,000[A] 20[B]	1[C]	100[E]	-	-	-	-	-	-	-
Silicon	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Silver	µg/L	5,000[A] 120[B]	0.25[C]	0.1[E]	-	-	-	-	-	-	-
Sodium	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Strontium	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Sulfur	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Thallium	µg/L	n/v	0.8[C]	0.3$_b$[G]	-	-	-	-	-	-	-
Tin	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Titanium	µg/L	5,000[A]	n/v	n/v	-	-	-	-	-	-	-
Uranium	µg/L	n/v	15[C] 33[D]	5$_a$[G]	-	-	-	-	-	-	-
Vanadium	µg/L	5,000[A]	n/v	6[G]	-	-	-	-	-	-	-
Zinc	µg/L	3,000[A] 40[B]	7.0$_{EQ2}$[C] 37$_{EQ1}$[D]	30[E] 20[G]	-	-	-	-	-	-	-
Zirconium	µg/L	n/v	n/v	4$_a$[G]	-	-	-	-	-	-	-
Polycyclic Aromatic Hydrocarbons											
Acenaphthene	µg/L	n/v	5.8[C]	n/v	-	-	-	-	-	-	-
Acenaphthylene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Acridine	µg/L	n/v	4.4[C]	n/v	-	-	-	-	-	-	-
Anthracene	µg/L	n/v	0.012[CD]	0.0008$_a$[G]	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/L	n/v	0.018[C]	0.0004$_a$[G]	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/L	n/v	0.015[C]	n/v	-	-	-	-	-	-	-
Benzo(b)pyridine (Quinoline)	µg/L	n/v	3.4[C]	10$_a$[G]	-	-	-	-	-	-	-
Benzo(b/j)fluoranthene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Benzo(c)phenanthrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Benzo(e)pyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	n/v	n/v	0.00002$_a$[G]	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/L	n/v	n/v	0.0002$_a$[G]	-	-	-	-	-	-	-
Chrysene	µg/L	n/v	n/v	0.0001$_a$[G]	-	-	-	-	-	-	-
Dibenzo(a,h)anthracene	µg/L	n/v	n/v	0.002$_a$[G]	-	-	-	-	-	-	-
Fluoranthene	µg/L	n/v	0.04[C]	0.0008$_a$[G]	-	-	-	-	-	-	-
Fluorene	µg/L	59[A]	3[C]	0.2$_a$[G]	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Methylnaphthalene (Total)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Methylnaphthalene, 1-	µg/L	32[A]	n/v	2$_b$[G]	-	-	-	-	-	-	-
Methylnaphthalene, 2-	µg/L	22[A]	n/v	2$_b$[G]	-	-	-	-	-	-	-
Naphthalene	µg/L	59[A] 6.4[B]	1.1[C]	7$_a$[G]	-	-	-	-	-	-	-
Perylene	µg/L	n/v	n/v	0.00007$_a$[G]	-	-	-	-	-	-	-
Phenanthrene	µg/L	n/v	0.4[C]	0.03$_a$[G]	-	-	-	-	-	-	-
Pyrene	µg/L	n/v	0.025[C]	n/v	-	-	-	-	-	-	-
Benzo(a)pyrene Total Potency Equivalents	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Polychlorinated Biphenyls											
Aroclor 1016	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1221	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1232	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1242	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1248	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1254	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1260	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1262	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Aroclor 1268	µg/L	n/v	n/v	s7[E]	-	-	-	-	-	-	-
Polychlorinated Biphenyls (PCBs)	µg/L	0.4[B]	n/v	0.001$_{s7}$[E]	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Sample Location					FIELD_BLANK			TRIP_BLANK			
Sample Date					18-Mar-16	12-Aug-16	24-Oct-19	18-Mar-16	24-Oct-19	6-Feb-20	13-Feb-20
Sample ID					FIELD BLANK	FIELD BLANK	FB-01	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sampling Company Laboratory					STANTEC MAXX	STANTEC MAXX	STANTEC BV	STANTEC MAXX	STANTEC BV	STANTEC BV	STANTEC BV
Laboratory Work Order					B655361	B6H0159	B9U0312	B655361	B9U0312	C034481	C041330
Laboratory Sample ID					CAX634	CWI955	LDB879	CAX635	LDB878	LYS005	MAD682
Sample Type	Units	Ottawa	CCME	PWQO	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Volatile Organic Compounds											
Acetone	µg/L	n/v	n/v	n/v	<10	<10	<10	<10	<10	-	-
Benzene	µg/L	10[A] 2[B]	370[C]	100_b[G]	<0.10	<0.10	<0.20	<0.10	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	350[A]	n/v	200_a[G]	<0.10	<0.10	<0.50	<0.10	<0.50	-	-
Bromoform (Tribromomethane)	µg/L	630[A]	n/v	60_a[G]	<0.20	<0.20	<1.0	<0.20	<1.0	-	-
Bromomethane (Methyl bromide)	µg/L	110[A]	n/v	0.9_a[G]	<0.50	<0.50	<0.50	<0.50	<0.50	-	-
Carbon Tetrachloride (Tetrachloromethane)	µg/L	57[A]	13.3[C]	n/v	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Chlorobenzene (Monochlorobenzene)	µg/L	57[A]	1.3[C]	15[E]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Chloroform (Trichloromethane)	µg/L	80[A] 2[B]	1.8[C]	n/v	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Dibromochloromethane	µg/L	57[A]	n/v	40_a[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Dichlorobenzene, 1,2-	µg/L	88[A] 5.6[B]	0.7[C]	2.5[E]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Dichlorobenzene, 1,3-	µg/L	36[A]	150[C]	2.5[E]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Dichlorobenzene, 1,4-	µg/L	17[A] 6.8[B]	26[C]	4[E]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Dichlorodifluoromethane (Freon 12)	µg/L	n/v	n/v	n/v	<0.50	<0.50	<1.0	<0.50	<1.0	-	-
Dichloroethane, 1,1-	µg/L	200[A]	n/v	200[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Dichloroethane, 1,2-	µg/L	210[A]	100[C]	100[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Dichloroethene, 1,1-	µg/L	40[A]	n/v	40[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Dichloroethene, cis-1,2-	µg/L	200[A] 5.6[B]	n/v	200[G]	<0.10	<0.10	<0.50	<0.10	<0.50	-	-
Dichloroethene, trans-1,2-	µg/L	200[A]	n/v	200[G]	<0.10	<0.10	<0.50	<0.10	<0.50	-	-
Dichloropropane, 1,2-	µg/L	850[A]	n/v	0.7_a[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Dichloropropene, 1,3- (sum of isomers cis + trans)	µg/L	n/v	n/v	n/v	<0.28	<0.28	-	<0.28	-	-	-
Dichloropropene, cis-1,3-	µg/L	70[A]	n/v	n/v	<0.20	<0.20	<0.30	<0.20	<0.30	-	-
Dichloropropene, trans-1,3-	µg/L	70[A] 5.6[B]	n/v	7[G]	<0.20	<0.20	<0.40	<0.20	<0.40	-	-
Ethylbenzene	µg/L	57[A] 2[B]	90[C]	8[G]	<0.10	<0.10	<0.20	<0.10	<0.20	<0.20	<0.20
Ethylene Dibromide (Dibromoethane, 1,2-)	µg/L	28[A]	n/v	5_a[G]	<0.20	<0.20	<0.20	<0.20	<0.20	-	-
Hexane (n-Hexane)	µg/L	n/v	n/v	n/v	<0.50	<0.50	<1.0	<0.50	<1.0	-	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	µg/L	n/v	n/v	400_a[G]	<5.0	<5.0	<10	<5.0	<10	-	-
Methyl Isobutyl Ketone (MIBK)	µg/L	n/v	n/v	n/v	<5.0	<5.0	<5.0	<5.0	<5.0	-	-
Methyl tert-butyl ether (MTBE)	µg/L	n/v	10,000[C]	200_a[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Methylene Chloride (Dichloromethane)	µg/L	211[A] 5.2[B]	98.1[C]	100_a[G]	<0.50	<0.50	<2.0	<0.50	<2.0	-	-
Styrene	µg/L	40[A]	72[C]	4[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Tetrachloroethane, 1,1,1,2-	µg/L	n/v	n/v	20_a[G]	<0.10	<0.10	<0.50	<0.10	<0.50	-	-
Tetrachloroethane, 1,1,2,2-	µg/L	40[A] 17[B]	n/v	70[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Tetrachloroethene (PCE)	µg/L	50[A] 4.4[B]	110[C]	50[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Toluene	µg/L	80[A] 2[B]	2[C]	0.8[G]	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethane, 1,1,1-	µg/L	54[A]	n/v	10_a[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Trichloroethane, 1,1,2-	µg/L	800[A]	n/v	800[G]	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Trichloroethene (TCE)	µg/L	54[A] 7.6[B]	21[C]	20[G]	<0.10	<0.10	<0.20	<0.10	<0.20	-	-
Trichlorofluoromethane (Freon 11)	µg/L	20[A]	n/v	n/v	<0.20	<0.20	<0.50	<0.20	<0.50	-	-
Vinyl Chloride	µg/L	400[A]	n/v	600_a[G]	<0.20	<0.20	<0.20	<0.20	<0.20	-	-
Xylene, m & p-	µg/L	n/v	n/v	32_{a17}[F]	<0.10	<0.10	<0.20	<0.10	<0.20	<0.40	<0.40
Xylene, o-	µg/L	n/v	n/v	40_b[G]	<0.10	<0.10	<0.20	<0.10	<0.20	<0.20	<0.20
Xylenes, Total	µg/L	320[A] 4.4[B]	n/v	72_{a30}[F]	<0.10	<0.10	<0.20	<0.10	<0.20	<0.40	<0.40
Glycols											
Diethylene Glycol	mg/L	n/v	n/v	11_a[G]	-	-	-	-	-	-	-
Ethylene Glycol	mg/L	n/v	192[C]	2_a[G]	-	-	-	-	-	-	-
Propylene Glycol, 1,2-	mg/L	n/v	500[C]	44_a[G]	-	-	-	-	-	-	-
Total Glycol	mg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Herbicides and Pesticides											
1,3-Dinitrobenzene (m-Dinitrobenzene)	µg/L	n/v	n/v	1_b[G]	-	-	-	-	-	-	-
2-Amino-4,6-dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
4-Amino-2,6-Dinitrotoluene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Aldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Aldrin + Dieldrin	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-
BHC, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
BHC, beta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
BHC, delta-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Camphechlor (Toxaphene)	µg/L	n/v	n/v	0.008[E]	-	-	-	-	-	-	-
Chlordane (Total)	µg/L	n/v	n/v	0.06[E]	-	-	-	-	-	-	-
Chlordane, alpha-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Chlordane, gamma-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDD (p,p'-DDD)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDD, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDD, o,p'- + DDD, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDE (p,p'-DDE)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDE, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDE, o,p'- + DDE, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDT (p,p'-DDT)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDT, o,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDT, o,p'- + DDT, p,p'-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
DDT+ Metabolites	µg/L	n/v	n/v	0.003[E]	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public Services and Procurement Canada

Sample Location					FIELD_BLANK			TRIP_BLANK			
Sample Date					18-Mar-16	12-Aug-16	24-Oct-19	18-Mar-16	24-Oct-19	6-Feb-20	13-Feb-20
Sample ID					FIELD BLANK	FIELD BLANK	FB-01	TRIP BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK
Sampling Company					STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory					MAXX	MAXX	BV	MAXX	BV	BV	BV
Laboratory Work Order					B655361	B6H0159	B9U0312	B655361	B9U0312	C034481	C041330
Laboratory Sample ID					CAX634	CWI955	LDB879	CAX635	LDB878	LYS005	MAD682
Sample Type	Units	Ottawa	CCME	PWQO	Field Blank	Field Blank	Field Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Herbicides and Pesticides											
Dieldrin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Dinitrotoluene, 2,4-	µg/L	n/v	n/v	4[G]	-	-	-	-	-	-	-
Dinitrotoluene, 2,6-	µg/L	n/v	n/v	6[G]	-	-	-	-	-	-	-
Endosulfan	µg/L	n/v	0.003[C] 0.06[D]	0.003[E]	-	-	-	-	-	-	-
Endosulfan I	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Endosulfan II	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Endosulfan Sulfate	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Endrin	µg/L	n/v	n/v	0.002[E]	-	-	-	-	-	-	-
Endrin Aldehyde	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Endrin Ketone	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Heptachlor	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Heptachlor + Heptachlor Epoxide	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-
Heptachlor Epoxide	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Hexachlorobenzene	µg/L	0.1[A] 0.04[B]	n/v	0.0065[E]	-	-	-	-	-	-	-
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Lindane (Hexachlorocyclohexane, gamma)	µg/L	n/v	n/v	0.01[E]	-	-	-	-	-	-	-
Methoxychlor (4,4'-Methoxychlor)	µg/L	n/v	n/v	0.04[E]	-	-	-	-	-	-	-
Mirex	µg/L	n/v	n/v	0.001[E]	-	-	-	-	-	-	-
Nitrobenzene	µg/L	n/v	n/v	0.02_9[G]	-	-	-	-	-	-	-
Nitrotoluene, 2-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Nitrotoluene, 3-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Nitrotoluene, 4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Octachlorostyrene	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine (HMX)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Oxychlordane	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Tetryl (Trinitrophenylmethylnitramine)	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Trinitrobenzene, 1,3,5-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Trinitrotoluene, 2,4,6-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Phenols											
Chloro-3-methyl phenol, 4-	µg/L	n/v	n/v	3_a[G]	-	-	-	-	-	-	-
Chlorophenol, 2- (ortho-Chlorophenol)	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	-
Chlorophenol, 3 & 4-	µg/L	n/v	7[C]	n/v	-	-	-	-	-	-	-
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	n/v	4[C]	1_b[G]	-	-	-	-	-	-	-
Cresol, o- (Methylphenol, 2-)	µg/L	n/v	4[C]	1_b[G]	-	-	-	-	-	-	-
Dichlorophenol, 2,3-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dichlorophenol, 2,4-	µg/L	44[A]	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dichlorophenol, 2,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dichlorophenol, 2,6-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dichlorophenol, 3,4-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dichlorophenol, 3,5-	µg/L	n/v	0.2[C]	0.2[E]	-	-	-	-	-	-	-
Dimethylphenol, 2,4-	µg/L	n/v	n/v	10_b[G]	-	-	-	-	-	-	-
Dinitro-o-cresol, 4,6-	µg/L	n/v	n/v	0.2_s[G]	-	-	-	-	-	-	-
Dinitrophenol, 2,4-	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-
Nitrophenol, 2-	µg/L	n/v	n/v	0.5_b[G]	-	-	-	-	-	-	-
Nitrophenol, 4-	µg/L	n/v	n/v	50_b[G]	-	-	-	-	-	-	-
Pentachlorophenol	µg/L	n/v	0.5[C]	0.5[E]	-	-	-	-	-	-	-
Phenol	µg/L	n/v	4[C]	5_b[G]	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,5-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,4,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-
Tetrachlorophenol, 2,3,5,6-	µg/L	n/v	1[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 2,3,4-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 2,3,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 2,3,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 2,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 2,4,6-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Trichlorophenol, 3,4,5-	µg/L	n/v	18[C]	n/v	-	-	-	-	-	-	-
Explosives											
Nitroglycerin	µg/L	n/v	n/v	n/v	-	-	-	-	-	-	-

See notes on last page

Summary of Groundwater Analytical Results
Sir John Carling West Annex Demolition Public
Services and Procurement Canada

Notes:

Ottawa	City of Ottawa Sewer Use By-Law No.2003-514
A	Table 1. Limits for Sanitary and Combined Sewers Discharges
B	Table 2. Limits for Storm Sewer Discharges
CCME	Canadian Council of Ministers of the Environment
C	Canadian Environmental Quality Guidelines, Canadian Water Quality Guidelines for the Protection of Aquatic Life - Freshwater Aquatics Long Term
D	Canadian Environmental Quality Guidelines, Canadian Water Quality Guidelines for the Protection of Aquatic Life - Freshwater Aquatics Short Term
PWQO	Provincial Water Quality Objectives of the Ministry of Environment and Energy (MOEE, 1999)
E	PWQO Table 2
F	PWQO Table 2 - Calculated
G	PWQO Table 2 - Interim
6.5[A]	Concentration exceeds the indicated standard for city of ottawa and/or CCME/PWQO.
6.5[A]	Concentration exceeds the indicated standard for CCME and/or PWQO.
15.2	Measured concentration did not exceed the indicated standard.
<0.50	Laboratory reporting limit was greater than the applicable standard.
<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
a	This Interim PWQO was set for emergency purposes based on the best information readily available. Employ due caution when applying this value.
b	This Interim PWQO is currently under development. The value is subject to change upon publication by MOE.
EQ1	The short-term benchmark is for dissolved zinc and is calculated using the following equation: Benchmark = exp(0.833[ln(hardness mg·L-1)] + 0.240[ln(DOC mg·L-1)] + 0.526). The value in the table is for surface water of 50 mg CaCO3·L−1 hardness and 0.5 mg·L−1 dissolved organic carbon (DOC). The benchmark equation is valid between hardness 13.8 and 250.5 mg CaCO3·L−1 and DOC 0.3 and 17.3 mg·L−1.
EQ2	The long-term CWQG is for dissolved zinc and is calculated using the following equation: CWQG = exp(0.947[ln(hardness mg·L-1)] - 0.815[pH] + 0.398[ln(DOC mg·L-1)] + 4.625). The value in the table is for surface water of 50 mg CaCO3·L−1 hardness, pH of 7.5 and 0.5 mg·L−1 DOC. The CWQG equation is valid between hardness 23.4 and 399 mg CaCO3·L−1, pH 6.5 and 8.13 and DOC 0.3 to 22.9 mg·L−1.
EQ3	The short-term benchmark is calculated using the benchmark calculator in Appendix B of the Scientific Criteria Document for the Development of the Canadian Water Quality Guidelines for the Protection of Aquatic Life: Manganese or the following equation: Benchmark = exp(0.878[ln(hardness)] + 4.76) where the benchmark is expressed in dissolved manganese concentration (µg/L), and hardness is measured as CaCO3 equivalents in mg/L. The value in the table is for surface water of 50 mg/L hardness. The benchmark equation is valid between hardness 25 and 250 mg/L.
EQ4	The long-term CWQG is found using the look-up table (see Table 5) or the CWQG and benchmark calculator is Appendix B of CCME (2019). The value in the table is for surface water of 50 mg/L hardness and pH of 7.5. The CWQG table is valid between hardness 25 and 670 mg/L and pH 5.8 and 8.4.
LTG	The CWQG for cadmium (i.e. long-term guideline) of 0.09 µg·L-1 is for waters of 50 mg CaCO3·L-1 hardness. The CWQG for cadmium is related to water hardness (as CaCO3): At hardness ≥ 17 to ≤ 280 mg/L, the CWQG is calculated using this equation (CWQG (µg/L) = 10{0.83(log[hardness]) – 2.46 }); At hardness > 280 mg/L, the CWQG is 0.37 µg/L.
s3	The PWQO for beryllium is hardness dependent. If hardness <75 mg/L than PWQO is 0.011 mg/L. For hardness > 75 mg/L, PWQO is 1.1 mg/L.
s7	Standard is applicable to total PCBs, and the individual Aroclors should be added for comparison.
s10	The PWQO value for Total Xylenes is 72 ug/L, which is the sum of the PWQOs for the isomers.
s12	The interim PWQO for cadmium is hardness dependent. If hardness <100 mg/L than PWQO is 0.0001 mg/L. For hardness >100 mg/L, PWQO is 0.0005 mg/L.
s13	The interim PWQO for copper is hardness dependent. If hardness <20 mg/L than PWQO is 0.001 mg/L. For hardness >20 mg/L, PWQO is 0.005 mg/L.
s14	PWQO for lead is alkalinity dependent. For alkalinity <20 mg/L, PWQO is 0.005 mg/L. For alkalinity between 20-40 mg/L, PWQO is 0.01 mg/L. For alkalinity between 40-80 mg/L, PWQO is 0.02 mg/L. For alkalinity >80 mg/L, PWQO is 0.025 mg/L.
s15	Interim PWQO for lead is hardness dependent. For hardness <30 mg/L, interim PWQO is 0.001 mg/L. For hardness between 30-80 mg/L, interim PWQO is 0.003 mg/L. For hardness >80 mg/L, interim PWQO is 0.005 mg/L.
s17	The laboratory is unable to distinguish the m- and p-Xylene isomers, therefore the PWQO standards for m-Xylene (2 ug/L) and p-Xylene (30 ug/L) have been summed to apply to m&p-Xylenes.
SN	see Narrative
STB	The short-term benchmark concentration of 1.0 µg·L-1 is for waters of 50 mg CaCO3·L-1 hardness. The short-term benchmark for cadmium is related to water hardness (as CaCO3): When the water hardness is 0 to < 5.3 mg/L, the short-term benchmark is 0.11 µg/L, At hardness ≥ 5.3 to ≤ 360 mg/L, the short-term benchmark is calculated using this equation (Short-term benchmark (µg/L) = 10{1.016(log[hardness]) – 1.71 }); At hardness > 360 mg/L, the short-term benchmark is 7.7 µg/L.
TBC	To be calculated (equation).
TBC1	Value is minimum value available. Sample-specific value to be calculated (equation).
TBC2	To be calculated (equation), then the present guideline values (mg/L NH3) can be converted to mg/L total ammonia-N by multiplying the corresponding guideline value by 0.8224.
VAR1	Variable, 5 µg/L if pH < 6.5 and 100 µg/L if pH > 6.5
DSM	Detection limits raised due to sample matrix
MI	Detection limit was raised due to matrix interferences.
MS	Matrix spike exceeds acceptance limits due to matrix interference.
RD	Dissolved greater than total. Reanalysis yields similar results.
YE	Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.
RPD	Relative Percent Difference.
61%	RPD exceeds data quality objective of 40%.
nc	RPD is not calculated if one or more values is non detect or if one or more values is less than five times the reportable detection limit.

Summary of Water Level Elevations and Well Construction Details
Sir John Carling West Annex Demolition
Public Services and Procurement Canada

MW Location	Top of Casing Elevation	Ground Surface Elevation	Stick Down	Formation Screened	Screened Interval	Groundwater Elevation (m ASL)						
	(m ASL)	(m ASL)	(m)		m BGS	8-Aug-16	31-Aug-16	16-Sep-16	5-Oct-16	24-Oct-16	February 5-6, 2020	February 12-14, 2020
MW16-1A	78.0	78.1	0.09	Fill/Clay	7.32 - 10.06	68.8	71.3	71.2	70.4	71.5	well damaged	-
MW16-3	77.9	77.9	0.04	Fill	3.05 - 6.10	Dry	Dry	Dry	Dry	Dry	73.3	73.2
MW16-5	76.0	76.0	0.03	Silty Sand	3.05 - 6.10	73.0	73.3	73.0	73.0	73.0	not found	-
MW16-6	74.7	74.8	0.05	Silty Sand	2.69 - 5.64	71.7	72.0	71.7	71.6	72.3	not found	-
MW16-7A	75.1	75.2	0.08	Silty Sand/Silty Clay	5.49 - 8.53	70.1	71.3	70.6	71.2	72.1	not found	-
MW16-8	74.8	74.9	0.04	Silty Clay	3.05 - 6.10	69.6	69.9	70.4	70.5	70.6	71.5	71.5
MW16-9	73.8	73.8	0.01	Silty Sand/Silty Clay	3.05 - 6.10	68.6	70.6	70.6	70.8	71.1	71.2	71.0
MW16-10	73.7	73.8	0.08	Silty Sand/Silty Clay	1.22 - 4.27	Dry	Dry	69.6	Dry	Dry	not found	-
MW16-11	72.6	72.6	0.08	Fill/Silty Clay	1.22 - 3.35	Dry	Dry	69.5	Dry	Dry	not found	-
MW16-12	75.9	76.0	0.03	Silty Clay	4.57 - 7.62	72.2	72.6	-	72.7	72.9	not found	-
MW16-13	77.7	77.8	0.03	Silty Clay	3.05 - 6.10	74.6	75.1	74.8	75.1	75.0	not found	-
MW16-14	79.5	79.5	0.06	Silty Clay	4.57 - 7.62	Dry	Dry	72.6	72.5	72.6	74.4	74.0
MW20-15	79.6	79.7	0.10	Silt/Silty Clay	6.71 - 9.76	-	-	-	-	-	73.8	73.6
MW20-16	79.4	79.5	0.15	Silty Clay	6.71 - 9.76	-	-	-	-	-	73.3	73.3
MW20-17	75.6	75.7	0.08	Silty Clay	6.71 - 9.76	-	-	-	-	-	72.7	72.8
MW20-18	74.9	75.0	0.09	Silty Clay	6.71 - 9.76	-	-	-	-	-	68.1	70.8

NOTES:
m ASL meters above sea level
m BGS meters below ground surface
m BTOC meters below top of casing
water levels were measured prior to monitoring well development and may not be representative of actual groundwater elevations

Single Well Response Test Results (2020)

Well ID	Test Type	Formation Screened	K (m/s)
MW16-3	Rising Head	Sand and Gravel Fill	2.5×10^{-4}
MW16-8	Rising Head	Silty Clay	1.1×10^{-8}
MW16-9	Rising Head	Silty Clay	1.1×10^{-9}
MW16-14	Rising Head	Silty Clay	9.0×10^{-10}
MW20-15	Falling Head	Silt/Silty Clay	5.0×10^{-8}
MW20-15	Rising Head	Silt/Silty Clay	2.3×10^{-8}
MW20-16	Rising Head	Silt and Sand Till	3.5×10^{-9}
MW20-17	Falling Head	Silty Clay	2.7×10^{-8}
MW20-18	Rising Head	Silty Sand Till	3.0×10^{-8}

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/24
Report #: R6086163
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C034481
Received: 2020/02/06, 16:00

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	8	N/A	2020/02/14		EPA 8260C m
Chloride by Automated Colourimetry (1)	8	N/A	2020/02/13	CAM SOP-00463	SM 23 4500-Cl E m
Acid Extractables by GC/MS (1)	2	2020/02/13	2020/02/13	CAM SOP-00332	EPA 8270 m
Acid Extractables by GC/MS (1)	1	2020/02/15	2020/02/19	CAM SOP-00332	EPA 8270 m
Free (WAD) Cyanide (1)	8	N/A	2020/02/14	CAM SOP-00457	OMOE E3015 m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	1	N/A	2020/02/14	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 4)	8	2020/02/18	2020/02/18	CAM SOP-00316	CCME PHC-CWS m
Fluoride (1)	8	2020/02/12	2020/02/12	CAM SOP-00449	SM 23 4500-F C m
Mercury (low level) (1)	8	2020/02/13	2020/02/14	CAM SOP-00453	EPA 7470 m
Sulphide (as H2S) (2)	8	N/A	2020/02/13	AB WI-00065	Auto Calc.
Hardness Total (calculated as CaCO3) (3, 5)	4	N/A	2020/02/21	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	8	N/A	2020/02/21	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	8	N/A	2020/02/21	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	8	N/A	2020/02/21	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	4	2020/02/12	2020/02/21	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	1	2020/02/20	2020/02/20	BBY7SOP-00003/02	EPA 6020B R2 m
Elements by CRC ICPMS (total) (3)	3	2020/02/20	2020/02/21	BBY7SOP-00003/02	EPA 6020B R2 m
B[a]P Total Potency Equivalent (2, 6)	8	N/A	2020/02/14		CCME
PAH in Water by GC/MS (2)	8	2020/02/13	2020/02/13	AB SOP-00037/AB SOP-00003	EPA 3510C/8270E m
Sulphide (2)	8	N/A	2020/02/13	AB SOP-00080	SM 22 4500 S2-A D F
Total Ammonia (as NH3) (1)	8	N/A	2020/02/14		EPA GS I-2522-90 m
Total Ammonia-N (1)	4	N/A	2020/02/13	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N (1)	4	N/A	2020/02/14	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 7)	8	N/A	2020/02/13	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (as NO3) (1)	8	N/A	2020/02/14		SM 23 4500-NO3I m
OC Pesticides (Selected) & PCB (1, 8)	2	2020/02/12	2020/02/13	CAM SOP-00307	EPA 8081A/8082B m
OC Pesticides (Selected) & PCB (1, 8)	1	2020/02/20	2020/02/21	CAM SOP-00307	EPA 8081A/8082B m
OC Pesticides Summed Parameters (1)	2	N/A	2020/02/13	CAM SOP-00307	EPA 8081A/8082B m
OC Pesticides Summed Parameters (1)	1	N/A	2020/02/14	CAM SOP-00307	EPA 8081A/8082B m
pH (1)	8	2020/02/12	2020/02/12	CAM SOP-00413	SM 4500H+ B m

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/24
Report #: R6086163
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C034481
Received: 2020/02/06, 16:00

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sulphate by Automated Colourimetry (1)	8	N/A	2020/02/13	CAM SOP-00464	EPA 375.4 m
Total Kjeldahl Nitrogen in Water (1)	2	2020/02/12	2020/02/18	CAM SOP-00938	OMOE E3516 m
Total Kjeldahl Nitrogen in Water (1)	1	2020/02/18	2020/02/18	CAM SOP-00938	OMOE E3516 m
Total Suspended Solids (1)	2	2020/02/12	2020/02/13	CAM SOP-00428	SM 23 2540D m
Total Suspended Solids (1)	1	2020/02/18	2020/02/19	CAM SOP-00428	SM 23 2540D m
Volatile Organic Compounds and F1 PHCs (1)	8	N/A	2020/02/13	CAM SOP-00230	EPA 8260C m
Volatile Suspended Solids (1)	2	2020/02/12	2020/02/13	CAM SOP-00428	SM 23 2540 m
Volatile Suspended Solids (1)	1	2020/02/18	2020/02/19	CAM SOP-00428	SM 23 2540 m

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, results relate to the supplied samples tested.

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 Laboratories Mississauga
(2) This test was performed by BVLabs Calgary via Mississauga
(3) This test was performed by BVLabs Burnaby via Mississauga
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

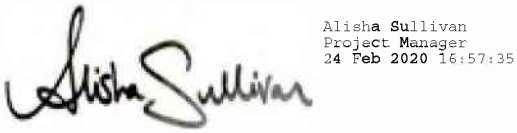
Report Date: 2020/02/24
Report #: R6086163
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C034481
Received: 2020/02/06, 16:00

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.
(5) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(6) B[a]P TPE is calculated using 1/2 of the RDL for non detect results as per Alberta Environment instructions. This protocol may not apply in other jurisdictions.
(7) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
(8) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key



Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Alisha Sullivan, Project Manager
Email: Alisha.Williamson@bvlabs.com
Phone# (613)274-0573
==========
BV Labs 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 Signature Page.

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYR997			LYR997			LYR998		
Sampling Date		2020/02/06 12:00			2020/02/06 12:00			2020/02/06 12:30		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	S-1S	RDL	QC Batch	S-1S Lab-Dup	RDL	QC Batch	S-2D	RDL	QC Batch
Calculated Parameters										
Total Ammonia (as NH3)	mg/L	<0.061	0.061	6585181				<0.061	0.061	6585181
Dissolved Hardness (CaCO3)	mg/L	34.6	0.50	6593620				34.7	0.50	6593620
Nitrate (NO3)	mg/L	11	0.4	6585182				12	0.4	6585182
Sulphide (as H2S)	mg/L	<0.0020	0.0020	6594026				0.0025	0.0020	6594026
Inorganics										
Total Ammonia-N	mg/L	<0.050	0.050	6586507				<0.050	0.050	6586507
Fluoride (F-)	mg/L	0.11	0.10	6585267				0.11	0.10	6585267
pH	pH	8.32		6585268				8.39		6585268
Dissolved Sulphate (SO4)	mg/L	88	1.0	6585916				87	1.0	6585916
Total Sulphide	mg/L	<0.0018	0.0018	6593957				0.0024	0.0018	6593957
WAD Cyanide (Free)	mg/L	0.0011	0.0010	6590556				<0.0010	0.0010	6590556
Dissolved Chloride (Cl-)	mg/L	160	2.0	6585910				150	2.0	6585910
Nitrite (N)	mg/L	<0.010	0.010	6585922				<0.010	0.010	6585265
Nitrate (N)	mg/L	2.57	0.10	6585922				2.60	0.10	6585265
Nitrate + Nitrite (N)	mg/L	2.57	0.10	6585922				2.60	0.10	6585265
Metals										
Dissolved Aluminum (Al)	ug/L	298	3.0	6600982	302	3.0	6600982	307	3.0	6600982
Dissolved Antimony (Sb)	ug/L	3.27	0.50	6600982	3.22	0.50	6600982	3.27	0.50	6600982
Dissolved Arsenic (As)	ug/L	0.66	0.10	6600982	0.69	0.10	6600982	0.73	0.10	6600982
Dissolved Barium (Ba)	ug/L	12.4	1.0	6600982	12.6	1.0	6600982	12.8	1.0	6600982
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	6600982	<0.10	0.10	6600982	<0.10	0.10	6600982
Dissolved Bismuth (Bi)	ug/L	<1.0	1.0	6600982	<1.0	1.0	6600982	<1.0	1.0	6600982
Dissolved Boron (B)	ug/L	73	50	6600982	74	50	6600982	75	50	6600982
Dissolved Cadmium (Cd)	ug/L	0.327	0.010	6600982	0.330	0.010	6600982	0.317	0.010	6600982
Dissolved Chromium (Cr)	ug/L	1.5	1.0	6600982	1.5	1.0	6600982	1.2	1.0	6600982
Dissolved Cobalt (Co)	ug/L	1.35	0.20	6600982	1.37	0.20	6600982	1.36	0.20	6600982
Dissolved Copper (Cu)	ug/L	9.43	0.20	6600982	9.68	0.20	6600982	9.57	0.20	6600982
Dissolved Iron (Fe)	ug/L	98.2	5.0	6600982	97.0	5.0	6600982	98.0	5.0	6600982
Dissolved Lead (Pb)	ug/L	0.66	0.20	6600982	0.69	0.20	6600982	0.70	0.20	6600982
Dissolved Lithium (Li)	ug/L	3.9	2.0	6600982	3.9	2.0	6600982	3.9	2.0	6600982
Dissolved Manganese (Mn)	ug/L	7.6	1.0	6600982	7.6	1.0	6600982	7.7	1.0	6600982
Dissolved Molybdenum (Mo)	ug/L	10.1	1.0	6600982	10.3	1.0	6600982	10.3	1.0	6600982

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYR997			LYR997			LYR998		
Sampling Date		2020/02/06 12:00			2020/02/06 12:00			2020/02/06 12:30		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	S-1S	RDL	QC Batch	S-1S Lab-Dup	RDL	QC Batch	S-2D	RDL	QC Batch
Dissolved Nickel (Ni)	ug/L	4.6	1.0	6600982	4.8	1.0	6600982	4.7	1.0	6600982
Dissolved Selenium (Se)	ug/L	0.26	0.10	6600982	0.22	0.10	6600982	0.23	0.10	6600982
Dissolved Silicon (Si)	ug/L	3500	100	6600982	3510	100	6600982	3570	100	6600982
Dissolved Silver (Ag)	ug/L	<0.020	0.020	6600982	<0.020	0.020	6600982	<0.020	0.020	6600982
Dissolved Strontium (Sr)	ug/L	1150	1.0	6600982	1150	1.0	6600982	1200	1.0	6600982
Dissolved Thallium (Tl)	ug/L	0.013	0.010	6600982	0.012	0.010	6600982	0.012	0.010	6600982
Dissolved Tin (Sn)	ug/L	<5.0	5.0	6600982	<5.0	5.0	6600982	<5.0	5.0	6600982
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	6600982	<5.0	5.0	6600982	<5.0	5.0	6600982
Dissolved Uranium (U)	ug/L	<0.10	0.10	6600982	<0.10	0.10	6600982	<0.10	0.10	6600982
Dissolved Vanadium (V)	ug/L	<5.0	5.0	6600982	<5.0	5.0	6600982	<5.0	5.0	6600982
Dissolved Zinc (Zn)	ug/L	209	5.0	6600982	214	5.0	6600982	219	5.0	6600982
Dissolved Zirconium (Zr)	ug/L	<0.10	0.10	6600982	<0.10	0.10	6600982	<0.10	0.10	6600982
Dissolved Calcium (Ca)	mg/L	13.4	0.050	6593621				13.4	0.050	6593621
Dissolved Magnesium (Mg)	mg/L	0.269	0.050	6593621				0.274	0.050	6593621
Dissolved Potassium (K)	mg/L	69.1	0.050	6593621				70.4	0.050	6593621
Dissolved Sodium (Na)	mg/L	134	0.050	6593621				138	0.050	6593621
Dissolved Sulphur (S)	mg/L	30.3	3.0	6593621				31.7	3.0	6593621
Mercury (Hg)	ug/L	<0.01	0.01	6587524	<0.01	0.01	6587524	<0.01	0.01	6587524

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYR999		LYS000			LYS000		
Sampling Date		2020/02/06 13:00		2020/02/06 13:30			2020/02/06 13:30		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	N-1S	QC Batch	N-2D	RDL	QC Batch	N-2D Lab-Dup	RDL	QC Batch
Calculated Parameters									
Total Ammonia (as NH3)	mg/L	<0.061	6585181	<0.061	0.061	6585181			
Dissolved Hardness (CaCO3)	mg/L	33.9	6593620	33.8	0.50	6593620			
Nitrate (NO3)	mg/L	11	6585182	12	0.4	6585182			
Sulphide (as H2S)	mg/L	<0.0020	6594026	0.0040	0.0020	6594026			
Inorganics									
Total Ammonia-N	mg/L	<0.050	6586507	<0.050	0.050	6586507			
Fluoride (F-)	mg/L	0.10	6585267	0.10	0.10	6585267			
pH	pH	8.42	6585268	8.45		6585268			
Dissolved Sulphate (SO4)	mg/L	85	6585916	85	1.0	6585916			
Total Sulphide	mg/L	<0.0018	6593957	0.0038	0.0018	6593957			
WAD Cyanide (Free)	mg/L	<0.0010	6590556	<0.0010	0.0010	6590556	<0.0010	0.0010	6590556
Dissolved Chloride (Cl-)	mg/L	160	6585910	150	2.0	6585910			
Nitrite (N)	mg/L	<0.010	6585265	<0.010	0.010	6585922			
Nitrate (N)	mg/L	2.57	6585265	2.60	0.10	6585922			
Nitrate + Nitrite (N)	mg/L	2.57	6585265	2.60	0.10	6585922			
Metals									
Dissolved Aluminum (Al)	ug/L	304	6600982	307	3.0	6600982			
Dissolved Antimony (Sb)	ug/L	3.28	6600982	3.19	0.50	6600982			
Dissolved Arsenic (As)	ug/L	0.72	6600982	0.70	0.10	6600982			
Dissolved Barium (Ba)	ug/L	12.4	6600982	12.3	1.0	6600982			
Dissolved Beryllium (Be)	ug/L	<0.10	6600982	<0.10	0.10	6600982			
Dissolved Bismuth (Bi)	ug/L	<1.0	6600982	<1.0	1.0	6600982			
Dissolved Boron (B)	ug/L	73	6600982	74	50	6600982			
Dissolved Cadmium (Cd)	ug/L	0.261	6600982	0.277	0.010	6600982			
Dissolved Chromium (Cr)	ug/L	<1.0	6600982	<1.0	1.0	6600982			
Dissolved Cobalt (Co)	ug/L	1.33	6600982	1.38	0.20	6600982			
Dissolved Copper (Cu)	ug/L	10.1	6600982	10.2	0.20	6600982			
Dissolved Iron (Fe)	ug/L	97.8	6600982	97.4	5.0	6600982			
Dissolved Lead (Pb)	ug/L	0.69	6600982	0.73	0.20	6600982			
Dissolved Lithium (Li)	ug/L	3.9	6600982	3.8	2.0	6600982			
Dissolved Manganese (Mn)	ug/L	7.3	6600982	7.6	1.0	6600982			
Dissolved Molybdenum (Mo)	ug/L	10.4	6600982	10.4	1.0	6600982			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYR999		LYS000			LYS000		
Sampling Date		2020/02/06 13:00		2020/02/06 13:30			2020/02/06 13:30		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	N-1S	QC Batch	N-2D	RDL	QC Batch	N-2D Lab-Dup	RDL	QC Batch
Dissolved Nickel (Ni)	ug/L	4.6	6600982	4.9	1.0	6600982			
Dissolved Selenium (Se)	ug/L	0.25	6600982	0.27	0.10	6600982			
Dissolved Silicon (Si)	ug/L	3550	6600982	3450	100	6600982			
Dissolved Silver (Ag)	ug/L	<0.020	6600982	<0.020	0.020	6600982			
Dissolved Strontium (Sr)	ug/L	1170	6600982	1170	1.0	6600982			
Dissolved Thallium (Tl)	ug/L	0.012	6600982	0.011	0.010	6600982			
Dissolved Tin (Sn)	ug/L	<5.0	6600982	<5.0	5.0	6600982			
Dissolved Titanium (Ti)	ug/L	<5.0	6600982	<5.0	5.0	6600982			
Dissolved Uranium (U)	ug/L	<0.10	6600982	<0.10	0.10	6600982			
Dissolved Vanadium (V)	ug/L	<5.0	6600982	<5.0	5.0	6600982			
Dissolved Zinc (Zn)	ug/L	205	6600982	206	5.0	6600982			
Dissolved Zirconium (Zr)	ug/L	<0.10	6600982	<0.10	0.10	6600982			
Dissolved Calcium (Ca)	mg/L	13.1	6593621	13.1	0.050	6593621			
Dissolved Magnesium (Mg)	mg/L	0.272	6593621	0.273	0.050	6593621			
Dissolved Potassium (K)	mg/L	69.0	6593621	69.3	0.050	6593621			
Dissolved Sodium (Na)	mg/L	134	6593621	137	0.050	6593621			
Dissolved Sulphur (S)	mg/L	31.7	6593621	31.8	3.0	6593621			
Mercury (Hg)	ug/L	<0.01	6587524	<0.01	0.01	6587524			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYS001		LYS002		LYS003		LYS004		
Sampling Date		2020/02/06 13:00		2020/02/06 14:00		2020/02/06 14:30		2020/02/06 15:00		
COC Number		757918-01-01		757918-01-01		757918-01-01		757918-01-01		
	UNITS	DUP-1	RDL	MW16-8	RDL	MW16-9	RDL	MW16-3	RDL	QC Batch
Calculated Parameters										
Total Ammonia (as NH3)	mg/L	<0.061	0.061	0.27	0.061	<0.061	0.061	0.78	0.061	6585181
Dissolved Hardness (CaCO3)	mg/L	34.7	0.50	523	0.50	640	0.50	356	0.50	6593620
Nitrate (NO3)	mg/L	11	0.4	<0.4	0.4	<0.4	0.4	3.4	0.4	6585182
Sulphide (as H2S)	mg/L	<0.0020	0.0020	<0.0020	0.0020	<0.019	0.019	<0.0020	0.0020	6594025
Inorganics										
Total Ammonia-N	mg/L	<0.050	0.050	0.22	0.050	<0.050	0.050	0.64	0.050	6585887
Fluoride (F-)	mg/L	0.10	0.10	0.17	0.10	<0.10	0.10	<0.10	0.10	6585267
pH	pH	8.42		7.62		7.59		11.3		6585268
Dissolved Sulphate (SO4)	mg/L	86	1.0	140	1.0	130	1.0	110	1.0	6584336
Total Sulphide	mg/L	<0.0018	0.0018	<0.0018 (1)	0.0018	<0.018 (2)	0.018	<0.0018	0.0018	6593957
WAD Cyanide (Free)	mg/L	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	<0.0010	0.0010	6590556
Dissolved Chloride (Cl-)	mg/L	150	2.0	140	1.0	35	1.0	490	5.0	6584326
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.438	0.010	6585265
Nitrate (N)	mg/L	2.58	0.10	<0.10	0.10	<0.10	0.10	0.76	0.10	6585265
Nitrate + Nitrite (N)	mg/L	2.58	0.10	<0.10	0.10	<0.10	0.10	1.20	0.10	6585265
Metals										
Dissolved Aluminum (Al)	ug/L	317	3.0	<6.0	6.0	<6.0	6.0	<3.0	3.0	6600982
Dissolved Antimony (Sb)	ug/L	3.29	0.50	<1.0	1.0	<1.0	1.0	<0.50	0.50	6600982
Dissolved Arsenic (As)	ug/L	0.68	0.10	0.24	0.20	<0.20	0.20	0.18	0.10	6600982
Dissolved Barium (Ba)	ug/L	12.6	1.0	105	2.0	61.9	2.0	132	1.0	6600982
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	<0.20	0.20	<0.20	0.20	<0.10	0.10	6600982
Dissolved Bismuth (Bi)	ug/L	<1.0	1.0	<2.0	2.0	<2.0	2.0	<1.0	1.0	6600982
Dissolved Boron (B)	ug/L	73	50	<100	100	<100	100	<50	50	6600982
Dissolved Cadmium (Cd)	ug/L	0.295	0.010	0.034	0.020	<0.020	0.020	<0.010	0.010	6600982
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	<2.0	2.0	<2.0	2.0	<1.0	1.0	6600982
Dissolved Cobalt (Co)	ug/L	1.36	0.20	0.63	0.40	<0.40	0.40	0.33	0.20	6600982
Dissolved Copper (Cu)	ug/L	10.2	0.20	1.11	0.40	0.77	0.40	4.33	0.20	6600982
Dissolved Iron (Fe)	ug/L	95.9	5.0	15	10	<10	10	<5.0	5.0	6600982
Dissolved Lead (Pb)	ug/L	0.73	0.20	<0.40	0.40	<0.40	0.40	0.58	0.20	6600982
Dissolved Lithium (Li)	ug/L	3.9	2.0	4.9	4.0	5.1	4.0	13.5	2.0	6600982

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.
(2) Detection limits raised due to sample matrix.
Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYS001		LYS002		LYS003		LYS004		
Sampling Date		2020/02/06 13:00		2020/02/06 14:00		2020/02/06 14:30		2020/02/06 15:00		
COC Number		757918-01-01		757918-01-01		757918-01-01		757918-01-01		
	UNITS	DUP-1	RDL	MW16-8	RDL	MW16-9	RDL	MW16-3	RDL	QC Batch
Dissolved Manganese (Mn)	ug/L	7.5	1.0	279	2.0	<2.0	2.0	<1.0	1.0	6600982
Dissolved Molybdenum (Mo)	ug/L	10.1	1.0	<2.0	2.0	3.3	2.0	11.3	1.0	6600982
Dissolved Nickel (Ni)	ug/L	4.7	1.0	<2.0	2.0	2.8	2.0	2.1	1.0	6600982
Dissolved Selenium (Se)	ug/L	0.26	0.10	<0.20	0.20	<0.20	0.20	0.19	0.10	6600982
Dissolved Silicon (Si)	ug/L	3630	100	9160	200	8120	200	2130	100	6600982
Dissolved Silver (Ag)	ug/L	<0.020	0.020	<0.040	0.040	<0.040	0.040	<0.020	0.020	6600982
Dissolved Strontium (Sr)	ug/L	1180	1.0	10400	2.0	10800	2.0	5500	1.0	6600982
Dissolved Thallium (Tl)	ug/L	0.012	0.010	<0.020	0.020	<0.020	0.020	0.048	0.010	6600982
Dissolved Tin (Sn)	ug/L	<5.0	5.0	<10	10	<10	10	<5.0	5.0	6600982
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	<10	10	<10	10	<5.0	5.0	6600982
Dissolved Uranium (U)	ug/L	<0.10	0.10	1.43	0.20	3.24	0.20	<0.10	0.10	6600982
Dissolved Vanadium (V)	ug/L	<5.0	5.0	<10	10	<10	10	<5.0	5.0	6600982
Dissolved Zinc (Zn)	ug/L	210	5.0	<10	10	<10	10	<5.0	5.0	6600982
Dissolved Zirconium (Zr)	ug/L	<0.10	0.10	<0.20	0.20	<0.20	0.20	<0.10	0.10	6600982
Dissolved Calcium (Ca)	mg/L	13.4	0.050	145	0.10	153	0.10	139	0.050	6593621
Dissolved Magnesium (Mg)	mg/L	0.277	0.050	39.2	0.10	62.5	0.10	1.98	0.050	6593621
Dissolved Potassium (K)	mg/L	70.0	0.050	3.44	0.10	3.81	0.10	42.4	0.050	6593621
Dissolved Sodium (Na)	mg/L	139	0.050	49.4	0.10	30.8	0.10	270	0.050	6593621
Dissolved Sulphur (S)	mg/L	32.3	3.0	38.8	6.0	45.9	6.0	32.5	3.0	6593621
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	6587524

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME PAHS (WATER)

BV Labs ID		LYR997	LYR998	LYR999	LYS000	LYS001		
Sampling Date		2020/02/06 12:00	2020/02/06 12:30	2020/02/06 13:00	2020/02/06 13:30	2020/02/06 13:00		
COC Number		757918-01-01	757918-01-01	757918-01-01	757918-01-01	757918-01-01		
	UNITS	S-1S	S-2D	N-1S	N-2D	DUP-1	RDL	QC Batch
Polyaromatic Hydrocarbons								
Benzo(a)pyrene Total Potency Equiv.	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6594023
Acenaphthene	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6594024
Acenaphthylene	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6594024
Acridine	ug/L	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	6594024
Anthracene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6594024
Benzo(a)anthracene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(b/j)fluoranthene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(k)fluoranthene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(g,h,i)perylene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(c)phenanthrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6594024
Benzo(a)pyrene	ug/L	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075	0.0075	6594024
Benzo(e)pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6594024
Chrysene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
Dibenzo(a,h)anthracene	ug/L	<0.0075	<0.0075	<0.0075	<0.0075	<0.0075	0.0075	6594024
Fluoranthene	ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	6594024
Fluorene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6594024
Indeno(1,2,3-cd)pyrene	ug/L	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	0.0085	6594024
1-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6594024
2-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6594024
Naphthalene	ug/L	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	6594024
Phenanthrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6594024
Perylene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	6594024
Pyrene	ug/L	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	6594024
Quinoline	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	6594024
Surrogate Recovery (%)								
D10-Anthracene	%	94	101	98	100	99		6594024
D14-Terphenyl	%	122	125	126	130	128		6594024
D8-Acenaphthylene	%	85	92	87	93	89		6594024
D8-Naphthalene	%	76	85	78	80	81		6594024

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME PAHS (WATER)

BV Labs ID		LYS002	LYS003	LYS004		
Sampling Date		2020/02/06 14:00	2020/02/06 14:30	2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01	757918-01-01		
	UNITS	MW16-8	MW16-9	MW16-3	RDL	QC Batch
Polyaromatic Hydrocarbons						
Benzo(a)pyrene Total Potency Equiv.	ug/L	<0.010	<0.010	<0.010	0.010	6594023
Acenaphthene	ug/L	<0.10	<0.10	<0.10	0.10	6594024
Acenaphthylene	ug/L	<0.10	<0.10	<0.10	0.10	6594024
Acridine	ug/L	<0.040	<0.040	<0.040	0.040	6594024
Anthracene	ug/L	<0.010	<0.010	<0.010	0.010	6594024
Benzo(a)anthracene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(b/j)fluoranthene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(k)fluoranthene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(g,h,i)perylene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
Benzo(c)phenanthrene	ug/L	<0.050	<0.050	<0.050	0.050	6594024
Benzo(a)pyrene	ug/L	<0.0075	<0.0075	<0.0075	0.0075	6594024
Benzo(e)pyrene	ug/L	<0.050	<0.050	<0.050	0.050	6594024
Chrysene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
Dibenzo(a,h)anthracene	ug/L	<0.0075	<0.0075	<0.0075	0.0075	6594024
Fluoranthene	ug/L	<0.010	0.011	0.012	0.010	6594024
Fluorene	ug/L	<0.050	<0.050	<0.050	0.050	6594024
Indeno(1,2,3-cd)pyrene	ug/L	<0.0085	<0.0085	<0.0085	0.0085	6594024
1-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	0.10	6594024
2-Methylnaphthalene	ug/L	<0.10	<0.10	<0.10	0.10	6594024
Naphthalene	ug/L	<0.10	<0.10	0.22	0.10	6594024
Phenanthrene	ug/L	<0.050	<0.050	0.056	0.050	6594024
Perylene	ug/L	<0.050	<0.050	<0.050	0.050	6594024
Pyrene	ug/L	<0.020	<0.020	<0.020	0.020	6594024
Quinoline	ug/L	<0.20	<0.20	<0.20	0.20	6594024
Surrogate Recovery (%)						
D10-Anthracene	%	101	107	102		6594024
D14-Terphenyl	%	130	140 (1)	135 (1)		6594024
D8-Acenaphthylene	%	93	100	95		6594024
D8-Naphthalene	%	83	91	82		6594024

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYR997			LYR997			LYR998		
Sampling Date		2020/02/06 12:00			2020/02/06 12:00			2020/02/06 12:30		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	S-1S	RDL	QC Batch	S-1S Lab-Dup	RDL	QC Batch	S-2D	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	6579124				<0.50	0.50	6585180
Volatile Organics										
Acetone (2-Propanone)	ug/L	<10	10	6585491	<10	10	6585491	<10	10	6585491
Benzene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Bromodichloromethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Bromoform	ug/L	<1.0	1.0	6585491	<1.0	1.0	6585491	<1.0	1.0	6585491
Bromomethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Carbon Tetrachloride	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Chlorobenzene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Chloroform	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Dibromochloromethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,2-Dichlorobenzene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,3-Dichlorobenzene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,4-Dichlorobenzene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	6585491	<1.0	1.0	6585491	<1.0	1.0	6585491
1,1-Dichloroethane	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
1,2-Dichloroethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,1-Dichloroethylene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,2-Dichloropropane	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	6585491	<0.30	0.30	6585491	<0.30	0.30	6585491
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	6585491	<0.40	0.40	6585491	<0.40	0.40	6585491
Ethylbenzene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Ethylene Dibromide	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Hexane	ug/L	<1.0	1.0	6585491	<1.0	1.0	6585491	<1.0	1.0	6585491
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	6585491	<2.0	2.0	6585491	<2.0	2.0	6585491
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	6585491	<10	10	6585491	<10	10	6585491
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	6585491	<5.0	5.0	6585491	<5.0	5.0	6585491
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Styrene	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYR997			LYR997			LYR998		
Sampling Date		2020/02/06 12:00			2020/02/06 12:00			2020/02/06 12:30		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	S-1S	RDL	QC Batch	S-1S Lab-Dup	RDL	QC Batch	S-2D	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Tetrachloroethylene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Toluene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
1,1,1-Trichloroethane	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
1,1,2-Trichloroethane	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Trichloroethylene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	6585491	<0.50	0.50	6585491	<0.50	0.50	6585491
Vinyl Chloride	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
p+m-Xylene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
o-Xylene	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
Total Xylenes	ug/L	<0.20	0.20	6585491	<0.20	0.20	6585491	<0.20	0.20	6585491
F1 (C6-C10)	ug/L	<25	25	6585491	<25	25	6585491	<25	25	6585491
F1 (C6-C10) - BTEX	ug/L	<25	25	6585491	<25	25	6585491	<25	25	6585491
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	6592810				<100	100	6592810
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	6592810				<200	200	6592810
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	6592810				<200	200	6592810
Reached Baseline at C50	ug/L	Yes		6592810				Yes		6592810
Surrogate Recovery (%)										
o-Terphenyl	%	109		6592810				109		6592810
4-Bromofluorobenzene	%	95		6585491	93		6585491	94		6585491
D4-1,2-Dichloroethane	%	102		6585491	101		6585491	104		6585491
D8-Toluene	%	97		6585491	97		6585491	98		6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYR998			LYR999		LYS000	LYS001		
Sampling Date		2020/02/06 12:30			2020/02/06 13:00		2020/02/06 13:30	2020/02/06 13:00		
COC Number		757918-01-01			757918-01-01		757918-01-01	757918-01-01		
	UNITS	S-2D Lab-Dup	RDL	QC Batch	N-1S	QC Batch	N-2D	DUP-1	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/L				<0.50	6579124	<0.50	<0.50	0.50	6585180
Volatile Organics										
Acetone (2-Propanone)	ug/L				<10	6585491	<10	<10	10	6585491
Benzene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Bromodichloromethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Bromoform	ug/L				<1.0	6585491	<1.0	<1.0	1.0	6585491
Bromomethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Carbon Tetrachloride	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Chlorobenzene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Chloroform	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Dibromochloromethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,2-Dichlorobenzene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,3-Dichlorobenzene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,4-Dichlorobenzene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Dichlorodifluoromethane (FREON 12)	ug/L				<1.0	6585491	<1.0	<1.0	1.0	6585491
1,1-Dichloroethane	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
1,2-Dichloroethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,1-Dichloroethylene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
cis-1,2-Dichloroethylene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
trans-1,2-Dichloroethylene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,2-Dichloropropane	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
cis-1,3-Dichloropropene	ug/L				<0.30	6585491	<0.30	<0.30	0.30	6585491
trans-1,3-Dichloropropene	ug/L				<0.40	6585491	<0.40	<0.40	0.40	6585491
Ethylbenzene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Ethylene Dibromide	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Hexane	ug/L				<1.0	6585491	<1.0	<1.0	1.0	6585491
Methylene Chloride(Dichloromethane)	ug/L				<2.0	6585491	<2.0	<2.0	2.0	6585491
Methyl Ethyl Ketone (2-Butanone)	ug/L				<10	6585491	<10	<10	10	6585491
Methyl Isobutyl Ketone	ug/L				<5.0	6585491	<5.0	<5.0	5.0	6585491
Methyl t-butyl ether (MTBE)	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Styrene	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
1,1,1,2-Tetrachloroethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYR998			LYR999		LYS000	LYS001		
Sampling Date		2020/02/06 12:30			2020/02/06 13:00		2020/02/06 13:30	2020/02/06 13:00		
COC Number		757918-01-01			757918-01-01		757918-01-01	757918-01-01		
	UNITS	S-2D Lab-Dup	RDL	QC Batch	N-1S	QC Batch	N-2D	DUP-1	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Tetrachloroethylene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Toluene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
1,1,1-Trichloroethane	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
1,1,2-Trichloroethane	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Trichloroethylene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Trichlorofluoromethane (FREON 11)	ug/L				<0.50	6585491	<0.50	<0.50	0.50	6585491
Vinyl Chloride	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
p+m-Xylene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
o-Xylene	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
Total Xylenes	ug/L				<0.20	6585491	<0.20	<0.20	0.20	6585491
F1 (C6-C10)	ug/L				<25	6585491	<25	<25	25	6585491
F1 (C6-C10) - BTEX	ug/L				<25	6585491	<25	<25	25	6585491
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	6592810	<100	6592810	<100	<100	100	6592810
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	6592810	<200	6592810	<200	<200	200	6592810
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	6592810	<200	6592810	<200	<200	200	6592810
Reached Baseline at C50	ug/L	Yes		6592810	Yes	6592810	Yes	Yes		6592810
Surrogate Recovery (%)										
o-Terphenyl	%	108		6592810	106	6592810	108	106		6592810
4-Bromofluorobenzene	%				93	6585491	92	92		6585491
D4-1,2-Dichloroethane	%				102	6585491	101	103		6585491
D8-Toluene	%				98	6585491	99	98		6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYS002	LYS003	LYS004		
Sampling Date		2020/02/06 14:00	2020/02/06 14:30	2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01	757918-01-01		
	UNITS	MW16-8	MW16-9	MW16-3	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	6585180
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	6585491
Benzene	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	6585491
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	6585491
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	6585491
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	6585491
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	6585491
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	6585491
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	6585491
Ethylbenzene	ug/L	<0.20	<0.20	0.21	0.20	6585491
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	6585491
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	6585491
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	6585491
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	6585491
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	6585491
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYS002	LYS003	LYS004		
Sampling Date		2020/02/06 14:00	2020/02/06 14:30	2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01	757918-01-01		
	UNITS	MW16-8	MW16-9	MW16-3	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Toluene	ug/L	<0.20	<0.20	0.70	0.20	6585491
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	6585491
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	6585491
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	6585491
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	5.4	0.50	6585491
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	6585491
p+m-Xylene	ug/L	<0.20	<0.20	0.48	0.20	6585491
o-Xylene	ug/L	<0.20	<0.20	0.51	0.20	6585491
Total Xylenes	ug/L	<0.20	<0.20	0.98	0.20	6585491
F1 (C6-C10)	ug/L	<25	<25	<25	25	6585491
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	6585491
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	6592810
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	6592810
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	6592810
Reached Baseline at C50	ug/L	Yes	Yes	Yes		6592810
Surrogate Recovery (%)						
o-Terphenyl	%	107	112	102		6592810
4-Bromofluorobenzene	%	92	91	94		6585491
D4-1,2-Dichloroethane	%	102	101	100		6585491
D8-Toluene	%	100	98	99		6585491

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		LYR997	LYR998	LYR999	LYS000		
Sampling Date		2020/02/06 12:00	2020/02/06 12:30	2020/02/06 13:00	2020/02/06 13:30		
COC Number		757918-01-01	757918-01-01	757918-01-01	757918-01-01		
	UNITS	S-1S	S-2D	N-1S	N-2D	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug/L	415	388	362	367	3.0	6600981
Total Antimony (Sb)	ug/L	3.27	3.24	3.24	3.14	0.50	6600981
Total Arsenic (As)	ug/L	0.75	0.67	0.68	0.67	0.10	6600981
Total Barium (Ba)	ug/L	20.2	15.6	13.6	13.5	1.0	6600981
Total Beryllium (Be)	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	6600981
Total Bismuth (Bi)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	6600981
Total Boron (B)	ug/L	69	68	67	67	50	6600981
Total Cadmium (Cd)	ug/L	0.485	0.454	0.367	0.352	0.010	6600981
Total Chromium (Cr)	ug/L	1.4	1.4	<1.0	<1.0	1.0	6600981
Total Cobalt (Co)	ug/L	1.47	1.37	1.33	1.34	0.20	6600981
Total Copper (Cu)	ug/L	11.1	10.5	11.6	11.0	0.50	6600981
Total Iron (Fe)	ug/L	223	214	194	189	10	6600981
Total Lead (Pb)	ug/L	8.29	3.54	1.41	1.40	0.20	6600981
Total Lithium (Li)	ug/L	4.1	4.0	4.0	3.9	2.0	6600981
Total Manganese (Mn)	ug/L	12.6	10.6	9.4	9.3	1.0	6600981
Total Molybdenum (Mo)	ug/L	9.9	9.7	9.8	9.6	1.0	6600981
Total Nickel (Ni)	ug/L	4.7	4.5	4.7	4.6	1.0	6600981
Total Selenium (Se)	ug/L	0.22	0.24	0.22	0.22	0.10	6600981
Total Silicon (Si)	ug/L	3780	3780	3780	3630	100	6600981
Total Silver (Ag)	ug/L	<0.020	<0.020	<0.020	<0.020	0.020	6600981
Total Strontium (Sr)	ug/L	1640	1290	1180	1160	1.0	6600981
Total Thallium (Tl)	ug/L	<0.010	<0.010	<0.010	<0.010	0.010	6600981
Total Tin (Sn)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	6600981
Total Titanium (Ti)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	6600981
Total Uranium (U)	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	6600981
Total Vanadium (V)	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	6600981
Total Zinc (Zn)	ug/L	359	298	264	261	5.0	6600981
Total Zirconium (Zr)	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	6600981
Total Calcium (Ca)	mg/L	29.9	17.7	13.3	13.1	0.050	6593617
Total Magnesium (Mg)	mg/L	0.327	0.286	0.268	0.271	0.050	6593617
Total Potassium (K)	mg/L	68.6	67.6	67.3	68.2	0.050	6593617
Total Sodium (Na)	mg/L	134	131	131	132	0.050	6593617
Total Sulphur (S)	mg/L	31.9	30.5	30.6	30.5	3.0	6593617

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TOTAL ICPMS METALS FOR CCME CEQG FOR SW (WATER)

BV Labs ID		LYR997	LYR998	LYR999	LYS000		
Sampling Date		2020/02/06 12:00	2020/02/06 12:30	2020/02/06 13:00	2020/02/06 13:30		
COC Number		757918-01-01	757918-01-01	757918-01-01	757918-01-01		
	UNITS	S-1S	S-2D	N-1S	N-2D	RDL	QC Batch
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	76.1	45.3	34.4	33.8	0.50	6593616

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

RESULTS OF ANALYSES OF WATER

BV Labs ID		LYR997	LYR999		LYS004		
Sampling Date		2020/02/06 12:00	2020/02/06 13:00		2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01		757918-01-01		
	UNITS	S-1S	N-1S	QC Batch	MW16-3	RDL	QC Batch
Inorganics							
Total Kjeldahl Nitrogen (TKN)	mg/L	0.93	0.88	6586498	1.1	0.10	6593209
Total Suspended Solids	mg/L	<10	<10	6584583	250	10	6593143
Volatile Suspended Solids	mg/L	<10	<10	6584592	34	10	6593146

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

SEMI-VOLATILE ORGANICS BY GC-MS (WATER)

BV Labs ID		LYR997	LYR999	LYR999		LYS004		
Sampling Date		2020/02/06 12:00	2020/02/06 13:00	2020/02/06 13:00		2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01	757918-01-01		757918-01-01		
	UNITS	S-1S	N-1S	N-1S Lab-Dup	QC Batch	MW16-3	RDL	QC Batch
Phenolics								
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,3,4,6-Tetrachlorophenol	ug/L	0.3	0.3	0.3	6587246	0.3	0.1	6591847
2,3,5-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,4-Dimethylphenol	ug/L	<1	<1	<1	6587246	<1	1	6591847
2,4,6-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,6-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
4-Chloro-3-Methylphenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
4-Nitrophenol	ug/L	<1	<1	<1	6587246	<1	1	6591847
m/p-Cresol	ug/L	<0.5	<0.5	<0.5	6587246	<0.5	0.5	6591847
o-Cresol	ug/L	<0.5	<0.5	<0.5	6587246	<0.5	0.5	6591847
Pentachlorophenol	ug/L	0.8	0.8	0.8	6587246	0.3	0.1	6591847
Phenol	ug/L	<0.5	<0.5	<0.5	6587246	3.8	0.5	6591847
2,3,4,5-Tetrachlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,3,5,6-Tetrachlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,3,4-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,3,6-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,4,5-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
3,4,5-Trichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,4-Dinitrophenol	ug/L	<1	<1	<1	6587246	<1	1	6591847
2,3-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2,5-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	0.3	0.1	6591847
3,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
3,5-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
4,6-Dinitro-2-methylphenol	ug/L	<1	<1	<1	6587246	<1	1	6591847
3 & 4-Chlorophenol	ug/L	<0.1	<0.1	<0.1	6587246	<0.1	0.1	6591847
2-Nitrophenol	ug/L	<1	<1	<1	6587246	<1	1	6591847
Surrogate Recovery (%)								
2,4,6-Tribromophenol	%	94	94	93	6587246	75		6591847
2-Fluorophenol	%	61	70	63	6587246	51		6591847
D5-Phenol	%	56	68	60	6587246	66		6591847

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

PETROLEUM HYDROCARBONS (CCME)

BV Labs ID		LYS005		
Sampling Date		2020/02/06 15:15		
COC Number		757918-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/L	<0.20	0.20	6589221
Toluene	ug/L	<0.20	0.20	6589221
Ethylbenzene	ug/L	<0.20	0.20	6589221
o-Xylene	ug/L	<0.20	0.20	6589221
p+m-Xylene	ug/L	<0.40	0.40	6589221
Total Xylenes	ug/L	<0.40	0.40	6589221
F1 (C6-C10)	ug/L	<25	25	6589221
F1 (C6-C10) - BTEX	ug/L	<25	25	6589221
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	104		6589221
4-Bromofluorobenzene	%	100		6589221
D10-Ethylbenzene	%	124		6589221
D4-1,2-Dichloroethane	%	97		6589221

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		LYR997	LYR999		LYS004		
Sampling Date		2020/02/06 12:00	2020/02/06 13:00		2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01		757918-01-01		
	UNITS	S-1S	N-1S	QC Batch	MW16-3	RDL	QC Batch
Calculated Parameters							
Aldrin + Dieldrin	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
Chlordane (Total)	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
DDT+ Metabolites	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
Heptachlor + Heptachlor epoxide	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
Total Endosulfan	ug/L	<0.005	<0.005	6585183	<0.005	0.005	6591184
Total PCB	ug/L	<0.05	<0.05	6585183	<0.05	0.05	6591184
Pesticides & Herbicides							
Aldrin	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Dieldrin	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
a-Chlordane	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
g-Chlordane	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
o,p-DDD	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
p,p-DDD	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
o,p-DDE	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
p,p-DDE	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
o,p-DDT	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
p,p-DDT	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Lindane	ug/L	<0.003	<0.003	6585122	<0.003	0.003	6596916
Endosulfan I (alpha)	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Endosulfan II (beta)	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Endrin	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Heptachlor	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Heptachlor epoxide	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Hexachlorobenzene	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Methoxychlor	ug/L	<0.01	<0.01	6585122	<0.01	0.01	6596916
Aroclor 1016	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
Aroclor 1221	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
Aroclor 1232	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
Aroclor 1242	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
Aroclor 1248	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

BV Labs ID		LYR997	LYR999		LYS004		
Sampling Date		2020/02/06 12:00	2020/02/06 13:00		2020/02/06 15:00		
COC Number		757918-01-01	757918-01-01		757918-01-01		
	UNITS	S-1S	N-1S	QC Batch	MW16-3	RDL	QC Batch
Aroclor 1254	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
Aroclor 1260	ug/L	<0.05	<0.05	6585122	<0.05	0.05	6596916
alpha-BHC	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
beta-BHC	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
delta-BHC	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Endosulfan sulfate	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Endrin aldehyde	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Endrin ketone	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Mirex	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Octachlorostyrene	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Oxychlordane	ug/L	<0.005	<0.005	6585122	<0.005	0.005	6596916
Toxaphene	ug/L	<0.2	<0.2	6585122	<0.2	0.2	6596916
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	89	89	6585122	69		6596916
Decachlorobiphenyl	%	101	105	6585122	59		6596916

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYR997
Sample ID: S-1S
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6579124	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6585910	N/A	2020/02/13	Deonarine Ramnarine
Acid Extractables by GC/MS	GC/MS	6587246	2020/02/13	2020/02/13	May Yin Mak
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594026	N/A	2020/02/13	Automated Statchk
Hardness Total (calculated as CaCO3)	CALC	6593616	N/A	2020/02/21	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6593617	2020/02/21	2020/02/21	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6600981	2020/02/20	2020/02/21	Valentina Balada
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6586507	N/A	2020/02/14	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585922	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
OC Pesticides (Selected) & PCB	GC/ECD	6585122	2020/02/12	2020/02/13	Li Peng
OC Pesticides Summed Parameters	CALC	6585183	N/A	2020/02/13	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6585916	N/A	2020/02/13	Deonarine Ramnarine
Total Kjeldahl Nitrogen in Water	SKAL	6586498	2020/02/12	2020/02/18	Rajni Tyagi
Total Suspended Solids	BAL	6584583	2020/02/12	2020/02/13	Massarat Jan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan
Volatile Suspended Solids	BAL	6584592	2020/02/12	2020/02/13	Massarat Jan

BV Labs ID: LYR997 Dup
Sample ID: S-1S
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYR998
Sample ID: S-2D
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6585910	N/A	2020/02/13	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594026	N/A	2020/02/13	Automated Statchk
Hardness Total (calculated as CaCO3)	CALC	6593616	N/A	2020/02/21	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6593617	2020/02/21	2020/02/21	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6600981	2020/02/20	2020/02/21	Valentina Balada
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6586507	N/A	2020/02/14	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6585916	N/A	2020/02/13	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs ID: LYR998 Dup
Sample ID: S-2D
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati

BV Labs ID: LYR999
Sample ID: N-1S
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6579124	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6585910	N/A	2020/02/13	Deonarine Ramnarine
Acid Extractables by GC/MS	GC/MS	6587246	2020/02/13	2020/02/13	May Yin Mak
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594026	N/A	2020/02/13	Automated Statchk

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYR999
Sample ID: N-1S
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hardness Total (calculated as CaCO3)	CALC	6593616	N/A	2020/02/21	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6593617	2020/02/21	2020/02/21	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6600981	2020/02/20	2020/02/21	Valentina Balada
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6586507	N/A	2020/02/14	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
OC Pesticides (Selected) & PCB	GC/ECD	6585122	2020/02/12	2020/02/13	Li Peng
OC Pesticides Summed Parameters	CALC	6585183	N/A	2020/02/13	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6585916	N/A	2020/02/13	Deonarine Ramnarine
Total Kjeldahl Nitrogen in Water	SKAL	6586498	2020/02/12	2020/02/18	Rajni Tyagi
Total Suspended Solids	BAL	6584583	2020/02/12	2020/02/13	Massarat Jan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan
Volatile Suspended Solids	BAL	6584592	2020/02/12	2020/02/13	Massarat Jan

BV Labs ID: LYR999 Dup
Sample ID: N-1S
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractables by GC/MS	GC/MS	6587246	2020/02/13	2020/02/13	May Yin Mak

BV Labs ID: LYS000
Sample ID: N-2D
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6585910	N/A	2020/02/13	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594026	N/A	2020/02/13	Automated Statchk
Hardness Total (calculated as CaCO3)	CALC	6593616	N/A	2020/02/21	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYS000
Sample ID: N-2D
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	6593617	2020/02/21	2020/02/21	Automated Statchk
Elements by CRC ICPMS (total)	ICP/MS	6600981	2020/02/20	2020/02/20	Valentina Balada
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6586507	N/A	2020/02/14	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585922	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6585916	N/A	2020/02/13	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs ID: LYS000 Dup
Sample ID: N-2D
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas

BV Labs ID: LYS001
Sample ID: DUP-1
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6584326	N/A	2020/02/13	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594025	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6585887	N/A	2020/02/13	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYS001
Sample ID: DUP-1
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sulphate by Automated Colourimetry	KONE	6584336	N/A	2020/02/13	Alina Dobreanu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs ID: LYS002
Sample ID: MW16-8
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6584326	N/A	2020/02/13	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594025	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6585887	N/A	2020/02/13	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6584336	N/A	2020/02/13	Alina Dobreanu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs ID: LYS003
Sample ID: MW16-9
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6584326	N/A	2020/02/13	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594025	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYS003
Sample ID: MW16-9
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6585887	N/A	2020/02/13	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6584336	N/A	2020/02/13	Alina Dobreanu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan

BV Labs ID: LYS004
Sample ID: MW16-3
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6585180	N/A	2020/02/14	Automated Statchk
Chloride by Automated Colourimetry	KONE	6584326	N/A	2020/02/13	Deonarine Ramnarine
Acid Extractables by GC/MS	GC/MS	6591847	2020/02/15	2020/02/19	May Yin Mak
Free (WAD) Cyanide	SKAL/CN	6590556	N/A	2020/02/14	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6592810	2020/02/18	2020/02/18	Prabhjot Gulati
Fluoride	ISE	6585267	2020/02/12	2020/02/12	Surinder Rai
Mercury (low level)	CV/AA	6587524	2020/02/13	2020/02/14	Medhat Nasr
Sulphide (as H2S)	CALC	6594025	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6593620	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6593621	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6594023	N/A	2020/02/14	Automated Statchk
PAH in Water by GC/MS	GC/MS	6594024	2020/02/13	2020/02/13	Nora Kazemian
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6585181	N/A	2020/02/14	Automated Statchk
Total Ammonia-N	LACH/NH4	6585887	N/A	2020/02/13	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6585265	N/A	2020/02/13	Chandra Nandlal
Nitrate (as NO3)	CALC	6585182	N/A	2020/02/14	Automated Statchk
OC Pesticides (Selected) & PCB	GC/ECD	6596916	2020/02/20	2020/02/21	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	6591184	N/A	2020/02/14	Automated Statchk
pH	AT	6585268	2020/02/12	2020/02/12	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6584336	N/A	2020/02/13	Alina Dobreanu
Total Kjeldahl Nitrogen in Water	SKAL	6593209	2020/02/18	2020/02/18	Rajni Tyagi
Total Suspended Solids	BAL	6593143	2020/02/18	2020/02/19	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6585491	N/A	2020/02/13	Anna Gabrielyan
Volatile Suspended Solids	BAL	6593146	2020/02/18	2020/02/19	Shivani Desai

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYS005
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2020/02/06
Shipped:
Received: 2020/02/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	6589221	N/A	2020/02/14	Domnica Andronescu

GENERAL COMMENTS

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

Package 1	0.7°C
Package 2	1.0°C
Package 3	6.7°C

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

Sample LYS002 [MW16-8] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.
Sample LYS003 [MW16-9] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

ORGANOCHLORINATED PESTICIDES BY GC-ECD (WATER)

OC Pesticides (Selected) & PCB: Due to sample matrix, recoveries for the flagged target analytes were below the control limit as stipulated by Ontario Regulation 153, however, these recoveries are still within Bureau Veritas Laboratories' performance based limits. Results reported for these specific analytes with recoveries within this range are still valid but may have an associated low bias.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6584326	DRM	Matrix Spike	Dissolved Chloride (Cl-)	2020/02/13		NC	%	80 - 120
6584326	DRM	Spiked Blank	Dissolved Chloride (Cl-)	2020/02/13		103	%	80 - 120
6584326	DRM	Method Blank	Dissolved Chloride (Cl-)	2020/02/13	<1.0		mg/L	
6584326	DRM	RPD	Dissolved Chloride (Cl-)	2020/02/13	0.82		%	20
6584336	ADB	Matrix Spike	Dissolved Sulphate (SO4)	2020/02/13		NC	%	75 - 125
6584336	ADB	Spiked Blank	Dissolved Sulphate (SO4)	2020/02/13		104	%	80 - 120
6584336	ADB	Method Blank	Dissolved Sulphate (SO4)	2020/02/13	<1.0		mg/L	
6584336	ADB	RPD	Dissolved Sulphate (SO4)	2020/02/13	0.60		%	20
6584583	MJ1	QC Standard	Total Suspended Solids	2020/02/13		99	%	85 - 115
6584583	MJ1	Method Blank	Total Suspended Solids	2020/02/13	<10		mg/L	
6584583	MJ1	RPD	Total Suspended Solids	2020/02/13	1.6		%	25
6584592	MJ1	Method Blank	Volatile Suspended Solids	2020/02/13	<10		mg/L	
6584592	MJ1	RPD	Volatile Suspended Solids	2020/02/13	1.6		%	25
6585122	LPG	Matrix Spike	2,4,5,6-Tetrachloro-m-xylene	2020/02/13		59	%	50 - 130
			Decachlorobiphenyl	2020/02/13		64	%	50 - 130
			Aldrin	2020/02/13		68	%	50 - 130
			Dieldrin	2020/02/13		88	%	50 - 130
			a-Chlordane	2020/02/13		77	%	50 - 130
			g-Chlordane	2020/02/13		77	%	50 - 130
			o,p-DDD	2020/02/13		78	%	50 - 130
			p,p-DDD	2020/02/13		74	%	50 - 130
			o,p-DDE	2020/02/13		74	%	50 - 130
			p,p-DDE	2020/02/13		73	%	50 - 130
			o,p-DDT	2020/02/13		78	%	50 - 130
			p,p-DDT	2020/02/13		85	%	50 - 130
			Lindane	2020/02/13		71	%	50 - 130
			Endosulfan I (alpha)	2020/02/13		74	%	50 - 130
			Endosulfan II (beta)	2020/02/13		71	%	50 - 130
			Endrin	2020/02/13		78	%	50 - 130
			Heptachlor	2020/02/13		76	%	50 - 130
			Heptachlor epoxide	2020/02/13		75	%	50 - 130
			Hexachlorobenzene	2020/02/13		78	%	50 - 130
			Methoxychlor	2020/02/13		93	%	50 - 130
			alpha-BHC	2020/02/13		76	%	30 - 130
			beta-BHC	2020/02/13		64	%	30 - 130
			delta-BHC	2020/02/13		71	%	30 - 130
			Endosulfan sulfate	2020/02/13		91	%	30 - 130
			Endrin aldehyde	2020/02/13		83	%	30 - 130
			Endrin ketone	2020/02/13		86	%	30 - 130
			Mirex	2020/02/13		74	%	30 - 130
			Octachlorostyrene	2020/02/13		73	%	30 - 130
			Oxychlordane	2020/02/13		73	%	30 - 130
6585122	LPG	Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2020/02/13		82	%	50 - 130
			Decachlorobiphenyl	2020/02/13		116	%	50 - 130
			Aldrin	2020/02/13		70	%	50 - 130
			Dieldrin	2020/02/13		101	%	50 - 130
			a-Chlordane	2020/02/13		88	%	50 - 130
			g-Chlordane	2020/02/13		89	%	50 - 130
			o,p-DDD	2020/02/13		88	%	50 - 130
			p,p-DDD	2020/02/13		81	%	50 - 130
			o,p-DDE	2020/02/13		87	%	50 - 130
			p,p-DDE	2020/02/13		82	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			o,p-DDT	2020/02/13		88	%	50 - 130
			p,p-DDT	2020/02/13		97	%	50 - 130
			Lindane	2020/02/13		81	%	50 - 130
			Endosulfan I (alpha)	2020/02/13		81	%	50 - 130
			Endosulfan II (beta)	2020/02/13		78	%	50 - 130
			Endrin	2020/02/13		86	%	50 - 130
			Heptachlor	2020/02/13		79	%	50 - 130
			Heptachlor epoxide	2020/02/13		83	%	50 - 130
			Hexachlorobenzene	2020/02/13		85	%	50 - 130
			Methoxychlor	2020/02/13		95	%	50 - 130
			alpha-BHC	2020/02/13		86	%	30 - 130
			beta-BHC	2020/02/13		74	%	30 - 130
			delta-BHC	2020/02/13		76	%	30 - 130
			Endosulfan sulfate	2020/02/13		95	%	30 - 130
			Endrin aldehyde	2020/02/13		91	%	30 - 130
			Endrin ketone	2020/02/13		89	%	30 - 130
			Mirex	2020/02/13		85	%	30 - 130
			Octachlorostyrene	2020/02/13		78	%	30 - 130
			Oxychlordane	2020/02/13		82	%	30 - 130
6585122	LPG	RPD	Aldrin	2020/02/13	7.3		%	30
			Dieldrin	2020/02/13	2.8		%	30
			a-Chlordane	2020/02/13	2.3		%	30
			g-Chlordane	2020/02/13	3.1		%	30
			o,p-DDD	2020/02/13	3.6		%	30
			p,p-DDD	2020/02/13	4.5		%	30
			o,p-DDE	2020/02/13	2.4		%	30
			p,p-DDE	2020/02/13	3.1		%	30
			o,p-DDT	2020/02/13	3.6		%	30
			p,p-DDT	2020/02/13	1.1		%	30
			Lindane	2020/02/13	0.51		%	30
			Endosulfan I (alpha)	2020/02/13	2.1		%	30
			Endosulfan II (beta)	2020/02/13	3.4		%	30
			Endrin	2020/02/13	2.4		%	30
			Heptachlor	2020/02/13	4.3		%	30
			Heptachlor epoxide	2020/02/13	1.5		%	30
			Hexachlorobenzene	2020/02/13	0.13		%	30
			Methoxychlor	2020/02/13	4.8		%	30
			alpha-BHC	2020/02/13	1.0		%	40
			beta-BHC	2020/02/13	0.55		%	40
			delta-BHC	2020/02/13	3.1		%	40
			Endosulfan sulfate	2020/02/13	4.7		%	40
			Endrin aldehyde	2020/02/13	4.0		%	40
			Endrin ketone	2020/02/13	2.6		%	40
			Mirex	2020/02/13	2.8		%	40
			Octachlorostyrene	2020/02/13	6.4		%	40
			Oxychlordane	2020/02/13	2.2		%	30
			Aldrin	2020/02/13	NC		%	30
			Dieldrin	2020/02/13	NC		%	30
			a-Chlordane	2020/02/13	NC		%	30
			g-Chlordane	2020/02/13	NC		%	30
			o,p-DDT	2020/02/13	NC		%	30
			p,p-DDT	2020/02/13	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Lindane	2020/02/13	NC		%	30
			Hexachlorobenzene	2020/02/13	NC		%	30
			Mirex	2020/02/13	NC		%	40
6585122	LPG	Method Blank	2,4,5,6-Tetrachloro-m-xylene	2020/02/13		75	%	50 - 130
			Decachlorobiphenyl	2020/02/13		107	%	50 - 130
			Aldrin	2020/02/13	<0.005		ug/L	
			Dieldrin	2020/02/13	<0.005		ug/L	
			a-Chlordane	2020/02/13	<0.005		ug/L	
			g-Chlordane	2020/02/13	<0.005		ug/L	
			o,p-DDD	2020/02/13	<0.005		ug/L	
			p,p-DDD	2020/02/13	<0.005		ug/L	
			o,p-DDE	2020/02/13	<0.005		ug/L	
			p,p-DDE	2020/02/13	<0.005		ug/L	
			o,p-DDT	2020/02/13	<0.005		ug/L	
			p,p-DDT	2020/02/13	<0.005		ug/L	
			Lindane	2020/02/13	<0.003		ug/L	
			Endosulfan I (alpha)	2020/02/13	<0.005		ug/L	
			Endosulfan II (beta)	2020/02/13	<0.005		ug/L	
			Endrin	2020/02/13	<0.005		ug/L	
			Heptachlor	2020/02/13	<0.005		ug/L	
			Heptachlor epoxide	2020/02/13	<0.005		ug/L	
			Hexachlorobenzene	2020/02/13	<0.005		ug/L	
			Methoxychlor	2020/02/13	<0.01		ug/L	
			Aroclor 1016	2020/02/13	<0.05		ug/L	
			Aroclor 1221	2020/02/13	<0.05		ug/L	
			Aroclor 1232	2020/02/13	<0.05		ug/L	
			Aroclor 1242	2020/02/13	<0.05		ug/L	
			Aroclor 1248	2020/02/13	<0.05		ug/L	
			Aroclor 1254	2020/02/13	<0.05		ug/L	
			Aroclor 1260	2020/02/13	<0.05		ug/L	
			alpha-BHC	2020/02/13	<0.005		ug/L	
			beta-BHC	2020/02/13	<0.005		ug/L	
			delta-BHC	2020/02/13	<0.005		ug/L	
			Endosulfan sulfate	2020/02/13	<0.005		ug/L	
			Endrin aldehyde	2020/02/13	<0.005		ug/L	
			Endrin ketone	2020/02/13	<0.005		ug/L	
			Mirex	2020/02/13	<0.005		ug/L	
			Octachlorostyrene	2020/02/13	<0.005		ug/L	
			Oxychlordane	2020/02/13	<0.005		ug/L	
			Toxaphene	2020/02/13	<0.2		ug/L	
6585265	C_N	Matrix Spike	Nitrite (N)	2020/02/13		104	%	80 - 120
			Nitrate (N)	2020/02/13		111	%	80 - 120
6585265	C_N	Spiked Blank	Nitrite (N)	2020/02/13		102	%	80 - 120
			Nitrate (N)	2020/02/13		103	%	80 - 120
6585265	C_N	Method Blank	Nitrite (N)	2020/02/13	<0.010		mg/L	
			Nitrate (N)	2020/02/13	<0.10		mg/L	
6585265	C_N	RPD	Nitrite (N)	2020/02/13	NC		%	20
			Nitrate (N)	2020/02/13	4.5		%	20
6585267	SAU	Matrix Spike	Fluoride (F-)	2020/02/12		28 (1)	%	80 - 120
6585267	SAU	Spiked Blank	Fluoride (F-)	2020/02/12		99	%	80 - 120
6585267	SAU	Method Blank	Fluoride (F-)	2020/02/12	<0.10		mg/L	
6585267	SAU	RPD	Fluoride (F-)	2020/02/12	NC		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6585268	SAU	Spiked Blank	pH	2020/02/12		102	%	98 - 103
6585268	SAU	RPD	pH	2020/02/12	0.79		%	N/A
6585491	AYA	Matrix Spike [LYR997-01]	4-Bromofluorobenzene	2020/02/13		102	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/13		103	%	70 - 130
			D8-Toluene	2020/02/13		100	%	70 - 130
			Acetone (2-Propanone)	2020/02/13		106	%	60 - 140
			Benzene	2020/02/13		96	%	70 - 130
			Bromodichloromethane	2020/02/13		91	%	70 - 130
			Bromoform	2020/02/13		91	%	70 - 130
			Bromomethane	2020/02/13		90	%	60 - 140
			Carbon Tetrachloride	2020/02/13		87	%	70 - 130
			Chlorobenzene	2020/02/13		90	%	70 - 130
			Chloroform	2020/02/13		89	%	70 - 130
			Dibromochloromethane	2020/02/13		94	%	70 - 130
			1,2-Dichlorobenzene	2020/02/13		91	%	70 - 130
			1,3-Dichlorobenzene	2020/02/13		93	%	70 - 130
			1,4-Dichlorobenzene	2020/02/13		104	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/13		79	%	60 - 140
			1,1-Dichloroethane	2020/02/13		96	%	70 - 130
			1,2-Dichloroethane	2020/02/13		97	%	70 - 130
			1,1-Dichloroethylene	2020/02/13		101	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/13		91	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/13		98	%	70 - 130
			1,2-Dichloropropane	2020/02/13		90	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/13		89	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/13		90	%	70 - 130
			Ethylbenzene	2020/02/13		88	%	70 - 130
			Ethylene Dibromide	2020/02/13		96	%	70 - 130
			Hexane	2020/02/13		103	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/13		96	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/13		103	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/13		95	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/13		83	%	70 - 130
			Styrene	2020/02/13		89	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/13		96	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/13		98	%	70 - 130
			Tetrachloroethylene	2020/02/13		89	%	70 - 130
			Toluene	2020/02/13		93	%	70 - 130
			1,1,1-Trichloroethane	2020/02/13		89	%	70 - 130
			1,1,2-Trichloroethane	2020/02/13		99	%	70 - 130
			Trichloroethylene	2020/02/13		96	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/13		97	%	70 - 130
			Vinyl Chloride	2020/02/13		96	%	70 - 130
			p+m-Xylene	2020/02/13		90	%	70 - 130
			o-Xylene	2020/02/13		90	%	70 - 130
			F1 (C6-C10)	2020/02/13		91	%	60 - 140
6585491	AYA	Spiked Blank	4-Bromofluorobenzene	2020/02/13		101	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/13		103	%	70 - 130
			D8-Toluene	2020/02/13		99	%	70 - 130
			Acetone (2-Propanone)	2020/02/13		110	%	60 - 140
			Benzene	2020/02/13		98	%	70 - 130
			Bromodichloromethane	2020/02/13		94	%	70 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromoform	2020/02/13		93	%	70 - 130
			Bromomethane	2020/02/13		92	%	60 - 140
			Carbon Tetrachloride	2020/02/13		91	%	70 - 130
			Chlorobenzene	2020/02/13		91	%	70 - 130
			Chloroform	2020/02/13		91	%	70 - 130
			Dibromochloromethane	2020/02/13		97	%	70 - 130
			1,2-Dichlorobenzene	2020/02/13		93	%	70 - 130
			1,3-Dichlorobenzene	2020/02/13		94	%	70 - 130
			1,4-Dichlorobenzene	2020/02/13		104	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/13		97	%	60 - 140
			1,1-Dichloroethane	2020/02/13		99	%	70 - 130
			1,2-Dichloroethane	2020/02/13		101	%	70 - 130
			1,1-Dichloroethylene	2020/02/13		105	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/13		93	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/13		99	%	70 - 130
			1,2-Dichloropropane	2020/02/13		93	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/13		83	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/13		81	%	70 - 130
			Ethylbenzene	2020/02/13		89	%	70 - 130
			Ethylene Dibromide	2020/02/13		99	%	70 - 130
			Hexane	2020/02/13		105	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/13		99	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/13		108	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/13		101	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/13		88	%	70 - 130
			Styrene	2020/02/13		90	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/13		97	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/13		102	%	70 - 130
			Tetrachloroethylene	2020/02/13		90	%	70 - 130
			Toluene	2020/02/13		94	%	70 - 130
			1,1,1-Trichloroethane	2020/02/13		92	%	70 - 130
			1,1,2-Trichloroethane	2020/02/13		102	%	70 - 130
			Trichloroethylene	2020/02/13		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/13		101	%	70 - 130
			Vinyl Chloride	2020/02/13		102	%	70 - 130
			p+m-Xylene	2020/02/13		91	%	70 - 130
			o-Xylene	2020/02/13		91	%	70 - 130
			F1 (C6-C10)	2020/02/13		98	%	60 - 140
6585491	AYA	Method Blank	4-Bromofluorobenzene	2020/02/13		94	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/13		100	%	70 - 130
			D8-Toluene	2020/02/13		99	%	70 - 130
			Acetone (2-Propanone)	2020/02/13	<10		ug/L	
			Benzene	2020/02/13	<0.20		ug/L	
			Bromodichloromethane	2020/02/13	<0.50		ug/L	
			Bromoform	2020/02/13	<1.0		ug/L	
			Bromomethane	2020/02/13	<0.50		ug/L	
			Carbon Tetrachloride	2020/02/13	<0.20		ug/L	
			Chlorobenzene	2020/02/13	<0.20		ug/L	
			Chloroform	2020/02/13	<0.20		ug/L	
			Dibromochloromethane	2020/02/13	<0.50		ug/L	
			1,2-Dichlorobenzene	2020/02/13	<0.50		ug/L	
			1,3-Dichlorobenzene	2020/02/13	<0.50		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,4-Dichlorobenzene	2020/02/13	<0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2020/02/13	<1.0		ug/L	
			1,1-Dichloroethane	2020/02/13	<0.20		ug/L	
			1,2-Dichloroethane	2020/02/13	<0.50		ug/L	
			1,1-Dichloroethylene	2020/02/13	<0.20		ug/L	
			cis-1,2-Dichloroethylene	2020/02/13	<0.50		ug/L	
			trans-1,2-Dichloroethylene	2020/02/13	<0.50		ug/L	
			1,2-Dichloropropane	2020/02/13	<0.20		ug/L	
			cis-1,3-Dichloropropene	2020/02/13	<0.30		ug/L	
			trans-1,3-Dichloropropene	2020/02/13	<0.40		ug/L	
			Ethylbenzene	2020/02/13	<0.20		ug/L	
			Ethylene Dibromide	2020/02/13	<0.20		ug/L	
			Hexane	2020/02/13	<1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2020/02/13	<2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2020/02/13	<10		ug/L	
			Methyl Isobutyl Ketone	2020/02/13	<5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2020/02/13	<0.50		ug/L	
			Styrene	2020/02/13	<0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2020/02/13	<0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2020/02/13	<0.50		ug/L	
			Tetrachloroethylene	2020/02/13	<0.20		ug/L	
			Toluene	2020/02/13	<0.20		ug/L	
			1,1,1-Trichloroethane	2020/02/13	<0.20		ug/L	
			1,1,2-Trichloroethane	2020/02/13	<0.50		ug/L	
			Trichloroethylene	2020/02/13	<0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2020/02/13	<0.50		ug/L	
			Vinyl Chloride	2020/02/13	<0.20		ug/L	
			p+m-Xylene	2020/02/13	<0.20		ug/L	
			o-Xylene	2020/02/13	<0.20		ug/L	
			Total Xylenes	2020/02/13	<0.20		ug/L	
			F1 (C6-C10)	2020/02/13	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/13	<25		ug/L	
6585491	AYA	RPD [LYR997-01]	Acetone (2-Propanone)	2020/02/13	NC		%	30
			Benzene	2020/02/13	NC		%	30
			Bromodichloromethane	2020/02/13	NC		%	30
			Bromoform	2020/02/13	NC		%	30
			Bromomethane	2020/02/13	NC		%	30
			Carbon Tetrachloride	2020/02/13	NC		%	30
			Chlorobenzene	2020/02/13	NC		%	30
			Chloroform	2020/02/13	NC		%	30
			Dibromochloromethane	2020/02/13	NC		%	30
			1,2-Dichlorobenzene	2020/02/13	NC		%	30
			1,3-Dichlorobenzene	2020/02/13	NC		%	30
			1,4-Dichlorobenzene	2020/02/13	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2020/02/13	NC		%	30
			1,1-Dichloroethane	2020/02/13	NC		%	30
			1,2-Dichloroethane	2020/02/13	NC		%	30
			1,1-Dichloroethylene	2020/02/13	NC		%	30
			cis-1,2-Dichloroethylene	2020/02/13	NC		%	30
			trans-1,2-Dichloroethylene	2020/02/13	NC		%	30
			1,2-Dichloropropane	2020/02/13	NC		%	30
			cis-1,3-Dichloropropene	2020/02/13	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			trans-1,3-Dichloropropene	2020/02/13	NC		%	30
			Ethylbenzene	2020/02/13	NC		%	30
			Ethylene Dibromide	2020/02/13	NC		%	30
			Hexane	2020/02/13	NC		%	30
			Methylene Chloride(Dichloromethane)	2020/02/13	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2020/02/13	NC		%	30
			Methyl Isobutyl Ketone	2020/02/13	NC		%	30
			Methyl t-butyl ether (MTBE)	2020/02/13	NC		%	30
			Styrene	2020/02/13	NC		%	30
			1,1,1,2-Tetrachloroethane	2020/02/13	NC		%	30
			1,1,2,2-Tetrachloroethane	2020/02/13	NC		%	30
			Tetrachloroethylene	2020/02/13	NC		%	30
			Toluene	2020/02/13	NC		%	30
			1,1,1-Trichloroethane	2020/02/13	NC		%	30
			1,1,2-Trichloroethane	2020/02/13	NC		%	30
			Trichloroethylene	2020/02/13	NC		%	30
			Trichlorofluoromethane (FREON 11)	2020/02/13	NC		%	30
			Vinyl Chloride	2020/02/13	NC		%	30
			p+m-Xylene	2020/02/13	NC		%	30
			o-Xylene	2020/02/13	NC		%	30
			Total Xylenes	2020/02/13	NC		%	30
			F1 (C6-C10)	2020/02/13	NC		%	30
			F1 (C6-C10) - BTEX	2020/02/13	NC		%	30
6585887	MT4	Matrix Spike	Total Ammonia-N	2020/02/13		96	%	75 - 125
6585887	MT4	Spiked Blank	Total Ammonia-N	2020/02/13		99	%	80 - 120
6585887	MT4	Method Blank	Total Ammonia-N	2020/02/13	<0.050		mg/L	
6585887	MT4	RPD	Total Ammonia-N	2020/02/13	NC		%	20
6585910	DRM	Matrix Spike	Dissolved Chloride (Cl-)	2020/02/13		109	%	80 - 120
6585910	DRM	Spiked Blank	Dissolved Chloride (Cl-)	2020/02/13		103	%	80 - 120
6585910	DRM	Method Blank	Dissolved Chloride (Cl-)	2020/02/13	<1.0		mg/L	
6585910	DRM	RPD	Dissolved Chloride (Cl-)	2020/02/13	0.95		%	20
6585916	DRM	Matrix Spike	Dissolved Sulphate (SO4)	2020/02/13		113	%	75 - 125
6585916	DRM	Spiked Blank	Dissolved Sulphate (SO4)	2020/02/13		102	%	80 - 120
6585916	DRM	Method Blank	Dissolved Sulphate (SO4)	2020/02/13	<1.0		mg/L	
6585916	DRM	RPD	Dissolved Sulphate (SO4)	2020/02/13	2.2		%	20
6585922	C_N	Matrix Spike	Nitrite (N)	2020/02/13		110	%	80 - 120
			Nitrate (N)	2020/02/13		103	%	80 - 120
6585922	C_N	Spiked Blank	Nitrite (N)	2020/02/13		103	%	80 - 120
			Nitrate (N)	2020/02/13		99	%	80 - 120
6585922	C_N	Method Blank	Nitrite (N)	2020/02/13	<0.010		mg/L	
			Nitrate (N)	2020/02/13	<0.10		mg/L	
6585922	C_N	RPD	Nitrate (N)	2020/02/13	NC		%	20
6586498	RTY	Matrix Spike	Total Kjeldahl Nitrogen (TKN)	2020/02/19		NC	%	80 - 120
6586498	RTY	QC Standard	Total Kjeldahl Nitrogen (TKN)	2020/02/18		102	%	80 - 120
6586498	RTY	Spiked Blank	Total Kjeldahl Nitrogen (TKN)	2020/02/18		101	%	80 - 120
6586498	RTY	Method Blank	Total Kjeldahl Nitrogen (TKN)	2020/02/18	<0.10		mg/L	
6586498	RTY	RPD	Total Kjeldahl Nitrogen (TKN)	2020/02/19	4.3		%	20
6586507	MT4	Matrix Spike	Total Ammonia-N	2020/02/14		95	%	75 - 125
6586507	MT4	Spiked Blank	Total Ammonia-N	2020/02/14		97	%	80 - 120
6586507	MT4	Method Blank	Total Ammonia-N	2020/02/14	<0.050		mg/L	
6586507	MT4	RPD	Total Ammonia-N	2020/02/14	NC		%	20
6587246	MYI	Matrix Spike [LYR997-14]	2,4,6-Tribromophenol	2020/02/13		92	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			2-Fluorophenol	2020/02/13		53	%	50 - 130
			D5-Phenol	2020/02/13		51	%	30 - 130
			2-Chlorophenol	2020/02/13		59	%	50 - 130
			2,3,4,6-Tetrachlorophenol	2020/02/13		82	%	10 - 130
			2,3,5-Trichlorophenol	2020/02/13		80	%	10 - 130
			2,4-Dichlorophenol	2020/02/13		67	%	50 - 130
			2,4-Dimethylphenol	2020/02/13		69	%	30 - 130
			2,4,6-Trichlorophenol	2020/02/13		72	%	10 - 130
			2,6-Dichlorophenol	2020/02/13		73	%	10 - 130
			4-Chloro-3-Methylphenol	2020/02/13		68	%	10 - 130
			4-Nitrophenol	2020/02/13		83	%	10 - 130
			m/p-Cresol	2020/02/13		65	%	10 - 130
			o-Cresol	2020/02/13		57	%	10 - 130
			Pentachlorophenol	2020/02/13		87	%	50 - 130
			Phenol	2020/02/13		51	%	30 - 130
			2,3,4,5-Tetrachlorophenol	2020/02/13		74	%	10 - 130
			2,3,5,6-Tetrachlorophenol	2020/02/13		85	%	10 - 130
			2,3,4-Trichlorophenol	2020/02/13		90	%	10 - 130
			2,3,6-Trichlorophenol	2020/02/13		75	%	30 - 130
			2,4,5-Trichlorophenol	2020/02/13		76	%	50 - 130
			3,4,5-Trichlorophenol	2020/02/13		87	%	10 - 130
			2,4-Dinitrophenol	2020/02/13		74	%	30 - 130
			2,3-Dichlorophenol	2020/02/13		72	%	10 - 130
			2,5-Dichlorophenol	2020/02/13		72	%	10 - 130
			3,4-Dichlorophenol	2020/02/13		74	%	10 - 130
			3,5-Dichlorophenol	2020/02/13		77	%	10 - 130
			4,6-Dinitro-2-methylphenol	2020/02/13		85	%	10 - 130
			3 & 4-Chlorophenol	2020/02/13		66	%	10 - 130
			2-Nitrophenol	2020/02/13		67	%	10 - 130
6587246	MYI	Spiked Blank	2,4,6-Tribromophenol	2020/02/13		89	%	50 - 130
			2-Fluorophenol	2020/02/13		78	%	50 - 130
			D5-Phenol	2020/02/13		60	%	30 - 130
			2-Chlorophenol	2020/02/13		83	%	50 - 130
			2,3,4,6-Tetrachlorophenol	2020/02/13		82	%	10 - 130
			2,3,5-Trichlorophenol	2020/02/13		84	%	10 - 130
			2,4-Dichlorophenol	2020/02/13		81	%	50 - 130
			2,4-Dimethylphenol	2020/02/13		81	%	30 - 130
			2,4,6-Trichlorophenol	2020/02/13		82	%	10 - 130
			2,6-Dichlorophenol	2020/02/13		86	%	10 - 130
			4-Chloro-3-Methylphenol	2020/02/13		75	%	10 - 130
			4-Nitrophenol	2020/02/13		76	%	10 - 130
			m/p-Cresol	2020/02/13		77	%	10 - 130
			o-Cresol	2020/02/13		70	%	10 - 130
			Pentachlorophenol	2020/02/13		82	%	50 - 130
			Phenol	2020/02/13		60	%	30 - 130
			2,3,4,5-Tetrachlorophenol	2020/02/13		70	%	10 - 130
			2,3,5,6-Tetrachlorophenol	2020/02/13		88	%	10 - 130
			2,3,4-Trichlorophenol	2020/02/13		88	%	10 - 130
			2,3,6-Trichlorophenol	2020/02/13		84	%	30 - 130
			2,4,5-Trichlorophenol	2020/02/13		79	%	50 - 130
			3,4,5-Trichlorophenol	2020/02/13		89	%	10 - 130
			2,4-Dinitrophenol	2020/02/13		78	%	30 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			2,3-Dichlorophenol	2020/02/13		83	%	10 - 130
			2,5-Dichlorophenol	2020/02/13		85	%	10 - 130
			3,4-Dichlorophenol	2020/02/13		88	%	10 - 130
			3,5-Dichlorophenol	2020/02/13		84	%	10 - 130
			4,6-Dinitro-2-methylphenol	2020/02/13		81	%	10 - 130
			3 & 4-Chlorophenol	2020/02/13		80	%	10 - 130
			2-Nitrophenol	2020/02/13		78	%	10 - 130
6587246	MYI	Method Blank	2,4,6-Tribromophenol	2020/02/13		91	%	50 - 130
			2-Fluorophenol	2020/02/13		82	%	50 - 130
			D5-Phenol	2020/02/13		67	%	30 - 130
			2-Chlorophenol	2020/02/13	<0.1		ug/L	
			2,3,4,6-Tetrachlorophenol	2020/02/13	<0.1		ug/L	
			2,3,5-Trichlorophenol	2020/02/13	<0.1		ug/L	
			2,4-Dichlorophenol	2020/02/13	<0.1		ug/L	
			2,4-Dimethylphenol	2020/02/13	<1		ug/L	
			2,4,6-Trichlorophenol	2020/02/13	<0.1		ug/L	
			2,6-Dichlorophenol	2020/02/13	<0.1		ug/L	
			4-Chloro-3-Methylphenol	2020/02/13	<0.1		ug/L	
			4-Nitrophenol	2020/02/13	<1		ug/L	
			m/p-Cresol	2020/02/13	<0.5		ug/L	
			o-Cresol	2020/02/13	<0.5		ug/L	
			Pentachlorophenol	2020/02/13	<0.1		ug/L	
			Phenol	2020/02/13	<0.5		ug/L	
			2,3,4,5-Tetrachlorophenol	2020/02/13	<0.1		ug/L	
			2,3,5,6-Tetrachlorophenol	2020/02/13	<0.1		ug/L	
			2,3,4-Trichlorophenol	2020/02/13	<0.1		ug/L	
			2,3,6-Trichlorophenol	2020/02/13	<0.1		ug/L	
			2,4,5-Trichlorophenol	2020/02/13	<0.1		ug/L	
			3,4,5-Trichlorophenol	2020/02/13	<0.1		ug/L	
			2,4-Dinitrophenol	2020/02/13	<1		ug/L	
			2,3-Dichlorophenol	2020/02/13	<0.1		ug/L	
			2,5-Dichlorophenol	2020/02/13	<0.1		ug/L	
			3,4-Dichlorophenol	2020/02/13	<0.1		ug/L	
			3,5-Dichlorophenol	2020/02/13	<0.1		ug/L	
			4,6-Dinitro-2-methylphenol	2020/02/13	<1		ug/L	
			3 & 4-Chlorophenol	2020/02/13	<0.1		ug/L	
			2-Nitrophenol	2020/02/13	<1		ug/L	
6587246	MYI	RPD [LYR999-14]	2-Chlorophenol	2020/02/13	NC		%	30
			2,3,4,6-Tetrachlorophenol	2020/02/13	2.7		%	40
			2,3,5-Trichlorophenol	2020/02/13	NC		%	40
			2,4-Dichlorophenol	2020/02/13	NC		%	30
			2,4-Dimethylphenol	2020/02/13	NC		%	30
			2,4,6-Trichlorophenol	2020/02/13	NC		%	30
			2,6-Dichlorophenol	2020/02/13	NC		%	40
			4-Chloro-3-Methylphenol	2020/02/13	NC		%	40
			4-Nitrophenol	2020/02/13	NC		%	40
			m/p-Cresol	2020/02/13	NC		%	40
			o-Cresol	2020/02/13	NC		%	40
			Pentachlorophenol	2020/02/13	2.2		%	30
			Phenol	2020/02/13	NC		%	30
			2,3,4,5-Tetrachlorophenol	2020/02/13	NC		%	40
			2,3,5,6-Tetrachlorophenol	2020/02/13	NC		%	40

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			2,3,4-Trichlorophenol	2020/02/13	NC		%	40
			2,3,6-Trichlorophenol	2020/02/13	NC		%	40
			2,4,5-Trichlorophenol	2020/02/13	NC		%	30
			3,4,5-Trichlorophenol	2020/02/13	NC		%	40
			2,4-Dinitrophenol	2020/02/13	NC		%	30
			2,3-Dichlorophenol	2020/02/13	NC		%	40
			2,5-Dichlorophenol	2020/02/13	NC		%	40
			3,4-Dichlorophenol	2020/02/13	NC		%	40
			3,5-Dichlorophenol	2020/02/13	NC		%	40
			4,6-Dinitro-2-methylphenol	2020/02/13	NC		%	40
			3 & 4-Chlorophenol	2020/02/13	NC		%	40
			2-Nitrophenol	2020/02/13	NC		%	40
6587524	MEN	Matrix Spike [LYR997-05]	Mercury (Hg)	2020/02/14		97	%	75 - 125
6587524	MEN	Spiked Blank	Mercury (Hg)	2020/02/14		99	%	80 - 120
6587524	MEN	Method Blank	Mercury (Hg)	2020/02/14	<0.01		ug/L	
6587524	MEN	RPD [LYR997-05]	Mercury (Hg)	2020/02/14	NC		%	20
6589221	DAN	Matrix Spike	1,4-Difluorobenzene	2020/02/14		101	%	70 - 130
			4-Bromofluorobenzene	2020/02/14		99	%	70 - 130
			D10-Ethylbenzene	2020/02/14		108	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/14		94	%	70 - 130
			Benzene	2020/02/14		109	%	70 - 130
			Toluene	2020/02/14		112	%	70 - 130
			Ethylbenzene	2020/02/14		115	%	70 - 130
			o-Xylene	2020/02/14		111	%	70 - 130
			p+m-Xylene	2020/02/14		115	%	70 - 130
			F1 (C6-C10)	2020/02/14		86	%	70 - 130
6589221	DAN	Spiked Blank	1,4-Difluorobenzene	2020/02/14		101	%	70 - 130
			4-Bromofluorobenzene	2020/02/14		98	%	70 - 130
			D10-Ethylbenzene	2020/02/14		108	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/14		97	%	70 - 130
			Benzene	2020/02/14		106	%	70 - 130
			Toluene	2020/02/14		112	%	70 - 130
			Ethylbenzene	2020/02/14		112	%	70 - 130
			o-Xylene	2020/02/14		110	%	70 - 130
			p+m-Xylene	2020/02/14		113	%	70 - 130
			F1 (C6-C10)	2020/02/14		112	%	70 - 130
6589221	DAN	Method Blank	1,4-Difluorobenzene	2020/02/14		101	%	70 - 130
			4-Bromofluorobenzene	2020/02/14		98	%	70 - 130
			D10-Ethylbenzene	2020/02/14		119	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/14		97	%	70 - 130
			Benzene	2020/02/14	<0.20		ug/L	
			Toluene	2020/02/14	<0.20		ug/L	
			Ethylbenzene	2020/02/14	<0.20		ug/L	
			o-Xylene	2020/02/14	<0.20		ug/L	
			p+m-Xylene	2020/02/14	<0.40		ug/L	
			Total Xylenes	2020/02/14	<0.40		ug/L	
			F1 (C6-C10)	2020/02/14	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/14	<25		ug/L	
6589221	DAN	RPD	Benzene	2020/02/14	NC		%	30
			Toluene	2020/02/14	7.3		%	30
			Ethylbenzene	2020/02/14	NC		%	30
			o-Xylene	2020/02/14	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			p+m-Xylene	2020/02/14	NC		%	30
			Total Xylenes	2020/02/14	NC		%	30
			F1 (C6-C10)	2020/02/14	NC		%	30
			F1 (C6-C10) - BTEX	2020/02/14	NC		%	30
6590556	GTO	Matrix Spike [LYS000-09]	WAD Cyanide (Free)	2020/02/14		95	%	80 - 120
6590556	GTO	Spiked Blank	WAD Cyanide (Free)	2020/02/14		94	%	80 - 120
6590556	GTO	Method Blank	WAD Cyanide (Free)	2020/02/14	<0.0010		mg/L	
6590556	GTO	RPD [LYS000-09]	WAD Cyanide (Free)	2020/02/14	NC		%	20
6591847	MYI	Matrix Spike [LYS004-12]	2,4,6-Tribromophenol	2020/02/19		77	%	50 - 130
			2-Fluorophenol	2020/02/19		48 (2)	%	50 - 130
			D5-Phenol	2020/02/19		63	%	30 - 130
			2-Chlorophenol	2020/02/19		63	%	50 - 130
			2,3,4,6-Tetrachlorophenol	2020/02/19		87	%	10 - 130
			2,3,5-Trichlorophenol	2020/02/19		84	%	10 - 130
			2,4-Dichlorophenol	2020/02/19		70	%	50 - 130
			2,4-Dimethylphenol	2020/02/19		1.6 (3)	%	30 - 130
			2,4,6-Trichlorophenol	2020/02/19		64	%	10 - 130
			2,6-Dichlorophenol	2020/02/19		72	%	10 - 130
			4-Chloro-3-Methylphenol	2020/02/19		72	%	10 - 130
			4-Nitrophenol	2020/02/19		89	%	10 - 130
			m/p-Cresol	2020/02/19		38	%	10 - 130
			o-Cresol	2020/02/19		37	%	10 - 130
			Pentachlorophenol	2020/02/19		97	%	50 - 130
			Phenol	2020/02/19		47	%	30 - 130
			2,3,4,5-Tetrachlorophenol	2020/02/19		83	%	10 - 130
			2,3,5,6-Tetrachlorophenol	2020/02/19		94	%	10 - 130
			2,3,4-Trichlorophenol	2020/02/19		87	%	10 - 130
			2,3,6-Trichlorophenol	2020/02/19		79	%	30 - 130
			2,4,5-Trichlorophenol	2020/02/19		79	%	50 - 130
			3,4,5-Trichlorophenol	2020/02/19		75	%	10 - 130
			2,4-Dinitrophenol	2020/02/19		82	%	30 - 130
			2,3-Dichlorophenol	2020/02/19		79	%	10 - 130
			2,5-Dichlorophenol	2020/02/19		79	%	10 - 130
			3,4-Dichlorophenol	2020/02/19		70	%	10 - 130
			3,5-Dichlorophenol	2020/02/19		79	%	10 - 130
			4,6-Dinitro-2-methylphenol	2020/02/19		90	%	10 - 130
			3 & 4-Chlorophenol	2020/02/19		78	%	10 - 130
			2-Nitrophenol	2020/02/19		83	%	10 - 130
6591847	MYI	Spiked Blank	2,4,6-Tribromophenol	2020/02/19		89	%	50 - 130
			2-Fluorophenol	2020/02/19		73	%	50 - 130
			D5-Phenol	2020/02/19		78	%	30 - 130
			2-Chlorophenol	2020/02/19		82	%	50 - 130
			2,3,4,6-Tetrachlorophenol	2020/02/19		85	%	10 - 130
			2,3,5-Trichlorophenol	2020/02/19		87	%	10 - 130
			2,4-Dichlorophenol	2020/02/19		85	%	50 - 130
			2,4-Dimethylphenol	2020/02/19		91	%	30 - 130
			2,4,6-Trichlorophenol	2020/02/19		73	%	10 - 130
			2,6-Dichlorophenol	2020/02/19		90	%	10 - 130
			4-Chloro-3-Methylphenol	2020/02/19		86	%	10 - 130
			4-Nitrophenol	2020/02/19		86	%	10 - 130
			m/p-Cresol	2020/02/19		99	%	10 - 130
			o-Cresol	2020/02/19		82	%	10 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Pentachlorophenol	2020/02/19		93	%	50 - 130
			Phenol	2020/02/19		79	%	30 - 130
			2,3,4,5-Tetrachlorophenol	2020/02/19		80	%	10 - 130
			2,3,5,6-Tetrachlorophenol	2020/02/19		97	%	10 - 130
			2,3,4-Trichlorophenol	2020/02/19		90	%	10 - 130
			2,3,6-Trichlorophenol	2020/02/19		88	%	30 - 130
			2,4,5-Trichlorophenol	2020/02/19		83	%	50 - 130
			3,4,5-Trichlorophenol	2020/02/19		79	%	10 - 130
			2,4-Dinitrophenol	2020/02/19		89	%	30 - 130
			2,3-Dichlorophenol	2020/02/19		89	%	10 - 130
			2,5-Dichlorophenol	2020/02/19		91	%	10 - 130
			3,4-Dichlorophenol	2020/02/19		80	%	10 - 130
			3,5-Dichlorophenol	2020/02/19		88	%	10 - 130
			4,6-Dinitro-2-methylphenol	2020/02/19		86	%	10 - 130
			3 & 4-Chlorophenol	2020/02/19		85	%	10 - 130
			2-Nitrophenol	2020/02/19		84	%	10 - 130
6591847	MYI	RPD	2-Chlorophenol	2020/02/19	0.56		%	30
			2,3,4,6-Tetrachlorophenol	2020/02/19	3.6		%	40
			2,3,5-Trichlorophenol	2020/02/19	0.86		%	40
			2,4-Dichlorophenol	2020/02/19	0.53		%	30
			2,4-Dimethylphenol	2020/02/19	4.7		%	30
			2,4,6-Trichlorophenol	2020/02/19	0.37		%	30
			2,6-Dichlorophenol	2020/02/19	2.1		%	40
			4-Chloro-3-Methylphenol	2020/02/19	1.0		%	40
			4-Nitrophenol	2020/02/19	1.6		%	40
			m/p-Cresol	2020/02/19	2.8		%	40
			o-Cresol	2020/02/19	2.0		%	40
			Pentachlorophenol	2020/02/19	0.59		%	30
			Phenol	2020/02/19	2.9		%	30
			2,3,4,5-Tetrachlorophenol	2020/02/19	0.44		%	40
			2,3,5,6-Tetrachlorophenol	2020/02/19	3.4		%	40
			2,3,4-Trichlorophenol	2020/02/19	0.59		%	40
			2,3,6-Trichlorophenol	2020/02/19	0.84		%	40
			2,4,5-Trichlorophenol	2020/02/19	1.9		%	30
			3,4,5-Trichlorophenol	2020/02/19	0.80		%	40
			2,4-Dinitrophenol	2020/02/19	3.4		%	30
			2,3-Dichlorophenol	2020/02/19	1.2		%	40
			2,5-Dichlorophenol	2020/02/19	2.1		%	40
			3,4-Dichlorophenol	2020/02/19	1.7		%	40
			3,5-Dichlorophenol	2020/02/19	2.6		%	40
			4,6-Dinitro-2-methylphenol	2020/02/19	1.7		%	40
			3 & 4-Chlorophenol	2020/02/19	1.6		%	40
			2-Nitrophenol	2020/02/19	1.6		%	40
6591847	MYI	Method Blank	2,4,6-Tribromophenol	2020/02/19		86	%	50 - 130
			2-Fluorophenol	2020/02/19		79	%	50 - 130
			D5-Phenol	2020/02/19		78	%	30 - 130
			2-Chlorophenol	2020/02/19	<0.1		ug/L	
			2,3,4,6-Tetrachlorophenol	2020/02/19	<0.1		ug/L	
			2,3,5-Trichlorophenol	2020/02/19	<0.1		ug/L	
			2,4-Dichlorophenol	2020/02/19	<0.1		ug/L	
			2,4-Dimethylphenol	2020/02/19	<1		ug/L	
			2,4,6-Trichlorophenol	2020/02/19	<0.1		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			2,6-Dichlorophenol	2020/02/19	<0.1		ug/L	
			4-Chloro-3-Methylphenol	2020/02/19	<0.1		ug/L	
			4-Nitrophenol	2020/02/19	<1		ug/L	
			m/p-Cresol	2020/02/19	<0.5		ug/L	
			o-Cresol	2020/02/19	<0.5		ug/L	
			Pentachlorophenol	2020/02/19	<0.1		ug/L	
			Phenol	2020/02/19	<0.5		ug/L	
			2,3,4,5-Tetrachlorophenol	2020/02/19	<0.1		ug/L	
			2,3,5,6-Tetrachlorophenol	2020/02/19	<0.1		ug/L	
			2,3,4-Trichlorophenol	2020/02/19	<0.1		ug/L	
			2,3,6-Trichlorophenol	2020/02/19	<0.1		ug/L	
			2,4,5-Trichlorophenol	2020/02/19	<0.1		ug/L	
			3,4,5-Trichlorophenol	2020/02/19	<0.1		ug/L	
			2,4-Dinitrophenol	2020/02/19	<1		ug/L	
			2,3-Dichlorophenol	2020/02/19	<0.1		ug/L	
			2,5-Dichlorophenol	2020/02/19	<0.1		ug/L	
			3,4-Dichlorophenol	2020/02/19	<0.1		ug/L	
			3,5-Dichlorophenol	2020/02/19	<0.1		ug/L	
			4,6-Dinitro-2-methylphenol	2020/02/19	<1		ug/L	
			3 & 4-Chlorophenol	2020/02/19	<0.1		ug/L	
			2-Nitrophenol	2020/02/19	<1		ug/L	
6592810	GUL	Matrix Spike [LYR997-02]	o-Terphenyl	2020/02/18		119	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/18		118	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/18		112	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/18		123	%	50 - 130
6592810	GUL	Spiked Blank	o-Terphenyl	2020/02/18		107	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/18		107	%	60 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/18		107	%	60 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/18		110	%	60 - 130
6592810	GUL	Method Blank	o-Terphenyl	2020/02/18		110	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/18	<100		ug/L	
			F3 (C16-C34 Hydrocarbons)	2020/02/18	<200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2020/02/18	<200		ug/L	
6592810	GUL	RPD [LYR998-02]	F2 (C10-C16 Hydrocarbons)	2020/02/18	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2020/02/18	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2020/02/18	NC		%	30
6593143	SDE	QC Standard	Total Suspended Solids	2020/02/19		95	%	85 - 115
6593143	SDE	Method Blank	Total Suspended Solids	2020/02/19	<10		mg/L	
6593143	SDE	RPD	Total Suspended Solids	2020/02/19	2.6		%	25
6593146	SDE	Method Blank	Volatile Suspended Solids	2020/02/19	<10		mg/L	
6593146	SDE	RPD	Volatile Suspended Solids	2020/02/19	6.2		%	25
6593209	RTY	Matrix Spike	Total Kjeldahl Nitrogen (TKN)	2020/02/18		NC	%	80 - 120
6593209	RTY	QC Standard	Total Kjeldahl Nitrogen (TKN)	2020/02/18		106	%	80 - 120
6593209	RTY	Spiked Blank	Total Kjeldahl Nitrogen (TKN)	2020/02/18		106	%	80 - 120
6593209	RTY	Method Blank	Total Kjeldahl Nitrogen (TKN)	2020/02/18	<0.10		mg/L	
6593209	RTY	RPD	Total Kjeldahl Nitrogen (TKN)	2020/02/18	NC		%	20
6593957	PK8	Matrix Spike	Total Sulphide	2020/02/13		48 (1)	%	80 - 120
6593957	PK8	Spiked Blank	Total Sulphide	2020/02/13		94	%	80 - 120
6593957	PK8	Method Blank	Total Sulphide	2020/02/13	<0.0018		mg/L	
6593957	PK8	RPD	Total Sulphide	2020/02/13	NC		%	20
6594024	éBH	Matrix Spike	D10-Anthracene	2020/02/13		103	%	50 - 130
			D14-Terphenyl	2020/02/13		129	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			D8-Acenaphthylene	2020/02/13		98	%	50 - 130
			D8-Naphthalene	2020/02/13		82	%	50 - 130
			Acenaphthene	2020/02/13		93	%	50 - 130
			Acenaphthylene	2020/02/13		93	%	50 - 130
			Acridine	2020/02/13		89	%	50 - 130
			Anthracene	2020/02/13		84	%	50 - 130
			Benzo(a)anthracene	2020/02/13		98	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/13		89	%	50 - 130
			Benzo(k)fluoranthene	2020/02/13		92	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/13		87	%	50 - 130
			Benzo(c)phenanthrene	2020/02/13		105	%	50 - 130
			Benzo(a)pyrene	2020/02/13		94	%	50 - 130
			Benzo(e)pyrene	2020/02/13		92	%	50 - 130
			Chrysene	2020/02/13		95	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/13		91	%	50 - 130
			Fluoranthene	2020/02/13		100	%	50 - 130
			Fluorene	2020/02/13		95	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/13		90	%	50 - 130
			1-Methylnaphthalene	2020/02/13		89	%	50 - 130
			2-Methylnaphthalene	2020/02/13		83	%	50 - 130
			Naphthalene	2020/02/13		90	%	50 - 130
			Phenanthrene	2020/02/13		96	%	50 - 130
			Perylene	2020/02/13		86	%	50 - 130
			Pyrene	2020/02/13		100	%	50 - 130
			Quinoline	2020/02/13		99	%	50 - 130
6594024	éBH	Spiked Blank	D10-Anthracene	2020/02/13		102	%	50 - 130
			D14-Terphenyl	2020/02/13		126	%	50 - 130
			D8-Acenaphthylene	2020/02/13		96	%	50 - 130
			D8-Naphthalene	2020/02/13		86	%	50 - 130
			Acenaphthene	2020/02/13		92	%	50 - 130
			Acenaphthylene	2020/02/13		94	%	50 - 130
			Acridine	2020/02/13		90	%	50 - 130
			Anthracene	2020/02/13		84	%	50 - 130
			Benzo(a)anthracene	2020/02/13		100	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/13		94	%	50 - 130
			Benzo(k)fluoranthene	2020/02/13		99	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/13		93	%	50 - 130
			Benzo(c)phenanthrene	2020/02/13		105	%	50 - 130
			Benzo(a)pyrene	2020/02/13		99	%	50 - 130
			Benzo(e)pyrene	2020/02/13		97	%	50 - 130
			Chrysene	2020/02/13		97	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/13		97	%	50 - 130
			Fluoranthene	2020/02/13		101	%	50 - 130
			Fluorene	2020/02/13		94	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/13		97	%	50 - 130
			1-Methylnaphthalene	2020/02/13		87	%	50 - 130
			2-Methylnaphthalene	2020/02/13		81	%	50 - 130
			Naphthalene	2020/02/13		88	%	50 - 130
			Phenanthrene	2020/02/13		96	%	50 - 130
			Perylene	2020/02/13		90	%	50 - 130
			Pyrene	2020/02/13		101	%	50 - 130
			Quinoline	2020/02/13		99	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6594024	éBH	Method Blank	D10-Anthracene	2020/02/13		102	%	50 - 130
			D14-Terphenyl	2020/02/13		126	%	50 - 130
			D8-Acenaphthylene	2020/02/13		96	%	50 - 130
			D8-Naphthalene	2020/02/13		82	%	50 - 130
			Acenaphthene	2020/02/13	<0.10		ug/L	
			Acenaphthylene	2020/02/13	<0.10		ug/L	
			Acridine	2020/02/13	<0.040		ug/L	
			Anthracene	2020/02/13	<0.010		ug/L	
			Benzo(a)anthracene	2020/02/13	<0.0085		ug/L	
			Benzo(b/j)fluoranthene	2020/02/13	<0.0085		ug/L	
			Benzo(k)fluoranthene	2020/02/13	<0.0085		ug/L	
			Benzo(g,h,i)perylene	2020/02/13	<0.0085		ug/L	
			Benzo(c)phenanthrene	2020/02/13	<0.050		ug/L	
			Benzo(a)pyrene	2020/02/13	<0.0075		ug/L	
			Benzo(e)pyrene	2020/02/13	<0.050		ug/L	
			Chrysene	2020/02/13	<0.0085		ug/L	
			Dibenzo(a,h)anthracene	2020/02/13	<0.0075		ug/L	
			Fluoranthene	2020/02/13	<0.010		ug/L	
			Fluorene	2020/02/13	<0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2020/02/13	<0.0085		ug/L	
			1-Methylnaphthalene	2020/02/13	<0.10		ug/L	
			2-Methylnaphthalene	2020/02/13	<0.10		ug/L	
			Naphthalene	2020/02/13	<0.10		ug/L	
			Phenanthrene	2020/02/13	<0.050		ug/L	
			Perylene	2020/02/13	<0.050		ug/L	
			Pyrene	2020/02/13	<0.020		ug/L	
			Quinoline	2020/02/13	<0.20		ug/L	
6596916	MAK	Matrix Spike	2,4,5,6-Tetrachloro-m-xylene	2020/02/21		39 (1)	%	50 - 130
			Decachlorobiphenyl	2020/02/21		52	%	50 - 130
			Aldrin	2020/02/21		NC	%	50 - 130
			Dieldrin	2020/02/21		52	%	50 - 130
			a-Chlordane	2020/02/21		NC	%	50 - 130
			g-Chlordane	2020/02/21		NC	%	50 - 130
			o,p-DDD	2020/02/21		84	%	50 - 130
			p,p-DDD	2020/02/21		NC	%	50 - 130
			o,p-DDE	2020/02/21		NC	%	50 - 130
			p,p-DDE	2020/02/21		45 (1)	%	50 - 130
			o,p-DDT	2020/02/21		47 (1)	%	50 - 130
			p,p-DDT	2020/02/21		57	%	50 - 130
			Lindane	2020/02/21		47 (1)	%	50 - 130
			Endosulfan I (alpha)	2020/02/21		73	%	50 - 130
			Endosulfan II (beta)	2020/02/21		47 (1)	%	50 - 130
			Endrin	2020/02/21		46 (1)	%	50 - 130
			Heptachlor	2020/02/21		48 (1)	%	50 - 130
			Heptachlor epoxide	2020/02/21		41 (1)	%	50 - 130
			Hexachlorobenzene	2020/02/21		46 (1)	%	50 - 130
			Methoxychlor	2020/02/21		40 (1)	%	50 - 130
			alpha-BHC	2020/02/21		46	%	30 - 130
			beta-BHC	2020/02/21		50	%	30 - 130
			delta-BHC	2020/02/21		NC	%	30 - 130
			Endosulfan sulfate	2020/02/21		42	%	30 - 130
			Endrin aldehyde	2020/02/21		39	%	30 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Endrin ketone	2020/02/21		41	%	30 - 130
			Mirex	2020/02/21		40	%	30 - 130
			Octachlorostyrene	2020/02/21		52	%	30 - 130
			Oxychlordane	2020/02/21		45	%	30 - 130
6596916	MAK	Spiked Blank	2,4,5,6-Tetrachloro-m-xylene	2020/02/21		78	%	50 - 130
			Decachlorobiphenyl	2020/02/21		85	%	50 - 130
			Aldrin	2020/02/21		75	%	50 - 130
			Dieldrin	2020/02/21		100	%	50 - 130
			a-Chlordane	2020/02/21		87	%	50 - 130
			g-Chlordane	2020/02/21		87	%	50 - 130
			o,p-DDD	2020/02/21		94	%	50 - 130
			p,p-DDD	2020/02/21		87	%	50 - 130
			o,p-DDE	2020/02/21		85	%	50 - 130
			p,p-DDE	2020/02/21		86	%	50 - 130
			o,p-DDT	2020/02/21		78	%	50 - 130
			p,p-DDT	2020/02/21		77	%	50 - 130
			Lindane	2020/02/21		80	%	50 - 130
			Endosulfan I (alpha)	2020/02/21		83	%	50 - 130
			Endosulfan II (beta)	2020/02/21		75	%	50 - 130
			Endrin	2020/02/21		85	%	50 - 130
			Heptachlor	2020/02/21		72	%	50 - 130
			Heptachlor epoxide	2020/02/21		83	%	50 - 130
			Hexachlorobenzene	2020/02/21		86	%	50 - 130
			Methoxychlor	2020/02/21		78	%	50 - 130
			alpha-BHC	2020/02/21		84	%	30 - 130
			beta-BHC	2020/02/21		75	%	30 - 130
			delta-BHC	2020/02/21		77	%	30 - 130
			Endosulfan sulfate	2020/02/21		101	%	30 - 130
			Endrin aldehyde	2020/02/21		82	%	30 - 130
			Endrin ketone	2020/02/21		89	%	30 - 130
			Mirex	2020/02/21		82	%	30 - 130
			Octachlorostyrene	2020/02/21		83	%	30 - 130
			Oxychlordane	2020/02/21		82	%	30 - 130
6596916	MAK	RPD	Aldrin	2020/02/21	7.5		%	30
			Dieldrin	2020/02/21	9.7		%	30
			a-Chlordane	2020/02/21	9.6		%	30
			g-Chlordane	2020/02/21	9.8		%	30
			o,p-DDD	2020/02/21	13		%	30
			p,p-DDD	2020/02/21	8.8		%	30
			o,p-DDE	2020/02/21	9.1		%	30
			p,p-DDE	2020/02/21	3.1		%	30
			o,p-DDT	2020/02/21	11		%	30
			p,p-DDT	2020/02/21	12		%	30
			Lindane	2020/02/21	9.3		%	30
			Endosulfan I (alpha)	2020/02/21	2.3		%	30
			Endosulfan II (beta)	2020/02/21	9.6		%	30
			Endrin	2020/02/21	13		%	30
			Heptachlor	2020/02/21	13		%	30
			Heptachlor epoxide	2020/02/21	9.7		%	30
			Hexachlorobenzene	2020/02/21	7.6		%	30
			Methoxychlor	2020/02/21	13		%	30
			Aroclor 1242	2020/02/21	200 (1)		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			alpha-BHC	2020/02/21	8.6		%	40
			beta-BHC	2020/02/21	10		%	40
			delta-BHC	2020/02/21	9.3		%	40
			Endosulfan sulfate	2020/02/21	8.4		%	40
			Endrin aldehyde	2020/02/21	7.9		%	40
			Endrin ketone	2020/02/21	9.4		%	40
			Mirex	2020/02/21	9.6		%	40
			Octachlorostyrene	2020/02/21	4.4		%	40
			Oxychlordane	2020/02/21	9.4		%	30
			Toxaphene	2020/02/21	200 (1)		%	40
			Aldrin	2020/02/21	NC		%	30
			Dieldrin	2020/02/21	NC		%	30
			a-Chlordane	2020/02/21	NC		%	30
			g-Chlordane	2020/02/21	NC		%	30
			o,p-DDT	2020/02/21	NC		%	30
			p,p-DDT	2020/02/21	NC		%	30
			Lindane	2020/02/21	NC		%	30
			Hexachlorobenzene	2020/02/21	NC		%	30
			Mirex	2020/02/21	NC		%	40
6596916	MAK	Method Blank	2,4,5,6-Tetrachloro-m-xylene	2020/02/21		71	%	50 - 130
			Decachlorobiphenyl	2020/02/21		78	%	50 - 130
			Aldrin	2020/02/21	<0.005		ug/L	
			Dieldrin	2020/02/21	<0.005		ug/L	
			a-Chlordane	2020/02/21	<0.005		ug/L	
			g-Chlordane	2020/02/21	<0.005		ug/L	
			o,p-DDD	2020/02/21	<0.005		ug/L	
			p,p-DDD	2020/02/21	<0.005		ug/L	
			o,p-DDE	2020/02/21	<0.005		ug/L	
			p,p-DDE	2020/02/21	<0.005		ug/L	
			o,p-DDT	2020/02/21	<0.005		ug/L	
			p,p-DDT	2020/02/21	<0.005		ug/L	
			Lindane	2020/02/21	<0.003		ug/L	
			Endosulfan I (alpha)	2020/02/21	<0.005		ug/L	
			Endosulfan II (beta)	2020/02/21	<0.005		ug/L	
			Endrin	2020/02/21	<0.005		ug/L	
			Heptachlor	2020/02/21	<0.005		ug/L	
			Heptachlor epoxide	2020/02/21	<0.005		ug/L	
			Hexachlorobenzene	2020/02/21	<0.005		ug/L	
			Methoxychlor	2020/02/21	<0.01		ug/L	
			Aroclor 1016	2020/02/21	<0.05		ug/L	
			Aroclor 1221	2020/02/21	<0.05		ug/L	
			Aroclor 1232	2020/02/21	<0.05		ug/L	
			Aroclor 1242	2020/02/21	<0.05		ug/L	
			Aroclor 1248	2020/02/21	<0.05		ug/L	
			Aroclor 1254	2020/02/21	<0.05		ug/L	
			Aroclor 1260	2020/02/21	<0.05		ug/L	
			alpha-BHC	2020/02/21	<0.005		ug/L	
			beta-BHC	2020/02/21	<0.005		ug/L	
			delta-BHC	2020/02/21	<0.005		ug/L	
			Endosulfan sulfate	2020/02/21	<0.005		ug/L	
			Endrin aldehyde	2020/02/21	<0.005		ug/L	
			Endrin ketone	2020/02/21	<0.005		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Mirex	2020/02/21	<0.005		ug/L	
			Octachlorostyrene	2020/02/21	<0.005		ug/L	
			Oxychlordane	2020/02/21	<0.005		ug/L	
			Toxaphene	2020/02/21	<0.2		ug/L	
6600981	VBA	Matrix Spike	Total Aluminum (Al)	2020/02/20		102	%	80 - 120
			Total Antimony (Sb)	2020/02/20		99	%	80 - 120
			Total Arsenic (As)	2020/02/20		102	%	80 - 120
			Total Barium (Ba)	2020/02/20		NC	%	80 - 120
			Total Beryllium (Be)	2020/02/20		95	%	80 - 120
			Total Bismuth (Bi)	2020/02/20		94	%	80 - 120
			Total Boron (B)	2020/02/20		97	%	80 - 120
			Total Cadmium (Cd)	2020/02/20		95	%	80 - 120
			Total Chromium (Cr)	2020/02/20		92	%	80 - 120
			Total Cobalt (Co)	2020/02/20		89	%	80 - 120
			Total Copper (Cu)	2020/02/20		85	%	80 - 120
			Total Iron (Fe)	2020/02/20		95	%	80 - 120
			Total Lead (Pb)	2020/02/20		97	%	80 - 120
			Total Lithium (Li)	2020/02/20		NC	%	80 - 120
			Total Manganese (Mn)	2020/02/20		91	%	80 - 120
			Total Molybdenum (Mo)	2020/02/20		NC	%	80 - 120
			Total Nickel (Ni)	2020/02/20		87	%	80 - 120
			Total Selenium (Se)	2020/02/20		101	%	80 - 120
			Total Silicon (Si)	2020/02/20		NC	%	80 - 120
			Total Silver (Ag)	2020/02/20		92	%	80 - 120
			Total Strontium (Sr)	2020/02/20		NC	%	80 - 120
			Total Thallium (Tl)	2020/02/20		98	%	80 - 120
			Total Tin (Sn)	2020/02/20		99	%	80 - 120
			Total Titanium (Ti)	2020/02/20		96	%	80 - 120
			Total Uranium (U)	2020/02/20		105	%	80 - 120
			Total Vanadium (V)	2020/02/20		96	%	80 - 120
			Total Zinc (Zn)	2020/02/20		88	%	80 - 120
			Total Zirconium (Zr)	2020/02/20		105	%	80 - 120
6600981	VBA	Spiked Blank	Total Aluminum (Al)	2020/02/20		102	%	80 - 120
			Total Antimony (Sb)	2020/02/20		100	%	80 - 120
			Total Arsenic (As)	2020/02/20		99	%	80 - 120
			Total Barium (Ba)	2020/02/20		102	%	80 - 120
			Total Beryllium (Be)	2020/02/20		102	%	80 - 120
			Total Bismuth (Bi)	2020/02/20		101	%	80 - 120
			Total Boron (B)	2020/02/20		106	%	80 - 120
			Total Cadmium (Cd)	2020/02/20		97	%	80 - 120
			Total Chromium (Cr)	2020/02/20		97	%	80 - 120
			Total Cobalt (Co)	2020/02/20		96	%	80 - 120
			Total Copper (Cu)	2020/02/20		94	%	80 - 120
			Total Iron (Fe)	2020/02/20		100	%	80 - 120
			Total Lead (Pb)	2020/02/20		102	%	80 - 120
			Total Lithium (Li)	2020/02/20		105	%	80 - 120
			Total Manganese (Mn)	2020/02/20		97	%	80 - 120
			Total Molybdenum (Mo)	2020/02/20		101	%	80 - 120
			Total Nickel (Ni)	2020/02/20		96	%	80 - 120
			Total Selenium (Se)	2020/02/20		98	%	80 - 120
			Total Silicon (Si)	2020/02/20		106	%	80 - 120
			Total Silver (Ag)	2020/02/20		97	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Strontium (Sr)	2020/02/20		101	%	80 - 120
			Total Thallium (Tl)	2020/02/20		101	%	80 - 120
			Total Tin (Sn)	2020/02/20		99	%	80 - 120
			Total Titanium (Ti)	2020/02/20		101	%	80 - 120
			Total Uranium (U)	2020/02/20		106	%	80 - 120
			Total Vanadium (V)	2020/02/20		97	%	80 - 120
			Total Zinc (Zn)	2020/02/20		95	%	80 - 120
			Total Zirconium (Zr)	2020/02/20		100	%	80 - 120
6600981	VBA	Method Blank	Total Aluminum (Al)	2020/02/20	<3.0		ug/L	
			Total Antimony (Sb)	2020/02/20	<0.50		ug/L	
			Total Arsenic (As)	2020/02/20	<0.10		ug/L	
			Total Barium (Ba)	2020/02/20	<1.0		ug/L	
			Total Beryllium (Be)	2020/02/20	<0.10		ug/L	
			Total Bismuth (Bi)	2020/02/20	<1.0		ug/L	
			Total Boron (B)	2020/02/20	<50		ug/L	
			Total Cadmium (Cd)	2020/02/20	<0.010		ug/L	
			Total Chromium (Cr)	2020/02/20	<1.0		ug/L	
			Total Cobalt (Co)	2020/02/20	<0.20		ug/L	
			Total Copper (Cu)	2020/02/20	<0.50		ug/L	
			Total Iron (Fe)	2020/02/20	<10		ug/L	
			Total Lead (Pb)	2020/02/20	<0.20		ug/L	
			Total Lithium (Li)	2020/02/20	<2.0		ug/L	
			Total Manganese (Mn)	2020/02/20	<1.0		ug/L	
			Total Molybdenum (Mo)	2020/02/20	<1.0		ug/L	
			Total Nickel (Ni)	2020/02/20	<1.0		ug/L	
			Total Selenium (Se)	2020/02/20	<0.10		ug/L	
			Total Silicon (Si)	2020/02/20	<100		ug/L	
			Total Silver (Ag)	2020/02/20	<0.020		ug/L	
			Total Strontium (Sr)	2020/02/20	<1.0		ug/L	
			Total Thallium (Tl)	2020/02/20	<0.010		ug/L	
			Total Tin (Sn)	2020/02/20	<5.0		ug/L	
			Total Titanium (Ti)	2020/02/20	<5.0		ug/L	
			Total Uranium (U)	2020/02/20	<0.10		ug/L	
			Total Vanadium (V)	2020/02/20	<5.0		ug/L	
			Total Zinc (Zn)	2020/02/20	<5.0		ug/L	
			Total Zirconium (Zr)	2020/02/20	<0.10		ug/L	
6600982	éCG	Matrix Spike	Dissolved Aluminum (Al)	2020/02/21		100	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/21		101	%	80 - 120
			Dissolved Arsenic (As)	2020/02/21		108	%	80 - 120
			Dissolved Barium (Ba)	2020/02/21		101	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/21		101	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/21		92	%	80 - 120
			Dissolved Boron (B)	2020/02/21		103	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/21		98	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/21		98	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/21		95	%	80 - 120
			Dissolved Copper (Cu)	2020/02/21		91	%	80 - 120
			Dissolved Iron (Fe)	2020/02/21		98	%	80 - 120
			Dissolved Lead (Pb)	2020/02/21		96	%	80 - 120
			Dissolved Lithium (Li)	2020/02/21		99	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/21		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/21		NC	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Nickel (Ni)	2020/02/21		94	%	80 - 120
			Dissolved Selenium (Se)	2020/02/21		104	%	80 - 120
			Dissolved Silicon (Si)	2020/02/21		99	%	80 - 120
			Dissolved Silver (Ag)	2020/02/21		97	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/21		NC	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/21		97	%	80 - 120
			Dissolved Tin (Sn)	2020/02/21		103	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/21		105	%	80 - 120
			Dissolved Uranium (U)	2020/02/21		105	%	80 - 120
			Dissolved Vanadium (V)	2020/02/21		103	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/21		NC	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/21		111	%	80 - 120
6600982	éCG	Spiked Blank	Dissolved Aluminum (Al)	2020/02/21		103	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/21		106	%	80 - 120
			Dissolved Arsenic (As)	2020/02/21		104	%	80 - 120
			Dissolved Barium (Ba)	2020/02/21		103	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/21		103	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/21		102	%	80 - 120
			Dissolved Boron (B)	2020/02/21		105	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/21		104	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/21		105	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/21		104	%	80 - 120
			Dissolved Copper (Cu)	2020/02/21		105	%	80 - 120
			Dissolved Iron (Fe)	2020/02/21		106	%	80 - 120
			Dissolved Lead (Pb)	2020/02/21		104	%	80 - 120
			Dissolved Lithium (Li)	2020/02/21		101	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/21		105	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/21		111	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/21		105	%	80 - 120
			Dissolved Selenium (Se)	2020/02/21		100	%	80 - 120
			Dissolved Silicon (Si)	2020/02/21		104	%	80 - 120
			Dissolved Silver (Ag)	2020/02/21		104	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/21		100	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/21		102	%	80 - 120
			Dissolved Tin (Sn)	2020/02/21		107	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/21		104	%	80 - 120
			Dissolved Uranium (U)	2020/02/21		106	%	80 - 120
			Dissolved Vanadium (V)	2020/02/21		105	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/21		105	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/21		101	%	80 - 120
6600982	éCG	Method Blank	Dissolved Aluminum (Al)	2020/02/21	<3.0		ug/L	
			Dissolved Antimony (Sb)	2020/02/21	<0.50		ug/L	
			Dissolved Arsenic (As)	2020/02/21	<0.10		ug/L	
			Dissolved Barium (Ba)	2020/02/21	<1.0		ug/L	
			Dissolved Beryllium (Be)	2020/02/21	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2020/02/21	<1.0		ug/L	
			Dissolved Boron (B)	2020/02/21	<50		ug/L	
			Dissolved Cadmium (Cd)	2020/02/21	<0.010		ug/L	
			Dissolved Chromium (Cr)	2020/02/21	<1.0		ug/L	
			Dissolved Cobalt (Co)	2020/02/21	<0.20		ug/L	
			Dissolved Copper (Cu)	2020/02/21	<0.20		ug/L	
			Dissolved Iron (Fe)	2020/02/21	<5.0		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Lead (Pb)	2020/02/21	<0.20		ug/L	
			Dissolved Lithium (Li)	2020/02/21	<2.0		ug/L	
			Dissolved Manganese (Mn)	2020/02/21	<1.0		ug/L	
			Dissolved Molybdenum (Mo)	2020/02/21	<1.0		ug/L	
			Dissolved Nickel (Ni)	2020/02/21	<1.0		ug/L	
			Dissolved Selenium (Se)	2020/02/21	<0.10		ug/L	
			Dissolved Silicon (Si)	2020/02/21	<100		ug/L	
			Dissolved Silver (Ag)	2020/02/21	<0.020		ug/L	
			Dissolved Strontium (Sr)	2020/02/21	<1.0		ug/L	
			Dissolved Thallium (Tl)	2020/02/21	<0.010		ug/L	
			Dissolved Tin (Sn)	2020/02/21	<5.0		ug/L	
			Dissolved Titanium (Ti)	2020/02/21	<5.0		ug/L	
			Dissolved Uranium (U)	2020/02/21	<0.10		ug/L	
			Dissolved Vanadium (V)	2020/02/21	<5.0		ug/L	
			Dissolved Zinc (Zn)	2020/02/21	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2020/02/21	<0.10		ug/L	
6600982	éCG	RPD [LYR997-07]	Dissolved Aluminum (Al)	2020/02/21	1.1		%	20
			Dissolved Antimony (Sb)	2020/02/21	1.6		%	20
			Dissolved Arsenic (As)	2020/02/21	5.2		%	20
			Dissolved Barium (Ba)	2020/02/21	1.7		%	20
			Dissolved Beryllium (Be)	2020/02/21	NC		%	20
			Dissolved Bismuth (Bi)	2020/02/21	NC		%	20
			Dissolved Boron (B)	2020/02/21	1.2		%	20
			Dissolved Cadmium (Cd)	2020/02/21	0.67		%	20
			Dissolved Chromium (Cr)	2020/02/21	0.64		%	20
			Dissolved Cobalt (Co)	2020/02/21	1.5		%	20
			Dissolved Copper (Cu)	2020/02/21	2.6		%	20
			Dissolved Iron (Fe)	2020/02/21	1.3		%	20
			Dissolved Lead (Pb)	2020/02/21	4.1		%	20
			Dissolved Lithium (Li)	2020/02/21	0.062		%	20
			Dissolved Manganese (Mn)	2020/02/21	0.14		%	20
			Dissolved Molybdenum (Mo)	2020/02/21	2.1		%	20
			Dissolved Nickel (Ni)	2020/02/21	4.2		%	20
			Dissolved Selenium (Se)	2020/02/21	16		%	20
			Dissolved Silicon (Si)	2020/02/21	0.36		%	20
			Dissolved Silver (Ag)	2020/02/21	NC		%	20
			Dissolved Strontium (Sr)	2020/02/21	0.51		%	20
			Dissolved Thallium (Tl)	2020/02/21	8.7		%	20
			Dissolved Tin (Sn)	2020/02/21	NC		%	20
			Dissolved Titanium (Ti)	2020/02/21	NC		%	20
			Dissolved Uranium (U)	2020/02/21	NC		%	20
			Dissolved Vanadium (V)	2020/02/21	NC		%	20
			Dissolved Zinc (Zn)	2020/02/21	2.3		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Zirconium (Zr)	2020/02/21	NC		%	20

N/A = Not Applicable

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.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

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.

(2) Surrogate recovery was below the lower control limit due to matrix interference. This may represent a lower bias in some results.

(3) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Anastassia Hamanov, Scientific Specialist

Harry (Peng) Liang, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Rob Reinert, B.Sc., Scientific Specialist

BV Labs 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 Signature Page.

BV Labs Job #: C034481
Report Date: 2020/02/24

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

Exceedance Summary Table – CCME Industrial

Result Exceedances

Sample ID	BV Labs ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

Bureau Veritas Laboratories 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvlabs.com

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-02-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/19
Report #: R6079846
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C035567
Received: 2020/02/07, 13:20

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	2	N/A	2020/02/12		EPA 8260C m
Chloride by Automated Colourimetry (1)	2	N/A	2020/02/11	CAM SOP-00463	SM 23 4500-Cl E m
Free (WAD) Cyanide (1)	2	N/A	2020/02/10	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1, 4)	2	2020/02/12	2020/02/13	CAM SOP-00316	CCME PHC-CWS m
Fluoride (1)	2	2020/02/10	2020/02/11	CAM SOP-00449	SM 23 4500-F C m
Mercury (low level) (1)	2	2020/02/10	2020/02/10	CAM SOP-00453	EPA 7470 m
Sulphide (as H2S) (2)	2	N/A	2020/02/13	AB WI-00065	Auto Calc.
Hardness (calculated as CaCO3) (3)	2	N/A	2020/02/12	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	2	N/A	2020/02/12	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	2	N/A	2020/02/12	BBY7SOP-00002	EPA 6020B R2 m
B[a]P Total Potency Equivalent (2, 5)	1	N/A	2020/02/12		CCME
PAH in Water by GC/MS (2)	1	2020/02/12	2020/02/12	AB SOP-00037/AB SOP-00003	EPA 3510C/8270E m
Sulphide (2)	2	N/A	2020/02/13	AB SOP-00080	SM 22 4500 S2-A D F
Total Ammonia (as NH3) (1)	2	N/A	2020/02/11		EPA GS I-2522-90 m
Total Ammonia-N (1)	2	N/A	2020/02/11	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 6)	2	N/A	2020/02/11	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (as NO3) (1)	2	N/A	2020/02/11		SM 23 4500-NO3I m
pH (1)	2	2020/02/10	2020/02/11	CAM SOP-00413	SM 4500H+ B m
Sulphate by Automated Colourimetry (1)	2	N/A	2020/02/11	CAM SOP-00464	EPA 375.4 m
Volatile Organic Compounds and F1 PHCs (1)	2	N/A	2020/02/11	CAM SOP-00230	EPA 8260C m

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-02-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/19
Report #: R6079846
Version: 1 - Final

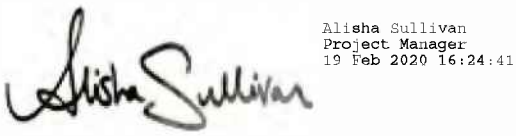
CERTIFICATE OF ANALYSIS

BV LABS JOB #: C035567
Received: 2020/02/07, 13:20

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, 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 Laboratories Mississauga
(2) This test was performed by BVLabs Calgary via Mississauga
(3) This test was performed by BVLabs Burnaby via Mississauga
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories 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.
(5) B[a]P TPE is calculated using 1/2 of the RDL for non detect results as per Alberta Environment instructions. This protocol may not apply in other jurisdictions.
(6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Encryption Key



Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Alisha Sullivan, Project Manager
Email: Alisha.Williamson@bvlabs.com
Phone# (613)274-0573

BV Labs 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 Signature Page.

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYY061			LYY061			LYY062		
Sampling Date		2020/02/07 09:30			2020/02/07 09:30			2020/02/07 10:30		
COC Number		757918-02-01			757918-02-01			757918-02-01		
	UNITS	1 OBSERVATORY	RDL	QC Batch	1 OBSERVATORY Lab-Dup	RDL	QC Batch	MW16-14	RDL	QC Batch
Calculated Parameters										
Total Ammonia (as NH3)	mg/L	0.27	0.061	6580111				<0.061	0.061	6580111
Dissolved Hardness (CaCO3)	mg/L	31.6	0.50	6585768				295	0.50	6585768
Nitrate (NO3)	mg/L	0.8	0.4	6580112				21	0.4	6580112
Sulphide (as H2S)	mg/L	<0.0020	0.0020	6593956				<0.0020	0.0020	6593956
Inorganics										
Total Ammonia-N	mg/L	0.22	0.050	6582243				<0.050	0.050	6582243
Fluoride (F-)	mg/L	0.66	0.10	6581184	0.65	0.10	6581184	0.22	0.10	6581184
pH	pH	8.61		6581192	8.64		6581192	7.72		6581192
Dissolved Sulphate (SO4)	mg/L	28	1.0	6581204				71	1.0	6581204
Total Sulphide	mg/L	<0.0018	0.0018	6593957	<0.0018	0.0018	6593957	<0.0018 (1)	0.0018	6593957
WAD Cyanide (Free)	mg/L	<0.0010	0.0010	6580615				<0.0010	0.0010	6580615
Dissolved Chloride (Cl-)	mg/L	7.1	1.0	6581197				12	1.0	6581197
Nitrite (N)	mg/L	<0.010	0.010	6581764				<0.010	0.010	6581764
Nitrate (N)	mg/L	0.17	0.10	6581764				4.71	0.10	6581764
Nitrate + Nitrite (N)	mg/L	0.17	0.10	6581764				4.71	0.10	6581764
Metals										
Dissolved Aluminum (Al)	ug/L	104	3.0	6585770				<3.0	3.0	6585770
Dissolved Antimony (Sb)	ug/L	<0.50	0.50	6585770				<0.50	0.50	6585770
Dissolved Arsenic (As)	ug/L	0.14	0.10	6585770				0.16	0.10	6585770
Dissolved Barium (Ba)	ug/L	11.8	1.0	6585770				57.3	1.0	6585770
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	6585770				<0.10	0.10	6585770
Dissolved Bismuth (Bi)	ug/L	<1.0	1.0	6585770				<1.0	1.0	6585770
Dissolved Boron (B)	ug/L	<50	50	6585770				<50	50	6585770
Dissolved Cadmium (Cd)	ug/L	<0.010	0.010	6585770				<0.010	0.010	6585770
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	6585770				<1.0	1.0	6585770
Dissolved Cobalt (Co)	ug/L	<0.20	0.20	6585770				<0.20	0.20	6585770
Dissolved Copper (Cu)	ug/L	1.64	0.20	6585770				0.70	0.20	6585770
Dissolved Iron (Fe)	ug/L	42.0	5.0	6585770				<5.0	5.0	6585770
Dissolved Lead (Pb)	ug/L	<0.20	0.20	6585770				<0.20	0.20	6585770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Matrix spike exceeds acceptance limits due to matrix interference.

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYY061			LYY061			LYY062		
Sampling Date		2020/02/07 09:30			2020/02/07 09:30			2020/02/07 10:30		
COC Number		757918-02-01			757918-02-01			757918-02-01		
	UNITS	1 OBSERVATORY	RDL	QC Batch	1 OBSERVATORY Lab-Dup	RDL	QC Batch	MW16-14	RDL	QC Batch
Dissolved Lithium (Li)	ug/L	<2.0	2.0	6585770				7.2	2.0	6585770
Dissolved Manganese (Mn)	ug/L	3.4	1.0	6585770				<1.0	1.0	6585770
Dissolved Molybdenum (Mo)	ug/L	<1.0	1.0	6585770				1.9	1.0	6585770
Dissolved Nickel (Ni)	ug/L	<1.0	1.0	6585770				1.9	1.0	6585770
Dissolved Selenium (Se)	ug/L	<0.10	0.10	6585770				0.48	0.10	6585770
Dissolved Silicon (Si)	ug/L	2430	100	6585770				7640	100	6585770
Dissolved Silver (Ag)	ug/L	<0.020	0.020	6585770				<0.020	0.020	6585770
Dissolved Strontium (Sr)	ug/L	37.5	1.0	6585770				1280	1.0	6585770
Dissolved Thallium (Tl)	ug/L	<0.010	0.010	6585770				0.023	0.010	6585770
Dissolved Tin (Sn)	ug/L	<5.0	5.0	6585770				<5.0	5.0	6585770
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	6585770				<5.0	5.0	6585770
Dissolved Uranium (U)	ug/L	<0.10	0.10	6585770				4.61	0.10	6585770
Dissolved Vanadium (V)	ug/L	<5.0	5.0	6585770				<5.0	5.0	6585770
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	6585770				<5.0	5.0	6585770
Dissolved Zirconium (Zr)	ug/L	<0.10	0.10	6585770				<0.10	0.10	6585770
Dissolved Calcium (Ca)	mg/L	9.03	0.050	6585769				76.4	0.050	6585769
Dissolved Magnesium (Mg)	mg/L	2.20	0.050	6585769				25.3	0.050	6585769
Dissolved Potassium (K)	mg/L	0.636	0.050	6585769				4.17	0.050	6585769
Dissolved Sodium (Na)	mg/L	17.6	0.050	6585769				144	0.050	6585769
Dissolved Sulphur (S)	mg/L	9.1	3.0	6585769				25.8	3.0	6585769
Mercury (Hg)	ug/L	<0.01	0.01	6581091				<0.01	0.01	6581091

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYY062		
Sampling Date		2020/02/07 10:30		
COC Number		757918-02-01		
	UNITS	MW16-14 Lab-Dup	RDL	QC Batch
Inorganics				
Nitrite (N)	mg/L	<0.010	0.010	6581764
Nitrate (N)	mg/L	4.66	0.10	6581764
Nitrate + Nitrite (N)	mg/L	4.66	0.10	6581764
Metals				
Dissolved Aluminum (Al)	ug/L	<3.0	3.0	6585770
Dissolved Antimony (Sb)	ug/L	<0.50	0.50	6585770
Dissolved Arsenic (As)	ug/L	0.20	0.10	6585770
Dissolved Barium (Ba)	ug/L	55.7	1.0	6585770
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	6585770
Dissolved Bismuth (Bi)	ug/L	<1.0	1.0	6585770
Dissolved Boron (B)	ug/L	<50	50	6585770
Dissolved Cadmium (Cd)	ug/L	0.024	0.010	6585770
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	6585770
Dissolved Cobalt (Co)	ug/L	<0.20	0.20	6585770
Dissolved Copper (Cu)	ug/L	0.78	0.20	6585770
Dissolved Iron (Fe)	ug/L	<5.0	5.0	6585770
Dissolved Lead (Pb)	ug/L	<0.20	0.20	6585770
Dissolved Lithium (Li)	ug/L	7.0	2.0	6585770
Dissolved Manganese (Mn)	ug/L	<1.0	1.0	6585770
Dissolved Molybdenum (Mo)	ug/L	1.9	1.0	6585770
Dissolved Nickel (Ni)	ug/L	1.9	1.0	6585770
Dissolved Selenium (Se)	ug/L	0.49	0.10	6585770
Dissolved Silicon (Si)	ug/L	7760	100	6585770
Dissolved Silver (Ag)	ug/L	<0.020	0.020	6585770
Dissolved Strontium (Sr)	ug/L	1290	1.0	6585770
Dissolved Thallium (Tl)	ug/L	0.026	0.010	6585770
Dissolved Tin (Sn)	ug/L	<5.0	5.0	6585770
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	6585770
Dissolved Uranium (U)	ug/L	4.53	0.10	6585770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		LYY062		
Sampling Date		2020/02/07 10:30		
COC Number		757918-02-01		
	UNITS	**MW16-14 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Vanadium (V)	ug/L	<5.0	5.0	6585770
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	6585770
Dissolved Zirconium (Zr)	ug/L	<0.10	0.10	6585770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME PAHS (WATER)

BV Labs ID		LYY062		
Sampling Date		2020/02/07 10:30		
COC Number		757918-02-01		
	UNITS	MW16-14	RDL	QC Batch
Polyaromatic Hydrocarbons				
Benzo(a)pyrene Total Potency Equiv.	ug/L	<0.010	0.010	6593958
Acenaphthene	ug/L	<0.10	0.10	6589984
Acenaphthylene	ug/L	<0.10	0.10	6589984
Acridine	ug/L	<0.040	0.040	6589984
Anthracene	ug/L	<0.010	0.010	6589984
Benzo(a)anthracene	ug/L	<0.0085	0.0085	6589984
Benzo(b/j)fluoranthene	ug/L	<0.0085	0.0085	6589984
Benzo(k)fluoranthene	ug/L	<0.0085	0.0085	6589984
Benzo(g,h,i)perylene	ug/L	<0.0085	0.0085	6589984
Benzo(c)phenanthrene	ug/L	<0.050	0.050	6589984
Benzo(a)pyrene	ug/L	<0.0075	0.0075	6589984
Benzo(e)pyrene	ug/L	<0.050	0.050	6589984
Chrysene	ug/L	<0.0085	0.0085	6589984
Dibenzo(a,h)anthracene	ug/L	<0.0075	0.0075	6589984
Fluoranthene	ug/L	<0.010	0.010	6589984
Fluorene	ug/L	<0.050	0.050	6589984
Indeno(1,2,3-cd)pyrene	ug/L	<0.0085	0.0085	6589984
1-Methylnaphthalene	ug/L	<0.10	0.10	6589984
2-Methylnaphthalene	ug/L	<0.10	0.10	6589984
Naphthalene	ug/L	<0.10	0.10	6589984
Phenanthrene	ug/L	<0.050	0.050	6589984
Perylene	ug/L	<0.050	0.050	6589984
Pyrene	ug/L	<0.020	0.020	6589984
Quinoline	ug/L	<0.20	0.20	6589984
Surrogate Recovery (%)				
D10-Anthracene	%	110		6589984
D14-Terphenyl	%	136 (1)		6589984
D8-Acenaphthylene	%	106		6589984
D8-Naphthalene	%	101		6589984

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYY061	LYY062		
Sampling Date		2020/02/07 09:30	2020/02/07 10:30		
COC Number		757918-02-01	757918-02-01		
	UNITS	1 OBSERVATORY	MW16-14	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	6580110
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	6580687
Benzene	ug/L	<0.20	<0.20	0.20	6580687
Bromodichloromethane	ug/L	3.8	<0.50	0.50	6580687
Bromoform	ug/L	<1.0	<1.0	1.0	6580687
Bromomethane	ug/L	<0.50	<0.50	0.50	6580687
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	6580687
Chlorobenzene	ug/L	<0.20	<0.20	0.20	6580687
Chloroform	ug/L	23	<0.20	0.20	6580687
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	6580687
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	6580687
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	6580687
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	6580687
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	6580687
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	6580687
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	6580687
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	6580687
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	6580687
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	6580687
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	6580687
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	6580687
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	6580687
Ethylbenzene	ug/L	<0.20	<0.20	0.20	6580687
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	6580687
Hexane	ug/L	<1.0	<1.0	1.0	6580687
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	6580687
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	6580687
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	6580687
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	6580687
Styrene	ug/L	<0.50	<0.50	0.50	6580687
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	6580687
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	6580687

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		LYY061	LYY062		
Sampling Date		2020/02/07 09:30	2020/02/07 10:30		
COC Number		757918-02-01	757918-02-01		
	UNITS	1 OBSERVATORY	MW16-14	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	6580687
Toluene	ug/L	<0.20	<0.20	0.20	6580687
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	6580687
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	6580687
Trichloroethylene	ug/L	<0.20	<0.20	0.20	6580687
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	6580687
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	6580687
p+m-Xylene	ug/L	<0.20	<0.20	0.20	6580687
o-Xylene	ug/L	<0.20	<0.20	0.20	6580687
Total Xylenes	ug/L	<0.20	<0.20	0.20	6580687
F1 (C6-C10)	ug/L	<25	<25	25	6580687
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	6580687
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	6586161
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	6586161
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	6586161
Reached Baseline at C50	ug/L	Yes	Yes		6586161
Surrogate Recovery (%)					
o-Terphenyl	%	112	112		6586161
4-Bromofluorobenzene	%	90	91		6580687
D4-1,2-Dichloroethane	%	107	110		6580687
D8-Toluene	%	101	100		6580687

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYY061
Sample ID: 1 OBSERVATORY
Matrix: Water

Collected: 2020/02/07
Shipped:
Received: 2020/02/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6580110	N/A	2020/02/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	6581197	N/A	2020/02/11	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6580615	N/A	2020/02/10	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6586161	2020/02/12	2020/02/13	Prabhjot Gulati
Fluoride	ISE	6581184	2020/02/10	2020/02/11	Surinder Rai
Mercury (low level)	CV/AA	6581091	2020/02/10	2020/02/10	Medhat Nasr
Sulphide (as H2S)	CALC	6593956	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6585768	N/A	2020/02/12	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6585769	N/A	2020/02/12	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6585770	N/A	2020/02/12	John Choo
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6580111	N/A	2020/02/11	Automated Statchk
Total Ammonia-N	LACH/NH4	6582243	N/A	2020/02/11	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6581764	N/A	2020/02/11	Chandra Nandlal
Nitrate (as NO3)	CALC	6580112	N/A	2020/02/11	Automated Statchk
pH	AT	6581192	2020/02/10	2020/02/11	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6581204	N/A	2020/02/11	Alina Dobreanu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6580687	N/A	2020/02/11	Denis Reid

BV Labs ID: LYY061 Dup
Sample ID: 1 OBSERVATORY
Matrix: Water

Collected: 2020/02/07
Shipped:
Received: 2020/02/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Fluoride	ISE	6581184	2020/02/10	2020/02/11	Surinder Rai
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
pH	AT	6581192	2020/02/10	2020/02/11	Surinder Rai

BV Labs ID: LYY062
Sample ID: MW16-14
Matrix: Water

Collected: 2020/02/07
Shipped:
Received: 2020/02/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6580110	N/A	2020/02/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	6581197	N/A	2020/02/11	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6580615	N/A	2020/02/10	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6586161	2020/02/12	2020/02/13	Prabhjot Gulati
Fluoride	ISE	6581184	2020/02/10	2020/02/11	Surinder Rai
Mercury (low level)	CV/AA	6581091	2020/02/10	2020/02/10	Medhat Nasr
Sulphide (as H2S)	CALC	6593956	N/A	2020/02/13	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6585768	N/A	2020/02/12	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6585769	N/A	2020/02/12	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6585770	N/A	2020/02/12	John Choo
B[a]P Total Potency Equivalent	GC/MS	6593958	N/A	2020/02/12	Automated Statchk

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: LYY062
Sample ID: MW16-14
Matrix: Water

Collected: 2020/02/07
Shipped:
Received: 2020/02/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PAH in Water by GC/MS	GC/MS	6589984	2020/02/12	2020/02/12	Liping Zong
Sulphide	SPEC	6593957	N/A	2020/02/13	Preetleen Kathuria
Total Ammonia (as NH3)	CALC	6580111	N/A	2020/02/11	Automated Statchk
Total Ammonia-N	LACH/NH4	6582243	N/A	2020/02/11	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6581764	N/A	2020/02/11	Chandra Nandlal
Nitrate (as NO3)	CALC	6580112	N/A	2020/02/11	Automated Statchk
pH	AT	6581192	2020/02/10	2020/02/11	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6581204	N/A	2020/02/11	Alina Dobreanu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6580687	N/A	2020/02/11	Denis Reid

BV Labs ID: LYY062 Dup
Sample ID: MW16-14
Matrix: Water

Collected: 2020/02/07
Shipped:
Received: 2020/02/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Elements by CRC ICPMS (dissolved)	ICP/MS	6585770	N/A	2020/02/12	John Choo
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6581764	N/A	2020/02/11	Chandra Nandlal

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

GENERAL COMMENTS

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

Package 1	2.0°C

Results relate only to the items tested.

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6580615	GTO	Matrix Spike	WAD Cyanide (Free)	2020/02/10		98	%	80 - 120
6580615	GTO	Spiked Blank	WAD Cyanide (Free)	2020/02/10		100	%	80 - 120
6580615	GTO	Method Blank	WAD Cyanide (Free)	2020/02/10	<0.0010		mg/L	
6580615	GTO	RPD	WAD Cyanide (Free)	2020/02/10	NC		%	20
6580687	DR1	Matrix Spike	4-Bromofluorobenzene	2020/02/11		93	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/11		107	%	70 - 130
			D8-Toluene	2020/02/11		106	%	70 - 130
			Acetone (2-Propanone)	2020/02/11		108	%	60 - 140
			Benzene	2020/02/11		98	%	70 - 130
			Bromodichloromethane	2020/02/11		93	%	70 - 130
			Bromoform	2020/02/11		98	%	70 - 130
			Bromomethane	2020/02/11		88	%	60 - 140
			Carbon Tetrachloride	2020/02/11		87	%	70 - 130
			Chlorobenzene	2020/02/11		92	%	70 - 130
			Chloroform	2020/02/11		90	%	70 - 130
			Dibromochloromethane	2020/02/11		100	%	70 - 130
			1,2-Dichlorobenzene	2020/02/11		94	%	70 - 130
			1,3-Dichlorobenzene	2020/02/11		93	%	70 - 130
			1,4-Dichlorobenzene	2020/02/11		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/11		64	%	60 - 140
			1,1-Dichloroethane	2020/02/11		99	%	70 - 130
			1,2-Dichloroethane	2020/02/11		103	%	70 - 130
			1,1-Dichloroethylene	2020/02/11		100	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/11		89	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/11		92	%	70 - 130
			1,2-Dichloropropane	2020/02/11		96	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/11		92	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/11		105	%	70 - 130
			Ethylbenzene	2020/02/11		92	%	70 - 130
			Ethylene Dibromide	2020/02/11		102	%	70 - 130
			Hexane	2020/02/11		100	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/11		91	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/11		113	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/11		106	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/11		87	%	70 - 130
			Styrene	2020/02/11		93	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/11		100	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/11		109	%	70 - 130
			Tetrachloroethylene	2020/02/11		85	%	70 - 130
			Toluene	2020/02/11		94	%	70 - 130
			1,1,1-Trichloroethane	2020/02/11		90	%	70 - 130
			1,1,2-Trichloroethane	2020/02/11		111	%	70 - 130
			Trichloroethylene	2020/02/11		88	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/11		92	%	70 - 130
			Vinyl Chloride	2020/02/11		90	%	70 - 130
			p+m-Xylene	2020/02/11		94	%	70 - 130
			o-Xylene	2020/02/11		93	%	70 - 130
			F1 (C6-C10)	2020/02/11		91	%	60 - 140
6580687	DR1	Spiked Blank	4-Bromofluorobenzene	2020/02/11		93	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/11		103	%	70 - 130
			D8-Toluene	2020/02/11		105	%	70 - 130
			Acetone (2-Propanone)	2020/02/11		89	%	60 - 140

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzene	2020/02/11		97	%	70 - 130
			Bromodichloromethane	2020/02/11		91	%	70 - 130
			Bromoform	2020/02/11		94	%	70 - 130
			Bromomethane	2020/02/11		94	%	60 - 140
			Carbon Tetrachloride	2020/02/11		88	%	70 - 130
			Chlorobenzene	2020/02/11		92	%	70 - 130
			Chloroform	2020/02/11		90	%	70 - 130
			Dibromochloromethane	2020/02/11		98	%	70 - 130
			1,2-Dichlorobenzene	2020/02/11		95	%	70 - 130
			1,3-Dichlorobenzene	2020/02/11		94	%	70 - 130
			1,4-Dichlorobenzene	2020/02/11		100	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/11		76	%	60 - 140
			1,1-Dichloroethane	2020/02/11		100	%	70 - 130
			1,2-Dichloroethane	2020/02/11		100	%	70 - 130
			1,1-Dichloroethylene	2020/02/11		106	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/11		89	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/11		94	%	70 - 130
			1,2-Dichloropropane	2020/02/11		94	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/11		87	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/11		99	%	70 - 130
			Ethylbenzene	2020/02/11		93	%	70 - 130
			Ethylene Dibromide	2020/02/11		98	%	70 - 130
			Hexane	2020/02/11		103	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/11		92	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/11		94	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/11		96	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/11		87	%	70 - 130
			Styrene	2020/02/11		93	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/11		100	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/11		104	%	70 - 130
			Tetrachloroethylene	2020/02/11		87	%	70 - 130
			Toluene	2020/02/11		95	%	70 - 130
			1,1,1-Trichloroethane	2020/02/11		91	%	70 - 130
			1,1,2-Trichloroethane	2020/02/11		108	%	70 - 130
			Trichloroethylene	2020/02/11		88	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/11		98	%	70 - 130
			Vinyl Chloride	2020/02/11		101	%	70 - 130
			p+m-Xylene	2020/02/11		96	%	70 - 130
			o-Xylene	2020/02/11		94	%	70 - 130
			F1 (C6-C10)	2020/02/11		93	%	60 - 140
6580687	DR1	Method Blank	4-Bromofluorobenzene	2020/02/11		92	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/11		105	%	70 - 130
			D8-Toluene	2020/02/11		101	%	70 - 130
			Acetone (2-Propanone)	2020/02/11	<10		ug/L	
			Benzene	2020/02/11	<0.20		ug/L	
			Bromodichloromethane	2020/02/11	<0.50		ug/L	
			Bromoform	2020/02/11	<1.0		ug/L	
			Bromomethane	2020/02/11	<0.50		ug/L	
			Carbon Tetrachloride	2020/02/11	<0.20		ug/L	
			Chlorobenzene	2020/02/11	<0.20		ug/L	
			Chloroform	2020/02/11	<0.20		ug/L	
			Dibromochloromethane	2020/02/11	<0.50		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-Dichlorobenzene	2020/02/11	<0.50		ug/L	
			1,3-Dichlorobenzene	2020/02/11	<0.50		ug/L	
			1,4-Dichlorobenzene	2020/02/11	<0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2020/02/11	<1.0		ug/L	
			1,1-Dichloroethane	2020/02/11	<0.20		ug/L	
			1,2-Dichloroethane	2020/02/11	<0.50		ug/L	
			1,1-Dichloroethylene	2020/02/11	<0.20		ug/L	
			cis-1,2-Dichloroethylene	2020/02/11	<0.50		ug/L	
			trans-1,2-Dichloroethylene	2020/02/11	<0.50		ug/L	
			1,2-Dichloropropane	2020/02/11	<0.20		ug/L	
			cis-1,3-Dichloropropene	2020/02/11	<0.30		ug/L	
			trans-1,3-Dichloropropene	2020/02/11	<0.40		ug/L	
			Ethylbenzene	2020/02/11	<0.20		ug/L	
			Ethylene Dibromide	2020/02/11	<0.20		ug/L	
			Hexane	2020/02/11	<1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2020/02/11	<2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2020/02/11	<10		ug/L	
			Methyl Isobutyl Ketone	2020/02/11	<5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2020/02/11	<0.50		ug/L	
			Styrene	2020/02/11	<0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2020/02/11	<0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2020/02/11	<0.50		ug/L	
			Tetrachloroethylene	2020/02/11	<0.20		ug/L	
			Toluene	2020/02/11	<0.20		ug/L	
			1,1,1-Trichloroethane	2020/02/11	<0.20		ug/L	
			1,1,2-Trichloroethane	2020/02/11	<0.50		ug/L	
			Trichloroethylene	2020/02/11	<0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2020/02/11	<0.50		ug/L	
			Vinyl Chloride	2020/02/11	<0.20		ug/L	
			p+m-Xylene	2020/02/11	<0.20		ug/L	
			o-Xylene	2020/02/11	<0.20		ug/L	
			Total Xylenes	2020/02/11	<0.20		ug/L	
			F1 (C6-C10)	2020/02/11	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/11	<25		ug/L	
6580687	DR1	RPD	Acetone (2-Propanone)	2020/02/11	6.3		%	30
			Benzene	2020/02/11	NC		%	30
			Bromodichloromethane	2020/02/11	NC		%	30
			Bromoform	2020/02/11	NC		%	30
			Bromomethane	2020/02/11	NC		%	30
			Carbon Tetrachloride	2020/02/11	NC		%	30
			Chlorobenzene	2020/02/11	NC		%	30
			Chloroform	2020/02/11	NC		%	30
			Dibromochloromethane	2020/02/11	NC		%	30
			1,2-Dichlorobenzene	2020/02/11	NC		%	30
			1,3-Dichlorobenzene	2020/02/11	NC		%	30
			1,4-Dichlorobenzene	2020/02/11	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2020/02/11	NC		%	30
			1,1-Dichloroethane	2020/02/11	NC		%	30
			1,2-Dichloroethane	2020/02/11	NC		%	30
			1,1-Dichloroethylene	2020/02/11	NC		%	30
			cis-1,2-Dichloroethylene	2020/02/11	NC		%	30
			trans-1,2-Dichloroethylene	2020/02/11	NC		%	30

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-Dichloropropane	2020/02/11	NC		%	30
			cis-1,3-Dichloropropene	2020/02/11	NC		%	30
			trans-1,3-Dichloropropene	2020/02/11	NC		%	30
			Ethylbenzene	2020/02/11	NC		%	30
			Ethylene Dibromide	2020/02/11	NC		%	30
			Hexane	2020/02/11	NC		%	30
			Methylene Chloride(Dichloromethane)	2020/02/11	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2020/02/11	NC		%	30
			Methyl Isobutyl Ketone	2020/02/11	NC		%	30
			Methyl t-butyl ether (MTBE)	2020/02/11	NC		%	30
			Styrene	2020/02/11	NC		%	30
			1,1,1,2-Tetrachloroethane	2020/02/11	NC		%	30
			1,1,2,2-Tetrachloroethane	2020/02/11	NC		%	30
			Tetrachloroethylene	2020/02/11	NC		%	30
			Toluene	2020/02/11	NC		%	30
			1,1,1-Trichloroethane	2020/02/11	NC		%	30
			1,1,2-Trichloroethane	2020/02/11	NC		%	30
			Trichloroethylene	2020/02/11	NC		%	30
			Trichlorofluoromethane (FREON 11)	2020/02/11	NC		%	30
			Vinyl Chloride	2020/02/11	NC		%	30
			p+m-Xylene	2020/02/11	4.3		%	30
			o-Xylene	2020/02/11	6.3		%	30
			Total Xylenes	2020/02/11	5.1		%	30
			F1 (C6-C10)	2020/02/11	NC		%	30
			F1 (C6-C10) - BTEX	2020/02/11	NC		%	30
6581091	MEN	Matrix Spike	Mercury (Hg)	2020/02/10		99	%	75 - 125
6581091	MEN	Spiked Blank	Mercury (Hg)	2020/02/10		100	%	80 - 120
6581091	MEN	Method Blank	Mercury (Hg)	2020/02/10	<0.01		ug/L	
6581091	MEN	RPD	Mercury (Hg)	2020/02/10	NC		%	20
6581184	SAU	Matrix Spike [LYY061-01]	Fluoride (F-)	2020/02/11		96	%	80 - 120
6581184	SAU	Spiked Blank	Fluoride (F-)	2020/02/11		98	%	80 - 120
6581184	SAU	Method Blank	Fluoride (F-)	2020/02/11	<0.10		mg/L	
6581184	SAU	RPD [LYY061-01]	Fluoride (F-)	2020/02/11	1.4		%	20
6581192	SAU	Spiked Blank	pH	2020/02/11		102	%	98 - 103
6581192	SAU	RPD [LYY061-01]	pH	2020/02/11	0.34		%	N/A
6581197	DRM	Matrix Spike	Dissolved Chloride (Cl-)	2020/02/11		NC	%	80 - 120
6581197	DRM	Spiked Blank	Dissolved Chloride (Cl-)	2020/02/11		104	%	80 - 120
6581197	DRM	Method Blank	Dissolved Chloride (Cl-)	2020/02/11	<1.0		mg/L	
6581197	DRM	RPD	Dissolved Chloride (Cl-)	2020/02/11	0.18		%	20
6581204	ADB	Matrix Spike	Dissolved Sulphate (SO4)	2020/02/11		NC	%	75 - 125
6581204	ADB	Spiked Blank	Dissolved Sulphate (SO4)	2020/02/11		104	%	80 - 120
6581204	ADB	Method Blank	Dissolved Sulphate (SO4)	2020/02/11	<1.0		mg/L	
6581204	ADB	RPD	Dissolved Sulphate (SO4)	2020/02/11	0.84		%	20
6581764	C_N	Matrix Spike [LYY062-01]	Nitrite (N)	2020/02/11		105	%	80 - 120
			Nitrate (N)	2020/02/11		87	%	80 - 120
6581764	C_N	Spiked Blank	Nitrite (N)	2020/02/11		101	%	80 - 120
			Nitrate (N)	2020/02/11		94	%	80 - 120
6581764	C_N	Method Blank	Nitrite (N)	2020/02/11	<0.010		mg/L	
			Nitrate (N)	2020/02/11	<0.10		mg/L	
6581764	C_N	RPD [LYY062-01]	Nitrite (N)	2020/02/11	NC		%	20
			Nitrate (N)	2020/02/11	1.2		%	20
6582243	MT4	Matrix Spike	Total Ammonia-N	2020/02/11		98	%	75 - 125

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6582243	MT4	Spiked Blank	Total Ammonia-N	2020/02/11		99	%	80 - 120
6582243	MT4	Method Blank	Total Ammonia-N	2020/02/11	<0.050		mg/L	
6582243	MT4	RPD	Total Ammonia-N	2020/02/11	2.8		%	20
6585770	JC8	Matrix Spike	Dissolved Aluminum (Al)	2020/02/12		98	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/12		99	%	80 - 120
			Dissolved Arsenic (As)	2020/02/12		105	%	80 - 120
			Dissolved Barium (Ba)	2020/02/12		NC	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/12		95	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/12		95	%	80 - 120
			Dissolved Boron (B)	2020/02/12		96	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/12		95	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/12		99	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/12		96	%	80 - 120
			Dissolved Copper (Cu)	2020/02/12		92	%	80 - 120
			Dissolved Iron (Fe)	2020/02/12		100	%	80 - 120
			Dissolved Lead (Pb)	2020/02/12		101	%	80 - 120
			Dissolved Lithium (Li)	2020/02/12		93	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/12		98	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/12		109	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/12		96	%	80 - 120
			Dissolved Selenium (Se)	2020/02/12		103	%	80 - 120
			Dissolved Silicon (Si)	2020/02/12		NC	%	80 - 120
			Dissolved Silver (Ag)	2020/02/12		96	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/12		NC	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/12		99	%	80 - 120
			Dissolved Tin (Sn)	2020/02/12		100	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/12		101	%	80 - 120
			Dissolved Uranium (U)	2020/02/12		107	%	80 - 120
			Dissolved Vanadium (V)	2020/02/12		105	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/12		91	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/12		105	%	80 - 120
6585770	JC8	Spiked Blank	Dissolved Aluminum (Al)	2020/02/12		99	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/12		100	%	80 - 120
			Dissolved Arsenic (As)	2020/02/12		100	%	80 - 120
			Dissolved Barium (Ba)	2020/02/12		99	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/12		103	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/12		104	%	80 - 120
			Dissolved Boron (B)	2020/02/12		104	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/12		100	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/12		101	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/12		100	%	80 - 120
			Dissolved Copper (Cu)	2020/02/12		102	%	80 - 120
			Dissolved Iron (Fe)	2020/02/12		104	%	80 - 120
			Dissolved Lead (Pb)	2020/02/12		106	%	80 - 120
			Dissolved Lithium (Li)	2020/02/12		101	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/12		102	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/12		105	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/12		104	%	80 - 120
			Dissolved Selenium (Se)	2020/02/12		98	%	80 - 120
			Dissolved Silicon (Si)	2020/02/12		98	%	80 - 120
			Dissolved Silver (Ag)	2020/02/12		102	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/12		98	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Thallium (Tl)	2020/02/12		103	%	80 - 120
			Dissolved Tin (Sn)	2020/02/12		98	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/12		101	%	80 - 120
			Dissolved Uranium (U)	2020/02/12		107	%	80 - 120
			Dissolved Vanadium (V)	2020/02/12		102	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/12		105	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/12		101	%	80 - 120
6585770	JC8	Method Blank	Dissolved Aluminum (Al)	2020/02/12	<3.0		ug/L	
			Dissolved Antimony (Sb)	2020/02/12	<0.50		ug/L	
			Dissolved Arsenic (As)	2020/02/12	<0.10		ug/L	
			Dissolved Barium (Ba)	2020/02/12	<1.0		ug/L	
			Dissolved Beryllium (Be)	2020/02/12	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2020/02/12	<1.0		ug/L	
			Dissolved Boron (B)	2020/02/12	<50		ug/L	
			Dissolved Cadmium (Cd)	2020/02/12	<0.010		ug/L	
			Dissolved Chromium (Cr)	2020/02/12	<1.0		ug/L	
			Dissolved Cobalt (Co)	2020/02/12	<0.20		ug/L	
			Dissolved Copper (Cu)	2020/02/12	<0.20		ug/L	
			Dissolved Iron (Fe)	2020/02/12	<5.0		ug/L	
			Dissolved Lead (Pb)	2020/02/12	<0.20		ug/L	
			Dissolved Lithium (Li)	2020/02/12	<2.0		ug/L	
			Dissolved Manganese (Mn)	2020/02/12	<1.0		ug/L	
			Dissolved Molybdenum (Mo)	2020/02/12	<1.0		ug/L	
			Dissolved Nickel (Ni)	2020/02/12	<1.0		ug/L	
			Dissolved Selenium (Se)	2020/02/12	<0.10		ug/L	
			Dissolved Silicon (Si)	2020/02/12	<100		ug/L	
			Dissolved Silver (Ag)	2020/02/12	<0.020		ug/L	
			Dissolved Strontium (Sr)	2020/02/12	<1.0		ug/L	
			Dissolved Thallium (Tl)	2020/02/12	<0.010		ug/L	
			Dissolved Tin (Sn)	2020/02/12	<5.0		ug/L	
			Dissolved Titanium (Ti)	2020/02/12	<5.0		ug/L	
			Dissolved Uranium (U)	2020/02/12	<0.10		ug/L	
			Dissolved Vanadium (V)	2020/02/12	<5.0		ug/L	
			Dissolved Zinc (Zn)	2020/02/12	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2020/02/12	<0.10		ug/L	
6585770	JC8	RPD [LYY062-07]	Dissolved Aluminum (Al)	2020/02/12	NC		%	20
			Dissolved Antimony (Sb)	2020/02/12	NC		%	20
			Dissolved Arsenic (As)	2020/02/12	19		%	20
			Dissolved Barium (Ba)	2020/02/12	2.7		%	20
			Dissolved Beryllium (Be)	2020/02/12	NC		%	20
			Dissolved Bismuth (Bi)	2020/02/12	NC		%	20
			Dissolved Boron (B)	2020/02/12	NC		%	20
			Dissolved Cadmium (Cd)	2020/02/12	NC		%	20
			Dissolved Chromium (Cr)	2020/02/12	NC		%	20
			Dissolved Cobalt (Co)	2020/02/12	NC		%	20
			Dissolved Copper (Cu)	2020/02/12	11		%	20
			Dissolved Iron (Fe)	2020/02/12	NC		%	20
			Dissolved Lead (Pb)	2020/02/12	NC		%	20
			Dissolved Lithium (Li)	2020/02/12	2.0		%	20
			Dissolved Manganese (Mn)	2020/02/12	NC		%	20
			Dissolved Molybdenum (Mo)	2020/02/12	3.2		%	20
			Dissolved Nickel (Ni)	2020/02/12	2.4		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Selenium (Se)	2020/02/12	2.9		%	20
			Dissolved Silicon (Si)	2020/02/12	1.6		%	20
			Dissolved Silver (Ag)	2020/02/12	NC		%	20
			Dissolved Strontium (Sr)	2020/02/12	0.42		%	20
			Dissolved Thallium (Tl)	2020/02/12	9.4		%	20
			Dissolved Tin (Sn)	2020/02/12	NC		%	20
			Dissolved Titanium (Ti)	2020/02/12	NC		%	20
			Dissolved Uranium (U)	2020/02/12	1.7		%	20
			Dissolved Vanadium (V)	2020/02/12	NC		%	20
			Dissolved Zinc (Zn)	2020/02/12	NC		%	20
			Dissolved Zirconium (Zr)	2020/02/12	NC		%	20
6586161	GUL	Matrix Spike	o-Terphenyl	2020/02/13		112	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/13		NC	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/13		99	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/13		110	%	50 - 130
6586161	GUL	Spiked Blank	o-Terphenyl	2020/02/13		112	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/13		113	%	60 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/13		112	%	60 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/13		112	%	60 - 130
6586161	GUL	Method Blank	o-Terphenyl	2020/02/13		115	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/13	<100		ug/L	
			F3 (C16-C34 Hydrocarbons)	2020/02/13	<200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2020/02/13	<200		ug/L	
6586161	GUL	RPD	F2 (C10-C16 Hydrocarbons)	2020/02/13	1.4		%	30
			F3 (C16-C34 Hydrocarbons)	2020/02/13	2.5		%	30
			F4 (C34-C50 Hydrocarbons)	2020/02/13	3.3		%	30
6589984	LZ3	Matrix Spike	D10-Anthracene	2020/02/11		112	%	50 - 130
			D14-Terphenyl	2020/02/11		128	%	50 - 130
			D8-Acenaphthylene	2020/02/11		103	%	50 - 130
			D8-Naphthalene	2020/02/11		91	%	50 - 130
			Acenaphthene	2020/02/11		87	%	50 - 130
			Acenaphthylene	2020/02/11		91	%	50 - 130
			Acridine	2020/02/11		95	%	50 - 130
			Anthracene	2020/02/11		88	%	50 - 130
			Benzo(a)anthracene	2020/02/11		104	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/11		94	%	50 - 130
			Benzo(k)fluoranthene	2020/02/11		104	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/11		93	%	50 - 130
			Benzo(c)phenanthrene	2020/02/11		112	%	50 - 130
			Benzo(a)pyrene	2020/02/11		99	%	50 - 130
			Benzo(e)pyrene	2020/02/11		100	%	50 - 130
			Chrysene	2020/02/11		103	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/11		96	%	50 - 130
			Fluoranthene	2020/02/11		107	%	50 - 130
			Fluorene	2020/02/11		90	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/11		94	%	50 - 130
			1-Methylnaphthalene	2020/02/11		88	%	50 - 130
			2-Methylnaphthalene	2020/02/11		82	%	50 - 130
			Naphthalene	2020/02/11		94	%	50 - 130
			Phenanthrene	2020/02/11		100	%	50 - 130
			Perylene	2020/02/11		92	%	50 - 130
			Pyrene	2020/02/11		106	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Quinoline	2020/02/11		96	%	50 - 130
6589984	LZ3	Spiked Blank	D10-Anthracene	2020/02/11		105	%	50 - 130
			D14-Terphenyl	2020/02/11		130	%	50 - 130
			D8-Acenaphthylene	2020/02/11		98	%	50 - 130
			D8-Naphthalene	2020/02/11		85	%	50 - 130
			Acenaphthene	2020/02/11		94	%	50 - 130
			Acenaphthylene	2020/02/11		95	%	50 - 130
			Acridine	2020/02/11		91	%	50 - 130
			Anthracene	2020/02/11		86	%	50 - 130
			Benzo(a)anthracene	2020/02/11		100	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/11		91	%	50 - 130
			Benzo(k)fluoranthene	2020/02/11		100	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/11		92	%	50 - 130
			Benzo(c)phenanthrene	2020/02/11		106	%	50 - 130
			Benzo(a)pyrene	2020/02/11		97	%	50 - 130
			Benzo(e)pyrene	2020/02/11		97	%	50 - 130
			Chrysene	2020/02/11		100	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/11		94	%	50 - 130
			Fluoranthene	2020/02/11		105	%	50 - 130
			Fluorene	2020/02/11		94	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/11		93	%	50 - 130
			1-Methylnaphthalene	2020/02/11		89	%	50 - 130
			2-Methylnaphthalene	2020/02/11		82	%	50 - 130
			Naphthalene	2020/02/11		90	%	50 - 130
			Phenanthrene	2020/02/11		98	%	50 - 130
			Perylene	2020/02/11		91	%	50 - 130
			Pyrene	2020/02/11		105	%	50 - 130
			Quinoline	2020/02/11		97	%	50 - 130
6589984	LZ3	Method Blank	D10-Anthracene	2020/02/11		104	%	50 - 130
			D14-Terphenyl	2020/02/11		126	%	50 - 130
			D8-Acenaphthylene	2020/02/11		96	%	50 - 130
			D8-Naphthalene	2020/02/11		84	%	50 - 130
			Acenaphthene	2020/02/11	<0.10		ug/L	
			Acenaphthylene	2020/02/11	<0.10		ug/L	
			Acridine	2020/02/11	<0.040		ug/L	
			Anthracene	2020/02/11	<0.010		ug/L	
			Benzo(a)anthracene	2020/02/11	<0.0085		ug/L	
			Benzo(b/j)fluoranthene	2020/02/11	<0.0085		ug/L	
			Benzo(k)fluoranthene	2020/02/11	<0.0085		ug/L	
			Benzo(g,h,i)perylene	2020/02/11	<0.0085		ug/L	
			Benzo(c)phenanthrene	2020/02/11	<0.050		ug/L	
			Benzo(a)pyrene	2020/02/11	<0.0075		ug/L	
			Benzo(e)pyrene	2020/02/11	<0.050		ug/L	
			Chrysene	2020/02/11	<0.0085		ug/L	
			Dibenzo(a,h)anthracene	2020/02/11	<0.0075		ug/L	
			Fluoranthene	2020/02/11	<0.010		ug/L	
			Fluorene	2020/02/11	<0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2020/02/11	<0.0085		ug/L	
			1-Methylnaphthalene	2020/02/11	<0.10		ug/L	
			2-Methylnaphthalene	2020/02/11	<0.10		ug/L	
			Naphthalene	2020/02/11	<0.10		ug/L	
			Phenanthrene	2020/02/11	<0.050		ug/L	

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Perylene	2020/02/11	<0.050		ug/L	
			Pyrene	2020/02/11	<0.020		ug/L	
			Quinoline	2020/02/11	<0.20		ug/L	
6593957	PK8	Matrix Spike	Total Sulphide	2020/02/13		48 (1)	%	80 - 120
6593957	PK8	Spiked Blank	Total Sulphide	2020/02/13		94	%	80 - 120
6593957	PK8	Method Blank	Total Sulphide	2020/02/13	<0.0018		mg/L	
6593957	PK8	RPD [LYY061-04]	Total Sulphide	2020/02/13	NC		%	20

N/A = Not Applicable

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 Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

BV Labs Job #: C035567
Report Date: 2020/02/19

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Harry (Peng) Liang, Senior Analyst

Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics

Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Rob Reinert, B.Sc., Scientific Specialist

BV Labs 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 Signature Page.

Bureau Veritas Laboratories 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.bvlabs.com

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/26
Report #: R6088897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C041330
Received: 2020/02/13, 16:40

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	5	N/A	2020/02/21		EPA 8260C m
Chloride by Automated Colourimetry (1)	4	N/A	2020/02/19	CAM SOP-00463	SM 23 4500-Cl E m
Chloride by Automated Colourimetry (1)	1	N/A	2020/02/20	CAM SOP-00463	SM 23 4500-Cl E m
Free (WAD) Cyanide (1)	4	N/A	2020/02/18	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide (1)	1	N/A	2020/02/20	CAM SOP-00457	OMOE E3015 m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	1	N/A	2020/02/20	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 4)	5	2020/02/19	2020/02/21	CAM SOP-00316	CCME PHC-CWS m
Fluoride (1)	4	2020/02/18	2020/02/18	CAM SOP-00449	SM 23 4500-F C m
Fluoride (1)	1	2020/02/19	2020/02/20	CAM SOP-00449	SM 23 4500-F C m
Mercury (low level) (1)	5	2020/02/19	2020/02/19	CAM SOP-00453	EPA 7470 m
Sulphide (as H2S) (2)	4	N/A	2020/02/20	AB WI-00065	Auto Calc.
Sulphide (as H2S) (2)	1	N/A	2020/02/21	AB WI-00065	Auto Calc.
Hardness (calculated as CaCO3) (3)	4	N/A	2020/02/20	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	1	N/A	2020/02/21	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	4	N/A	2020/02/20	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	1	N/A	2020/02/21	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	4	N/A	2020/02/20	BBY7SOP-00002	EPA 6020B R2 m
Elements by CRC ICPMS (dissolved) (3)	1	N/A	2020/02/21	BBY7SOP-00002	EPA 6020B R2 m
B[a]P Total Potency Equivalent (2, 5)	5	N/A	2020/02/22		CCME
PAH in Water by GC/MS (2)	5	2020/02/21	2020/02/21	AB SOP-00037/AB SOP-00003	EPA 3510C/8270E m
Sulphide (2)	4	N/A	2020/02/19	AB SOP-00080	SM 22 4500 S2-A D F
Sulphide (2)	1	N/A	2020/02/20	AB SOP-00080	SM 22 4500 S2-A D F
Total Ammonia (as NH3) (1)	5	N/A	2020/02/19		EPA GS I-2522-90 m
Total Ammonia-N (1)	5	N/A	2020/02/19	CAM SOP-00441	USGS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (1, 6)	4	N/A	2020/02/18	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (1, 6)	1	N/A	2020/02/19	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (as NO3) (1)	4	N/A	2020/02/18		SM 23 4500-NO3I m
Nitrate (as NO3) (1)	1	N/A	2020/02/19		SM 23 4500-NO3I m
pH (1)	4	2020/02/18	2020/02/18	CAM SOP-00413	SM 4500H+ B m
pH (1)	1	2020/02/19	2020/02/20	CAM SOP-00413	SM 4500H+ B m

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/26
Report #: R6088897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C041330
Received: 2020/02/13, 16:40

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Sulphate by Automated Colourimetry (1)	4	N/A	2020/02/19	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry (1)	1	N/A	2020/02/20	CAM SOP-00464	EPA 375.4 m
Volatile Organic Compounds and F1 PHCs (1)	3	N/A	2020/02/19	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs (1)	2	N/A	2020/02/20	CAM SOP-00230	EPA 8260C m

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, results relate to the supplied samples tested.

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 Laboratories Mississauga
(2) This test was performed by BVLabs Calgary via Mississauga
(3) This test was performed by BVLabs Burnaby via Mississauga
(4) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories 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.
(5) B[a]P TPE is calculated using 1/2 of the RDL for non detect results as per Alberta Environment instructions. This protocol may not apply in other jurisdictions.
(6) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

Your P.O. #: 700479149
Your Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your C.O.C. #: 757918-01-01

Attention: Allen MacGarvie

Stantec Consulting Ltd
1331 Clyde Avenue
Suite 400
Ottawa, ON
CANADA K2C 3G4

Report Date: 2020/02/26
Report #: R6088897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C041330
Received: 2020/02/13, 16:40

Encryption Key

Katherine Szozda
Project Manager
26 Feb 2020 16:32:23

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Alisha Sullivan, Project Manager
Email: Alisha.Williamson@bvlabs.com
Phone# (613)274-0573

==========

BV Labs 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 Signature Page.

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD678		MAD679			MAD679		
Sampling Date		2020/02/13 11:00		2020/02/13 12:00			2020/02/13 12:00		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	MW20-15	RDL	MW20-16	RDL	QC Batch	MW20-16 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Total Ammonia (as NH3)	mg/L	0.066	0.061	0.23	0.061	6591789			
Dissolved Hardness (CaCO3)	mg/L	755	0.50	1310	0.50	6600207			
Nitrate (NO3)	mg/L	<0.4	0.4	<0.4	0.4	6591790			
Sulphide (as H2S)	mg/L	0.0065	0.0020	<0.0020	0.0020	6606046			
Inorganics									
Total Ammonia-N	mg/L	0.055	0.050	0.19	0.050	6593663			
Fluoride (F-)	mg/L	0.20	0.10	0.37	0.10	6591661			
pH	pH	7.41		7.51		6591663			
Dissolved Sulphate (SO4)	mg/L	260	1.0	96	1.0	6592938			
Total Sulphide	mg/L	0.0061 (1)	0.0018	<0.0018 (1)	0.0018	6606047			
WAD Cyanide (Free)	mg/L	<0.0010	0.0010	<0.0010	0.0010	6593160	<0.0010	0.0010	6593160
Dissolved Chloride (Cl-)	mg/L	160	2.0	650	6.0	6592937			
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	6592978			
Nitrate (N)	mg/L	<0.10	0.10	<0.10	0.10	6592978			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	0.10	6592978			
Metals									
Dissolved Aluminum (Al)	ug/L	<15	15	<30	30	6601030			
Dissolved Antimony (Sb)	ug/L	<2.5	2.5	<5.0	5.0	6601030			
Dissolved Arsenic (As)	ug/L	<0.50	0.50	<1.0	1.0	6601030			
Dissolved Barium (Ba)	ug/L	79.6	5.0	104	10	6601030			
Dissolved Beryllium (Be)	ug/L	<0.50	0.50	<1.0	1.0	6601030			
Dissolved Bismuth (Bi)	ug/L	<5.0	5.0	<10	10	6601030			
Dissolved Boron (B)	ug/L	<250	250	<500	500	6601030			
Dissolved Cadmium (Cd)	ug/L	<0.050	0.050	<0.10	0.10	6601030			
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	<10	10	6601030			
Dissolved Cobalt (Co)	ug/L	1.4	1.0	<2.0	2.0	6601030			
Dissolved Copper (Cu)	ug/L	<1.0	1.0	<2.0	2.0	6601030			
Dissolved Iron (Fe)	ug/L	253	25	238	50	6601030			
Dissolved Lead (Pb)	ug/L	<1.0	1.0	<2.0	2.0	6601030			
Dissolved Lithium (Li)	ug/L	14	10	59	20	6601030			
Dissolved Manganese (Mn)	ug/L	215	5.0	88	10	6601030			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD678		MAD679			MAD679		
Sampling Date		2020/02/13 11:00		2020/02/13 12:00			2020/02/13 12:00		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	MW20-15	RDL	MW20-16	RDL	QC Batch	MW20-16 Lab-Dup	RDL	QC Batch
Dissolved Molybdenum (Mo)	ug/L	<5.0	5.0	<10	10	6601030			
Dissolved Nickel (Ni)	ug/L	<5.0	5.0	<10	10	6601030			
Dissolved Selenium (Se)	ug/L	<0.50	0.50	<1.0	1.0	6601030			
Dissolved Silicon (Si)	ug/L	17100	500	28800	1000	6601030			
Dissolved Silver (Ag)	ug/L	<0.10	0.10	<0.20	0.20	6601030			
Dissolved Strontium (Sr)	ug/L	30700	5.0	50000	10	6601030			
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	<0.10	0.10	6601030			
Dissolved Tin (Sn)	ug/L	<25	25	<50	50	6601030			
Dissolved Titanium (Ti)	ug/L	<25	25	<50	50	6601030			
Dissolved Uranium (U)	ug/L	0.54	0.50	<1.0	1.0	6601030			
Dissolved Vanadium (V)	ug/L	<25	25	<50	50	6601030			
Dissolved Zinc (Zn)	ug/L	<25	25	<50	50	6601030			
Dissolved Zirconium (Zr)	ug/L	<0.50	0.50	<1.0	1.0	6601030			
Dissolved Calcium (Ca)	mg/L	150	0.25	80.9	0.50	6600208			
Dissolved Magnesium (Mg)	mg/L	92.4	0.25	269	0.50	6600208			
Dissolved Potassium (K)	mg/L	4.36	0.25	7.82	0.50	6600208			
Dissolved Sodium (Na)	mg/L	33.3	0.25	76.1	0.50	6600208			
Dissolved Sulphur (S)	mg/L	87	15	35	30	6600208			
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	6594793			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD680		MAD681			MAD681		
Sampling Date		2020/02/13 13:00		2020/02/13 14:00			2020/02/13 14:00		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	MW20-17	RDL	MW20-18	RDL	QC Batch	MW20-18 Lab-Dup	RDL	QC Batch
Calculated Parameters									
Total Ammonia (as NH3)	mg/L	0.064	0.061	0.19	0.061	6591789			
Dissolved Hardness (CaCO3)	mg/L	643	0.50	201	0.50	6600207			
Nitrate (NO3)	mg/L	<0.4	0.4	<0.4	0.4	6591790			
Sulphide (as H2S)	mg/L	<0.0020	0.0020	0.0020	0.0020	6606046			
Inorganics									
Total Ammonia-N	mg/L	0.053	0.050	0.15	0.050	6593663			
Fluoride (F-)	mg/L	0.22	0.10	0.54	0.10	6591661			
pH	pH	7.63		8.19		6591663			
Dissolved Sulphate (SO4)	mg/L	170	1.0	38	1.0	6592938	38	1.0	6592938
Total Sulphide	mg/L	<0.0018 (1)	0.0018	0.0019	0.0018	6606047			
WAD Cyanide (Free)	mg/L	<0.0010	0.0010	<0.0010	0.0010	6593160			
Dissolved Chloride (Cl-)	mg/L	360	4.0	43	1.0	6592937	43	1.0	6592937
Nitrite (N)	mg/L	<0.010	0.010	<0.010	0.010	6592978			
Nitrate (N)	mg/L	<0.10	0.10	<0.10	0.10	6592978			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	0.10	6592978			
Metals									
Dissolved Aluminum (Al)	ug/L	<15	15	8.3	6.0	6601030			
Dissolved Antimony (Sb)	ug/L	<2.5	2.5	<1.0	1.0	6601030			
Dissolved Arsenic (As)	ug/L	<0.50	0.50	0.89	0.20	6601030			
Dissolved Barium (Ba)	ug/L	134	5.0	92.1	2.0	6601030			
Dissolved Beryllium (Be)	ug/L	<0.50	0.50	<0.20	0.20	6601030			
Dissolved Bismuth (Bi)	ug/L	<5.0	5.0	<2.0	2.0	6601030			
Dissolved Boron (B)	ug/L	<250	250	<100	100	6601030			
Dissolved Cadmium (Cd)	ug/L	<0.050	0.050	<0.020	0.020	6601030			
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	<2.0	2.0	6601030			
Dissolved Cobalt (Co)	ug/L	1.0	1.0	<0.40	0.40	6601030			
Dissolved Copper (Cu)	ug/L	<1.0	1.0	0.49	0.40	6601030			
Dissolved Iron (Fe)	ug/L	<25	25	<10	10	6601030			
Dissolved Lead (Pb)	ug/L	<1.0	1.0	<0.40	0.40	6601030			
Dissolved Lithium (Li)	ug/L	15	10	8.9	4.0	6601030			
Dissolved Manganese (Mn)	ug/L	139	5.0	48.0	2.0	6601030			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD680		MAD681			MAD681		
Sampling Date		2020/02/13 13:00		2020/02/13 14:00			2020/02/13 14:00		
COC Number		757918-01-01		757918-01-01			757918-01-01		
	UNITS	MW20-17	RDL	MW20-18	RDL	QC Batch	MW20-18 Lab-Dup	RDL	QC Batch
Dissolved Molybdenum (Mo)	ug/L	<5.0	5.0	3.8	2.0	6601030			
Dissolved Nickel (Ni)	ug/L	<5.0	5.0	<2.0	2.0	6601030			
Dissolved Selenium (Se)	ug/L	<0.50	0.50	<0.20	0.20	6601030			
Dissolved Silicon (Si)	ug/L	13600	500	10700	200	6601030			
Dissolved Silver (Ag)	ug/L	<0.10	0.10	<0.040	0.040	6601030			
Dissolved Strontium (Sr)	ug/L	38100	5.0	12700	2.0	6601030			
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	<0.020	0.020	6601030			
Dissolved Tin (Sn)	ug/L	<25	25	<10	10	6601030			
Dissolved Titanium (Ti)	ug/L	<25	25	<10	10	6601030			
Dissolved Uranium (U)	ug/L	0.75	0.50	0.61	0.20	6601030			
Dissolved Vanadium (V)	ug/L	<25	25	<10	10	6601030			
Dissolved Zinc (Zn)	ug/L	<25	25	<10	10	6601030			
Dissolved Zirconium (Zr)	ug/L	<0.50	0.50	<0.20	0.20	6601030			
Dissolved Calcium (Ca)	mg/L	121	0.25	31.5	0.10	6600208			
Dissolved Magnesium (Mg)	mg/L	82.8	0.25	29.8	0.10	6600208			
Dissolved Potassium (K)	mg/L	5.35	0.25	7.00	0.10	6600208			
Dissolved Sodium (Na)	mg/L	91.9	0.25	11.1	0.10	6600208			
Dissolved Sulphur (S)	mg/L	54	15	14.0	6.0	6600208			
Mercury (Hg)	ug/L	<0.01	0.01	<0.01	0.01	6594793			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD683			MAD683		
Sampling Date		2020/02/13			2020/02/13		
COC Number		757918-01-01			757918-01-01		
	UNITS	DUP2	RDL	QC Batch	DUP2 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Total Ammonia (as NH3)	mg/L	0.12	0.061	6593749			
Dissolved Hardness (CaCO3)	mg/L	652	0.50	6601031			
Nitrate (NO3)	mg/L	<0.4	0.4	6593750			
Sulphide (as H2S)	mg/L	0.0085	0.0020	6596381			
Inorganics							
Total Ammonia-N	mg/L	0.10	0.050	6595252			
Fluoride (F-)	mg/L	0.24	0.10	6595659			
pH	pH	7.78		6595674			
Dissolved Sulphate (SO4)	mg/L	170	1.0	6595069			
Total Sulphide	mg/L	0.0080 (1)	0.0018	6606049			
WAD Cyanide (Free)	mg/L	<0.0010	0.0010	6597926	<0.0010	0.0010	6597926
Dissolved Chloride (Cl-)	mg/L	350	5.0	6595044			
Nitrite (N)	mg/L	<0.010	0.010	6594134			
Nitrate (N)	mg/L	<0.10	0.10	6594134			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	6594134			
Metals							
Dissolved Aluminum (Al)	ug/L	<30	30	6600982			
Dissolved Antimony (Sb)	ug/L	<5.0	5.0	6600982			
Dissolved Arsenic (As)	ug/L	<1.0	1.0	6600982			
Dissolved Barium (Ba)	ug/L	136	10	6600982			
Dissolved Beryllium (Be)	ug/L	<1.0	1.0	6600982			
Dissolved Bismuth (Bi)	ug/L	<10	10	6600982			
Dissolved Boron (B)	ug/L	<500	500	6600982			
Dissolved Cadmium (Cd)	ug/L	<0.10	0.10	6600982			
Dissolved Chromium (Cr)	ug/L	<10	10	6600982			
Dissolved Cobalt (Co)	ug/L	<2.0	2.0	6600982			
Dissolved Copper (Cu)	ug/L	<2.0	2.0	6600982			
Dissolved Iron (Fe)	ug/L	<50	50	6600982			
Dissolved Lead (Pb)	ug/L	<2.0	2.0	6600982			
Dissolved Lithium (Li)	ug/L	<20	20	6600982			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Sample pH <9, preservation incomplete. Due to volatility of analyte, a low bias in the results is likely.

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

BV Labs ID		MAD683			MAD683		
Sampling Date		2020/02/13			2020/02/13		
COC Number		757918-01-01			757918-01-01		
	UNITS	DUP2	RDL	QC Batch	DUP2 Lab-Dup	RDL	QC Batch
Dissolved Manganese (Mn)	ug/L	140	10	6600982			
Dissolved Molybdenum (Mo)	ug/L	<10	10	6600982			
Dissolved Nickel (Ni)	ug/L	<10	10	6600982			
Dissolved Selenium (Se)	ug/L	<1.0	1.0	6600982			
Dissolved Silicon (Si)	ug/L	13600	1000	6600982			
Dissolved Silver (Ag)	ug/L	<0.20	0.20	6600982			
Dissolved Strontium (Sr)	ug/L	35800	10	6600982			
Dissolved Thallium (Tl)	ug/L	<0.10	0.10	6600982			
Dissolved Tin (Sn)	ug/L	<50	50	6600982			
Dissolved Titanium (Ti)	ug/L	<50	50	6600982			
Dissolved Uranium (U)	ug/L	<1.0	1.0	6600982			
Dissolved Vanadium (V)	ug/L	<50	50	6600982			
Dissolved Zinc (Zn)	ug/L	<50	50	6600982			
Dissolved Zirconium (Zr)	ug/L	<1.0	1.0	6600982			
Dissolved Calcium (Ca)	mg/L	121	0.50	6601032			
Dissolved Magnesium (Mg)	mg/L	84.7	0.50	6601032			
Dissolved Potassium (K)	mg/L	5.44	0.50	6601032			
Dissolved Sodium (Na)	mg/L	92.5	0.50	6601032			
Dissolved Sulphur (S)	mg/L	50	30	6601032			
Mercury (Hg)	ug/L	<0.01	0.01	6594793	<0.01	0.01	6594793

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

CCME PAHS (WATER)

BV Labs ID		MAD678	MAD679		MAD680	MAD681		
Sampling Date		2020/02/13 11:00	2020/02/13 12:00		2020/02/13 13:00	2020/02/13 14:00		
COC Number		757918-01-01	757918-01-01		757918-01-01	757918-01-01		
	UNITS	MW20-15	MW20-16	QC Batch	MW20-17	MW20-18	RDL	QC Batch
Polyaromatic Hydrocarbons								
Benzo(a)pyrene Total Potency Equiv.	ug/L	<0.010	<0.010	6606045	<0.010	<0.010	0.010	6601661
Acenaphthene	ug/L	<0.10	<0.10	6601662	<0.10	<0.10	0.10	6601662
Acenaphthylene	ug/L	<0.10	<0.10	6601662	<0.10	<0.10	0.10	6601662
Acridine	ug/L	<0.040	<0.040	6601662	<0.040	<0.040	0.040	6601662
Anthracene	ug/L	<0.010	<0.010	6601662	<0.010	<0.010	0.010	6601662
Benzo(a)anthracene	ug/L	<0.0085	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
Benzo(b/j)fluoranthene	ug/L	<0.0085	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
Benzo(k)fluoranthene	ug/L	<0.0085	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
Benzo(g,h,i)perylene	ug/L	<0.0085	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
Benzo(c)phenanthrene	ug/L	<0.050	<0.050	6601662	<0.050	<0.050	0.050	6601662
Benzo(a)pyrene	ug/L	<0.0075	<0.0075	6601662	<0.0075	<0.0075	0.0075	6601662
Benzo(e)pyrene	ug/L	<0.050	<0.050	6601662	<0.050	<0.050	0.050	6601662
Chrysene	ug/L	0.015	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
Dibenzo(a,h)anthracene	ug/L	<0.0075	<0.0075	6601662	<0.0075	<0.0075	0.0075	6601662
Fluoranthene	ug/L	0.28	0.093	6601662	0.081	0.11	0.010	6601662
Fluorene	ug/L	<0.050	<0.050	6601662	<0.050	0.083	0.050	6601662
Indeno(1,2,3-cd)pyrene	ug/L	<0.0085	<0.0085	6601662	<0.0085	<0.0085	0.0085	6601662
1-Methylnaphthalene	ug/L	<0.10	0.12	6601662	<0.10	<0.10	0.10	6601662
2-Methylnaphthalene	ug/L	<0.10	0.19	6601662	<0.10	<0.10	0.10	6601662
Naphthalene	ug/L	<0.10	0.24	6601662	<0.10	<0.10	0.10	6601662
Phenanthrene	ug/L	0.40	0.18	6601662	0.32	0.49	0.050	6601662
Perylene	ug/L	<0.050	<0.050	6601662	<0.050	<0.050	0.050	6601662
Pyrene	ug/L	0.25	0.14	6601662	0.073	0.12	0.020	6601662
Quinoline	ug/L	<0.20	<0.20	6601662	<0.20	<0.20	0.20	6601662
Surrogate Recovery (%)								
D10-Anthracene	%	100	102	6601662	111	104		6601662
D14-Terphenyl	%	133 (1)	135 (1)	6601662	146 (1)	132 (1)		6601662
D8-Acenaphthylene	%	95	96	6601662	104	97		6601662
D8-Naphthalene	%	88	89	6601662	94	86		6601662

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME PAHS (WATER)

BV Labs ID		MAD681			MAD683		
Sampling Date		2020/02/13 14:00			2020/02/13		
COC Number		757918-01-01			757918-01-01		
	UNITS	MW20-18 Lab-Dup	RDL	QC Batch	DUP2	RDL	QC Batch
Polyaromatic Hydrocarbons							
Benzo(a)pyrene Total Potency Equiv.	ug/L				<0.010	0.010	6606048
Acenaphthene	ug/L	<0.10	0.10	6601662	<0.10	0.10	6601662
Acenaphthylene	ug/L	<0.10	0.10	6601662	<0.10	0.10	6601662
Acridine	ug/L	<0.040	0.040	6601662	<0.040	0.040	6601662
Anthracene	ug/L	<0.010	0.010	6601662	<0.010	0.010	6601662
Benzo(a)anthracene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
Benzo(b/j)fluoranthene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
Benzo(k)fluoranthene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
Benzo(g,h,i)perylene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
Benzo(c)phenanthrene	ug/L	<0.050	0.050	6601662	<0.050	0.050	6601662
Benzo(a)pyrene	ug/L	<0.0075	0.0075	6601662	<0.0075	0.0075	6601662
Benzo(e)pyrene	ug/L	<0.050	0.050	6601662	<0.050	0.050	6601662
Chrysene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
Dibenzo(a,h)anthracene	ug/L	<0.0075	0.0075	6601662	<0.0075	0.0075	6601662
Fluoranthene	ug/L	0.14	0.010	6601662	0.079	0.010	6601662
Fluorene	ug/L	0.079	0.050	6601662	<0.050	0.050	6601662
Indeno(1,2,3-cd)pyrene	ug/L	<0.0085	0.0085	6601662	<0.0085	0.0085	6601662
1-Methylnaphthalene	ug/L	<0.10	0.10	6601662	<0.10	0.10	6601662
2-Methylnaphthalene	ug/L	<0.10	0.10	6601662	<0.10	0.10	6601662
Naphthalene	ug/L	<0.10	0.10	6601662	<0.10	0.10	6601662
Phenanthrene	ug/L	0.55	0.050	6601662	0.29	0.050	6601662
Perylene	ug/L	<0.050	0.050	6601662	<0.050	0.050	6601662
Pyrene	ug/L	0.15	0.020	6601662	0.067	0.020	6601662
Quinoline	ug/L	<0.20	0.20	6601662	<0.20	0.20	6601662
Surrogate Recovery (%)							
D10-Anthracene	%	104		6601662	99		6601662
D14-Terphenyl	%	134 (1)		6601662	131 (1)		6601662
D8-Acenaphthylene	%	96		6601662	92		6601662
D8-Naphthalene	%	85		6601662	85		6601662

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

CCME VOCS & F1-F4 (WATER)

BV Labs ID		MAD678			MAD678			MAD679		
Sampling Date		2020/02/13 11:00			2020/02/13 11:00			2020/02/13 12:00		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	MW20-15	RDL	QC Batch	MW20-15 Lab-Dup	RDL	QC Batch	MW20-16	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	6591603				<0.50	0.50	6591603
Volatile Organics										
Acetone (2-Propanone)	ug/L	<10	10	6581205	<10	10	6581205	<10	10	6581205
Benzene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	0.54	0.20	6581205
Bromodichloromethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Bromoform	ug/L	<1.0	1.0	6581205	<1.0	1.0	6581205	<1.0	1.0	6581205
Bromomethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Carbon Tetrachloride	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Chlorobenzene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Chloroform	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Dibromochloromethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,2-Dichlorobenzene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,3-Dichlorobenzene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,4-Dichlorobenzene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	6581205	<1.0	1.0	6581205	<1.0	1.0	6581205
1,1-Dichloroethane	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
1,2-Dichloroethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,1-Dichloroethylene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,2-Dichloropropane	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	6581205	<0.30	0.30	6581205	<0.30	0.30	6581205
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	6581205	<0.40	0.40	6581205	<0.40	0.40	6581205
Ethylbenzene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Ethylene Dibromide	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Hexane	ug/L	<1.0	1.0	6581205	<1.0	1.0	6581205	<1.0	1.0	6581205
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	6581205	<2.0	2.0	6581205	<2.0	2.0	6581205
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	6581205	<10	10	6581205	<10	10	6581205
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	6581205	<5.0	5.0	6581205	<5.0	5.0	6581205
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Styrene	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		MAD678			MAD678			MAD679		
Sampling Date		2020/02/13 11:00			2020/02/13 11:00			2020/02/13 12:00		
COC Number		757918-01-01			757918-01-01			757918-01-01		
	UNITS	MW20-15	RDL	QC Batch	MW20-15 Lab-Dup	RDL	QC Batch	MW20-16	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Tetrachloroethylene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Toluene	ug/L	0.52	0.20	6581205	0.49	0.20	6581205	2.4	0.20	6581205
1,1,1-Trichloroethane	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
1,1,2-Trichloroethane	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Trichloroethylene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	6581205	<0.50	0.50	6581205	<0.50	0.50	6581205
Vinyl Chloride	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	<0.20	0.20	6581205
p+m-Xylene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	0.51	0.20	6581205
o-Xylene	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	0.33	0.20	6581205
Total Xylenes	ug/L	<0.20	0.20	6581205	<0.20	0.20	6581205	0.83	0.20	6581205
F1 (C6-C10)	ug/L	<25	25	6581205	<25	25	6581205	<25	25	6581205
F1 (C6-C10) - BTEX	ug/L	<25	25	6581205	<25	25	6581205	<25	25	6581205
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	6596134				<100	100	6596134
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	6596134				<200	200	6596134
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	6596134				<200	200	6596134
Reached Baseline at C50	ug/L	Yes		6596134				Yes		6596134
Surrogate Recovery (%)										
o-Terphenyl	%	96		6596134				80		6596134
4-Bromofluorobenzene	%	99		6581205	99		6581205	94		6581205
D4-1,2-Dichloroethane	%	103		6581205	102		6581205	97		6581205
D8-Toluene	%	101		6581205	101		6581205	99		6581205

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

CCME VOCS & F1-F4 (WATER)

BV Labs ID		MAD679			MAD680	MAD681		MAD683		
Sampling Date		2020/02/13 12:00			2020/02/13 13:00	2020/02/13 14:00		2020/02/13		
COC Number		757918-01-01			757918-01-01	757918-01-01		757918-01-01		
	UNITS	MW20-16 Lab-Dup	RDL	QC Batch	MW20-17	MW20-18	QC Batch	DUP2	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/L				<0.50	<0.50	6591603	<0.50	0.50	6592941
Volatile Organics										
Acetone (2-Propanone)	ug/L				20	16	6581205	19	10	6594867
Benzene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Bromodichloromethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Bromoform	ug/L				<1.0	<1.0	6581205	<1.0	1.0	6594867
Bromomethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Carbon Tetrachloride	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Chlorobenzene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Chloroform	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Dibromochloromethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,2-Dichlorobenzene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,3-Dichlorobenzene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,4-Dichlorobenzene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Dichlorodifluoromethane (FREON 12)	ug/L				<1.0	<1.0	6581205	<1.0	1.0	6594867
1,1-Dichloroethane	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
1,2-Dichloroethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,1-Dichloroethylene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
cis-1,2-Dichloroethylene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
trans-1,2-Dichloroethylene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,2-Dichloropropane	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
cis-1,3-Dichloropropene	ug/L				<0.30	<0.30	6581205	<0.30	0.30	6594867
trans-1,3-Dichloropropene	ug/L				<0.40	<0.40	6581205	<0.40	0.40	6594867
Ethylbenzene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Ethylene Dibromide	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Hexane	ug/L				<1.0	<1.0	6581205	<1.0	1.0	6594867
Methylene Chloride(Dichloromethane)	ug/L				<2.0	<2.0	6581205	<2.0	2.0	6594867
Methyl Ethyl Ketone (2-Butanone)	ug/L				<10	<10	6581205	<10	10	6594867
Methyl Isobutyl Ketone	ug/L				<5.0	<5.0	6581205	<5.0	5.0	6594867
Methyl t-butyl ether (MTBE)	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Styrene	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
1,1,1,2-Tetrachloroethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

CCME VOCS & F1-F4 (WATER)

BV Labs ID		MAD679			MAD680	MAD681		MAD683		
Sampling Date		2020/02/13 12:00			2020/02/13 13:00	2020/02/13 14:00		2020/02/13		
COC Number		757918-01-01			757918-01-01	757918-01-01		757918-01-01		
	UNITS	MW20-16 Lab-Dup	RDL	QC Batch	MW20-17	MW20-18	QC Batch	DUP2	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Tetrachloroethylene	ug/L				<0.20	11	6581205	<0.20	0.20	6594867
Toluene	ug/L				0.23	<0.20	6581205	<0.20	0.20	6594867
1,1,1-Trichloroethane	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
1,1,2-Trichloroethane	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Trichloroethylene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Trichlorofluoromethane (FREON 11)	ug/L				<0.50	<0.50	6581205	<0.50	0.50	6594867
Vinyl Chloride	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
p+m-Xylene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
o-Xylene	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
Total Xylenes	ug/L				<0.20	<0.20	6581205	<0.20	0.20	6594867
F1 (C6-C10)	ug/L				<25	<25	6581205	<25	25	6594867
F1 (C6-C10) - BTEX	ug/L				<25	<25	6581205	<25	25	6594867
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	6596134	<100	<100	6596134	<100	100	6596134
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	6596134	<200	<200	6596134	<200	200	6596134
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	6596134	<200	<200	6596134	<200	200	6596134
Reached Baseline at C50	ug/L	Yes		6596134	Yes	Yes	6596134	Yes		6596134
Surrogate Recovery (%)										
o-Terphenyl	%	79		6596134	100	109	6596134	99		6596134
4-Bromofluorobenzene	%				94	94	6581205	98		6594867
D4-1,2-Dichloroethane	%				100	97	6581205	103		6594867
D8-Toluene	%				98	98	6581205	102		6594867

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

PETROLEUM HYDROCARBONS (CCME)

BV Labs ID		MAD682		
Sampling Date		2020/02/13 14:10		
COC Number		757918-01-01		
	UNITS	TRIP BLANK	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/L	<0.20	0.20	6596380
Toluene	ug/L	<0.20	0.20	6596380
Ethylbenzene	ug/L	<0.20	0.20	6596380
o-Xylene	ug/L	<0.20	0.20	6596380
p+m-Xylene	ug/L	<0.40	0.40	6596380
Total Xylenes	ug/L	<0.40	0.40	6596380
F1 (C6-C10)	ug/L	<25	25	6596380
F1 (C6-C10) - BTEX	ug/L	<25	25	6596380
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	101		6596380
4-Bromofluorobenzene	%	100		6596380
D10-Ethylbenzene	%	121		6596380
D4-1,2-Dichloroethane	%	96		6596380

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: MAD678
Sample ID: MW20-15
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6591603	N/A	2020/02/21	Automated Statchk
Chloride by Automated Colourimetry	KONE	6592937	N/A	2020/02/19	Alina Dobreanu
Free (WAD) Cyanide	SKAL/CN	6593160	N/A	2020/02/18	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li
Fluoride	ISE	6591661	2020/02/18	2020/02/18	Surinder Rai
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr
Sulphide (as H2S)	CALC	6606046	N/A	2020/02/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6600207	N/A	2020/02/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6600208	N/A	2020/02/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6601030	N/A	2020/02/20	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6606045	N/A	2020/02/22	Automated Statchk
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphide	SPEC	6606047	N/A	2020/02/19	Kathleen Dalton
Total Ammonia (as NH3)	CALC	6591789	N/A	2020/02/19	Automated Statchk
Total Ammonia-N	LACH/NH4	6593663	N/A	2020/02/19	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6592978	N/A	2020/02/18	Chandra Nandlal
Nitrate (as NO3)	CALC	6591790	N/A	2020/02/18	Automated Statchk
pH	AT	6591663	2020/02/18	2020/02/18	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6592938	N/A	2020/02/19	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6581205	N/A	2020/02/20	Rebecca McClean

BV Labs ID: MAD678 Dup
Sample ID: MW20-15
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6581205	N/A	2020/02/20	Rebecca McClean

BV Labs ID: MAD679
Sample ID: MW20-16
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6591603	N/A	2020/02/21	Automated Statchk
Chloride by Automated Colourimetry	KONE	6592937	N/A	2020/02/19	Alina Dobreanu
Free (WAD) Cyanide	SKAL/CN	6593160	N/A	2020/02/18	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li
Fluoride	ISE	6591661	2020/02/18	2020/02/18	Surinder Rai
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr
Sulphide (as H2S)	CALC	6606046	N/A	2020/02/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6600207	N/A	2020/02/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6600208	N/A	2020/02/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6601030	N/A	2020/02/20	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6606045	N/A	2020/02/22	Automated Statchk

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: MAD679
Sample ID: MW20-16
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphide	SPEC	6606047	N/A	2020/02/19	Kathleen Dalton
Total Ammonia (as NH3)	CALC	6591789	N/A	2020/02/19	Automated Statchk
Total Ammonia-N	LACH/NH4	6593663	N/A	2020/02/19	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6592978	N/A	2020/02/18	Chandra Nandlal
Nitrate (as NO3)	CALC	6591790	N/A	2020/02/18	Automated Statchk
pH	AT	6591663	2020/02/18	2020/02/18	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6592938	N/A	2020/02/19	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6581205	N/A	2020/02/19	Rebecca McClean

BV Labs ID: MAD679 Dup
Sample ID: MW20-16
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	6593160	N/A	2020/02/18	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li

BV Labs ID: MAD680
Sample ID: MW20-17
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6591603	N/A	2020/02/21	Automated Statchk
Chloride by Automated Colourimetry	KONE	6592937	N/A	2020/02/19	Alina Dobreanu
Free (WAD) Cyanide	SKAL/CN	6593160	N/A	2020/02/18	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li
Fluoride	ISE	6591661	2020/02/18	2020/02/18	Surinder Rai
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr
Sulphide (as H2S)	CALC	6606046	N/A	2020/02/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6600207	N/A	2020/02/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6600208	N/A	2020/02/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6601030	N/A	2020/02/20	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6601661	N/A	2020/02/22	Automated Statchk
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphide	SPEC	6606047	N/A	2020/02/19	Kathleen Dalton
Total Ammonia (as NH3)	CALC	6591789	N/A	2020/02/19	Automated Statchk
Total Ammonia-N	LACH/NH4	6593663	N/A	2020/02/19	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6592978	N/A	2020/02/18	Chandra Nandlal
Nitrate (as NO3)	CALC	6591790	N/A	2020/02/18	Automated Statchk
pH	AT	6591663	2020/02/18	2020/02/18	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6592938	N/A	2020/02/19	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6581205	N/A	2020/02/19	Rebecca McClean

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: MAD681
Sample ID: MW20-18
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6591603	N/A	2020/02/21	Automated Statchk
Chloride by Automated Colourimetry	KONE	6592937	N/A	2020/02/19	Alina Dobreanu
Free (WAD) Cyanide	SKAL/CN	6593160	N/A	2020/02/18	Gnana Thomas
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li
Fluoride	ISE	6591661	2020/02/18	2020/02/18	Surinder Rai
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr
Sulphide (as H2S)	CALC	6606046	N/A	2020/02/20	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6600207	N/A	2020/02/20	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6600208	N/A	2020/02/20	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6601030	N/A	2020/02/20	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6601661	N/A	2020/02/22	Automated Statchk
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphide	SPEC	6606047	N/A	2020/02/19	Kathleen Dalton
Total Ammonia (as NH3)	CALC	6591789	N/A	2020/02/19	Automated Statchk
Total Ammonia-N	LACH/NH4	6593663	N/A	2020/02/19	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6592978	N/A	2020/02/18	Chandra Nandlal
Nitrate (as NO3)	CALC	6591790	N/A	2020/02/18	Automated Statchk
pH	AT	6591663	2020/02/18	2020/02/18	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6592938	N/A	2020/02/19	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6581205	N/A	2020/02/19	Rebecca McClean

BV Labs ID: MAD681 Dup
Sample ID: MW20-18
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	6592937	N/A	2020/02/19	Alina Dobreanu
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphate by Automated Colourimetry	KONE	6592938	N/A	2020/02/19	Deonarine Ramnarine

BV Labs ID: MAD682
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	6596380	N/A	2020/02/20	Georgeta Rusu

BV Labs ID: MAD683
Sample ID: DUP2
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	6592941	N/A	2020/02/21	Automated Statchk
Chloride by Automated Colourimetry	KONE	6595044	N/A	2020/02/20	Deonarine Ramnarine
Free (WAD) Cyanide	SKAL/CN	6597926	N/A	2020/02/20	Gnana Thomas

BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

TEST SUMMARY

BV Labs ID: MAD683
Sample ID: DUP2
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	6596134	2020/02/19	2020/02/21	(Kent) Maolin Li
Fluoride	ISE	6595659	2020/02/19	2020/02/20	Surinder Rai
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr
Sulphide (as H2S)	CALC	6596381	N/A	2020/02/21	Automated Statchk
Hardness (calculated as CaCO3)	CALC	6601031	N/A	2020/02/21	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	6601032	N/A	2020/02/21	Automated Statchk
Elements by CRC ICPMS (dissolved)	ICP/MS	6600982	N/A	2020/02/21	Andrew An
B[a]P Total Potency Equivalent	GC/MS	6606048	N/A	2020/02/22	Automated Statchk
PAH in Water by GC/MS	GC/MS	6601662	2020/02/21	2020/02/21	Nora Kazemian
Sulphide	SPEC	6606049	N/A	2020/02/20	Kathleen Dalton
Total Ammonia (as NH3)	CALC	6593749	N/A	2020/02/19	Automated Statchk
Total Ammonia-N	LACH/NH4	6595252	N/A	2020/02/19	Mazin Wakai
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	6594134	N/A	2020/02/19	Chandra Nandlal
Nitrate (as NO3)	CALC	6593750	N/A	2020/02/19	Automated Statchk
pH	AT	6595674	2020/02/19	2020/02/20	Surinder Rai
Sulphate by Automated Colourimetry	KONE	6595069	N/A	2020/02/20	Deonarine Ramnarine
Volatile Organic Compounds and F1 PHCs	GC/MSFD	6594867	N/A	2020/02/20	Anna Gabrielyan

BV Labs ID: MAD683 Dup
Sample ID: DUP2
Matrix: Water

Collected: 2020/02/13
Shipped:
Received: 2020/02/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	6597926	N/A	2020/02/20	Gnana Thomas
Mercury (low level)	CV/AA	6594793	2020/02/19	2020/02/19	Medhat Nasr

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

GENERAL COMMENTS

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

Package 1	1.0°C

CCME GROUNDWATER INORGANICS PACKAGE (WATER)

Sample MAD678 [MW20-15] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.
Sample MAD679 [MW20-16] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.
Sample MAD680 [MW20-17] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.
Sample MAD681 [MW20-18] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.
Sample MAD683 [DUP2] Elements by CRC ICPMS (dissolved): RDL raised due to concentration over linear range, sample dilution required.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6581205	RSC	Matrix Spike [MAD678-01]	4-Bromofluorobenzene	2020/02/19		99	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		96	%	70 - 130
			D8-Toluene	2020/02/19		105	%	70 - 130
			Acetone (2-Propanone)	2020/02/19		91	%	60 - 140
			Benzene	2020/02/19		89	%	70 - 130
			Bromodichloromethane	2020/02/19		84	%	70 - 130
			Bromoform	2020/02/19		86	%	70 - 130
			Bromomethane	2020/02/19		85	%	60 - 140
			Carbon Tetrachloride	2020/02/19		88	%	70 - 130
			Chlorobenzene	2020/02/19		86	%	70 - 130
			Chloroform	2020/02/19		84	%	70 - 130
			Dibromochloromethane	2020/02/19		89	%	70 - 130
			1,2-Dichlorobenzene	2020/02/19		86	%	70 - 130
			1,3-Dichlorobenzene	2020/02/19		90	%	70 - 130
			1,4-Dichlorobenzene	2020/02/19		96	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/19		92	%	60 - 140
			1,1-Dichloroethane	2020/02/19		88	%	70 - 130
			1,2-Dichloroethane	2020/02/19		87	%	70 - 130
			1,1-Dichloroethylene	2020/02/19		97	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/19		82	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/19		96	%	70 - 130
			1,2-Dichloropropane	2020/02/19		82	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/19		79	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/19		85	%	70 - 130
			Ethylbenzene	2020/02/19		85	%	70 - 130
			Ethylene Dibromide	2020/02/19		87	%	70 - 130
			Hexane	2020/02/19		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/19		90	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/19		83	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/19		83	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/19		79	%	70 - 130
			Styrene	2020/02/19		84	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/19		93	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/19		87	%	70 - 130
			Tetrachloroethylene	2020/02/19		86	%	70 - 130
			Toluene	2020/02/19		86	%	70 - 130
			1,1,1-Trichloroethane	2020/02/19		89	%	70 - 130
			1,1,2-Trichloroethane	2020/02/19		90	%	70 - 130
			Trichloroethylene	2020/02/19		92	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/19		96	%	70 - 130
			Vinyl Chloride	2020/02/19		112	%	70 - 130
			p+m-Xylene	2020/02/19		92	%	70 - 130
			o-Xylene	2020/02/19		87	%	70 - 130
			F1 (C6-C10)	2020/02/19		96	%	60 - 140
6581205	RSC	Spiked Blank	4-Bromofluorobenzene	2020/02/19		101	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		99	%	70 - 130
			D8-Toluene	2020/02/19		102	%	70 - 130
			Acetone (2-Propanone)	2020/02/19		101	%	60 - 140
			Benzene	2020/02/19		93	%	70 - 130
			Bromodichloromethane	2020/02/19		92	%	70 - 130
			Bromoform	2020/02/19		99	%	70 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromomethane	2020/02/19		88	%	60 - 140
			Carbon Tetrachloride	2020/02/19		91	%	70 - 130
			Chlorobenzene	2020/02/19		93	%	70 - 130
			Chloroform	2020/02/19		89	%	70 - 130
			Dibromochloromethane	2020/02/19		99	%	70 - 130
			1,2-Dichlorobenzene	2020/02/19		93	%	70 - 130
			1,3-Dichlorobenzene	2020/02/19		94	%	70 - 130
			1,4-Dichlorobenzene	2020/02/19		100	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/19		95	%	60 - 140
			1,1-Dichloroethane	2020/02/19		92	%	70 - 130
			1,2-Dichloroethane	2020/02/19		95	%	70 - 130
			1,1-Dichloroethylene	2020/02/19		99	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/19		87	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/19		98	%	70 - 130
			1,2-Dichloropropane	2020/02/19		89	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/19		85	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/19		88	%	70 - 130
			Ethylbenzene	2020/02/19		89	%	70 - 130
			Ethylene Dibromide	2020/02/19		96	%	70 - 130
			Hexane	2020/02/19		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/19		96	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/19		95	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/19		99	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/19		85	%	70 - 130
			Styrene	2020/02/19		92	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/19		101	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/19		101	%	70 - 130
			Tetrachloroethylene	2020/02/19		89	%	70 - 130
			Toluene	2020/02/19		90	%	70 - 130
			1,1,1-Trichloroethane	2020/02/19		92	%	70 - 130
			1,1,2-Trichloroethane	2020/02/19		98	%	70 - 130
			Trichloroethylene	2020/02/19		97	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/19		97	%	70 - 130
			Vinyl Chloride	2020/02/19		103	%	70 - 130
			p+m-Xylene	2020/02/19		96	%	70 - 130
			o-Xylene	2020/02/19		93	%	70 - 130
			F1 (C6-C10)	2020/02/19		91	%	60 - 140
6581205	RSC	Method Blank	4-Bromofluorobenzene	2020/02/19		97	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		94	%	70 - 130
			D8-Toluene	2020/02/19		99	%	70 - 130
			Acetone (2-Propanone)	2020/02/19	<10		ug/L	
			Benzene	2020/02/19	<0.20		ug/L	
			Bromodichloromethane	2020/02/19	<0.50		ug/L	
			Bromoform	2020/02/19	<1.0		ug/L	
			Bromomethane	2020/02/19	<0.50		ug/L	
			Carbon Tetrachloride	2020/02/19	<0.20		ug/L	
			Chlorobenzene	2020/02/19	<0.20		ug/L	
			Chloroform	2020/02/19	<0.20		ug/L	
			Dibromochloromethane	2020/02/19	<0.50		ug/L	
			1,2-Dichlorobenzene	2020/02/19	<0.50		ug/L	
			1,3-Dichlorobenzene	2020/02/19	<0.50		ug/L	
			1,4-Dichlorobenzene	2020/02/19	<0.50		ug/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dichlorodifluoromethane (FREON 12)	2020/02/19	<1.0		ug/L	
			1,1-Dichloroethane	2020/02/19	<0.20		ug/L	
			1,2-Dichloroethane	2020/02/19	<0.50		ug/L	
			1,1-Dichloroethylene	2020/02/19	<0.20		ug/L	
			cis-1,2-Dichloroethylene	2020/02/19	<0.50		ug/L	
			trans-1,2-Dichloroethylene	2020/02/19	<0.50		ug/L	
			1,2-Dichloropropane	2020/02/19	<0.20		ug/L	
			cis-1,3-Dichloropropene	2020/02/19	<0.30		ug/L	
			trans-1,3-Dichloropropene	2020/02/19	<0.40		ug/L	
			Ethylbenzene	2020/02/19	<0.20		ug/L	
			Ethylene Dibromide	2020/02/19	<0.20		ug/L	
			Hexane	2020/02/19	<1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2020/02/19	<2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2020/02/19	<10		ug/L	
			Methyl Isobutyl Ketone	2020/02/19	<5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2020/02/19	<0.50		ug/L	
			Styrene	2020/02/19	<0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2020/02/19	<0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2020/02/19	<0.50		ug/L	
			Tetrachloroethylene	2020/02/19	<0.20		ug/L	
			Toluene	2020/02/19	<0.20		ug/L	
			1,1,1-Trichloroethane	2020/02/19	<0.20		ug/L	
			1,1,2-Trichloroethane	2020/02/19	<0.50		ug/L	
			Trichloroethylene	2020/02/19	<0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2020/02/19	<0.50		ug/L	
			Vinyl Chloride	2020/02/19	<0.20		ug/L	
			p+m-Xylene	2020/02/19	<0.20		ug/L	
			o-Xylene	2020/02/19	<0.20		ug/L	
			Total Xylenes	2020/02/19	<0.20		ug/L	
			F1 (C6-C10)	2020/02/19	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/19	<25		ug/L	
6581205	RSC	RPD [MAD678-01]	Acetone (2-Propanone)	2020/02/20	NC		%	30
			Benzene	2020/02/20	NC		%	30
			Bromodichloromethane	2020/02/20	NC		%	30
			Bromoform	2020/02/20	NC		%	30
			Bromomethane	2020/02/20	NC		%	30
			Carbon Tetrachloride	2020/02/20	NC		%	30
			Chlorobenzene	2020/02/20	NC		%	30
			Chloroform	2020/02/20	NC		%	30
			Dibromochloromethane	2020/02/20	NC		%	30
			1,2-Dichlorobenzene	2020/02/20	NC		%	30
			1,3-Dichlorobenzene	2020/02/20	NC		%	30
			1,4-Dichlorobenzene	2020/02/20	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2020/02/20	NC		%	30
			1,1-Dichloroethane	2020/02/20	NC		%	30
			1,2-Dichloroethane	2020/02/20	NC		%	30
			1,1-Dichloroethylene	2020/02/20	NC		%	30
			cis-1,2-Dichloroethylene	2020/02/20	NC		%	30
			trans-1,2-Dichloroethylene	2020/02/20	NC		%	30
			1,2-Dichloropropane	2020/02/20	NC		%	30
			cis-1,3-Dichloropropene	2020/02/20	NC		%	30
			trans-1,3-Dichloropropene	2020/02/20	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Ethylbenzene	2020/02/20	NC		%	30
			Ethylene Dibromide	2020/02/20	NC		%	30
			Hexane	2020/02/20	NC		%	30
			Methylene Chloride(Dichloromethane)	2020/02/20	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2020/02/20	NC		%	30
			Methyl Isobutyl Ketone	2020/02/20	NC		%	30
			Methyl t-butyl ether (MTBE)	2020/02/20	NC		%	30
			Styrene	2020/02/20	NC		%	30
			1,1,1,2-Tetrachloroethane	2020/02/20	NC		%	30
			1,1,2,2-Tetrachloroethane	2020/02/20	NC		%	30
			Tetrachloroethylene	2020/02/20	NC		%	30
			Toluene	2020/02/20	5.0		%	30
			1,1,1-Trichloroethane	2020/02/20	NC		%	30
			1,1,2-Trichloroethane	2020/02/20	NC		%	30
			Trichloroethylene	2020/02/20	NC		%	30
			Trichlorofluoromethane (FREON 11)	2020/02/20	NC		%	30
			Vinyl Chloride	2020/02/20	NC		%	30
			p+m-Xylene	2020/02/20	NC		%	30
			o-Xylene	2020/02/20	NC		%	30
			Total Xylenes	2020/02/20	NC		%	30
			F1 (C6-C10)	2020/02/20	NC		%	30
			F1 (C6-C10) - BTEX	2020/02/20	NC		%	30
6591661	SAU	Matrix Spike	Fluoride (F-)	2020/02/18		99	%	80 - 120
6591661	SAU	Spiked Blank	Fluoride (F-)	2020/02/18		99	%	80 - 120
6591661	SAU	Method Blank	Fluoride (F-)	2020/02/18	<0.10		mg/L	
6591661	SAU	RPD	Fluoride (F-)	2020/02/18	3.4		%	20
6591663	SAU	Spiked Blank	pH	2020/02/18		102	%	98 - 103
6591663	SAU	RPD	pH	2020/02/18	0.71		%	N/A
6592937	ADB	Matrix Spike [MAD681-04]	Dissolved Chloride (Cl-)	2020/02/19		NC	%	80 - 120
6592937	ADB	Spiked Blank	Dissolved Chloride (Cl-)	2020/02/19		103	%	80 - 120
6592937	ADB	Method Blank	Dissolved Chloride (Cl-)	2020/02/19	<1.0		mg/L	
6592937	ADB	RPD [MAD681-04]	Dissolved Chloride (Cl-)	2020/02/19	0.15		%	20
6592938	DRM	Matrix Spike [MAD681-04]	Dissolved Sulphate (SO4)	2020/02/19		NC	%	75 - 125
6592938	DRM	Spiked Blank	Dissolved Sulphate (SO4)	2020/02/19		103	%	80 - 120
6592938	DRM	Method Blank	Dissolved Sulphate (SO4)	2020/02/19	<1.0		mg/L	
6592938	DRM	RPD [MAD681-04]	Dissolved Sulphate (SO4)	2020/02/19	0.27		%	20
6592978	C_N	Matrix Spike	Nitrite (N)	2020/02/18		105	%	80 - 120
			Nitrate (N)	2020/02/18		104	%	80 - 120
6592978	C_N	Spiked Blank	Nitrite (N)	2020/02/18		99	%	80 - 120
			Nitrate (N)	2020/02/18		102	%	80 - 120
6592978	C_N	Method Blank	Nitrite (N)	2020/02/18	<0.010		mg/L	
			Nitrate (N)	2020/02/18	<0.10		mg/L	
6592978	C_N	RPD	Nitrite (N)	2020/02/18	NC		%	20
			Nitrate (N)	2020/02/18	0.61		%	20
6593160	GTO	Matrix Spike [MAD679-05]	WAD Cyanide (Free)	2020/02/18		100	%	80 - 120
6593160	GTO	Spiked Blank	WAD Cyanide (Free)	2020/02/18		101	%	80 - 120
6593160	GTO	Method Blank	WAD Cyanide (Free)	2020/02/18	<0.0010		mg/L	
6593160	GTO	RPD [MAD679-05]	WAD Cyanide (Free)	2020/02/18	NC		%	20
6593663	MT4	Matrix Spike	Total Ammonia-N	2020/02/19		97	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6593663	MT4	Spiked Blank	Total Ammonia-N	2020/02/19		99	%	80 - 120
6593663	MT4	Method Blank	Total Ammonia-N	2020/02/19	<0.050		mg/L	
6593663	MT4	RPD	Total Ammonia-N	2020/02/19	NC		%	20
6594134	C_N	Matrix Spike	Nitrite (N)	2020/02/19		107	%	80 - 120
			Nitrate (N)	2020/02/19		96	%	80 - 120
6594134	C_N	Spiked Blank	Nitrite (N)	2020/02/19		100	%	80 - 120
			Nitrate (N)	2020/02/19		101	%	80 - 120
6594134	C_N	Method Blank	Nitrite (N)	2020/02/19	<0.010		mg/L	
			Nitrate (N)	2020/02/19	<0.10		mg/L	
6594134	C_N	RPD	Nitrite (N)	2020/02/19	0.88		%	20
			Nitrate (N)	2020/02/19	0.17		%	20
6594793	MEN	Matrix Spike [MAD683-06]	Mercury (Hg)	2020/02/19		99	%	75 - 125
6594793	MEN	Spiked Blank	Mercury (Hg)	2020/02/19		100	%	80 - 120
6594793	MEN	Method Blank	Mercury (Hg)	2020/02/19	<0.01		ug/L	
6594793	MEN	RPD [MAD683-06]	Mercury (Hg)	2020/02/19	NC		%	20
6594867	AYA	Matrix Spike	4-Bromofluorobenzene	2020/02/20		101	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/20		104	%	70 - 130
			D8-Toluene	2020/02/20		101	%	70 - 130
			Acetone (2-Propanone)	2020/02/20		95	%	60 - 140
			Benzene	2020/02/20		86	%	70 - 130
			Bromodichloromethane	2020/02/20		84	%	70 - 130
			Bromoform	2020/02/20		92	%	70 - 130
			Bromomethane	2020/02/20		73	%	60 - 140
			Carbon Tetrachloride	2020/02/20		82	%	70 - 130
			Chlorobenzene	2020/02/20		83	%	70 - 130
			Chloroform	2020/02/20		81	%	70 - 130
			Dibromochloromethane	2020/02/20		91	%	70 - 130
			1,2-Dichlorobenzene	2020/02/20		82	%	70 - 130
			1,3-Dichlorobenzene	2020/02/20		83	%	70 - 130
			1,4-Dichlorobenzene	2020/02/20		88	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/20		74	%	60 - 140
			1,1-Dichloroethane	2020/02/20		86	%	70 - 130
			1,2-Dichloroethane	2020/02/20		93	%	70 - 130
			1,1-Dichloroethylene	2020/02/20		89	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/20		80	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/20		84	%	70 - 130
			1,2-Dichloropropane	2020/02/20		84	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/20		88	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/20		93	%	70 - 130
			Ethylbenzene	2020/02/20		82	%	70 - 130
			Ethylene Dibromide	2020/02/20		92	%	70 - 130
			Hexane	2020/02/20		87	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/20		80	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/20		111	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/20		102	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/20		82	%	70 - 130
			Styrene	2020/02/20		83	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/20		89	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/20		93	%	70 - 130
			Tetrachloroethylene	2020/02/20		78	%	70 - 130
			Toluene	2020/02/20		79	%	70 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,1,1-Trichloroethane	2020/02/20		84	%	70 - 130
			1,1,2-Trichloroethane	2020/02/20		94	%	70 - 130
			Trichloroethylene	2020/02/20		85	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/20		86	%	70 - 130
			Vinyl Chloride	2020/02/20		82	%	70 - 130
			p+m-Xylene	2020/02/20		87	%	70 - 130
			o-Xylene	2020/02/20		84	%	70 - 130
			F1 (C6-C10)	2020/02/20		78	%	60 - 140
6594867	AYA	Spiked Blank	4-Bromofluorobenzene	2020/02/20		100	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/20		101	%	70 - 130
			D8-Toluene	2020/02/20		103	%	70 - 130
			Acetone (2-Propanone)	2020/02/20		96	%	60 - 140
			Benzene	2020/02/20		94	%	70 - 130
			Bromodichloromethane	2020/02/20		90	%	70 - 130
			Bromoform	2020/02/20		97	%	70 - 130
			Bromomethane	2020/02/20		84	%	60 - 140
			Carbon Tetrachloride	2020/02/20		90	%	70 - 130
			Chlorobenzene	2020/02/20		91	%	70 - 130
			Chloroform	2020/02/20		87	%	70 - 130
			Dibromochloromethane	2020/02/20		99	%	70 - 130
			1,2-Dichlorobenzene	2020/02/20		91	%	70 - 130
			1,3-Dichlorobenzene	2020/02/20		94	%	70 - 130
			1,4-Dichlorobenzene	2020/02/20		99	%	70 - 130
			Dichlorodifluoromethane (FREON 12)	2020/02/20		87	%	60 - 140
			1,1-Dichloroethane	2020/02/20		94	%	70 - 130
			1,2-Dichloroethane	2020/02/20		97	%	70 - 130
			1,1-Dichloroethylene	2020/02/20		100	%	70 - 130
			cis-1,2-Dichloroethylene	2020/02/20		87	%	70 - 130
			trans-1,2-Dichloroethylene	2020/02/20		93	%	70 - 130
			1,2-Dichloropropane	2020/02/20		90	%	70 - 130
			cis-1,3-Dichloropropene	2020/02/20		91	%	70 - 130
			trans-1,3-Dichloropropene	2020/02/20		96	%	70 - 130
			Ethylbenzene	2020/02/20		93	%	70 - 130
			Ethylene Dibromide	2020/02/20		98	%	70 - 130
			Hexane	2020/02/20		98	%	70 - 130
			Methylene Chloride(Dichloromethane)	2020/02/20		85	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2020/02/20		113	%	60 - 140
			Methyl Isobutyl Ketone	2020/02/20		105	%	70 - 130
			Methyl t-butyl ether (MTBE)	2020/02/20		88	%	70 - 130
			Styrene	2020/02/20		94	%	70 - 130
			1,1,1,2-Tetrachloroethane	2020/02/20		97	%	70 - 130
			1,1,2,2-Tetrachloroethane	2020/02/20		98	%	70 - 130
			Tetrachloroethylene	2020/02/20		89	%	70 - 130
			Toluene	2020/02/20		89	%	70 - 130
			1,1,1-Trichloroethane	2020/02/20		93	%	70 - 130
			1,1,2-Trichloroethane	2020/02/20		101	%	70 - 130
			Trichloroethylene	2020/02/20		94	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2020/02/20		97	%	70 - 130
			Vinyl Chloride	2020/02/20		92	%	70 - 130
			p+m-Xylene	2020/02/20		99	%	70 - 130
			o-Xylene	2020/02/20		95	%	70 - 130
			F1 (C6-C10)	2020/02/20		89	%	60 - 140

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6594867	AYA	Method Blank	4-Bromofluorobenzene	2020/02/20		99	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/20		100	%	70 - 130
			D8-Toluene	2020/02/20		102	%	70 - 130
			Acetone (2-Propanone)	2020/02/20	<10		ug/L	
			Benzene	2020/02/20	<0.20		ug/L	
			Bromodichloromethane	2020/02/20	<0.50		ug/L	
			Bromoform	2020/02/20	<1.0		ug/L	
			Bromomethane	2020/02/20	<0.50		ug/L	
			Carbon Tetrachloride	2020/02/20	<0.20		ug/L	
			Chlorobenzene	2020/02/20	<0.20		ug/L	
			Chloroform	2020/02/20	<0.20		ug/L	
			Dibromochloromethane	2020/02/20	<0.50		ug/L	
			1,2-Dichlorobenzene	2020/02/20	<0.50		ug/L	
			1,3-Dichlorobenzene	2020/02/20	<0.50		ug/L	
			1,4-Dichlorobenzene	2020/02/20	<0.50		ug/L	
			Dichlorodifluoromethane (FREON 12)	2020/02/20	<1.0		ug/L	
			1,1-Dichloroethane	2020/02/20	<0.20		ug/L	
			1,2-Dichloroethane	2020/02/20	<0.50		ug/L	
			1,1-Dichloroethylene	2020/02/20	<0.20		ug/L	
			cis-1,2-Dichloroethylene	2020/02/20	<0.50		ug/L	
			trans-1,2-Dichloroethylene	2020/02/20	<0.50		ug/L	
			1,2-Dichloropropane	2020/02/20	<0.20		ug/L	
			cis-1,3-Dichloropropene	2020/02/20	<0.30		ug/L	
			trans-1,3-Dichloropropene	2020/02/20	<0.40		ug/L	
			Ethylbenzene	2020/02/20	<0.20		ug/L	
			Ethylene Dibromide	2020/02/20	<0.20		ug/L	
			Hexane	2020/02/20	<1.0		ug/L	
			Methylene Chloride(Dichloromethane)	2020/02/20	<2.0		ug/L	
			Methyl Ethyl Ketone (2-Butanone)	2020/02/20	<10		ug/L	
			Methyl Isobutyl Ketone	2020/02/20	<5.0		ug/L	
			Methyl t-butyl ether (MTBE)	2020/02/20	<0.50		ug/L	
			Styrene	2020/02/20	<0.50		ug/L	
			1,1,1,2-Tetrachloroethane	2020/02/20	<0.50		ug/L	
			1,1,2,2-Tetrachloroethane	2020/02/20	<0.50		ug/L	
			Tetrachloroethylene	2020/02/20	<0.20		ug/L	
			Toluene	2020/02/20	<0.20		ug/L	
			1,1,1-Trichloroethane	2020/02/20	<0.20		ug/L	
			1,1,2-Trichloroethane	2020/02/20	<0.50		ug/L	
			Trichloroethylene	2020/02/20	<0.20		ug/L	
			Trichlorofluoromethane (FREON 11)	2020/02/20	<0.50		ug/L	
			Vinyl Chloride	2020/02/20	<0.20		ug/L	
			p+m-Xylene	2020/02/20	<0.20		ug/L	
			o-Xylene	2020/02/20	<0.20		ug/L	
			Total Xylenes	2020/02/20	<0.20		ug/L	
			F1 (C6-C10)	2020/02/20	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/20	<25		ug/L	
6594867	AYA	RPD	Acetone (2-Propanone)	2020/02/20	NC		%	30
			Benzene	2020/02/20	NC		%	30
			Bromodichloromethane	2020/02/20	NC		%	30
			Bromoform	2020/02/20	NC		%	30
			Bromomethane	2020/02/20	NC		%	30
			Carbon Tetrachloride	2020/02/20	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Chlorobenzene	2020/02/20	NC		%	30
			Chloroform	2020/02/20	NC		%	30
			Dibromochloromethane	2020/02/20	NC		%	30
			1,2-Dichlorobenzene	2020/02/20	NC		%	30
			1,3-Dichlorobenzene	2020/02/20	NC		%	30
			1,4-Dichlorobenzene	2020/02/20	NC		%	30
			Dichlorodifluoromethane (FREON 12)	2020/02/20	NC		%	30
			1,1-Dichloroethane	2020/02/20	NC		%	30
			1,2-Dichloroethane	2020/02/20	NC		%	30
			1,1-Dichloroethylene	2020/02/20	NC		%	30
			cis-1,2-Dichloroethylene	2020/02/20	NC		%	30
			trans-1,2-Dichloroethylene	2020/02/20	NC		%	30
			1,2-Dichloropropane	2020/02/20	NC		%	30
			cis-1,3-Dichloropropene	2020/02/20	NC		%	30
			trans-1,3-Dichloropropene	2020/02/20	NC		%	30
			Ethylbenzene	2020/02/20	NC		%	30
			Ethylene Dibromide	2020/02/20	NC		%	30
			Hexane	2020/02/20	NC		%	30
			Methylene Chloride(Dichloromethane)	2020/02/20	NC		%	30
			Methyl Ethyl Ketone (2-Butanone)	2020/02/20	NC		%	30
			Methyl Isobutyl Ketone	2020/02/20	NC		%	30
			Methyl t-butyl ether (MTBE)	2020/02/20	NC		%	30
			Styrene	2020/02/20	NC		%	30
			1,1,1,2-Tetrachloroethane	2020/02/20	NC		%	30
			1,1,2,2-Tetrachloroethane	2020/02/20	NC		%	30
			Tetrachloroethylene	2020/02/20	NC		%	30
			Toluene	2020/02/20	4.2		%	30
			1,1,1-Trichloroethane	2020/02/20	NC		%	30
			1,1,2-Trichloroethane	2020/02/20	NC		%	30
			Trichloroethylene	2020/02/20	NC		%	30
			Trichlorofluoromethane (FREON 11)	2020/02/20	NC		%	30
			Vinyl Chloride	2020/02/20	NC		%	30
			p+m-Xylene	2020/02/20	NC		%	30
			o-Xylene	2020/02/20	NC		%	30
			Total Xylenes	2020/02/20	NC		%	30
			F1 (C6-C10)	2020/02/20	NC		%	30
			F1 (C6-C10) - BTEX	2020/02/20	NC		%	30
6595044	DRM	Matrix Spike	Dissolved Chloride (Cl-)	2020/02/20		NC	%	80 - 120
6595044	DRM	Spiked Blank	Dissolved Chloride (Cl-)	2020/02/20		106	%	80 - 120
6595044	DRM	Method Blank	Dissolved Chloride (Cl-)	2020/02/20	<1.0		mg/L	
6595044	DRM	RPD	Dissolved Chloride (Cl-)	2020/02/20	1.6		%	20
6595069	DRM	Matrix Spike	Dissolved Sulphate (SO4)	2020/02/20		NC	%	75 - 125
6595069	DRM	Spiked Blank	Dissolved Sulphate (SO4)	2020/02/20		105	%	80 - 120
6595069	DRM	Method Blank	Dissolved Sulphate (SO4)	2020/02/20	<1.0		mg/L	
6595069	DRM	RPD	Dissolved Sulphate (SO4)	2020/02/20	3.6		%	20
6595252	MT4	Matrix Spike	Total Ammonia-N	2020/02/19		95	%	75 - 125
6595252	MT4	Spiked Blank	Total Ammonia-N	2020/02/19		97	%	80 - 120
6595252	MT4	Method Blank	Total Ammonia-N	2020/02/19	<0.050		mg/L	
6595252	MT4	RPD	Total Ammonia-N	2020/02/19	3.0		%	20
6595659	SAU	Matrix Spike	Fluoride (F-)	2020/02/20		102	%	80 - 120
6595659	SAU	Spiked Blank	Fluoride (F-)	2020/02/20		102	%	80 - 120
6595659	SAU	Method Blank	Fluoride (F-)	2020/02/20	<0.10		mg/L	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6595659	SAU	RPD	Fluoride (F-)	2020/02/20	3.4		%	20
6595674	SAU	Spiked Blank	pH	2020/02/20		102	%	98 - 103
6595674	SAU	RPD	pH	2020/02/20	0.81		%	N/A
6596134	KLI	Matrix Spike [MAD678-02]	o-Terphenyl	2020/02/21		94	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/21		96	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/21		91	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/21		97	%	50 - 130
6596134	KLI	Spiked Blank	o-Terphenyl	2020/02/21		102	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/21		107	%	60 - 130
			F3 (C16-C34 Hydrocarbons)	2020/02/21		105	%	60 - 130
			F4 (C34-C50 Hydrocarbons)	2020/02/21		112	%	60 - 130
6596134	KLI	Method Blank	o-Terphenyl	2020/02/21		86	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2020/02/21	<100		ug/L	
			F3 (C16-C34 Hydrocarbons)	2020/02/21	<200		ug/L	
			F4 (C34-C50 Hydrocarbons)	2020/02/21	<200		ug/L	
6596134	KLI	RPD [MAD679-02]	F2 (C10-C16 Hydrocarbons)	2020/02/21	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2020/02/21	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2020/02/21	NC		%	30
6596380	GRU	Matrix Spike	1,4-Difluorobenzene	2020/02/19		100	%	70 - 130
			4-Bromofluorobenzene	2020/02/19		100	%	70 - 130
			D10-Ethylbenzene	2020/02/19		107	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		96	%	70 - 130
			Benzene	2020/02/19		108	%	70 - 130
			Toluene	2020/02/19		111	%	70 - 130
			Ethylbenzene	2020/02/19		111	%	70 - 130
			o-Xylene	2020/02/19		110	%	70 - 130
			p+m-Xylene	2020/02/19		112	%	70 - 130
			F1 (C6-C10)	2020/02/19		112	%	70 - 130
6596380	GRU	Spiked Blank	1,4-Difluorobenzene	2020/02/19		98	%	70 - 130
			4-Bromofluorobenzene	2020/02/19		98	%	70 - 130
			D10-Ethylbenzene	2020/02/19		106	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		94	%	70 - 130
			Benzene	2020/02/19		104	%	70 - 130
			Toluene	2020/02/19		107	%	70 - 130
			Ethylbenzene	2020/02/19		108	%	70 - 130
			o-Xylene	2020/02/19		106	%	70 - 130
			p+m-Xylene	2020/02/19		109	%	70 - 130
			F1 (C6-C10)	2020/02/19		94	%	70 - 130
6596380	GRU	Method Blank	1,4-Difluorobenzene	2020/02/19		99	%	70 - 130
			4-Bromofluorobenzene	2020/02/19		99	%	70 - 130
			D10-Ethylbenzene	2020/02/19		117	%	70 - 130
			D4-1,2-Dichloroethane	2020/02/19		96	%	70 - 130
			Benzene	2020/02/19	<0.20		ug/L	
			Toluene	2020/02/19	<0.20		ug/L	
			Ethylbenzene	2020/02/19	<0.20		ug/L	
			o-Xylene	2020/02/19	<0.20		ug/L	
			p+m-Xylene	2020/02/19	<0.40		ug/L	
			Total Xylenes	2020/02/19	<0.40		ug/L	
			F1 (C6-C10)	2020/02/19	<25		ug/L	
			F1 (C6-C10) - BTEX	2020/02/19	<25		ug/L	
6596380	GRU	RPD	F1 (C6-C10)	2020/02/19	NC		%	30

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			F1 (C6-C10) - BTEX	2020/02/19	NC		%	30
6597926	GTO	Matrix Spike [MAD683-05]	WAD Cyanide (Free)	2020/02/20		97	%	80 - 120
6597926	GTO	Spiked Blank	WAD Cyanide (Free)	2020/02/20		97	%	80 - 120
6597926	GTO	Method Blank	WAD Cyanide (Free)	2020/02/20	<0.0010		mg/L	
6597926	GTO	RPD [MAD683-05]	WAD Cyanide (Free)	2020/02/20	NC		%	20
6600982	éCG	Matrix Spike	Dissolved Aluminum (Al)	2020/02/21		100	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/21		101	%	80 - 120
			Dissolved Arsenic (As)	2020/02/21		108	%	80 - 120
			Dissolved Barium (Ba)	2020/02/21		101	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/21		101	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/21		92	%	80 - 120
			Dissolved Boron (B)	2020/02/21		103	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/21		98	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/21		98	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/21		95	%	80 - 120
			Dissolved Copper (Cu)	2020/02/21		91	%	80 - 120
			Dissolved Iron (Fe)	2020/02/21		98	%	80 - 120
			Dissolved Lead (Pb)	2020/02/21		96	%	80 - 120
			Dissolved Lithium (Li)	2020/02/21		99	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/21		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/21		NC	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/21		94	%	80 - 120
			Dissolved Selenium (Se)	2020/02/21		104	%	80 - 120
			Dissolved Silicon (Si)	2020/02/21		99	%	80 - 120
			Dissolved Silver (Ag)	2020/02/21		97	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/21		NC	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/21		97	%	80 - 120
			Dissolved Tin (Sn)	2020/02/21		103	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/21		105	%	80 - 120
			Dissolved Uranium (U)	2020/02/21		105	%	80 - 120
			Dissolved Vanadium (V)	2020/02/21		103	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/21		NC	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/21		111	%	80 - 120
6600982	éCG	Spiked Blank	Dissolved Aluminum (Al)	2020/02/21		103	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/21		106	%	80 - 120
			Dissolved Arsenic (As)	2020/02/21		104	%	80 - 120
			Dissolved Barium (Ba)	2020/02/21		103	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/21		103	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/21		102	%	80 - 120
			Dissolved Boron (B)	2020/02/21		105	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/21		104	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/21		105	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/21		104	%	80 - 120
			Dissolved Copper (Cu)	2020/02/21		105	%	80 - 120
			Dissolved Iron (Fe)	2020/02/21		106	%	80 - 120
			Dissolved Lead (Pb)	2020/02/21		104	%	80 - 120
			Dissolved Lithium (Li)	2020/02/21		101	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/21		105	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/21		111	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/21		105	%	80 - 120
			Dissolved Selenium (Se)	2020/02/21		100	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Silicon (Si)	2020/02/21		104	%	80 - 120
			Dissolved Silver (Ag)	2020/02/21		104	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/21		100	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/21		102	%	80 - 120
			Dissolved Tin (Sn)	2020/02/21		107	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/21		104	%	80 - 120
			Dissolved Uranium (U)	2020/02/21		106	%	80 - 120
			Dissolved Vanadium (V)	2020/02/21		105	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/21		105	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/21		101	%	80 - 120
6600982	éCG	Method Blank	Dissolved Aluminum (Al)	2020/02/21	<3.0		ug/L	
			Dissolved Antimony (Sb)	2020/02/21	<0.50		ug/L	
			Dissolved Arsenic (As)	2020/02/21	<0.10		ug/L	
			Dissolved Barium (Ba)	2020/02/21	<1.0		ug/L	
			Dissolved Beryllium (Be)	2020/02/21	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2020/02/21	<1.0		ug/L	
			Dissolved Boron (B)	2020/02/21	<50		ug/L	
			Dissolved Cadmium (Cd)	2020/02/21	<0.010		ug/L	
			Dissolved Chromium (Cr)	2020/02/21	<1.0		ug/L	
			Dissolved Cobalt (Co)	2020/02/21	<0.20		ug/L	
			Dissolved Copper (Cu)	2020/02/21	<0.20		ug/L	
			Dissolved Iron (Fe)	2020/02/21	<5.0		ug/L	
			Dissolved Lead (Pb)	2020/02/21	<0.20		ug/L	
			Dissolved Lithium (Li)	2020/02/21	<2.0		ug/L	
			Dissolved Manganese (Mn)	2020/02/21	<1.0		ug/L	
			Dissolved Molybdenum (Mo)	2020/02/21	<1.0		ug/L	
			Dissolved Nickel (Ni)	2020/02/21	<1.0		ug/L	
			Dissolved Selenium (Se)	2020/02/21	<0.10		ug/L	
			Dissolved Silicon (Si)	2020/02/21	<100		ug/L	
			Dissolved Silver (Ag)	2020/02/21	<0.020		ug/L	
			Dissolved Strontium (Sr)	2020/02/21	<1.0		ug/L	
			Dissolved Thallium (Tl)	2020/02/21	<0.010		ug/L	
			Dissolved Tin (Sn)	2020/02/21	<5.0		ug/L	
			Dissolved Titanium (Ti)	2020/02/21	<5.0		ug/L	
			Dissolved Uranium (U)	2020/02/21	<0.10		ug/L	
			Dissolved Vanadium (V)	2020/02/21	<5.0		ug/L	
			Dissolved Zinc (Zn)	2020/02/21	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2020/02/21	<0.10		ug/L	
6600982	éCG	RPD	Dissolved Aluminum (Al)	2020/02/21	1.1		%	20
			Dissolved Antimony (Sb)	2020/02/21	1.6		%	20
			Dissolved Arsenic (As)	2020/02/21	5.2		%	20
			Dissolved Barium (Ba)	2020/02/21	1.7		%	20
			Dissolved Beryllium (Be)	2020/02/21	NC		%	20
			Dissolved Bismuth (Bi)	2020/02/21	NC		%	20
			Dissolved Boron (B)	2020/02/21	1.2		%	20
			Dissolved Cadmium (Cd)	2020/02/21	0.67		%	20
			Dissolved Chromium (Cr)	2020/02/21	0.64		%	20
			Dissolved Cobalt (Co)	2020/02/21	1.5		%	20
			Dissolved Copper (Cu)	2020/02/21	2.6		%	20
			Dissolved Iron (Fe)	2020/02/21	1.3		%	20
			Dissolved Lead (Pb)	2020/02/21	4.1		%	20
			Dissolved Lithium (Li)	2020/02/21	0.062		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Manganese (Mn)	2020/02/21	0.14		%	20
			Dissolved Molybdenum (Mo)	2020/02/21	2.1		%	20
			Dissolved Nickel (Ni)	2020/02/21	4.2		%	20
			Dissolved Selenium (Se)	2020/02/21	16		%	20
			Dissolved Silicon (Si)	2020/02/21	0.36		%	20
			Dissolved Silver (Ag)	2020/02/21	NC		%	20
			Dissolved Strontium (Sr)	2020/02/21	0.51		%	20
			Dissolved Thallium (Tl)	2020/02/21	8.7		%	20
			Dissolved Tin (Sn)	2020/02/21	NC		%	20
			Dissolved Titanium (Ti)	2020/02/21	NC		%	20
			Dissolved Uranium (U)	2020/02/21	NC		%	20
			Dissolved Vanadium (V)	2020/02/21	NC		%	20
			Dissolved Zinc (Zn)	2020/02/21	2.3		%	20
			Dissolved Zirconium (Zr)	2020/02/21	NC		%	20
6601030	éCG	Matrix Spike	Dissolved Aluminum (Al)	2020/02/20		98	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/20		99	%	80 - 120
			Dissolved Arsenic (As)	2020/02/20		102	%	80 - 120
			Dissolved Barium (Ba)	2020/02/20		98	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/20		101	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/20		98	%	80 - 120
			Dissolved Boron (B)	2020/02/20		98	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/20		100	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/20		95	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/20		93	%	80 - 120
			Dissolved Copper (Cu)	2020/02/20		93	%	80 - 120
			Dissolved Iron (Fe)	2020/02/20		98	%	80 - 120
			Dissolved Lead (Pb)	2020/02/20		99	%	80 - 120
			Dissolved Lithium (Li)	2020/02/20		103	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/20		95	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/20		103	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/20		94	%	80 - 120
			Dissolved Selenium (Se)	2020/02/20		101	%	80 - 120
			Dissolved Silicon (Si)	2020/02/20		102	%	80 - 120
			Dissolved Silver (Ag)	2020/02/20		99	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/20		102	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/20		98	%	80 - 120
			Dissolved Tin (Sn)	2020/02/20		99	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/20		97	%	80 - 120
			Dissolved Uranium (U)	2020/02/20		101	%	80 - 120
			Dissolved Vanadium (V)	2020/02/20		95	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/20		97	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/20		104	%	80 - 120
6601030	éCG	Spiked Blank	Dissolved Aluminum (Al)	2020/02/20		99	%	80 - 120
			Dissolved Antimony (Sb)	2020/02/20		100	%	80 - 120
			Dissolved Arsenic (As)	2020/02/20		102	%	80 - 120
			Dissolved Barium (Ba)	2020/02/20		99	%	80 - 120
			Dissolved Beryllium (Be)	2020/02/20		101	%	80 - 120
			Dissolved Bismuth (Bi)	2020/02/20		99	%	80 - 120
			Dissolved Boron (B)	2020/02/20		97	%	80 - 120
			Dissolved Cadmium (Cd)	2020/02/20		100	%	80 - 120
			Dissolved Chromium (Cr)	2020/02/20		98	%	80 - 120
			Dissolved Cobalt (Co)	2020/02/20		95	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Copper (Cu)	2020/02/20		95	%	80 - 120
			Dissolved Iron (Fe)	2020/02/20		98	%	80 - 120
			Dissolved Lead (Pb)	2020/02/20		101	%	80 - 120
			Dissolved Lithium (Li)	2020/02/20		103	%	80 - 120
			Dissolved Manganese (Mn)	2020/02/20		97	%	80 - 120
			Dissolved Molybdenum (Mo)	2020/02/20		103	%	80 - 120
			Dissolved Nickel (Ni)	2020/02/20		97	%	80 - 120
			Dissolved Selenium (Se)	2020/02/20		96	%	80 - 120
			Dissolved Silicon (Si)	2020/02/20		100	%	80 - 120
			Dissolved Silver (Ag)	2020/02/20		99	%	80 - 120
			Dissolved Strontium (Sr)	2020/02/20		104	%	80 - 120
			Dissolved Thallium (Tl)	2020/02/20		99	%	80 - 120
			Dissolved Tin (Sn)	2020/02/20		102	%	80 - 120
			Dissolved Titanium (Ti)	2020/02/20		98	%	80 - 120
			Dissolved Uranium (U)	2020/02/20		103	%	80 - 120
			Dissolved Vanadium (V)	2020/02/20		97	%	80 - 120
			Dissolved Zinc (Zn)	2020/02/20		97	%	80 - 120
			Dissolved Zirconium (Zr)	2020/02/20		107	%	80 - 120
6601030	éCG	Method Blank	Dissolved Aluminum (Al)	2020/02/20	<3.0		ug/L	
			Dissolved Antimony (Sb)	2020/02/20	<0.50		ug/L	
			Dissolved Arsenic (As)	2020/02/20	<0.10		ug/L	
			Dissolved Barium (Ba)	2020/02/20	<1.0		ug/L	
			Dissolved Beryllium (Be)	2020/02/20	<0.10		ug/L	
			Dissolved Bismuth (Bi)	2020/02/20	<1.0		ug/L	
			Dissolved Boron (B)	2020/02/20	<50		ug/L	
			Dissolved Cadmium (Cd)	2020/02/20	<0.010		ug/L	
			Dissolved Chromium (Cr)	2020/02/20	<1.0		ug/L	
			Dissolved Cobalt (Co)	2020/02/20	<0.20		ug/L	
			Dissolved Copper (Cu)	2020/02/20	<0.20		ug/L	
			Dissolved Iron (Fe)	2020/02/20	<5.0		ug/L	
			Dissolved Lead (Pb)	2020/02/20	<0.20		ug/L	
			Dissolved Lithium (Li)	2020/02/20	<2.0		ug/L	
			Dissolved Manganese (Mn)	2020/02/20	<1.0		ug/L	
			Dissolved Molybdenum (Mo)	2020/02/20	<1.0		ug/L	
			Dissolved Nickel (Ni)	2020/02/20	<1.0		ug/L	
			Dissolved Selenium (Se)	2020/02/20	<0.10		ug/L	
			Dissolved Silicon (Si)	2020/02/20	<100		ug/L	
			Dissolved Silver (Ag)	2020/02/20	<0.020		ug/L	
			Dissolved Strontium (Sr)	2020/02/20	<1.0		ug/L	
			Dissolved Thallium (Tl)	2020/02/20	<0.010		ug/L	
			Dissolved Tin (Sn)	2020/02/20	<5.0		ug/L	
			Dissolved Titanium (Ti)	2020/02/20	<5.0		ug/L	
			Dissolved Uranium (U)	2020/02/20	<0.10		ug/L	
			Dissolved Vanadium (V)	2020/02/20	<5.0		ug/L	
			Dissolved Zinc (Zn)	2020/02/20	<5.0		ug/L	
			Dissolved Zirconium (Zr)	2020/02/20	<0.10		ug/L	
6601662	éBH	Matrix Spike	D10-Anthracene	2020/02/21		105	%	50 - 130
			D14-Terphenyl	2020/02/21		136 (1)	%	50 - 130
			D8-Acenaphthylene	2020/02/21		98	%	50 - 130
			D8-Naphthalene	2020/02/21		82	%	50 - 130
			Acenaphthene	2020/02/21		81	%	50 - 130
			Acenaphthylene	2020/02/21		85	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acridine	2020/02/21		88	%	50 - 130
			Anthracene	2020/02/21		84	%	50 - 130
			Benzo(a)anthracene	2020/02/21		99	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/21		90	%	50 - 130
			Benzo(k)fluoranthene	2020/02/21		96	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/21		88	%	50 - 130
			Benzo(c)phenanthrene	2020/02/21		110	%	50 - 130
			Benzo(a)pyrene	2020/02/21		95	%	50 - 130
			Benzo(e)pyrene	2020/02/21		94	%	50 - 130
			Chrysene	2020/02/21		97	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/21		89	%	50 - 130
			Fluoranthene	2020/02/21		104	%	50 - 130
			Fluorene	2020/02/21		88	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/21		90	%	50 - 130
			1-Methylnaphthalene	2020/02/21		81	%	50 - 130
			2-Methylnaphthalene	2020/02/21		75	%	50 - 130
			Naphthalene	2020/02/21		91	%	50 - 130
			Phenanthrene	2020/02/21		97	%	50 - 130
			Perylene	2020/02/21		87	%	50 - 130
			Pyrene	2020/02/21		102	%	50 - 130
			Quinoline	2020/02/21		99	%	50 - 130
6601662	éBH	Spiked Blank	D10-Anthracene	2020/02/21		100	%	50 - 130
			D14-Terphenyl	2020/02/21		128	%	50 - 130
			D8-Acenaphthylene	2020/02/21		92	%	50 - 130
			D8-Naphthalene	2020/02/21		83	%	50 - 130
			Acenaphthene	2020/02/21		84	%	50 - 130
			Acenaphthylene	2020/02/21		86	%	50 - 130
			Acridine	2020/02/21		86	%	50 - 130
			Anthracene	2020/02/21		80	%	50 - 130
			Benzo(a)anthracene	2020/02/21		99	%	50 - 130
			Benzo(b/j)fluoranthene	2020/02/21		89	%	50 - 130
			Benzo(k)fluoranthene	2020/02/21		97	%	50 - 130
			Benzo(g,h,i)perylene	2020/02/21		89	%	50 - 130
			Benzo(c)phenanthrene	2020/02/21		104	%	50 - 130
			Benzo(a)pyrene	2020/02/21		96	%	50 - 130
			Benzo(e)pyrene	2020/02/21		94	%	50 - 130
			Chrysene	2020/02/21		96	%	50 - 130
			Dibenzo(a,h)anthracene	2020/02/21		92	%	50 - 130
			Fluoranthene	2020/02/21		99	%	50 - 130
			Fluorene	2020/02/21		88	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2020/02/21		92	%	50 - 130
			1-Methylnaphthalene	2020/02/21		80	%	50 - 130
			2-Methylnaphthalene	2020/02/21		73	%	50 - 130
			Naphthalene	2020/02/21		83	%	50 - 130
			Phenanthrene	2020/02/21		92	%	50 - 130
			Perylene	2020/02/21		87	%	50 - 130
			Pyrene	2020/02/21		98	%	50 - 130
			Quinoline	2020/02/21		99	%	50 - 130
6601662	éBH	Method Blank	D10-Anthracene	2020/02/21		105	%	50 - 130
			D14-Terphenyl	2020/02/21		134 (1)	%	50 - 130
			D8-Acenaphthylene	2020/02/21		94	%	50 - 130
			D8-Naphthalene	2020/02/21		81	%	50 - 130

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acenaphthene	2020/02/21	<0.10		ug/L	
			Acenaphthylene	2020/02/21	<0.10		ug/L	
			Acridine	2020/02/21	<0.040		ug/L	
			Anthracene	2020/02/21	<0.010		ug/L	
			Benzo(a)anthracene	2020/02/21	<0.0085		ug/L	
			Benzo(b/j)fluoranthene	2020/02/21	<0.0085		ug/L	
			Benzo(k)fluoranthene	2020/02/21	<0.0085		ug/L	
			Benzo(g,h,i)perylene	2020/02/21	<0.0085		ug/L	
			Benzo(c)phenanthrene	2020/02/21	<0.050		ug/L	
			Benzo(a)pyrene	2020/02/21	<0.0075		ug/L	
			Benzo(e)pyrene	2020/02/21	<0.050		ug/L	
			Chrysene	2020/02/21	<0.0085		ug/L	
			Dibenzo(a,h)anthracene	2020/02/21	<0.0075		ug/L	
			Fluoranthene	2020/02/21	<0.010		ug/L	
			Fluorene	2020/02/21	<0.050		ug/L	
			Indeno(1,2,3-cd)pyrene	2020/02/21	<0.0085		ug/L	
			1-Methylnaphthalene	2020/02/21	<0.10		ug/L	
			2-Methylnaphthalene	2020/02/21	<0.10		ug/L	
			Naphthalene	2020/02/21	<0.10		ug/L	
			Phenanthrene	2020/02/21	<0.050		ug/L	
			Perylene	2020/02/21	<0.050		ug/L	
			Pyrene	2020/02/21	<0.020		ug/L	
			Quinoline	2020/02/21	<0.20		ug/L	
6601662	éBH	RPD [MAD681-02]	Acenaphthene	2020/02/21	NC		%	30
			Acenaphthylene	2020/02/21	NC		%	30
			Acridine	2020/02/21	NC		%	30
			Anthracene	2020/02/21	NC		%	30
			Benzo(a)anthracene	2020/02/21	NC		%	30
			Benzo(b/j)fluoranthene	2020/02/21	NC		%	30
			Benzo(k)fluoranthene	2020/02/21	NC		%	30
			Benzo(g,h,i)perylene	2020/02/21	NC		%	30
			Benzo(c)phenanthrene	2020/02/21	NC		%	30
			Benzo(a)pyrene	2020/02/21	NC		%	30
			Benzo(e)pyrene	2020/02/21	NC		%	30
			Chrysene	2020/02/21	NC		%	30
			Dibenzo(a,h)anthracene	2020/02/21	NC		%	30
			Fluoranthene	2020/02/21	29		%	30
			Fluorene	2020/02/21	5.0		%	30
			Indeno(1,2,3-cd)pyrene	2020/02/21	NC		%	30
			1-Methylnaphthalene	2020/02/21	NC		%	30
			2-Methylnaphthalene	2020/02/21	NC		%	30
			Naphthalene	2020/02/21	NC		%	30
			Phenanthrene	2020/02/21	12		%	30
			Perylene	2020/02/21	NC		%	30
			Pyrene	2020/02/21	24		%	30
			Quinoline	2020/02/21	NC		%	30
6606047	KD9	Matrix Spike	Total Sulphide	2020/02/19		111	%	80 - 120
6606047	KD9	Spiked Blank	Total Sulphide	2020/02/19		106	%	80 - 120
6606047	KD9	Method Blank	Total Sulphide	2020/02/19	<0.0018		mg/L	
6606049	KD9	Matrix Spike	Total Sulphide	2020/02/20		103	%	80 - 120
6606049	KD9	Spiked Blank	Total Sulphide	2020/02/20		101	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
6606049	KD9	Method Blank	Total Sulphide	2020/02/20	<0.0018		mg/L	

N/A = Not Applicable

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.

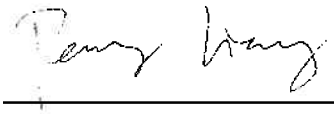
BV Labs Job #: C041330
Report Date: 2020/02/26

Stantec Consulting Ltd
Client Project #: 122170347
Site Location: 930 Carling Avenue, Ottawa, ON
Your P.O. #: 700479149
Sampler Initials: TS

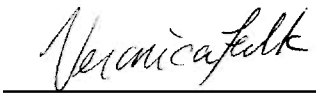
VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

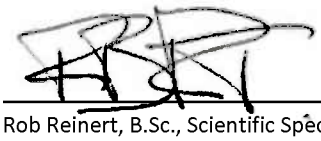
Anastassia Hamanov, Scientific Specialist



Harry (Peng) Liang, Senior Analyst



Veronica Falk, B.Sc., P.Chem., QP, Scientific Specialist, Organics



Rob Reinert, B.Sc., Scientific Specialist

BV Labs 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 Signature Page.

Bureau Veritas Laboratories 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvlabs.com