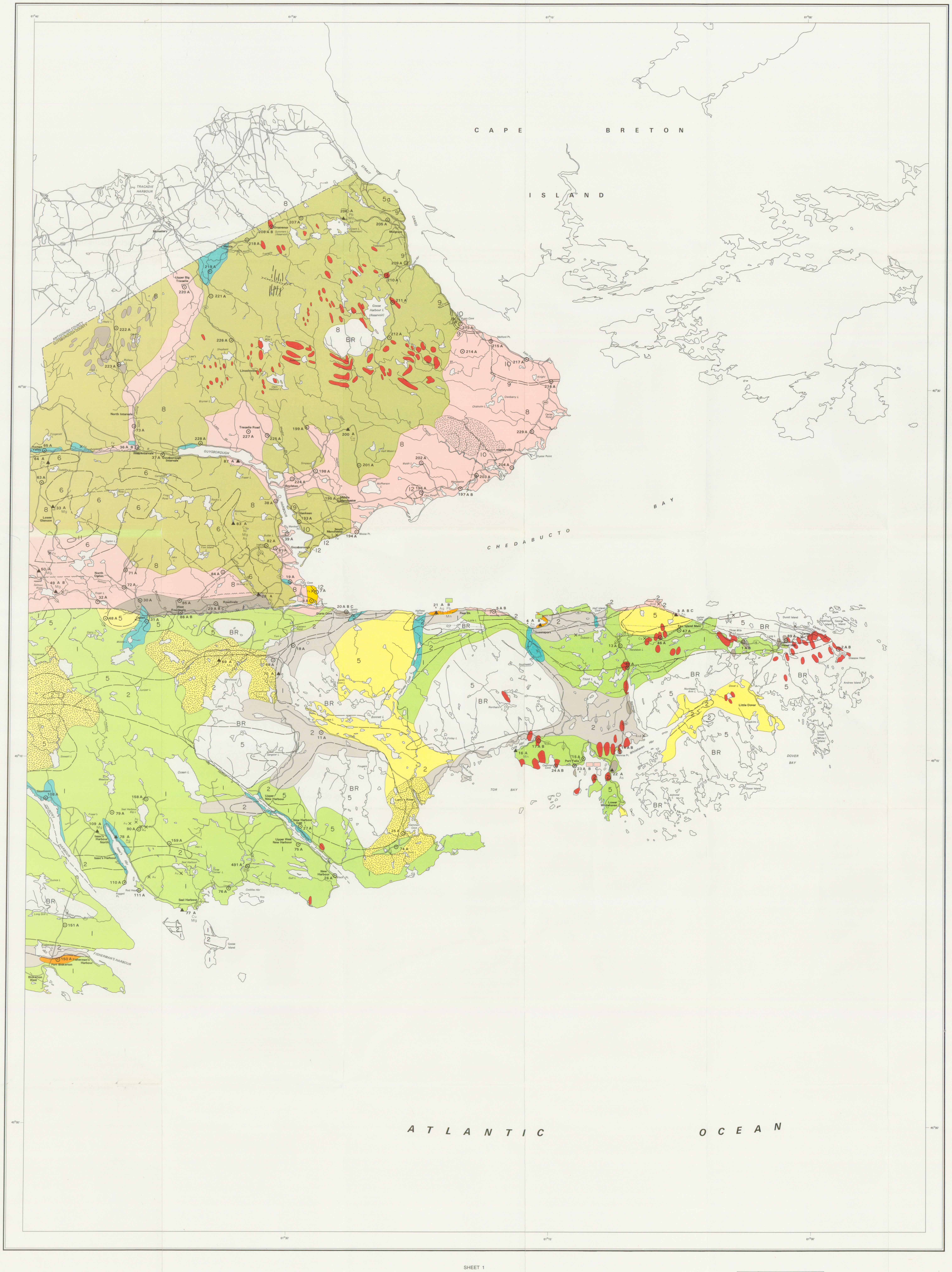

SHEET 1

PLEISTOCENE GEOLOGY

EASTERN SHORE REGION

NOVA SCOTIA

1979

Scale = 1:100,000

0 5 10 15 Kilometres

To accompany Nova Scotia Department of Mines Paper 79 - 4 by R. R. Stea and J. H. Fowler

A Joint Program of the Nova Scotia Department of Mines and The Canada Department of Regional Economic Expansion

LEGEND

PLEISTOCENE GEOLOGY

UNIT *	DESCRIPTION OF UNIT AND FACIES	GEOMORPHIC AND TOPOGRAPHIC EXPRESSION	THICKNESS	LITHOLOGICAL ASSOCIATIONS OF CLASTS	GENETIC CLASSIFICATION	NATURE AND DEPTH OF WEATHERING
Glaciofluvial Deposits	Water sorted; bedded; sand, silt and gravel.	Terraced valley trains, hummocky kame fields, sinuous ridges (eskers) and outwash.	5 m to 30 m variable	A homogenization of local till clasts.	Glaciofluvial sediments	
Lawrencetown Till (Ablation)	Red-brown, loose, sand till.	Hummocky ablation moraine, knob and kettle topography.	3 m average	Carboniferous conglomerates, sandstones, slates (variable).	Ablation till	Deep leaching, due to porous nature of deposits.
Lawrencetown Till	Crimson-ochre red, moderately compact clay till with a facies gradation to a brown, compact, sand-silt till. Clay till matrix (sand 25%, silt 40%, clay 25%), sandy till matrix (sand 50%, silt 35%, clay 15%).	Ground moraine, commonly fluted, over lowlands; drumlins displaced over the upland region underlain by quartzite and slate. Occurs also as drift tails and mantling bedrock cores. Facies are a result of comminution of local bedrock with the parent red clay till, down ice and peripherally in drumlin fields (Grant, 1963).	Ground moraine 8 m average 35 m maximum Drumlins 25 m maximum	Drumlins developed on the quartzite terrain consist of a mixture of local and "foreign" components. Red clay can be 25% of the matrix. "Foreign" pebbles vary from 10%-20% of the clast fraction. These consist of Carboniferous rocks, and assemblages from the Antigonish Highlands and Cobequid Mountains.	Basal melt out till (Neilson, 1976) or Basal lodgement till	Weathering is manifested as crumbling granite and sandstone clasts, and black iron-manganese oxide staining along fracture planes. The primary hematitic colour tends to mask the expression of weathering by-products. The till may have reworked components which have undergone previous weathering. Depths of intense weathering averages 2 metres on well drained surfaces.
Red Till - Quartzite Till "Hybrid"	A mixture of red till and quartzite till as inclusions of red clay and silt in the quartzite till matrix.	In areas surrounding drumlin fields and as till-like mounds covering bedrock highs.	4 m average	60% -70% quartzite clasts, 10% - 20% granite, 5% - 10% "foreign" clasts (maroon sandstone, leucogranite, amygdaloidal basalt, fossiliferous sandstone).	Basal-englacial till mixture?	
Quartzite Till	Bluish-greenish-grey, loose, cobbly silt-sand till, will grade into a sandier, coarser till, sometimes with red clay inclusions (matrix: sand 80%, silt 15%, clay 5%).	Ground moraine overlying quartzite bedrock. In the higher regions (150 m), the till is usually thinner and coarser in nature. Near the coast the till matrix becomes siltier with pebble-cobble sized clasts predominating. Several quartzite till drumlins occur in these coastal areas (Grant, 1963).	3 m average 20 m maximum	Quartzite clasts derived locally comprise more than 85% of the coarse fraction of the till. Hybrid types down ice from the rock unit boundaries consist of a mixture of tills derived from each rock type. Resistant rocks; granite and quartzite, persist farther down ice than slates (in the coarse clasts fraction 4-5 km transported distance).	Lodgement or ablation—origin problematical.	Weathering is not usually visually evident as the matrix is composed of quartzite rock flour. Due to porosity of this till intense weathering of many labile components takes place at depths greater than 4 metres on well drained surfaces.
Granite Till (Ablation)	Yellow-grey, bouldery sand till. Rounded clasts, lensoid sand and silt inclusions.	Knob and kettle topography, disintegration ridges, associated glaciofluvial sediments.	10 m maximum	Granite 50%, slate 10% variable, quartzite 10% and "foreign" 5% variable.	Ablation till	Weathering is usually intensive due to porous nature of these tills. Constituent feldspars and micas of the granite clasts in the matrix can be altered to sericite and kaolinite. Many clasts crumble upon handling. Depth of weathering is comparable to the quartzite tills.
Granite Till	Yellow-brown, loose, sand till. Angular granite clasts, pebble to boulder size.	Hummocky ground moraine overlying granite bedrock. In some areas granite bedrock is mantled with rounded boulders.	2 m average 5 m maximum	Clasts of granite (adamellite, granodiorite) comprise greater than 85% of the clast fraction with 1%-2% "foreign" clasts.	?	
Bridgewater Conglomerate (Iron cemented slate till)	Brown, iron cemented, diamict; till like and stratified, inclusions and beds of sorted sediment.	As kamiform mounds flanking the Musquodoboit River, and as a till sheet in Guysborough County.	5 m maximum	Slate >60%, granite 20-40%, quartzite 5% (variable), quartz vein (variable).	Flow tills? Ablation till? Glaciofluvial sediments.	Weathers to a brownish colour. High percentage of iron oxide in matrix, derived from the pyritiferous slates. Cementation may be effected if groundwater, charged with iron leached from the slates, is allowed to circulate freely, as it can precipitate as limonite on the sand grains in the matrix.
Slate Till	Olive brown, loose, cobbly sand till.	Ground moraine over slate bedrock.	4 m maximum	Slate 90% (Halifax Formation), 1%-3% "foreign" clasts.	?	
Slate Till (Compact)	Black to dark grey, compact, silt-clay till fissility developed.	Drumlins and ground moraine, occuring with red clay till drumlins, on and down ice from slate areas.	6 m average 30 m maximum	Slate 80% (Halifax Formation and Carboniferous slates), quartzite and some "foreign" clasts.	Basal lodgement till	
"Upland Till"	Brown, loose, cobbly, sand till.	Ground moraine, commonly furrowed.	3 m average	Undifferentiated, loose sand tills developed over resistant Carboniferous and Devonian rocks.	?	Very porous, deep weathering extending into bedrock.
Triassic Till	Red-orange, loose, sandy till with very few clast sized particles.		?	Triassic sandstone (Blomidon Formation >90%).	?	
HT Hartlen Till	Dark grey, compact-extremely compact, clay-silt till.	Underlying red till at Hartlen Point, correlative with other basal units along the Eastern Shore. Possible older till (early Wisconsinan?) or lodgement phase of the main late Wisconsinan event.	?	Quartzite >80%, slate 10% (variable) "foreign" components ≤5%.	Basal lodgement till.	Unweathered at most exposures.
BR Bedrock or bedrock with thin till cover	Greater than 40% bedrock exposed.					

* No stratigraphic order implied.

BEDROCK GEOLOGY

TRIASSIC

12 *Basalt, sandstone, shale*

LATE CARBONIFEROUS OR YOUNGER

11 *Undifferentiated; diabase, gabbro, rhyolite and clastic sedimentary rocks*

LATE CARBONIFEROUS

CANSO GROUP

10 *Marginal basin sedimentary rocks*

EARLY CARBONIFEROUS

WINDSOR GROUP

9 *Marine and marginal basin sedimentary rocks*

HORTON GROUP

8 *Continental and marginal basin sedimentary rocks*

PRE-CARBONIFEROUS

7 *Undifferentiated sedimentary and volcanic rocks*

MIDDLE TO LATE DEVONIAN

6 *Mixed sedimentary and volcanic rocks*

DEVONIAN

5 *Granite; 5a, mainly granite (age uncertain)*

EARLY DEVONIAN

4 *TORBROOK FORMATION: marine clastic rocks, minor volcanics*
KNOYDART FORMATION: non-marine clastic rocks

ORDOVICIAN TO LATE SILURIAN

3 *WHITE ROCK, KENTVILLE, NEW CANAAN FORMATIONS AND ARISAIG GROUP: marine and non-marine clastic rocks, minor volcanics*

EARLY ORDOVICIAN (?)

2 *HALIFAX FORMATION: slate, schist, minor quartzite*

1 *GOLDENVILLE FORMATION: quartzite, gneiss, greywacke, minor slate*

Bedrock geological boundary

Surficial geological boundary

Fault

Glacial striae (direction of ice movements known, unknown)
NOTE: numbers indicate relative age, 1 being older.

Stoss and lee bedrock forms

Average paleocurrent direction

Drumlin (idealized form, tail points down ice)

Esker (direction of flow known, unknown)

Washboard moraine

Mineral occurrence ... Au

MINERALS

Andalusite	And	*Gold*	Au
Arsenic	As	*Iron*	Fe
Barite	Ba	*Lead*	Pb
Beryllium	Be	*Manganese*	Mn
Strontium	Sr	*Silver*	Ag
Copper	Cu	*Tungsten*	W
Zinc	Zn		

Sample location

Anomalous sample location

Sample depth notation

Sample number → 21 A B

Multiple till section → * Ag Pb / Pb Zn / Mn — Anomalous elements at depths A & B

NOTE:

1. Tills systematically sampled at various depths indicated by letter notation A, B, or C. Samples may be from one till horizon or span two or three till types (multiple till section). Multiple till sections are designated with an asterisk below sample number. Map - unit block above sample depth notation for multiple till sections indicates unmapped till type at that depth. Anomalous elements are listed under corresponding sample depth notation.

2. Anomalous values of elements calculated for each till type using the formula $M + 2\sigma$ (mean plus two standard deviations, Hawkes and Webb, 1962) except where the mean value for the till type is unusually high or incalculable (< 10 samples). These "anomalous" elements are underlined.

Pleistocene geology by R. R. Stea and J. R. Dickie, 1977. Bedrock geology adapted from "Geological Map of the Province of Nova Scotia", Department of Mines, Nova Scotia, 1965.

SAMPLE[1]	Ag	Cd	Cu	Ni	Pb	Zn	Co	Fe%	Mn	Ca	Mg	Mo	Hg	U	As	DEPTH[2]
1A	<0.2	<0.2	67.6	47.4	58.	266.	17.0	4.52	1780.	34.	9460.	1.0	.11	<0.4	11.0	1.0
1B	<0.2	.2	73.6	50.2	40.	302.	14.4	5.02	1340.	37.	9020.	.9	.20	<0.4	13.2	2.0
2A	<0.2	<0.2	57.2	45.0	26.	238.	15.4	4.82	1020.	50.	10300.	1.0	.16	<0.4	6.0	1.0
2B	<0.2	<0.2	51.2	44.8	22.	240.	17.2	4.88	1260.	130.	10420.	.6	.16	.4	6.6	2.0
3A	<0.2	<0.2	52.2	45.8	22.	610.	15.4	4.54	1160.	35.	10140.	.7	.14	.4	6.6	1.0
3B	<0.2	<0.2	47.2	41.2	22.	216.	14.4	4.58	1040.	180.	10380.	1.4	.14	<0.4	6.6	2.0
3C	<0.2	<0.2	51.4	63.8	40.	240.	24.6	4.56	2260.	796.	10840.	.6	.11	<0.4	9.0	3.0
4A	<0.2	<0.2	111.6	67.4	90.	506.	21.4	17.44	780.	136.	5340.	---	---	<0.4	---	2.0
4B	<0.2	<0.2	64.4	79.8	50.	374.	25.2	5.24	940.	192.	10940.	---	---	<0.4	---	3.0
5A	<0.2	<0.2	39.2	39.8	24.	190.	14.0	4.14	1380.	22.	11280.	.6	.11	<0.4	11.6	1.0
5B	<0.2	<0.2	31.8	33.6	16.	162.	12.2	3.20	1120.	118.	9880.	.5	.16	<0.4	9.8	3.0
7A	<0.2	<0.2	48.2	57.8	18.	160.	27.2	5.02	1360.	638.	11400.	.6	.14	<0.4	6.0	2.0
8A	<0.2	<0.2	42.6	39.8	48.	140.	18.2	3.54	9740.	68.	8700.	---	---	<0.4	---	1.0
11A	<0.2	<0.2	59.2	44.0	68.	146.	16.8	5.14	1560.	108.	9160.	2.4	---	.4	---	2.0
13A	<0.2	<0.2	73.0	9.4	198.	80.	14.0	14.96	4420.	36.	6260.	9.2	---	<0.4	49.2	1.0
14A	<0.2	<0.2	49.4	48.4	18.	204.	18.0	4.74	1140.	48.	9880.	.8	.11	<0.4	11.0	1.0
14B	<0.2	<0.2	48.4	48.2	20.	232.	17.4	4.82	960.	102.	9900.	.6	.11	<0.4	11.0	2.0
15A	<0.2	<0.2	70.0	52.8	30.	228.	28.2	4.42	2100.	30.	8740.	---	---	<0.4	---	2.0
16A	<0.2	<0.2	117.2	127.2	96.	328.	112.8	8.20	2240.	310.	16040.	---	---	<0.4	---	2.0
17A	<0.2	<0.2	52.4	40.4	10.	146.	14.0	3.84	1160.	424.	10380.	1.0	.16	<0.4	6.2	1.0
17B	<0.2	<0.2	31.0	41.0	14.	254.	14.6	11.00	4120.	118.	8500.	.3	.11	<0.4	5.4	3.0
18A	<0.2	<0.2	135.2	35.4	478.	60.	26.6	4.30	700.	79.	4200.	3.8	---	<0.4	38.0	2.0
19A	<0.2	<0.2	12.2	21.0	4.	62.	11.0	4.32	720.	40.	4300.	.7	---	<0.4	---	1.0
20A	<0.2	<0.2	62.4	43.6	50.	174.	15.0	6.22	1060.	19.	9360.	1.8	.18	<0.4	13.0	1.0
20B	<0.2	<0.2	53.6	32.8	62.	164.	14.0	5.48	1400.	12.	8800.	1.1	.14	<0.4	8.6	2.0
20C	<0.2	<0.2	53.6	38.8	64.	168.	14.6	5.42	780.	15.	8640.	1.1	.18	<0.4	10.4	3.0
21A	4.2	<0.2	102.4	10.8	790.	168.	51.0	16.18	11300.	126.	5180.	---	---	<0.4	---	1.0
21B	.2	<0.2	166.6	91.8	620.	956.	80.0	5.86	18460.	124.	10900.	---	---	<0.4	---	1.0
22A	.2	<0.2	85.0	44.4	24.	178.	22.4	5.72	1680.	24.	10400.	1.1	.11	<0.4	50.4	1.0
23A	<0.2	<0.2	85.8	39.6	18.	180.	19.2	5.90	1240.	78.	9580.	---	---	<0.4	---	1.0
23B	<0.2	<0.2	81.8	41.8	20.	212.	19.2	5.52	1540.	106.	13500.	.8	.11	<0.4	13.6	2.0
23C	<0.2	<0.2	60.8	36.2	16.	190.	19.2	5.04	1100.	246.	14200.	.4	.11	<0.4	11.0	4.0
24A	<0.2	<0.2	71.0	42.0	20.	220.	19.2	5.48	1500.	70.	15700.	.5	.14	<0.4	11.2	3.0
24B	<0.2	<0.2	59.8	42.8	20.	222.	19.8	5.70	1360.	152.	17460.	.6	.11	<0.4	6.8	6.0
25A	.4	<0.2	50.0	14.2	114.	118.	11.0	11.16	540.	136.	200.	---	---	<0.4	---	2.0
26A	.2	<0.2	126.4	55.8	98.	182.	52.8	5.66	4260.	418.	10060.	---	---	<0.4	---	3.0
27A	.2	<0.2	93.8	30.0	80.	116.	31.8	5.50	4480.	226.	7360.	1.2	---	<0.4	17.0	2.0
28A	<0.2	<0.2	84.2	105.6	8.	246.	42.2	4.74	11360.	3380.	47400.	1.0	---	<0.4	5.0	3.0
29A	<0.2	<0.2	164.6	58.0	20.	188.	36.6	4.80	2400.	130.	19760.	1.0	.22	<0.4	---	2.0
29B	<0.2	<0.2	170.4	61.4	22.	236.	32.6	5.44	1840.	204.	17800.	1.3	.14	<0.4	20.4	3.0
29C	<0.2	<0.2	147.0	52.4	16.	186.	29.2	4.80	1740.	168.	15500.	.7	.11	<0.4	33.8	4.0
30A	<0.2	<0.2	196.8	58.2	26.	124.	63.0	6.18	5580.	218.	13080.	1.3	---	<0.4	---	3.0
31A	<0.2	<0.2	81.0	38.6	32.	286.	17.0	5.90	1960.	374.	14300.	.5	.08	<0.4	12.2	2.0
32A	<0.2	<0.2	103.0	30.2	6.	86.	14.8	4.94	1680.	66.	6660.	.8	.14	<0.4	12.6	2.0
33A	<0.2	<0.2	115.2	62.0	22.	144.	31.6	6.12	2020.	108.	17300.	.4	.18	<0.4	4.2	2.0
36A	<0.2	<0.2	57.0	46.2	46.	178.	22.4	4.76	1340.	706.	12640.	.3	.08	<0.4	9.6	3.0
36B	<0.2	<0.2	53.2	44.8	44.	174.	22.0	5.04	1300.	424.	11860.	1.0	.11	<0.4	8.2	5.0
37A	<0.2	<0.2	71.2	72.6	56.	306.	48.2	5.94	6160.	316.	20000.	---	---	<0.4	---	2.0
38A	<0.2	<0.2	91.4	60.4	38.	268.	30.2	5.64	1920.	542.	19200.	.9	.14	<0.4	6.8	2.0
39A	<0.2	<0.2	86.4	61.8	42.	234.	29.0	5.20	1660.	138.	19600.	.6	.20	<0.4	4.8	3.0
46A	<0.2	<0.2	61.8	48.8	8.	116.	28.2	5.12	2340.	856.	13180.	.7	.11	<0.4	8.2	3.0
47A	<0.2	<0.2	83.6	32.2	28.	158.	32.0	5.34	6820.	124.	8900.	.4	.24	<0.4	23.0	2.0
48A	<0.2	<0.2	21.6	8.8	30.	90.	10.8	4.02	920.	72.	3140.	---	---	<0.4	---	1.0
49A	<0.2	<0.2	55.6	41.0	8.	104.	20.8	4.52	1660.	770.	10540.	.1	.14	<0.4	8.0	3.0
49B	<0.2	<0.2	57.8	38.2	32.	270.	17.4	4.90	1620.	470.	16180.	.3	.06	<0.4	8.0	4.0
50A	<0.2	<0.2	91.6	55.0	14.	128.	29.6	5.90	1940.	58.	16220.	.7	.14	<0.4	7.2	2.0
63A	<0.2	<0.2	80.4	53.6	18.	110.	24.2	4.56	3620.	126.	14160.	.5	.24	<0.4	4.2	2.0
64A	<0.2	<0.2	138.4	89.0	132.	402.	63.2	5.58	3780.	136.	12740.	1.0	---	<0.4	20.2	1.0
65A	<0.2	<0.2	122.6	65.4	58.	202.	31.6	6.00	3260.	426.	20400.	.4	---	<0.4	---	3.0
68A	<0.2	<0.2	69.4	16.6	86.	122.	11.8	12.20	440.	78.	7300.	---	---	1.7	---	2.0
69A	<0.2	<0.2	70.4	27.2	78.	118.	12.0	9.36	360.	58.	11620.	5.1	---	.4	81.6	1.0
70A	<0.2	<0.2	68.4	10.2	480.	98.	16.6	16.26	560.	56.	4320.	5.6	---	.7	17.0	1.0
71A	<0.2	<0.2	82.8	54.8	38.	138.	22.6	5.02	1340.	120.	19040.	.4	.18	.4	7.4	2.0
72A	<0.2	<0.2	87.6	55.4	36.	158.	24.8	5.44	1920.	116.	14600.	.6	.22	.4	8.6	2.0
73A	<0.2	<0.2	61.4	44.8	52.	262.	19.8	4.60	1660.	82.	9700.	.3	.11	1.0	14.2	2.0
74A	<0.2	<0.2	91.2	12.8	330.	126.	14.4	11.68	1080.	172.	5520.	5.4	---	2.0	36.0	2.0
75A	<0.2	<0.2	99.6	25.6	96.	150.	17.6	7.14	1860.	134.	8320.	---	---	<0.4	---	2.0

SAMPLE[1]	Ag	Cd	Cu	Ni	Pb	Zn	Co	Fe%	Mn	Ca	Mg	Mo	Hg	U	As	DEPTH[2]
76A	<0.2	<0.2	15.2	58.2	166.	238.	39.8	4.50	3980.	434.	13100.	---	---	.7	---	1.0
77A	<0.2	<0.2	442.0	62.4	46.	166.	34.0	5.80	3200.	626.	16000.	.9	---	.4	55.2	2.0
78A	1.4	.8	131.6	34.4	100.	130.	37.6	4.28	3480.	258.	6940.	---	---	<0.4	---	2.0
79A	<0.2	<0.2	21.2	16.4	8.	60.	8.0	1.60	480.	768.	5400.	.3	.14	1.0	5.8	5.0
81A	<0.2	<0.2	119.8	63.0	22.	154.	28.4	4.12	2560.	208.	16800.	.6	.30	.7	3.6	2.0
82A	<0.2	<0.2	136.8	64.6	30.	172.	34.2	4.48	3480.	322.	17000.	---	---	.4	---	2.0
83A	<0.2	<0.2	516.0	109.0	86.	376.	52.8	4.12	4780.	964.	20400.	.9	.34	.4	30.3	1.0
84A	<0.2	<0.2	144.2	73.4	38.	266.	35.8	5.60	3240.	352.	25600.	.6	.22	1.0	5.8	1.0
85A	<0.2	<0.2	85.6	45.6	14.	158.	20.4	5.86	1340.	210.	17080.	.5	.18	1.0	9.8	1.0
86A	<0.2	<0.2	95.0	52.4	34.	250.	20.0	5.06	2120.	38.	16220.	1.0	.18	.4	9.0	2.0
86B	<0.2	<0.2	146.6	71.4	44.	266.	35.6	4.86	2020.	290.	18200.	1.0	---	.4	5.0	4.0
87A	<0.2	<0.2	91.6	47.2	34.	318.	18.6	5.28	1860.	110.	14160.	.8	.08	.4	11.4	1.0
88A	<0.2	<0.2	97.0	53.0	32.	258.	21.2	5.16	2380.	32.	16060.	.8	.18	.4	9.6	1.0
89A	<0.2	<0.2	93.6	50.8	40.	330.	19.8	5.58	2040.	112.	16280.	.6	.11	<0.4	9.2	2.0
90A	<0.2	<0.2	129.4	65.6	76.	182.	25.6	5.38	1740.	3600.	11600.	---	---	<0.4	---	1.0
108A	<0.2	2.0	59.4	23.0	214.	214.	44.6	4.74	4980.	254.	4480.	---	---	2.3	---	1.0
109A	<0.2	<0.2	157.4	83.0	54.	246.	27.2	6.42	1580.	104.	13020.	.4	---	<0.4	35.4	1.0
110A	<0.2	2.6	80.4	36.2	100.	120.	30.0	4.26	1200.	266.	5420.	1.1	---	<0.4	---	1.0
111B	<0.2	1.2	178.4	78.8	290.	236.	34.6	11.58	1400.	228.	8020.	1.7	---	<0.4	---	3.0
150A	<0.2	.2	149.0	35.0	122.	122.	14.2	6.20	640.	296.	12020.	---	---	<0.4	---	1.0
151A	<0.2	<0.2	161.8	37.6	96.	116.	16.4	5.28	740.	264.	12120.	1.7	---	<0.4	---	2.0
158A	<0.2	<0.2	81.0	47.0	38.	136.	23.0	5.76	960.	76.	15320.	---	---	<0.4	---	1.0
159A	<0.2	<0.2	123.0	55.8	64.	162.	37.0	4.16	1320.	142.	11680.	1.2	---	<0.4	---	1.0
193A	<0.2	.2	62.8	54.0	28.	174.	18.2	6.52	2280.	108.	8640.	1.0	.42	<0.4	7.0	1.5
194A	<0.2	<0.2	59.6	46.6	18.	176.	16.6	5.52	1100.	1248.	9400.	1.3	.14	<0.4	5.0	4.0
195A	.2	<0.2	248.0	56.4	76.	206.	50.4	12.74	8620.	138.	7920.	.4	---	<0.4	---	2.0
196A	<0.2	<0.2	73.0	36.0	18.	242.	14.4	5.72	940.	94.	7760.	.5	.08	<0.4	5.0	1.0
197A	<0.2	<0.2	79.0	38.8	26.	226.	16.4	6.68	1740.	394.	8020.	.4	.16	<0.4	7.4	2.0
197B	<0.2	<0.2	45.2	40.8	24.	232.	18.2	5.58	820.	1236.	8000.	.7	.08	<0.4	4.2	7.0
198A	<0.2	<0.2	90.8	44.0	22.	230.	25.6	5.92	1600.	250.	7240.	.4	.11	<0.4	11.4	1.0
199A	<0.2	<0.2	100.4	51.0	22.	212.	20.8	6.38	1860.	68.	7160.	.7	.11	<0.4	7.0	1.0
200A	<0.2	<0.2	318.0	57.2	44.	198.	43.8	8.28	5700.	60.	7020.	1.2	---	<0.4	5.2	.5
201A	<0.2	<0.2	147.0	42.4	18.	212.	20.2	6.90	1620.	66.	7760.	.8	---	<0.4	---	.5
202A	<0.2	<0.2	54.4	33.4	22.	264.	11.8	6.32	720.	118.	6460.	.4	.24	.4	24.0	1.0
203A	<0.2	<0.2	51.0	41.8	26.	266.	16.4	6.72	980.	1262.	8480.	.3	.11	.4	6.0	2.0
204A	<0.2	<0.2	44.0	39.8	22.	272.	15.2	5.52	680.	1210.	8580.	.4	.11	<0.4	5.4	2.0
205A	<0.2	<0.2	68.4	51.2	60.	250.	35.2	9.92	3460.	112.	10300.	.3	---	<0.4	6.2	2.0
206A	<0.2	<0.2	131.0	77.4	362.	264.	43.2	10.62	4860.	66.	12080.	3.5	---	<0.4	32.2	2.0
207A	<0.2	<0.2	69.2	59.6	74.	266.	45.0	7.80	3800.	58.	6040.	.4	---	<0.4	10.2	2.0
208A	<0.2	<0.2	43.8	40.0	36.	252.	14.0	7.26	1040.	932.	7680.	.3	.08	<0.4	11.4	1.0
208B	<0.2	<0.2	110.2	50.6	68.	250.	31.2	7.64	2900.	62.	6900.	.5	---	<0.4	10.8	2.0
209A	<0.2	<0.2	72.6	41.0	98.	256.	15.0	6.38	2380.	48.	7020.	.3	---	<0.4	8.0	1.0
210A	<0.2	<0.2	48.4	36.4	36.	258.	13.8	6.50	1180.	52.	6580.	.2	.14	<0.4	8.2	1.0
211A	<0.2	<0.2	46.4	40.2	20.	212.	13.0	5.68	780.	46.	6660.	.3	.08	<0.4	3.0	1.0
212A	<0.2	<0.2	53.2	37.0	18.	196.	13.6	5.72	1540.	106.	7240.	.2	.11	<0.4	4.0	1.0
213A	<0.2	<0.2	39.6	42.4	38.	172.	14.8	7.16	780.	1358.	8020.	.4	.09	<0.4	9.8	3.0
214A	<0.2	<0.2	51.6	39.2	26.	166.	14.2	6.22	1200.	436.	6920.	.2	.14	<0.4	8.6	2.0
215A	<0.2	<0.2	36.2	39.2	32.	182.	14.4	6.98	700.	144.	7040.	.4	.08	<0.4	9.2	1.5
216A	<0.2	<0.2	51.0	41.8	26.	262.	15.6	7.20	1100.	498.	7220.	.3	.08	.4	6.2	1.0
217A	<0.2	<0.2	37.2	44.0	30.	250.	16.8	7.14	760.	1462.	7380.	.1	.18	<0.4	6.2	1.0
218A	<0.2	<0.2	96.6	41.6	12.	264.	18.8	8.12	3260.	102.	7100.	.4	.24	.9	4.0	1.5
219A	<0.2	<0.2	85.4	36.4	82.	266.	29.8	8.56	4880.	108.	6180.	.5	---	<0.4	8.0	1.0
220A	<0.2	.2	48.6	37.6	36.	250.	13.6	6.68	1120.	222.	6280.	.3	.14	.4	4.0	1.0
221A	<0.2	.2	99.0	46.2	74.	252.	38.2	5.80	3780.	248.	6360.	.4	---	.4	---	1.0
222A	<0.2	.2	100.2	45.2	92.	182.	32.4	6.94	3680.	84.	6500.	.7	---	<0.4	9.8	1.0
223A	<0.2	.2	77.6	59.0	34.	172.	24.2	6.18	1780.	58.	6640.	.9	.26	.9	8.6	2.0
224A	<0.2	<0.2	44.4	39.6	30.	210.	14.0	6.32	900.	134.	8500.	.1	.11	<0.4	13.6	2.0
225A	<0.2	.2	63.8	44.6	26.	170.	17.4	5.82	1280.	48.	7220.	.6	.16	.9	1.8	2.0
226A	<0.2	<0.2	72.4	52.6	44.	126.	21.4	6.64	3060.	120.	6980.	.7	.20	<0.4	9.2	1.0
227A	<0.2	<0.2	63.4	46.2	26.	184.	19.8	6.76	1560.	292.	7040.	.4	.11	<0.4	26.8	2.0
228A	<0.2	.2	40.4	39.6	24.	206.	11.0	6.14	580.	119.	6520.	.5	.11	.4	10.0	1.0
229A	<0.2	.2	72.2	65.6	38.	242.	20.6	7.02	2280.	84.	6980.	.8	---	<0.4	9.2	2.0
491A	<0.2	<0.2	152.8	62.8	192.	296.	40.2	4.88	3560.	398.	13240.	---	---	1.0	---	1.0

1 Assay values expressed in ppm except Fe.

2 Depth of sample expressed in metres.