Appendix C 2021 INVESTIGATION RESULTS

C.1 SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

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

C.2 BOREHOLE RECORDS (BH21-01 TO BH21-12)

Stantec DRILLHOLE RECORD BH21-01

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **111.272 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-19-21 to 10-22-21** WATER LEVEL **3.67m 1-24-22** INCLIN. / AZ. **-60 / 170**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	111.27										
0		OVERBURDEN									
4	107.57										
5		Fair to good quality, moderately to slightly weathered, medium grained, massive texture, light grey, GREYWACKE	1 HQ		100	82	82	5			
6			2 HQ	BC BC BC	94	79	70	4 4 6			
7	105.49										
7	104.98	Fair quality, slightly weathered, fine grained, massive texture, dark grey, ARGILITE									
8	104.54	Fair to good quality, slightly weathered, medium grained, massive texture, light grey, GREYWACKE									
9	104.00	Good quality, fresh, fine grained, massive texture, dark grey, ARGILITE	3 HQ		87	83	82	6 4 2		1.40×10^{-6}	
10		Good quality, slightly weathered to fresh, medium grained, massive texture, light grey, GREYWACKE									
12	100.73		4 HQ		90	87	80	1 4 6			
13		Good quality, slightly weathered to fresh, fine grained, massive texture, dark grey, ARGILITE									
14	98.91										
15		Fair to excellent quality, fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with thin to very thin intermitent lenses of ARGILITE	5 HQ		96	90	84	3 3 5			
18			6 HQ		100	93	84	6 7 5		2.90×10^{-8}	
21			7 HQ		99	97	94	1 3 5			
24			8 HQ		100	95	93	2 3 5			
27			9 HQ		97	80	62	7 6 9		4.70×10^{-8}	
28	86.35										
29		Fair to good quality, fresh, medium grained, massive texture, light grey, GREYWACKE	10 HQ		93	85	70	5 8 9			
33			11 HQ		96	73	58	8 10 5		5.00×10^{-9}	
34		- interpreted possible fault/shear zone from 33.0 m to 33.7 m.									
35											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-01

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **111.272 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-19-21 to 10-22-21** WATER LEVEL **3.67m 1-24-22** INCLIN. / AZ. **-60 / 170**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Fair to good quality, fresh, medium grained, massive texture, light grey, GREYWACKE *(continued...)*	12 HQ		83	78	74	4 6 9			
37											
38			13 HQ	=BC=	98	91	85	2 3 10		5.00×10^{-8}	
39											
40											
41			14 HQ		90	84	75	9 10 10			
42											
43	73.36										
44		Good to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with thin to very thin intermitent lenses of ARGILITE	15 HQ		96	86	77	4 6 13		4.10×10^{-9}	
45											
46											
47			16 HQ		99	95	91	3 4 7			
48											
49											
50			17 HQ		100	90	85	5 6 1			
51											
52											
53			18 HQ		98	90	86	5 6 4		2.50×10^{-8}	
54											
55											
56			19 HQ		87	86	86	5 4 2			
57											
58											
59			20 HQ	=BC=	100	88	80	7 9			
60											
61	58.45	End of Borehole									
62											
63											
64											
65											
66											
67											
68											
69											
70											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-02

PAGE 1 of 2

CLIENT **Atlantic Mining NS Inc.**
PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal**
LOCATION **Middle Musquodobit, NS**
DATES DRILLED (mm-dd-yy) **10-24-21 to 10-30-21**

PROJECT No. **121619250.5500**
METHOD **Wash Bore**
ELEVATION: **109.36 m**
DATUM **Geodetic**
WATER LEVEL **11.67m 1-24-22**
INCLIN. / AZ. **-60 / 170**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	109.36										
0		OVERBURDEN									
5	104.48										
6		Poor quality, slightly weathered, fine grained, foliated texture, light grey, GREYWACKE	1 HQ	BC	68	34	26	4, 4			
8			2 HQ	BC BC BC BC BC	70	56	40	7, 6, 5			
11			3 HQ	BC BC BC	84	67	57	9, 8, 13		5.60×10^{-8}	
14			4 HQ		93	59	37	6, 4, 10			
17		- interpreted possible fault/shear zone from 16.8 m to 21.4 m. - at 17.0 m (0.05 m thick quartz vein noted). - at 17.1 m (0.05 m thick quartz vein noted).	5 HQ	BC BC BC BC BC	80	46	26	10, 12, 8			
20			6 HQ	BC	92	66	50	6, 9, 4		4.30×10^{-8}	
21	91.07										
22		Poor to good quality, slightly weathered to fresh, medium grained, massive texture, light grey, GREYWACKE									
23		- at 23.2 m (0.25 m thick quartz vein noted).	7 HQ	BC	95	88	79	5, 2, 10			
26			8 HQ		92	56	42	8, 6, 11			
28		- at 28.3 m (0.05 m thick quartz vein noted).	9 HQ		99	84	72	8, 6, 3		3.90×10^{-8}	
32			10 HQ		96	88	84	3, 4, 4			
34				BC	100	84	77			2.30×10^{-8}	
35											

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Reviewed By: _____

DRILLHOLE RECORD BH21-02

PAGE 2 of 2

CLIENT **Atlantic Mining NS Inc.**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal**

LOCATION **Middle Musquodobit, NS**

DATES DRILLED (mm-dd-yy) **10-24-21 to 10-30-21**

PROJECT No. **121619250.5500**

METHOD **Wash Bore**

ELEVATION: **109.36 m**

DATUM **Geodetic**

WATER LEVEL **11.67m 1-24-22**

INCLIN. / AZ. **-60 / 170**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Poor to good quality, slightly weathered to fresh, medium grained, massive texture, light grey, GREYWACKE *(continued...)*	11 HQ	BC	100	84	77	4, 4, 5, 7			
37	76.96										
38		Poor to good quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE	12 HQ		97	92	90	4, 2, 7		2.30×10^{-8}	
41			13 HQ		79	63	50	4, 2, 12			
43		- interpreted possible fault/shear zone or quartz vein with localized shearing from 42.9 m to 44.0 m.		BC BC							
44			14 HQ	BC	91	78	60	8, 8, 4			
47		- at 46.5 m (0.1 m thick quartz vein noted).	15 HQ	BC BC	95	80	70	7, 10, 11		9.00×10^{-8}	
49	66.40										
50		Very poor to good quality, slightly weathered to fresh, medium grained, massive texture, light grey, GREYWACKE	16 HQ	BC BC	91	81	73	9, 10, 15			
53			17 HQ		90	70	57	10, 5, 7			
56			18 HQ	BC	70	46	25	10, 6, 8		4.80×10^{-8}	
59			19 HQ	BC BC	97	90	83	9, 3, 4			
61	56.00										
62		End of Borehole									
70											

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Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-03

PAGE 1 of 4

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **113.234 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-6-21 to 11-15-21** WATER LEVEL **8.59m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	113.23										
0		OVERBURDEN									
3	110.44	Poor quality, slightly weathered, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE	1 HQ		95	77	69	5, 8, 2			**Packer Testing Not Completed from 3.0 m to 17.0 m Depth.**
6			2 HQ		100	91	90	8			
7	106.87	Possible UNDERGROUND OPENING.	3 HQ								
8	105.17	Excellent quality, slightly weathered, medium grained, massive texture, light grey, GREYWACKE	4 HQ		93	93	93	1, 3, 0			
11	102.17	Fair to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE	5 HQ		95	95	93	1, 2, 0			
			6 HQ		100	96	95	4, 4, 1			
			7 HQ		99	99	99	2, 2, 2			
			8 HQ		97	94	93	1, 2, 1		1.10×10^{-7}	
			9 HQ	BC, BC	95	76	66	3, 10, 3			
		- at 26.0 m (0.05 m thick quartz vein noted).	10 HQ		91	80	73	4, 6, 5			
			11 HQ		95	88	84	2, 5, 3		4.60×10^{-8}	
32	81.17	Poor to good quality, fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE	12 HQ	BC	82	63	47	15, 14, 5			
35											

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Stantec DRILLHOLE RECORD BH21-03

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **113.234 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-6-21 to 11-15-21** WATER LEVEL **8.59m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Poor to good quality, fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE *(continued...)*	13 HQ		95	86	81	4 6 5			
37											
38											
39			14 HQ		95	82	70	5 5 7		2.00×10^{-8}	
40											
41											
42			15 HQ		96	87	85	5 2 4			
43											
44	69.18										
45		Good to excellent quality, fresh, medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE - at 45.6 m (0.20 m thick quartz vein noted).	16 HQ		99	88	79	1 8 5			
46											
47			17 HQ	BC	93	88	88	2 2 3		2.70×10^{-9}	
48											
49		- at 49.2 m (0.05 m thick quartz vein noted). - at 49.4 m (0.05 m thick quartz vein noted).									
50			18 HQ		99	99	99	0 0 5			
51											
52											
53			19 HQ		99	99	99	0 0 0			
54											
55											
56			20 HQ		97	90	85	0 3 7		7.60×10^{-9}	
57		- at 57.3 m (0.05 m thick quartz vein noted).									
58											
59	54.18										
60		Good quality, slightly weathered to fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE	21 HQ	BC	100	91	84	1 10 2			
61											
62		- at 62.2 m (0.05 m thick quartz vein noted).									
63			22 HQ		94	85	82	5 0 3			
64											
65	48.18										
66		Fair to excellent quality, fresh, medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE - at 65.2 m (0.1 m thick quartz vein noted).	23 HQ		97	79	73	7 4 8		4.70×10^{-9}	
67											
68		- at 65.2 m (0.1 m thick quartz vein noted).									
69			24 HQ		100	100	100	2 0			
70											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-03

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **113.234 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-6-21 to 11-15-21** WATER LEVEL **8.59m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
70											
71		Fair to excellent quality, fresh, medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE *(continued...)*	24 HQ		100	100	100	0		4.70×10^{-9}	
72			25 HQ		99	94	93	0			
73								0			
74								3			
75			26 HQ		95	92	91	0		5.00×10^{-9}	
76				BC				2			
77				BC				3			
78		- at 77.5 m (0.05 m thick quartz vein noted).	27 HQ		99	93	92	2			
79								2			
80								0			
81			28 HQ		97	97	97	1			
82								0			
83	30.18							0			
84		Excellent quality, slightly weathered to fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE	29 HQ		98	95	95	0		1.50×10^{-9}	
85		- at 83.9 m (0.1 m thick quartz vein noted).						3			
86	27.18							4			
87		Good to excellent quality, slightly weathered to fresh, medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE	30 HQ		97	91	91	0			
88		- at 88.4 m (0.05 m thick quartz vein noted).						2			
89								1			
90			31 HQ		99	92	90	0			
91								6			
92								3			
93			32 HQ		98	97	97	0		4.60×10^{-9}	
94								2			
95								1			
96			33 HQ		92	88	87	0			
97	15.74	- at 96.8 m (0.6 m thick quartz vein noted).						6			
98		Fair to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE	34 HQ		99	96	96	1			
99								0			
100								3			
101											
102		- at 101.8 m (0.2 m thick quartz vein noted).	35 HQ		100	100	100	0		1.50×10^{-9}	
103								1			
104								0			
105			36 HQ		100	98	98	0			

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-03

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **113.234 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-6-21 to 11-15-21** WATER LEVEL **8.59m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
105													
106		Fair to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, GREYWACKE with medium to very thin intermitent lenses of ARGILITE *(continued...)*			36 HQ		100	98	98	0	a	1.50×10^{-9}	
107		- at 106.9 m (0.05 m thick quartz vein noted).											
108		- at 106.9 m (0.06 m thick quartz vein noted).			37 HQ		100	90	90	4 3 3	o		
109													
110													
111					38 HQ		88	77	74	5 4 5	o		
112		- at 111.6 m (0.16 m thick quartz vein noted).											
113						BC							
114					39 HQ		95	71	62	10 8 6	o	2.80×10^{-9}	
115													
116													
117					40 HQ		100	96	96	3 5 4	o		
118													
119													
120	-6.91				41 HQ		95	95	95	3			
121		End of Borehole											
122													
123													
124													
125													
126													
127													
128													
129													
130													
131													
132													
133													
134													
135													
136													
137													
138													
139													
140													

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-04

Stantec

CLIENT **Atlantic Mining NS Inc.**
PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal**
LOCATION **Middle Musquodobit, NS**
DATES DRILLED (mm-dd-yy) **9-30-21 to 10-6-21**

PROJECT No. **121619250.5500**
METHOD **Wash Bore**
ELEVATION: **104.966 m**
DATUM **Geodetic**
WATER LEVEL **0.1m 1-24-22**
INCLIN. / AZ. **-60 / 40**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	104.97										
0		OVERBURDEN									
3	102.10										
4		Very poor to good quality, slightly weathered to fresh, fine grained, massive texture, medium strong to strong, occasionally laminated to medium bands of quartz and shale, grey, ARGILITE	1 HQ	BC	100	35	26	25, 25			
7			2 HQ		65	33	17	13, 9, 15			
10			3 HQ		93	77	68	17, 14, 6		4.10×10^{-8}	
12			4 HQ	BC	79	49	36	25, 6, 11			
15			5 HQ		76	45	30	18, 20, 15			
17		- at 16.4 m (0.60 m thick quartz vein noted).									
18		- at 18.1 m (0.10 m thick quartz vein noted).	6 HQ		93	65	42	7, 14, 17		4.30×10^{-9}	
20		- at 19.2 m (0.05 m thick quartz vein noted).									
21			7 HQ	BC	95	47	33	25, 20, 15			
22		- at 21.9 m (0.05 m thick quartz vein noted).									
24			8 HQ		90	66	38	12, 14, 12			
27			9 HQ		41	32	24	25, 25, 25		6.10×10^{-9}	
30			10 HQ	BC	97	45	30	11, 25, 13			
33			11 HQ	BC	95	66	55	15, 15, 8		4.00×10^{-9}	
35											

Logged By: _____
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DRILLHOLE RECORD BH21-04

Stantec

CLIENT **Atlantic Mining NS Inc.**
PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal**
LOCATION **Middle Musquodobit, NS**
DATES DRILLED (mm-dd-yy) **9-30-21 to 10-6-21**

PROJECT No. **121619250.5500**
METHOD **Wash Bore**
ELEVATION: **104.966 m**
DATUM **Geodetic**
WATER LEVEL **0.1m 1-24-22**
INCLIN. / AZ. **-60 / 40**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Very poor to good quality, slightly weathered to fresh, fine grained, massive texture, medium strong to strong, occasionally laminated to medium bands of quartz and shale, grey, ARGILITE *(continued...)*		BC							
37		- broken core noted from 35.3 m to 38.3 m possibly a result of nearby underground workings.	12 HQ	BC BC BC BC BC BC BC BC	71	48	35	15 25 20		4.00×10^{-9}	
38											
39			13 HQ	BC	64	37	29	8 15 15			
40											
41											
42	68.15										
43		Poor to good quality, fresh, fine to medium grained, massive to foliated texture, medium strong to strong, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE	14 HQ	BC BC	97	90	85	5 3			
44		- at 43.4 m (0.4 m thick quartz vein noted).									
45			15 HQ	BC BC	95	78	64	9 7 2		3.20×10^{-9}	
46											
47											
48			16 HQ		97	68	53	8 16 5			
49											
50		- at 49.5 m (0.1 m thick quartz vein noted).									
51			17 HQ		97	78	68	7 7 7			
52											
53											
54			18 HQ	BC BC	87	66	48	11 12 11		2.80×10^{-9}	
55											
56											
57			19 HQ		91	80	75	12 12 12			
58											
59											
60	52.52		20 HQ		100	85	80	5			
61		End of Borehole									
62											
63											
64											
65											
66											
67											
68											
69											
70											

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Stantec DRILLHOLE RECORD BH21-05

PAGE 1 of 2

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **108.773 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-1-21 to 11-3-21** WATER LEVEL **2.84m 1-24-22** INCLIN. / AZ. **-60 / 100**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	108.77										
0 – 6.08	103.82	OVERBURDEN									
6.08 – 11.00	97.81	Poor quality, slightly weathered to fresh, fine grained, foliated texture, dark grey, SHALE with very thin lenses of ARGILITE - drilling sub-parallel to foliation/bedding. - interpreted possible fault/shear zone from 10.1 m to 11.0 m.	1 HQ	BC, BC	100	55	40	25, 25			
			2 HQ	BC, BC	68	48	41	10, 10, 10			
			3 HQ	BC	85	55	43	20, 10, 4		1.10×10^{-8}	
11.00 – 35.00		Poor to good quality, moderately weathered to fresh, fine grained, massive to foliated texture, occasionally laminated to medium bands of quartz and shale, dark grey, ARGILITE - at 21.9 m (0.25 m thick quartz vein noted).	4 HQ	BC, BC, BC, BC	95	90	89	4, 5, 5			
			5 HQ		95	71	63	5, 10, 6			
			6 HQ		91	72	56	7, 8, 7		6.80×10^{-9}	
			7 HQ	BC, BC	83	45	32	5, 20, 10			
			8 HQ		97	55	50	12, 7, 8			
			9 HQ		94	76	65	8, 7, 9		5.00×10^{-9}	
			10 HQ		95	75	62	4, 5, 5			
			11 HQ		99	92	90	2		3.90×10^{-9}	

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-05

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **108.773 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-1-21 to 11-3-21** WATER LEVEL **2.84m 1-24-22** INCLIN. / AZ. **-60 / 100**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35		Poor to good quality, moderately weathered to fresh, fine grained, massive to foliated texture, occasionally laminated to medium bands of quartz and shale, dark grey, ARGILITE *(continued...)*			11 HQ		99	92	90	4 5			
36													
37													
38					12 HQ		85	76	70	3 4 5		$3.90x10^{-9}$	
39													
40													
41					13 HQ		86	55	40	6 6 10			
42													
43													
44					14 HQ		89	69	62	5 2 8			
45													
46													
47					15 HQ		92	86	84	5 7 3		$3.20x10^{-9}$	
48													
49													
50					16 HQ		87	76	73	3 4 5			
51													
52													
53					17 HQ		96	90	89	2 3 5			
54													
55													
56					18 HQ		97	88	85	4 3 3		$3.70x10^{-9}$	
57													
58													
59					19 HQ		93	90	90	3 2 1			
60													
61	55.57												
62		End of Borehole											
63													
64													
65													
66													
67													
68													
69													
70													

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-06

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **120.461 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-7-21 to 10-9-21** WATER LEVEL **0.26m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	120.46										
0		OVERBURDEN									
5	115.46										
5		Poor to fair quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACK with thinly laminated to laminated lenses of ARGILITE	1 HQ		73	65	53	8, 7, 4			
7			2 HQ		90	82	73	6, 9, 7			
10			3 HQ	BC	93	76	70	20, 15, 8		1.10×10^{-8}	
13			4 HQ	BC	97	66	51	10, 15, 16			
15	104.06										
15		Good quality, slightly weathered, fine grained, massive texture, dark grey, ARGILITE									
17	102.96										
17	102.36	Fair quality, slightly weathered, medium grained, massive texture, light grey, GREYWACKE	5 HQ		96	78	70	10, 10, 10			
18	101.56	Fair quality, slightly weathered, fine grained, massive texture, dark grey, ARGILITE									
20		Poor to good quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE	6 HQ		92	70	58	11, 11, 11		5.70×10^{-8}	
22			7 HQ	BC	93	72	60	10, 10, 10			
25			8 HQ	BC	90	82	80	5, 5, 5			
28			9 HQ	BC	96	75	67	10, 10, 10		4.50×10^{-9}	
31			10 HQ		97	74	66	11, 11, 11			
35											

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-06

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **120.461 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-7-21 to 10-9-21** WATER LEVEL **0.26m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Poor to good quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE *(continued...)* - interpreted possible fault zone from 36.1 m to 36.4 m.	11 HQ		85	79	85	3, 5, 4			
37											
38											
39			12 HQ		97	85	79	7, 11, 5		6.90×10^{-8}	
40											
41											
42			13 HQ		75	71	69	10, 8, 7			
43											
44											
45			14 HQ	BC, BC, BC	83	52	40	7, 6, 8			
46											
47											
48			15 HQ	BC	100	83	77	5, 7, 6		9.40×10^{-9}	
49											
50	70.41										
51		Fair to good quality, slightly weathered to fresh, medium grained, massive texture, light grey, GREYWACKE	16 HQ		93	84	77	6, 5, 1			
52											
53											
54			17 HQ		100	84	90	2, 5, 4			
55											
56											
57			18 HQ		100	91	87	4, 2, 4		3.20×10^{-9}	
58											
59											
60	60.41		19 HQ		100	92	90	3			
61		End of Borehole									
62											
63											
64											
65											
66											
67											
68											
69											
70											

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-07

Stantec

CLIENT Atlantic Mining NS Inc.
PROJECT No. 121619250.5500
PROJECT Geotechnical Investigation - Touquoy In-Pit Disposal
METHOD Wash Bore
LOCATION Middle Musquodobit, NS
ELEVATION: 118.93 m
DATUM Geodetic
DATES DRILLED (mm-dd-yy) 9-25-21 to 9-27-21
WATER LEVEL N/A Backfilled
INCLIN. / AZ. -60 / 30

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	118.93										
0 to 7.3		OVERBURDEN									
7.3	112.18										
7.3 to 35		Poor to good quality, moderately weathered to fresh, fine grained, massive to foliated texture, occasionally laminated to medium bands of quartz and shale, dark grey, ARGILITE	1 HQ	BC	40	26	13	25, 25, 25	0	1.20x10^{-7}	
			2 HQ	BC	67	12	0	25, 25, 25	0		
		- at 13.8 m clay seam noted (50 mm).	3 HQ	BC, BC, BC	75	20	7	25, 25, 20	0		
			4 HQ	BC	73	24	10	25, 25, 10	0		
			5 HQ	BC	77	49	40	10, 20, 16	0	3.90x10^{-8}	
			6 HQ	BC, BC	83	52	47	10, 10, 4	0		
		- interpreted possible fault/shear zone from 26.2 m to 26.4 m.	7 HQ		73	38	27	6, 6, 13	0		
			8 HQ	BC, BC	62	19	13	25, 20, 15	0	3.60x10^{-8}	
			9 HQ		66	37	28	25, 10, 4	0		
35											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-07

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **118.93 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **9-25-21 to 9-27-21** WATER LEVEL **N/A Backfilled** INCLIN. / AZ. **-60 / 30**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35													
36		Poor to good quality, moderately weathered to fresh, fine grained, massive to foliated texture, occasionally laminated to medium bands of quartz and shale, dark grey, ARGILITE *(continued...)* - interpreted possible fault/shear zone from 35.2 m to 35.5 m. - at 35.8 m clay seam noted (50 mm).			10 HQ		90	66	50	15			
37										9			
38										10			
39					11 HQ		90	90	84	3		1.80×10^{-8}	
40	83.60					BC				15			
41		End of Borehole								7			
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60													
61													
62													
63													
64													
65													
66													
67													
68													
69													
70													

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-08

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **118.027 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-17-21 to 10-18-21** WATER LEVEL **1.38m 1-24-22** INCLIN. / AZ. **-60 / 270**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	118.03										
0		OVERBURDEN									
2	115.81										
3		Poor to good quality, moderately weathered to fresh, fine grained, massive texture, dark grey, ARGILITE	1 HQ		20	7	0	10 10			
5				BC							
6		- from 5.7 m to 7.1 m highly fractured rock.	2 HQ		82	52	30	6 8 8			
8				BC							
9			3 HQ		97	70	60	12 10 8		8.70×10^{-8}	
10	108.80										
11		Poor to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE	4 HQ		84	82	79	2 2 2			
14			5 HQ		100	95	93	6 5 4			
16		- from 15.4 m to 16.0 m increase in grain size.									
17			6 HQ		100	88	80	5 6 4		8.70×10^{-8}	
20			7 HQ		97	76	47	3 4 3			
23			8 HQ		97	90	82	3 4 3			
26			9 HQ		87	77	69	4 5 5		2.10×10^{-8}	
28		- interpreted possible fault/shear zone from 28.1 m to 28.3 m.									
29			10 HQ		93	83	70	9 8 5			
31		- interpreted possible fault/shear zone from 30.1 m to 30.3 m.									
32			11 HQ		95	82	73	5 6 3		7.30×10^{-8}	
34			12		93	84	79				
35											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-08

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **118.027 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-17-21 to 10-18-21** WATER LEVEL **1.38m 1-24-22** INCLIN. / AZ. **-60 / 270**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35													
36		Poor to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE *(continued...)*			HQ					5			
37					12 HQ		93	84	79	4			
38										4			
39					13 HQ	BC	90	69	52	6		7.30×10^{-9}	
40	82.96									5			
41		End of Borehole								7			
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
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55													
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64													
65													
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67													
68													
69													
70													

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Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-09

PAGE 1 of 4

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **112.001 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-16-21 to 11-26-21** WATER LEVEL **19.57m 1-24-22** INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	112.00										
0		OVERBURDEN									
7	105.40										
8		Very poor to fair quality, slightly weathered to fresh, fine grained, massive texture, occasional sulphide inclusions, greywacke laminations and quartz veins, dark grey, ARGILITE - at 7.6 m (0.9 m thick quartz vein noted). - interpreted possible fault/shear zone from 9.0 m to 13.0 m.	1 HQ	BC	57	33	25	15 30 30			
12			2 HQ	BC	47	19	11	20 10 8			
15			3 HQ	BC	90	58	43	10 10 6		1.40×10^{-7}	
18			4 HQ	BC	69	37	33	8 10 15			
20			5 HQ	BC	77	64	57	5 8 5			
24			6 HQ		83	63	57	7 10 10		9.70×10^{-9}	
27			7 HQ	BC	85	76	73	5 3 5			
28	87.22										
29		Very poor to fair quality, fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE	8 HQ	BC BC BC	63	29	20	10 10 10			
31	85.07										
32		Very poor to poor quality, slightly weathered, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke lmaintations and quartz veins, dark grey, ARGILITE	9 HQ	BC BC BC	73	34	26	15 15 10		4.40×10^{-5}	
35					70	39	22				

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Stantec DRILLHOLE RECORD BH21-09

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **112.001 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-16-21 to 11-26-21** WATER LEVEL **19.57m 1-24-22** INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35											
36		Very poor to poor quality, slightly weathered, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke lmaintations and quartz veins, dark grey, ARGILITE *(continued...)*	10 HQ	BC BC	70	39	22	10 10 7 10		4.40×10^{-8}	
37		- at 35.7 m (0.25 m thick quartz vein noted).									
38		- broken core noted from 36.0 m to 37.4 m possibly a result of nearby underground workings.	11 HQ	BC	70	41	27	10 9			
39											
40		- broken core noted from 39.6 m to 44.4 m possibly a result of nearby underground workings.		BC BC BC				10			
41	76.30	- at 41.2 m (0.2 m thick quartz vein noted).	12 HQ	BC BC	68	37	29	9 8		6.10×10^{-9}	
42		Poor to fair quality, fresh, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke laminations and quartz veins, dark grey, ARGILITE									
43		- at 41.9 m (0.4 m thick quartz vein noted).		BC BC				10			
44		- at 41.9 m (0.1 m thick quartz vein noted).	13 HQ	BC BC BC	79	44	40	15 6			
45											
46											
47		- at 47.0 m (0.3 m thick quartz vein noted).	14 HQ		98	76	69	4 6			
48		- at 48.2 m (0.6 m thick quartz vein noted).						6			
49											
50			15 HQ		87	61	44	5 8			
51		- at 50.9 m (0.2 m thick quartz vein noted).									
52		- at 50.9 m (0.05 m thick quartz vein noted).						10			
53		- at 52.4 m (0.4 m thick quartz vein noted).	16 HQ	BC	87	50	37	8 10			
54		- broken core noted from 53.9 m to 54.6 m possibly a result of nearby underground workings.									
55				BC BC				10			
56											
57	62.81	Poor quality, fresh, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke laminations, dark grey, ARGILITE	17 HQ	BC	77	51	44	10 6			
58		- at 56.8 m (3.2 m thick quartz vein noted).						6			
59			18 HQ	BC	77	47	40	8 10		3.30×10^{-7}	
60	59.52										
61		Poor to good quality, fresh, fine grained, massive texture, QUARTZ VEIN						5			
62			19 HQ		95	86	81	4 4			
63								3			
64											
65	55.31							4			
66		Poor to fair quality, fresh, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke laminations, dark grey, ARGILITE	20 HQ	BC	78	50	35	10		2.30×10^{-9}	
67								10			
68				BC				8			
69			21 HQ		89	76	70	7			
70											

NOTE: PERMEABILITY >10-4 FOR THIS INTERVAL. FLOW RATE HIGH (> 50 L/MIN) AND THEREFORE COULD NOT ACHEVIE PRESSURE FOR TESTING IN HOLE.

TEST INTERVAL IN AREA OF UNDERGROUND WORKINGS

Logged By: _____

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Stantec DRILLHOLE RECORD BH21-09

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **112.001 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-16-21 to 11-26-21** WATER LEVEL **19.57m 1-24-22** INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
70		Poor to fair quality, fresh, fine grained, massive texture, occasional sulphide inclusions, occasional greywacke laminations, dark grey, ARGILITE *(continued...)*	21 HQ	BC	89	76	70	4			
71		- at 70.0 m (0.6 m thick quartz vein noted).						4			
72			22 HQ	BC	88	65	58	3		2.30×10^{-9}	
73								8			
74								10			
75			23 HQ	BC	75	57	49	11			
76				BC				11			
77								8			
78			24 HQ		91	60	53	12		6.00×10^{-9}	
79				BC				7			
80				BC				6			
81			25 HQ	BC	93	77	71	7			
82				BC				8			
83		- broken core noted from 82.9 m to 83.1 m possibly a result of nearby underground workings.						10			
84			26 HQ	BC	76	62	54	10			
85								5			
86								6			
87			27 HQ	BC	80	68	56	7		3.50×10^{-9}	
88	35.76	- at 87.8 m (0.2 m thick quartz vein noted).		BC				10			
		Very poor to fair quality, slightly weathered to fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE		BC				9			
89			28 HQ	BC	96	69	57	6			
90								8			
91				BC				6			
92			29 HQ	BC	56	49	46	8			
93								10			
94								13			
95			30 HQ		77	67	65	6		8.10×10^{-9}	
96								5			
97								5			
98			31 HQ		95	66	31	5			
99								10			
100								12			
101			32 HQ	BC	93	53	35	5			
102								10			
103								10		2.70×10^{-9}	
104			33 HQ	BC	78	15	5	15			
105											

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-09

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **112.001 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **11-16-21 to 11-26-21** WATER LEVEL **19.57m 1-24-22** INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
105													
106		Very poor to fair quality, slightly weathered to fresh, fine to medium grained, foliated texture, light grey to dark grey, interbedded GREYWACKE and ARGILITE *(continued...)*			33 HQ	BC	78	15	5	15, 15, 10			
107													
108					34 HQ		98	74	66	8, 3, 3		2.70×10^{-9}	
109													
110						BC							
111					35 HQ		83	65	54	10, 6, 10			
112													
113										5			
114					36 HQ		83	63	53	11			
115										11		1.00×10^{-8}	
116										15			
117					37 HQ		95	45	30	10			
118										10			
119										7			
120	7.39				38 HQ		99	77	67	3			
121		End of Borehole								1			
122													
123													
124													
125													
126													
127													
128													
129													
130													
131													
132													
133													
134													
135													
136													
137													
138													
139													
140													

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DRILLHOLE RECORD BH21-10

Stantec

CLIENT Atlantic Mining NS Inc.
PROJECT Geotechnical Investigation - Touquoy In-Pit Disposal
LOCATION Middle Musquodobit, NS
DATES DRILLED (mm-dd-yy) 9-27-21 to 9-28-21

PROJECT No. 121619250.5500
METHOD Wash Bore
ELEVATION: 110.311 m
DATUM Geodetic
WATER LEVEL 0m 1-24-22
INCLIN. / AZ. -60 / 360

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	110.31										
0		OVERBURDEN									
3	107.78										
3		Very poor to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE	1 HQ	BC BC	100	66	56	15 6			
5			2 HQ		93	70	42	5 16 10			
8			3 HQ	BC BC BC BC	90	53	40	17 17 20		3.20×10^{-8}	
12			4 HQ		98	79	62	14 6 5			
14			5 HQ	BC	97	86	77	25 20 15			
18		- interpreted possible fault/shear zone from 18.9 m to 19.2 m.	6 HQ	BC BC	92	83	75	2 2 5		1.10×10^{-8}	
21			7 HQ	BC BC	98	88	83	5 4 6			
24			8 HQ	BC	100	100	100	2 4 5			
27			9 HQ	BC BC	92	87	85	2 0 5		8.10×10^{-9}	
30			10 HQ	BC	87	67	43	8 20 25			
33			11 HQ	BC	98	90	88	1 3 5		1.80×10^{-5}	
35			12		93	89	83				

Logged By: _____
Reviewed By: _____

DRILLHOLE RECORD BH21-10

Stantec

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **110.311 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **9-27-21 to 9-28-21** WATER LEVEL **0m 1-24-22** INCLIN. / AZ. **-60 / 360**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35													
36		Very poor to excellent quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent lenses of ARGILITE *(continued...)*			12 HQ	BC	93	89	83	3, 4, 2			
37													
38					13 HQ	BC	92	77	73	0, 7, 10		1.80×10^{-8}	
39													
40													
41					14 HQ	BC	87	79	77	4, 3, 5			
42													
43													
44					15 HQ	BC, BC	75	36	22	25, 20, 15		1.70×10^{-8}	
45													
46													
47					16 HQ	BC	97	94	93	2, 4, 6			
48													
49													
50					17 HQ	BC, BC	97	80	73	5, 8, 6			
51													
52													
53					18 HQ	BC, BC, BC	90	77	63	9, 3, 6		4.00×10^{-8}	
54													
55													
56					19 HQ		98	85	80	5, 8, 9			
57													
58													
59					20 HQ		100	73	60	9			
60	57.43												
61		End of Borehole											
62													
63													
64													
65													
66													
67													
68													
69													
70													

Logged By: _____

Reviewed By: _____

DRILLHOLE RECORD BH21-11

Stantec

CLIENT **Atlantic Mining NS Inc.**
PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal**
LOCATION **Middle Musquodobit, NS**
DATES DRILLED (mm-dd-yy) **10-10-21 to 10-12-21**

PROJECT No. **121619250.5500**
METHOD **Wash Bore**
ELEVATION: **119.072 m**
DATUM **Geodetic**
WATER LEVEL **0m 1-24-22**
INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	119.07										
0		OVERBURDEN									
5	114.32										
6		Very poor to poor quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, medium grey to dark grey, occasional quartz/pyrite veins, ARGILITE with very thin to medium intermitent laminations of GREYWACKE	1 HQ	BC	63	0	0	25	0		
				BC				25			
				BC				25			
8		- drilling sub-parallel to foliation/bedding.	2 HQ	BC	70	10	6	25	0		
				BC				25			
				BC				25			
11			3 HQ	BC	78	4	0	20	0	8.50×10^{-8}	
				BC				25			
				BC				25			
14		- at 13.2 m clay seam noted (50 mm).	4 HQ	BC	80	44	33	25	0		
				BC				5			
				BC				7			
17			5 HQ	BC	47	31	23	15	0		
				BC				10			
								25			
20			6 HQ		90	60	45	5	0	4.00×10^{-8}	
								4			
								10			
23			7 HQ					17			
				BC	100	61	45	20	0		
				BC				15			
				BC				15			
26			8 HQ	BC	96	54	47	10	0		
								8			
29			9 HQ	BC				7			
				BC	96	62	46	18	0	1.90×10^{-8}	
								6			
32			10 HQ					9			
				BC	97	51	43	13	0		
35								7			
			11		93	57	48				

Logged By: _____
Reviewed By: _____

DRILLHOLE RECORD BH21-11

Stantec

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **119.072 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-10-21 to 10-12-21** WATER LEVEL **0m 1-24-22** INCLIN. / AZ. **-60 / 45**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35					HQ								
36		Very poor to poor quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, medium grey to dark grey, occasional quartz/pyrite veins, ARGILITE with very thin to medium intermitent laminations of GREYWACKE			11 HQ	BC BC	93	57	48	10 10 6 8			
37													
38		- drilling sub-parallel to foliation/bedding. *(continued...)*				BC							
39					12 HQ	BC BC	95	59	50	6 4 6		4.40×10^{-9}	
40													
41					13 HQ	BC	99	49	45	9 10 10			
42													
43	81.46												
44		Poor to fair quality, slightly weathered to fresh, fine grained, massive texture, dark grey, occasional quartz/pyrite veins, ARGILITE			14 HQ		97	57	50	11 12 12			
45													
46													
47					15 HQ	BC	97	70	60	12 9 12			
48													
49													
50					16 HQ	BC	98	50	36	13 14 11		5.00×10^{-9}	
51													
52													
53					17 HQ	BC	98	61	50	9 13 8			
54													
55													
56					18 HQ	BC	88	74	70	3 6 3		3.00×10^{-9}	
57													
58													
59					19 HQ	BC	92	59	47	4 12 10			
60													
61	65.91												
62		End of Borehole											
63													
64													
65													
66													
67													
68													
69													
70													

Logged By: _____

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Stantec DRILLHOLE RECORD BH21-12

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **110.133 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-22-21 to 10-24-21** WATER LEVEL **1.86m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	RUN NO.	LOST / BROKEN CORE	RECOVERY TOTAL CORE %	RECOVERY SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
0	110.13										
0		OVERBURDEN		BC							
3	106.49										
4		Fair quality, slightly weathered, fine to medium grained, massive texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent laminations of ARGILITE	1 HQ	BC BC	100	44	59	7 20			
5	105.07										
6		Fair quality, fresh, fine grained, massive to foliated texture, occasionally laminated to medium bands of quartz and shale, dark grey, ARGILITE	2 HQ	BC	100	80	75	7 8 11			
8	102.08										
8		Poor to good quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent laminations of ARGILITE/SHALE	3 HQ	BC BC BC	99	76	64	7 8 11		3.00×10^{-7}	
12			4 HQ	BC BC	75	75	75	3 6 7			
15			5 HQ	BC	87	71	57	3 10 7			
18			6 HQ	BC BC	93	87	85	8 6 4		1.60×10^{-7}	
21			7 HQ	BC BC	92	78	73	4 3 8			
24			8 HQ	BC BC	90	57	46	1 13 12 10			
27			9 HQ	BC BC	84	61	46	14 10 10		6.00×10^{-9}	
30			10 HQ		93	77	67	6 7 10			
33			11 HQ	BC BC	79	62	50	3 5 2		5.50×10^{-9}	
35											

Logged By: _____

Reviewed By: _____

Stantec DRILLHOLE RECORD BH21-12

CLIENT **Atlantic Mining NS Inc.** PROJECT No. **121619250.5500**

PROJECT **Geotechnical Investigation - Touquoy In-Pit Disposal** METHOD **Wash Bore**

LOCATION **Middle Musquodobit, NS** ELEVATION: **110.133 m** DATUM **Geodetic**

DATES DRILLED (mm-dd-yy) **10-22-21 to 10-24-21** WATER LEVEL **1.86m 1-24-22** INCLIN. / AZ. **-90 / N/A**

NOTE: For abbreviations, symbols and descriptions refer to SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

DEPTH (m)	ELEVATION (m)	LITHOLOGICAL DESCRIPTION	STRATA PLOT	WATER LEVEL	RUN NO.	RECOVERY: LOST / BROKEN CORE	RECOVERY: TOTAL CORE %	RECOVERY: SOLID CORE %	R.Q.D. %	FRACTURE INDEX PER 1 m	DISCONTUNITY DIP w.r.t. CORE AXIS	HYDRAULIC CONDUCTIVITY k, m/sec.	WELL CONSTRUCTION DETAILS
35													
36		Poor to good quality, slightly weathered to fresh, fine to medium grained, massive to foliated texture, light grey to dark grey, occasional quartz veins, GREYWACKE with very thin to medium intermitent laminations of ARGILITE/SHALE *(continued...)*			12 HQ		100	88	83	5			
37										4			
38										3		5.50×10^{-9}	
39					13 HQ		91	67	52	6			
40										7			
41	69.09									4			
		End of Borehole											
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Logged By: _____

Reviewed By: _____

C.3 BEDROCK CORE PHOTOGRAPHIC LOGS

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 1	
Borehole ID: BH21-01	
Depth from (m): 4.00	
Depth to (m): 11.88	
Core Runs: 1-3	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 2	
Borehole ID: BH21-01	
Depth from (m): 4.00	
Depth to (m): 11.88	
Core Runs: 1-3	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 3	
Borehole ID: BH21-01	
Depth from (m): 11.88	
Depth to (m): 19.98	
Core Runs: 3-6	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 4	
Borehole ID: BH21-01	
Depth from (m): 11.88	
Depth to (m): 19.98	
Core Runs: 3-6	
Core Photograph Condition: Wet	
Comments:	

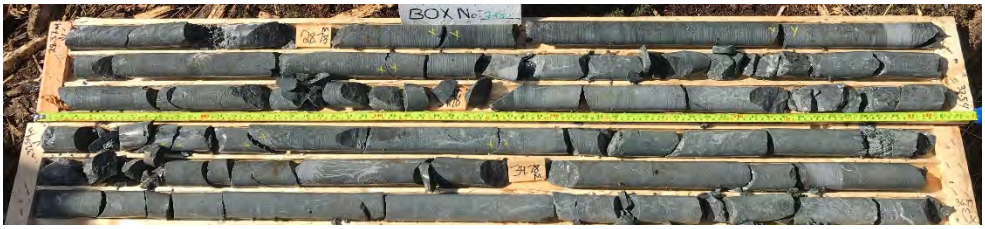
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 5	
Borehole ID: BH21-01	
Depth from (m): 19.98	
Depth to (m): 28.37	
Core Runs: 6-8	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 6	
Borehole ID: BH21-01	
Depth from (m): 19.98	
Depth to (m): 28.37	
Core Runs: 6-8	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 7	
Borehole ID: BH21-01	
Depth from (m): 28.37	
Depth to (m): 36.79	
Core Runs: 8-11	
Core Photograph Condition: Dry	
Comments:	

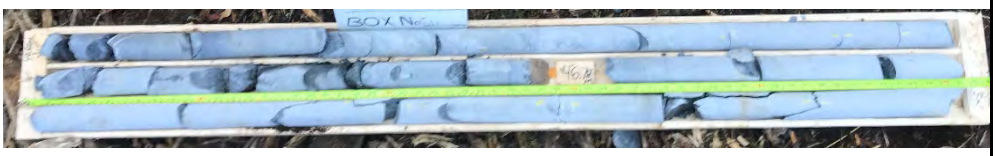
Photograph ID: 8	
Borehole ID: BH21-01	
Depth from (m): 28.37	
Depth to (m): 36.79	
Core Runs: 8-11	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 9	
Borehole ID: BH21-01	
Depth from (m): 36.79	
Depth to (m): 44.52	
Core Runs: 11-13	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 10	
Borehole ID: BH21-01	
Depth from (m): 36.79	
Depth to (m): 44.52	
Core Runs: 11-13	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 11	
Borehole ID: BH21-01	
Depth from (m): 44.52	
Depth to (m): 48.57	
Core Runs: 13-15	
Core Photograph Condition: Dry	
Comments:	

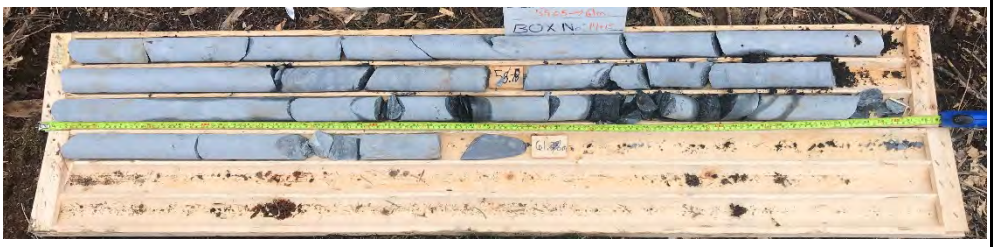
Photograph ID: 12	
Borehole ID: BH21-01	
Depth from (m): 44.52	
Depth to (m): 48.57	
Core Runs: 13-15	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 13	
Borehole ID: BH21-01	
Depth from (m): 48.57	
Depth to (m): 56.65	
Core Runs: 15-18	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 14	
Borehole ID: BH21-01	
Depth from (m): 48.57	
Depth to (m): 56.65	
Core Runs: 15-18	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 15	
Borehole ID: BH21-01	
Depth from (m): 56.65	
Depth to (m): 61.00	
Core Runs: 18-20	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 16	No Picture
Borehole ID: BH21-01	
Depth from (m): 56.65	
Depth to (m): 61.00	
Core Runs: 18-20	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 17	
Borehole ID: BH21-02	
Depth from (m): 5.65	
Depth to (m): 13.63	
Core Runs: 1-3	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 18	
Borehole ID: BH21-02	
Depth from (m): 5.65	
Depth to (m): 13.63	
Core Runs: 1-3	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 19	
Borehole ID: BH21-02	
Depth from (m): 13.63	
Depth to (m): 25.54	
Core Runs: 3-6	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 20	
Borehole ID: BH21-02	
Depth from (m): 13.63	
Depth to (m): 25.54	
Core Runs: 3-6	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 21	
Borehole ID: BH21-02	
Depth from (m): 25.59	
Depth to (m): 33.65	
Core Runs: 6-9	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 22	
Borehole ID: BH21-02	
Depth from (m): 25.59	
Depth to (m): 33.65	
Core Runs: 6-9	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 23	
Borehole ID: BH21-02	
Depth from (m): 33.65	
Depth to (m): 41.68	
Core Runs: 9-12	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 24	
Borehole ID: BH21-02	
Depth from (m): 33.65	
Depth to (m): 41.68	
Core Runs: 9-12	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 25	
Borehole ID: BH21-02	
Depth from (m): 41.68	
Depth to (m): 52.95	
Core Runs: 12-16	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 26	
Borehole ID: BH21-02	
Depth from (m): 41.68	
Depth to (m): 52.95	
Core Runs: 12-16	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 27	
Borehole ID: BH21-02	
Depth from (m): 52.95	
Depth to (m): 61.59	
Core Runs: 16-18	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 28	
Borehole ID: BH21-02	
Depth from (m): 52.95	
Depth to (m): 61.59	
Core Runs: 16-18	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 29	
Borehole ID: BH21-03	
Depth from (m): 2.79	
Depth to (m): 16.02	
Core Runs: 1-5	
Core Photograph Condition: Dry	
Comments:	

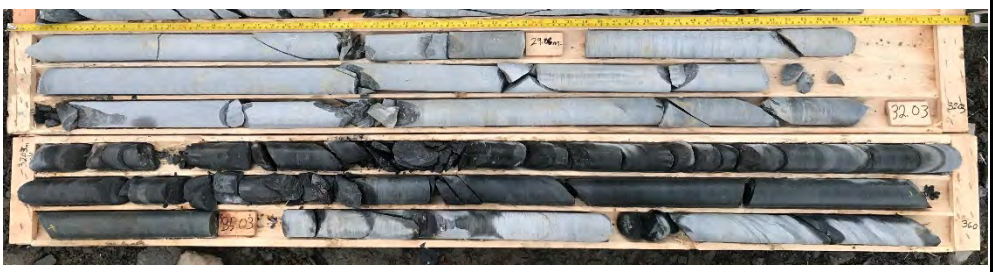
Photograph ID: 30	
Borehole ID: BH21-03	
Depth from (m): 2.79	
Depth to (m): 16.02	
Core Runs: 1-5	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 31	
Borehole ID: BH21-03	
Depth from (m): 16.02	
Depth to (m): 28.81	
Core Runs: 5-9	
Core Photograph Condition: Dry	
Comments:	

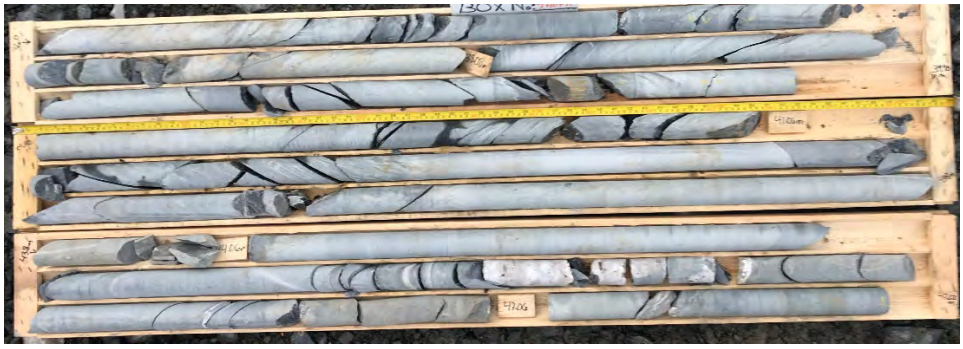
Photograph ID: 32	
Borehole ID: BH21-03	
Depth from (m): 16.02	
Depth to (m): 28.81	
Core Runs: 5-9	
Core Photograph Condition: Wet	
Comments:	

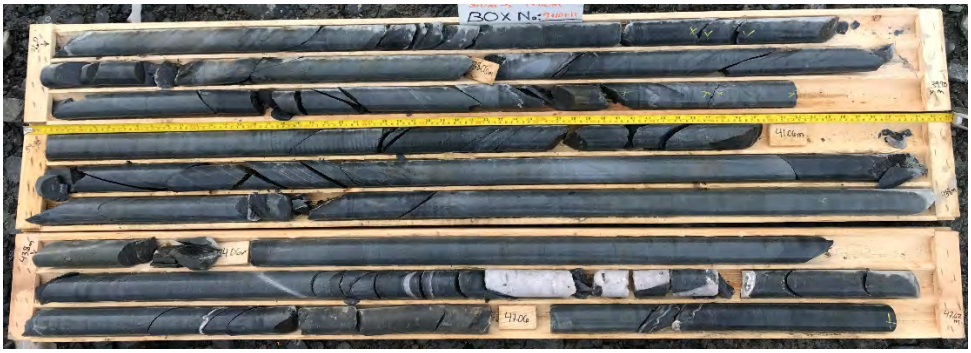
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 33	
Borehole ID: BH21-03	
Depth from (m): 28.81	
Depth to (m): 36.00	
Core Runs: 9-12	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 34	
Borehole ID: BH21-03	
Depth from (m): 28.81	
Depth to (m): 36.00	
Core Runs: 9-12	
Core Photograph Condition: Wet	
Comments:	

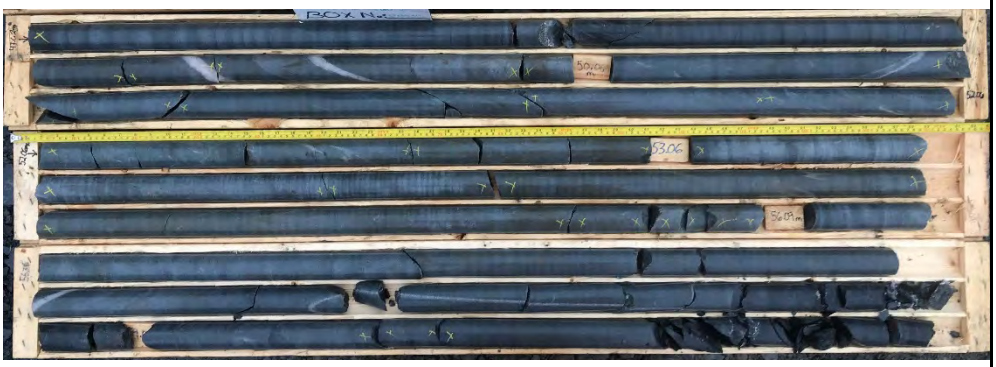
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 35	
Borehole ID: BH21-03	
Depth from (m): 36.00	
Depth to (m): 47.62	
Core Runs: 12-16	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 36	
Borehole ID: BH21-03	
Depth from (m): 36.00	
Depth to (m): 47.62	
Core Runs: 12-16	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 37	
Borehole ID: BH21-03	
Depth from (m): 47.62	
Depth to (m): 60.29	
Core Runs: 16-20	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 38	
Borehole ID: BH21-03	
Depth from (m): 47.62	
Depth to (m): 60.29	
Core Runs: 16-20	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 39	
Borehole ID: BH21-03	
Depth from (m): 60.29	
Depth to (m): 72.38	
Core Runs: 20-24	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 40	
Borehole ID: BH21-03	
Depth from (m): 60.29	
Depth to (m): 72.38	
Core Runs: 20-24	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 41	
Borehole ID: BH21-03	
Depth from (m): 72.38	
Depth to (m): 85.00	
Core Runs: 24-28	
Core Photograph Condition: Dry	
Comments:	

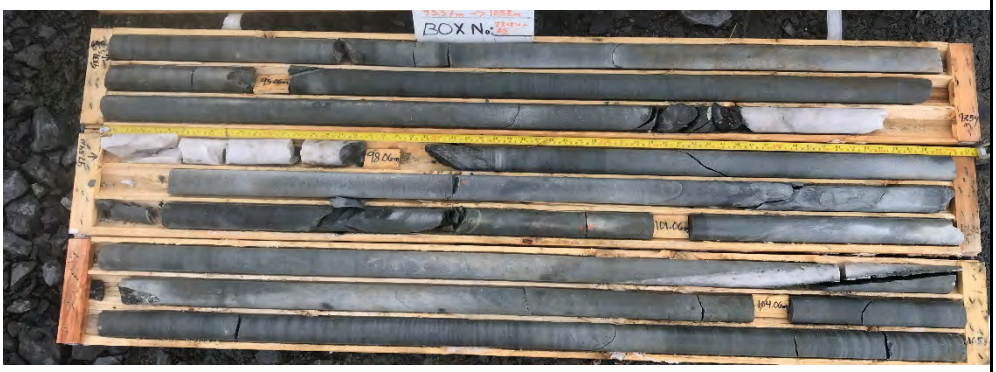
Photograph ID: 42	
Borehole ID: BH21-03	
Depth from (m): 72.38	
Depth to (m): 85.00	
Core Runs: 24-28	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 43	
Borehole ID: BH21-03	
Depth from (m): 85.00	
Depth to (m): 93.37	
Core Runs: 28-31	
Core Photograph Condition: Dry	
Comments:	

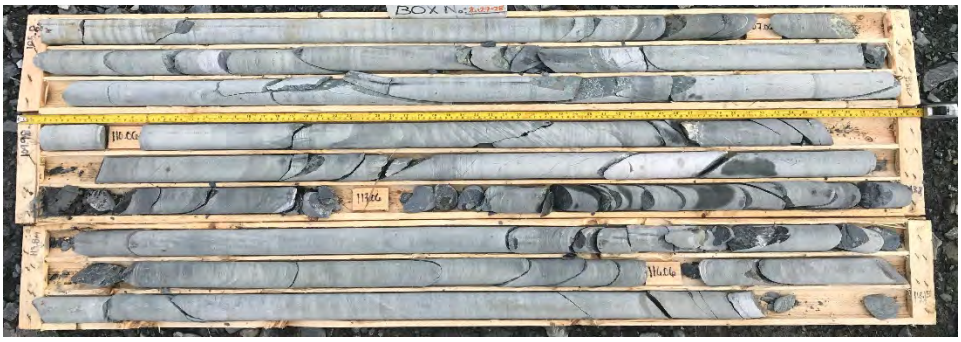
Photograph ID: 44	
Borehole ID: BH21-03	
Depth from (m): 85.00	
Depth to (m): 93.37	
Core Runs: 28-31	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 45	
Borehole ID: BH21-03	
Depth from (m): 93.37	
Depth to (m): 105.80	
Core Runs: 31-35	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 46	
Borehole ID: BH21-03	
Depth from (m): 93.37	
Depth to (m): 105.80	
Core Runs: 31-35	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 47	
Borehole ID: BH21-03	
Depth from (m): 105.80	
Depth to (m): 118.15	
Core Runs: 35-39	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 48	
Borehole ID: BH21-03	
Depth from (m): 105.80	
Depth to (m): 118.15	
Core Runs: 35-39	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 49	
Borehole ID: BH21-03	
Depth from (m): 118.15	
Depth to (m): 120.15	
Core Runs: 39-40	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 50	
Borehole ID: BH21-03	
Depth from (m): 118.15	
Depth to (m): 120.15	
Core Runs: 39-40	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 51	
Borehole ID: BH21-04	
Depth from (m): 3.30	
Depth to (m): 11.90	
Core Runs: 1-4	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 52	
Borehole ID: BH21-04	
Depth from (m): 3.30	
Depth to (m): 11.90	
Core Runs: 1-4	
Core Photograph Condition: Wet	
Comments:	

No Picture

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 53	
Borehole ID: BH21-04	
Depth from (m): 11.90	
Depth to (m): 17.40	
Core Runs: 4-5	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 54	
Borehole ID: BH21-04	
Depth from (m): 11.90	
Depth to (m): 17.40	
Core Runs: 4-5	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 55	
Borehole ID: BH21-04	
Depth from (m): 17.40	
Depth to (m): 21.50	
Core Runs: 6-7	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 56	
Borehole ID: BH21-04	
Depth from (m): 17.40	
Depth to (m): 21.50	
Core Runs: 6-7	
Core Photograph Condition: Wet	
Comments:	

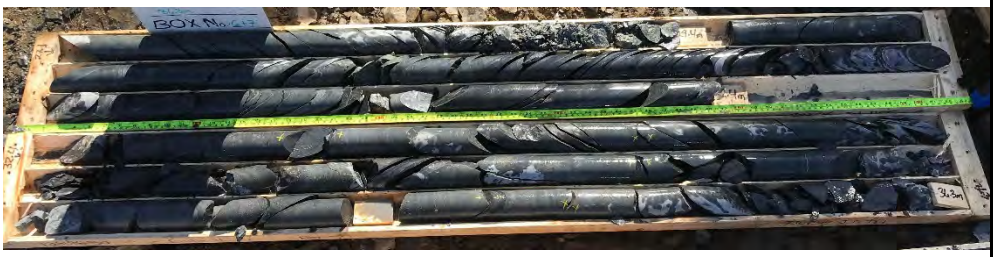
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 57	
Borehole ID: BH21-04	
Depth from (m): 21.50	
Depth to (m): 27.10	
Core Runs: 7-9	
Core Photograph Condition: Dry	
Comments:	

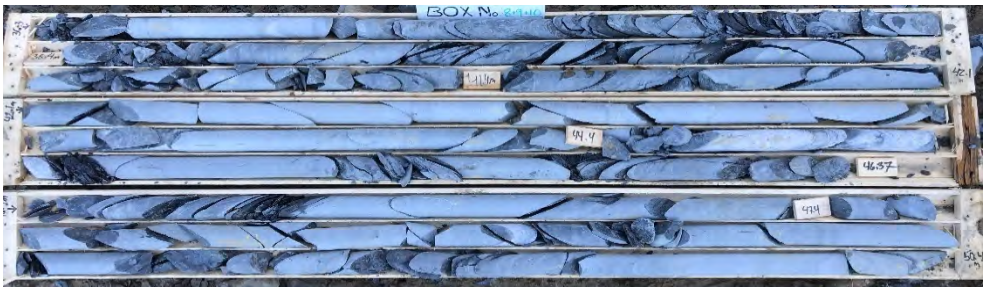
Photograph ID: 58	
Borehole ID: BH21-04	
Depth from (m): 21.50	
Depth to (m): 27.10	
Core Runs: 7-9	
Core Photograph Condition: Wet	
Comments:	

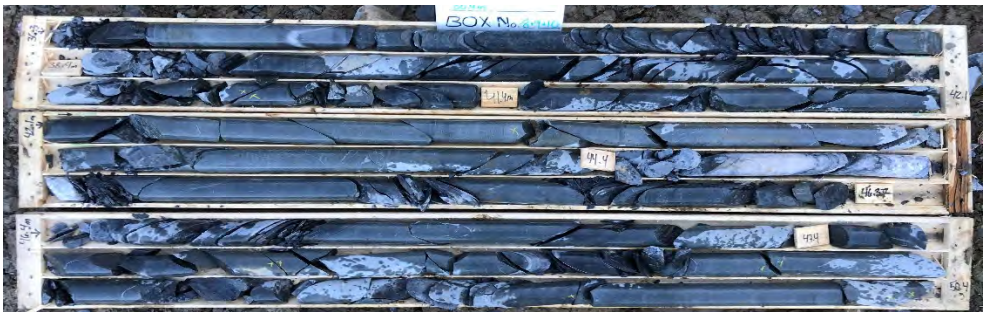
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 59	
Borehole ID: BH21-04	
Depth from (m): 27.10	
Depth to (m): 36.30	
Core Runs: 9-12	
Core Photograph Condition: Dry	
Comments:	

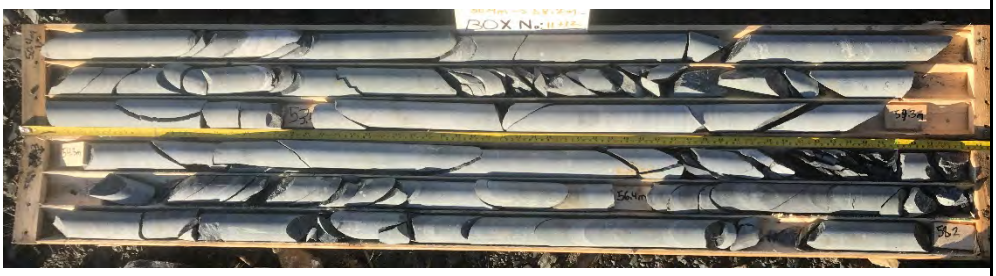
Photograph ID: 60	
Borehole ID: BH21-04	
Depth from (m): 27.10	
Depth to (m): 36.30	
Core Runs: 9-12	
Core Photograph Condition: Wet	
Comments:	

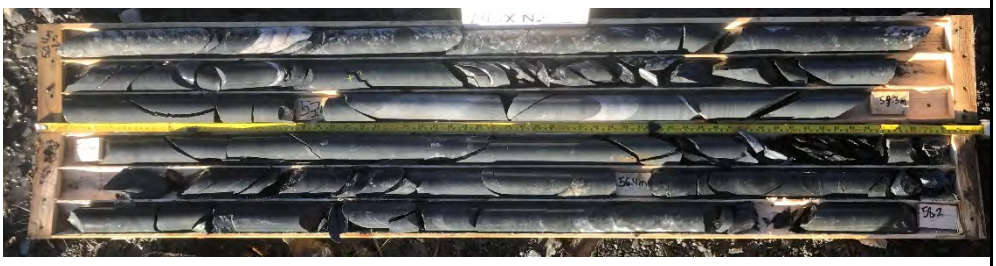
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 61	
Borehole ID: BH21-04	
Depth from (m): 36.30	
Depth to (m): 50.40	
Core Runs: 12-17	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 62	
Borehole ID: BH21-04	
Depth from (m): 36.30	
Depth to (m): 50.40	
Core Runs: 12-17	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 63	
Borehole ID: BH21-04	
Depth from (m): 50.40	
Depth to (m): 58.20	
Core Runs: 17-20	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 64	
Borehole ID: BH21-04	
Depth from (m): 50.40	
Depth to (m): 58.20	
Core Runs: 17-20	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 65	
Borehole ID: BH21-04	
Depth from (m): 58.20	
Depth to (m): 60.40	
Core Runs: 20-21	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 66	
Borehole ID: BH21-04	
Depth from (m): 58.20	
Depth to (m): 60.40	
Core Runs: 20-21	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 67	
Borehole ID: BH21-05	
Depth from (m): 5.72	
Depth to (m): 15.10	
Core Runs: 1-3	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 68	
Borehole ID: BH21-05	
Depth from (m): 5.72	
Depth to (m): 15.10	
Core Runs: 1-3	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 69	
Borehole ID: BH-21-05	
Depth from (m): 15.10	
Depth to (m): 22.10	
Core Runs: 3-6	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 70	
Borehole ID: BH21-05	
Depth from (m): 15.10	
Depth to (m): 22.10	
Core Runs: 3-6	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 71	
Borehole ID: BH21-05	
Depth from (m): 22.10	
Depth to (m): 25.43	
Core Runs: 6-7	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 72	
Borehole ID: BH21-05	
Depth from (m): 22.10	
Depth to (m): 25.43	
Core Runs: 6-7	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 73	
Borehole ID: BH21-05	
Depth from (m): 25.43	
Depth to (m): 32.11	
Core Runs: 8-10	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 74	
Borehole ID: BH21-05	
Depth from (m): 25.43	
Depth to (m): 32.11	
Core Runs: 8-10	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 75	
Borehole ID: BH21-05	
Depth from (m): 32.11	
Depth to (m): 42.32	
Core Runs: 10-13	
Core Photograph Condition: Dry	
Comments:	

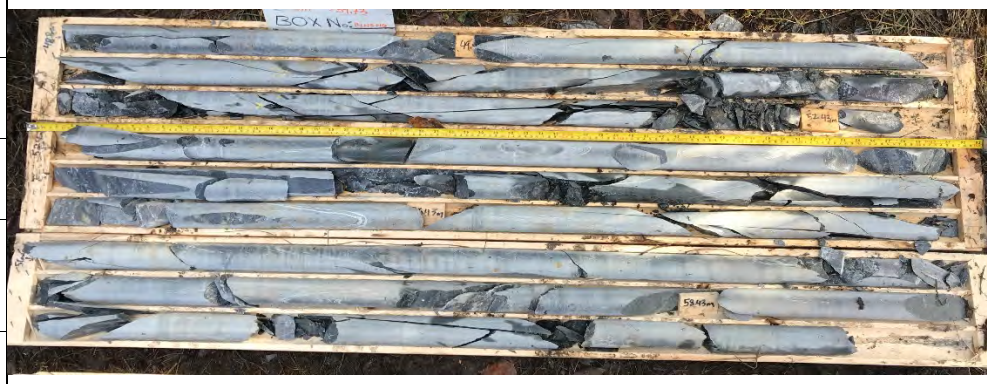
Photograph ID: 76	
Borehole ID: BH21-05	
Depth from (m): 32.11	
Depth to (m): 42.32	
Core Runs: 10-13	
Core Photograph Condition: Wet	
Comments:	

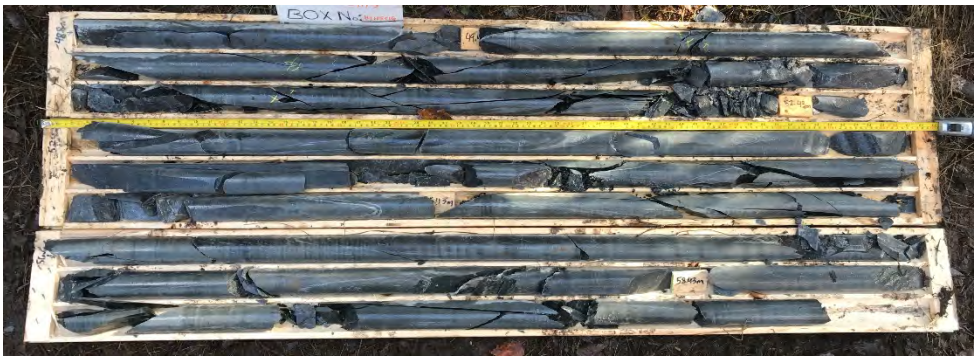
Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 77	
Borehole ID: BH21-05	
Depth from (m): 42.32	
Depth to (m): 48.80	
Core Runs: 13-15	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 78	
Borehole ID: BH21-05	
Depth from (m): 42.32	
Depth to (m): 48.80	
Core Runs: 13-15	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 79	
Borehole ID: BH21-05	
Depth from (m): 48.80	
Depth to (m): 59.73	
Core Runs: 15-19	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 80	
Borehole ID: BH21-05	
Depth from (m): 48.80	
Depth to (m): 59.73	
Core Runs: 15-19	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 81	
Borehole ID: BH21-06	
Depth from (m): 5.05	
Depth to (m): 14.05	
Core Runs: 1-3	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 82	
Borehole ID: BH21-05	
Depth from (m): 5.05	
Depth to (m): 14.05	
Core Runs: 1-3	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 83	
Borehole ID: BH21-06	
Depth from (m): 14.05	
Depth to (m): 25.66	
Core Runs: 4-7	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 84	
Borehole ID: BH21-06	
Depth from (m): 14.05	
Depth to (m): 25.66	
Core Runs: 4-7	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 85	
Borehole ID: BH21-06	
Depth from (m): 25.66	
Depth to (m): 33.68	
Core Runs: 7-10	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 86	
Borehole ID: BH21-06	
Depth from (m): 25.66	
Depth to (m): 33.68	
Core Runs: 7-10	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 87	
Borehole ID: BH21-06	
Depth from (m): 33.68	
Depth to (m): 41.45	
Core Runs: 10-13	
Core Photograph Condition: Dry	
Comments:	

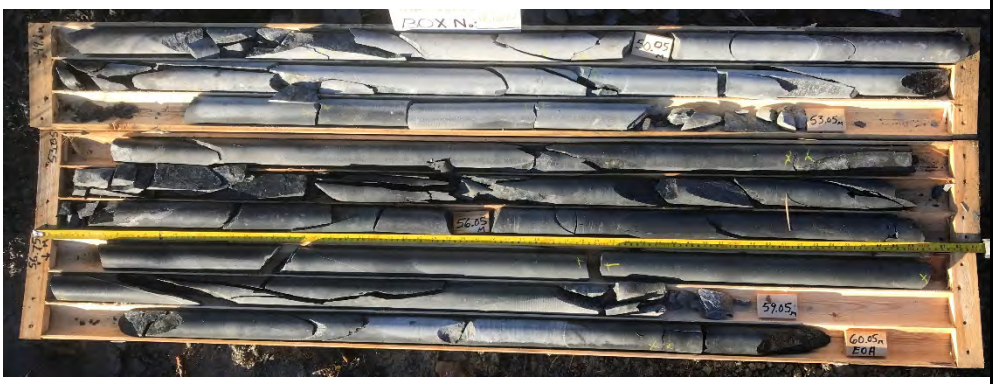
Photograph ID: 88	
Borehole ID: BH21-06	
Depth from (m): 33.68	
Depth to (m): 41.45	
Core Runs: 10-13	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 89	
Borehole ID: BH21-06	
Depth from (m): 41.45	
Depth to (m): 49.10	
Core Runs: 13-15	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 90	
Borehole ID: BH21-06	
Depth from (m): 41.45	
Depth to (m): 49.10	
Core Runs: 13-15	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 91	
Borehole ID: BH21-06	
Depth from (m): 49.10	
Depth to (m): 60.05	
Core Runs: 15-17	
Core Photograph Condition: Dry	
Comments:	

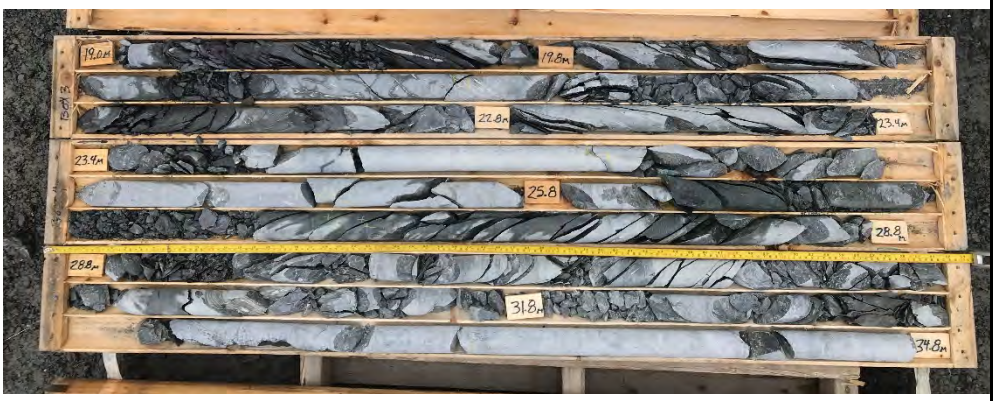
Photograph ID: 92	
Borehole ID: BH21-06	
Depth from (m): 49.10	
Depth to (m): 60.05	
Core Runs: 15-17	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 93	
Borehole ID: BH21-07	
Depth from (m): 7.80	
Depth to (m): 19.00	
Core Runs: 1-4	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 94	
Borehole ID: BH21-07	
Depth from (m): 7.80	
Depth to (m): 19.00	
Core Runs: 1-4	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 95	
Borehole ID: BH21-07	
Depth from (m): 19.00	
Depth to (m): 34.80	
Core Runs: 4-9	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 96	
Borehole ID: BH21-07	
Depth from (m): 19.00	
Depth to (m): 34.80	
Core Runs: 4-9	
Core Photograph Condition: Wet	
Comments:	

Client:	**Atlantic Mining NS Inc.**	**Project:**	**In-Pit Tailings Disposal Invest.**
Site Name:	**Touquoy Gold Project**	**Site Location:**	**Middle Musquodobit, NS**

Photograph ID: 97	
Borehole ID: BH21-07	
Depth from (m): 34.80	
Depth to (m): 40.80	
Core Runs: 9-11	
Core Photograph Condition: Dry	
Comments:	

Photograph ID: 98	
Borehole ID: BH21-07	
Depth from (m): 34.80	
Depth to (m): 40.80	
Core Runs: 9-11	
Core Photograph Condition: Wet	
Comments:	