Battle Mountain Canada Ltd

DIAMOND DRILL LOG

PROPERTY: TYRRELL (710060)
HOLE No.: T97-1
Collar Eastings: -100.00
Collar Northings: -560.00
Collar Elevation: 0.00
Grid: BMG 020 DEG
Claim: 478796

Collar Inclination: -45.00
Grid Bearing: 0.00
Final Depth: 245.00 metres
Log Completed: 27/11/97
Core: NQ/stored at Aunor Minesite, Timmins

Logged by: S McCann/D Truscott
Date: 24/11/97 to 27/11/97
Down-hole Survey: Acid
Contractor: NDS Drilling

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
0.0	3.7	(Ob) **Overburden** 4.0m casing						
3.7	167.9	(2U 2U t-bx,loc Ank-Ser) ***Mafic to Intermediate Volcanic - tuff-breccia*** Medium grained, pale grey to green colour, relatively massive uniform rock with weak foliation at 50-60 degrees to core axis. 10% quartz/ankerite/calcite clots, stringers, and veins generally <5 cm. Moderate pervasive leucoxene, mm scale grains, and ankerite alteration, local strong sericite horizons. Oxidized, rust stained horizons up to 50cm commonly associated with fractures, veins, and sericitic horizons. Trace-1% disseminated pyrite overall, locally up to 3% associated with veining and sericitic horizons as at 50.0m, occasional cluster a seen at 102.8m. Local blocky intervals partially due to sericite alteration. Local weak shearing. Strong sericite alteration appears as cream coloured intervals, usually <50cm. Sericite slips common also. 3.7-41.0: mm scale white feldspar phenocrysts are prominent. **18.0: whole rock sample** **31.2: whole rock sample** Below 24.0m unit becomes darker green in colour and more uniform (chloritization?), mm scale subangular green breccia fragments are prominent, local bleached sericitic horizons hosting green carbonate as at 27.0 and 65.2m. 34.1 42.0 (AZ sAZ/2U sSer) Strong sericite alteration, cream colour.	5403	6.50	8.00	1.50	0.01	
			5404	8.00	9.50	1.50	0.01	
			5405	9.50	11.00	1.50	0.01	
			5406	11.00	12.00	1.00	0.01	
			5407	12.00	13.00	1.00	0.01	0.03
			5408	13.00	14.00	1.00	0.01	
			5409	14.00	15.50	1.50	0.01	
			5410	15.50	17.00	1.50	0.04	
			5411	17.00	18.50	1.50	0.01	
			5412	18.50	20.00	1.50	0.01	
			5413	20.00	21.50	1.50	0.01	
			5414	21.50	23.00	1.50	0.01	
			5415	23.00	24.00	1.00	0.01	
			5416	34.00	35.00	1.00	0.01	
			5417	35.00	36.50	1.50	0.01	
			5418	36.50	38.00	1.50	0.06	
			5419	38.00	39.50	1.50	0.01	
			5420	39.50	41.00	1.50	0.01	0.03
			5421	41.00	42.50	1.50	0.01	
			5422	42.50	44.00	1.50	0.01	
			5423	44.00	45.50	1.50	0.07	
			5424	45.50	47.00	1.50	0.01	
			5425	47.00	48.50	1.50	0.01	
			5426	48.50	50.00	1.50	2.59	
			5427	50.00	51.50	1.50	0.47	
			5428	51.50	53.00	1.50	0.01	
			5634	53.00	54.00	1.00	0.07	
			5635	54.00	55.00	1.00	0.10	
			5636	55.00	56.50	1.50	0.01	
			5637	56.50	58.00	1.50	0.01	
			5638	58.00	59.50	1.50	0.11	
			5639	59.50	61.00	1.50	0.05	0.04
			5429	61.00	62.00	1.00	0.18	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
			5430	62.00	63.50	1.50	0.15	
		39.0: whole rock sample	5431	63.50	65.00	1.50	0.01	
		90.0: whole rock sample	5432	65.00	66.00	1.00	0.28	
			5433	66.00	67.00	1.00	0.07	0.03
		92.3 96.0 (AZ mAZ/2U mSer,1-2% py,loc wGcb)	5640	67.00	68.50	1.50	0.01	
		Sericite altered, 1-2% disseminated pyrite, local green	5641	68.50	70.00	1.50	0.01	
		carbonate.	5642	70.00	71.50	1.50	0.01	
			5643	71.50	73.00	1.50	0.01	
		Below 100m breccia fragments are up to 3cm locally, still	5434	73.00	74.00	1.00	0.60	
		average 5mm.	5644	74.00	75.50	1.50	0.09	
			5645	75.50	77.00	1.50	0.01	
		154.1 167.9 (AZ mAZ/2U w-mSer-wAnk)	5435	92.00	93.50	1.50	0.01	
		Patchy weak to moderate sericitization has	5436	93.50	95.00	1.50	0.33	
		increased to moderate and pervasive. Ankeritization has	5437	95.00	96.50	1.50	0.79	
		increased to moderate to strong and pervasive. Colour is	5646	101.00	102.00	1.00	0.01	
		persistently pale grey. Green breccia fragments are typically	5438	102.00	103.00	1.00	0.09	
		very soft (chlorite).	5647	103.00	104.00	1.00	0.11	
		Density of cross-cutting quartz-calcite-ankerite veining	5439	125.00	126.00	1.00	0.01	
		increasing to 5-8% with depth towards fault zone at lower	5440	128.00	129.00	1.00	0.01	
		contact. Trace disseminated fine-grained pyrite throughout.	5441	129.00	130.00	1.00	0.01	
		Foliation consistently at 40 degrees to core axis.	5442	130.00	131.00	1.00	0.01	
			5443	145.70	146.70	1.00	0.01	0.06
			5444	166.40	167.90	1.50	0.01	
167.9	175.0	(FZ/2U?/5ARGF m-sSer-mAnk)	5445	167.90	168.90	1.00	0.01	
		Fault Zone/Graphitic Argillite	5446	168.90	170.10	1.20	0.04	
		167.9-168.9: mafic tuff-breccia	5447	170.10	171.30	1.20	0.06	
		Increasingly sheared, ankeritized, and quartz-ankerite veined	5448	171.30	172.50	1.20	0.01	
		downhole. 1-2% clustered pyrite in matrix. Shearing at 30	5449	172.50	174.00	1.50	0.01	
		degrees to core axis; 5-10% quartz-ankerite veining in shear	5450	174.00	175.00	1.00	0.01	
		plane.						
		168.9-171.3: graphitic argillite						
		Dark grey to black. Bedding is at 35 degrees to core axis.						
		1-2%, 1-2 mm pyrite bands. Bedding - normal fractures						
		contort, locally displace mm-cm wide laminations.						
		Fractures are quartz-carbonate filled.						
		171.3-175.0: altered mafic volcanic						
		Massive to brecciated towards lower contact. Yellowish-						
		green, strongly sericitized and ankeritized. Occasionally						
		appears pillowed with 3-6 cm pillows supported by ankerite-						

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	ASSAYS WIDTH	Au g/t	ck g/t
		black carbon (?) matrix. Matrix hosts 2-3% clustered pyrite. **173.0: whole rock sample** 174.3-175.0: weak talc-chlorite alteration Lower contact at 20 degrees to core axis.						
175.0	179.0	(1U 1U/1TC/5ARGF m-sSer-m-sAnk,mTc-mSerp) **Altered Ultramafic Volcanic and Graphitic Argillite** 175.0-176.3: dark grey to black, massive, peridotitic, talc-serpentine altered. No significant magnetic signature. 176.3-179.0: ultramafic Pillowed/polysutured to komatiitic - appearance of ultramafic. Dark green to dark grey depending upon intensity of patchy moderate to strong sericitization and ankeritization over a given interval. Darker intervals are talc serpentine altered, weakly sericitized. Occasional narrow (<10 cm) graphitic argillite bands as 168.9 to 171.3. Moderately to well developed foliation at 50 degrees to core axis. 3-5% ankerite-quartz veining. 1-2% clustered pyrite. Lower contact sheared at 45 degrees over 10cm (178.8-178.9). **177.5: whole rock sample** Komatiitic interval, moderate talc, weak sericite.	5451 5452 5453 5454	175.00 176.30 177.30 178.40	176.30 177.30 178.40 179.00	1.30 1.00 1.10 0.60	0.01 0.01 0.01 0.01	
179.0	245.0	(3U 3D/3A t/lap-t,w-mSer-w-mAnk) **Dacitic to Andesitic Lithic Tuff/Lapilli Tuff** Bimodal, fine and medium to coarse-grained dacitic pyroclastics. Similar in composition and texture to 3.7-167.9 lithologies, though becomes increasingly coarse-grained, harder, more siliceous/dacitic with depth. Lithic fragments are typically dacitic, and rounded to rarely subangular. Occasional <1cm sericite bands in foliation. Coarse-grained lithic tuff features patchy moderate ankerite	5455 5456 5457	179.00 180.50 182.00	180.50 182.00 183.10	1.50 1.50 1.10	0.01 0.01 0.01	0.01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t

and sericite in medium- grained, closely-packed lithic tuff-breccia matrix (2-3mm fragments, andesitic). Larger bombs generally dacitic in appearance, massive, host 1-2mm chloritic phenocrysts (Ca-plagioclase ?), to 25 cm.

1% pyrite throughout unit as fragments in finer-grained matrix.

2-3% calcite veining throughout.

Graphitic slips/fracture coatings to 2% overall.

Upper contact marked by shearing, brecciation and strong chloritization (179.0-179.4). Possibly altered mafic volcanic.

179.0-183.1: dark to medium grey, moderately to strongly ankeritized. Massive as 3.7-41.0; siliceous. 1-2% stockwork pyrite, 1% clustered pyrite.

179.5: whole rock sample

183.1-184.5: mafic-ultramafic flow
Yellow-green, sericitized, as 171.3-175.0 interval. Possible xenolith.

184.5-196.1: pyroclastic
Altered, medium to coarse-grained.
Foliation/lamination at 45-55 degrees to core axis.

196.1-208.6: ash to lapilli tuff
Massive to poorly laminated/foliated at 40-55 degrees to core axis.
Hard, siliceous, 3-5%, 1-3 mm Ca-plagioclase crystals and intercalated fine lithic tuff intervals. Gradational contacts.

199.5: whole rock sample

208.6-245.0: pyroclastic
Altered, coarsely textured as 184.5-196.1; increasingly dacitic composition. Moderate to patchy strong ankeritization, strong sericitization enveloping dacitic

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	ASSAYS WIDTH	Au g/t	ck g/t

fragments in foliation plane.

245.0 End of Hole

Casing left, capped
Core boxes: 58, stored at Aunor Minesite, Timmins
Assay samples: 69 (Au)
Township: Tyrrell
NTS: 41P 10/11
UTM: 499946E/5275250N (approx)
Claim: collar on 478796, eoh on same
Collar Location: 163m E, 2m N of #3 post of 478796
Location of eoh: 100W/384.57S, elevation -171.02m

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.00	-44.00	0.00
120.00	-45.00	0.00
180.00	-43.00	0.00
239.00	-45.00	0.00
245.00	-45.00	0.00

GEOLOGY LEGEND

8U Diabase (U=undifferentiated)

7U Felsic to Intermediate Intrusive
- 7G Granite
- 7Gd Granodiorite, Quartz Monzonite
- 7T Tonalite
- 7S Syenite
- 7M Monzonite
- 7FP Feldspar Porphyry
- 7QFP Quartz-Feldspar Porphyry
- 7PA Pegmatite
- 7A Aplite
- 7F Felsite

6U Mafic to Ultramafic Intrusive
- 6D Diorite, Trondhjemite
- 6G Gabbro
- 6A Anorthosite
- 6P Peridotite, Pyroxenite
- 6L Lamprophyre

5U Clastic Sediments
- 5Ar Argillite
- 5ARGF Graphitic Argillite
- 5GW Greywacke
- 5CG Conglomerate
  - 5CGT Timiskaming Conglomerate
- 5SS Sandstone
- 5ST Ssiltstone
- 5Q Quartzite
- 5A Arkose

4U Chemical Sediments
- 4IF Iron Formation
  - 4IFS Sulphide Facies
  - 4IFC Silicate Facies
  - 4IFO Oxide Facies
- 4C Chert
- 4IGF Graphite

3U Felsic to Intermediate Volcanic
- 3R Rhyolite
- 3D Dacite
- 3A Andesite
- 3T Trachyte

2U Mafic Volcanics
- 2MS Massive
- 2P Pillowed
- 2FB Flow Breccia
- 2HY Hyaloclastite
- 2VAR Variolitic
- 2POR Porphyritic
- 2CA Calc-Alkaline
- 2IT Iron Tholeiite
- 2MT Magnesium Tholeiite

1U Ultramafic Volcanic
- 1TC Talc-Chlorite (altered)
- 1GCB Green-Carbonate (altered)
- 1K Komatiite
- 1BK Basaltic Komatiite

ABBREVIATIONS

Texture

ag, agg	agglomerate
amy	amygdaloidal
FB, fb, fbx	flow breccia
fol	foliated
glom	glomerophyric
gm	groundmass
hy	hyaloclastic
htr	heterolithic
lap	lapilli
ms, msv, mas	massive
p	pillowed
pj	polygonal jointing
por	porphyritic
qt	quench testure
sch	schistose
sfx	spinifex
t	tuff, tuffaceous
tx	texture
tbx, t-bx	tuff-breccia
ves	vesicular
var	variolitic
_phy	_phyric

Alteration

Ab	albitization
Ank	ankeritization
AZ, az	alteration zone
Bi	biotite
Blch	bleached
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Fu	fuchsite
Gcb	green carbonate/fuchsite
Gos	gosson
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Sil	silicification
Tc	talc
Tour	tourmaline

Mineralization

Asb	asbestose
Asp	arsenopyrite
Clpy	cluster pyrite
Cpy, Cp	chalcopyrite
Cry	crysotile
Dspy	disseminated pyrite
Gn, Gal	galena
Gf	graphite
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork
VG	visible gold
MZ	mineralized zone

Veining

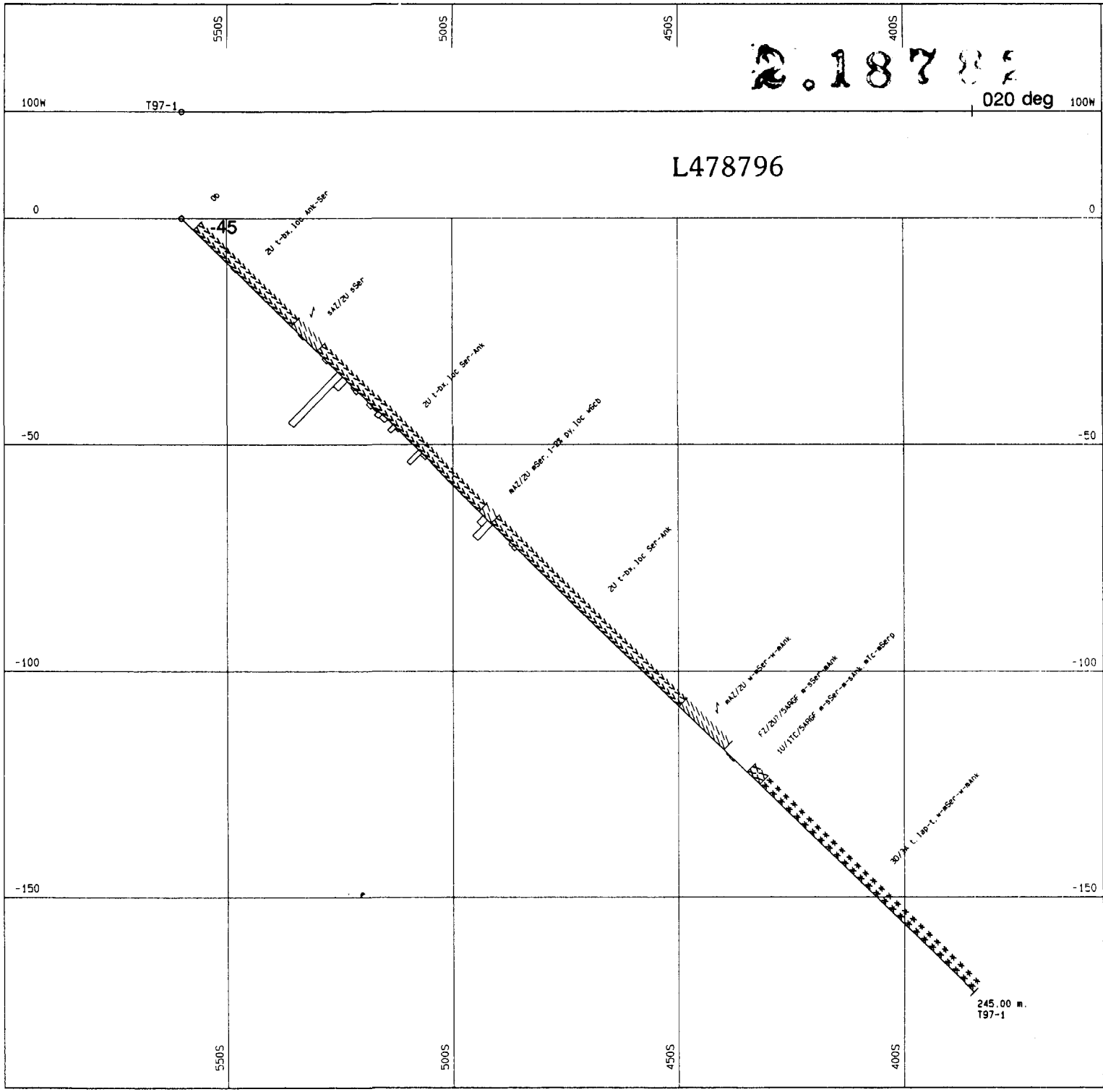
Asbv	asbestose
Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qav	quartz-ankerite
Qcv	quartz-calcite
Qtourv	quartz-tourmaline
Tourv	tourmaline

Structural

bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
F, f	fault
FZ, fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
pj	polygonal jointing
s, sh	shear
SZ, sz	shear zone
slk	slickenside

Other

bld	boulder
ch, cty	cherty
cg	coarse-grained
fg	fine-grained
int	intermittent
loc, l__	local, locally
mag	magnetic
mg	medium-grained
mnr	minor
mod, m__	moderate
Ob, Ovb	overburden
pv	pervasive
rub	rubble
sil	siliceous
st, s__	strong
tect	tectonized
tr	trace
v__	very
wk, w__	weak



Geological Legend:

Intrusive - Late

Diabase

Intrusive - Early

Felsic

Mafic to Ultramafic

Sediments

Clastic

Chemical

Volcanics

Felsic

Intermediate

MAFIC VOLCANICS

Undifferentiated

Massive

Variolitic

ULTRAMAFIC VOLCANICS

Undifferentiated

ALTERATION

Undifferentiated Zone

MINERALIZATION

Undifferentiated Zone

0 25 50

meters

BATTLE MOUNTAIN GOLD

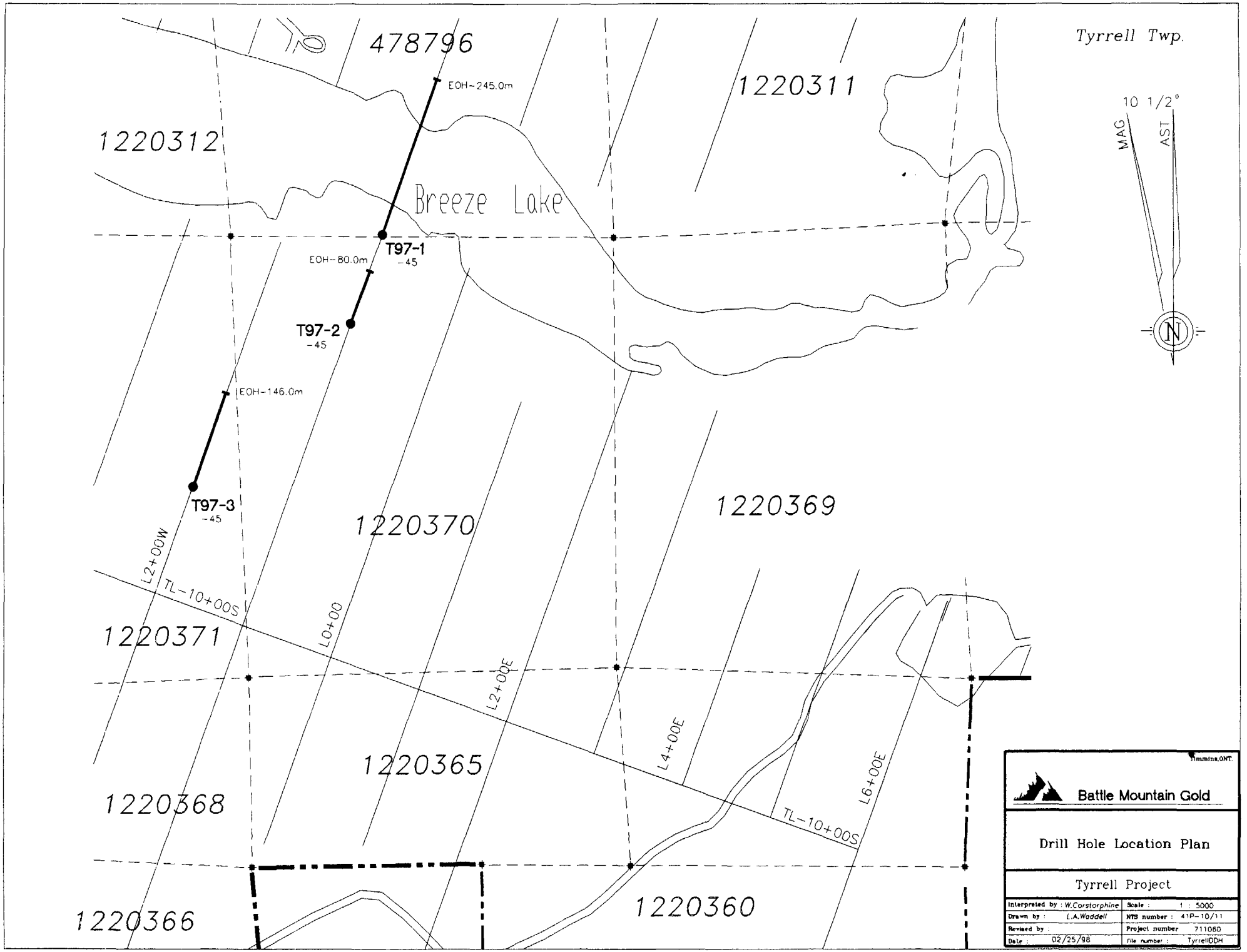
PROJECT: TYRRELL (710060)

SECTION 100W

DRILL HOLE: T97-1

ASSAY SCALE: 1cm=2g/t Au

DATE: 98/02/23 | SCALE: 1/1200


Tyrrell Twp.
478796
1220311
1220312
Breeze Lake
EOH-245.0m
T97-1
-45
EOH-80.0m
T97-2
-45
EOH-146.0m
T97-3
-45
1220370
1220369
1220371
1220365
1220368
1220366
1220360
L2+00W
TL-10+00S
L0+00
L2+00E
L4+00E
L6+00E
TL-10+00S
10 1/2°
MAG
AST
N
Timmins, ONT.
Battle Mountain Gold
Drill Hole Location Plan
Tyrrell Project
Interpreted by : W.Corstorphine
Drawn by : L.A.Waddell
Revised by :
Date : 02/25/98
Scale : 1 : 5000
NTS number : 41P-10/11
Project number 711060
File number : TyrrellDDH

Battle Mountain Canada Ltd

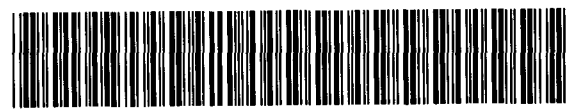
DIAMOND DRILL LOG

PROPERTY: TYRRELL (710060)
HOLE No.: T97-2
Collar Eastings: -100.00
Collar Northings: -655.00
Collar Elevation: 0.00
Grid: BMG 020 DEG
Claim: 1220370

Collar Inclination: -45.00
Grid Bearing: 0.00
Final Depth: 80.00 metres
Log Completed: 29/11/97
Core: NQ/stored at Aunor Minesite, Timmins

Logged by: D Truscott
Date: 27/11/97 to 28/11/97
Down-hole Survey: Acid
Contractor: NDS Drilling

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS SAMPLE No.	FROM	TO	WIDTH	Au g/t	ck g/t
0.0	2.4	(Ob) **Overburden** 3.0m casing						
2.4	5.7	(2MS 2MS sil,smag) **Massive Mafic Volcanic** Dark grey to black, fine-grained, massive, hard, siliceous. Strong magnetic signature. 1-2% calcite veining to 3mm. Lower 5 cm bleached by calcite. Lower contact at 50 degrees to core axis.						
5.7	8.3	(6U 6D por,mag,hem) **Porphyritic Diorite** Dark grey, weakly magnetic, weak, patchy hematization. 5-10% zoned, euhedral white feldspar phenocrysts to 4 mm in fine-grained groundmass. Black chlorite slips. Calcite veins to 2% as 2.4-5.7. Trace-1% fine-grained vein pyrite. Sharp lower contact at 70 degrees to core axis.						
8.3	11.6	(2MS 2MS smag,sCal) **Massive Mafic Volcanic** Dark grey to black, fine-grained, massive to poorly foliated at 50 degrees to core axis. Strong magnetic signature. Moderately chloritic. Strong, pervasive calcite throughout. 3-5% calcite veining. More strongly chloritic, less calcitic intervals tend to be dark green as opposed to black. 8.3-10.4: dark grey to black, calcitic, 1-2% fine, disseminated pyrite. **9.0: Whole rock sample** 10.4-11.6: weakly sheared, increasingly chloritic, less calcitic.						



41P10NW2001 2.18782 TYRRELL 020

Wayne Austin

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		Possible weak ankerite overprint towards lower contact. Lower contact indistinct.						
11.6	16.2	(2MS 2MS mg,wmag,wfol) **Mafic Volcanic** Relatively unaltered, medium-grained, ophitic. Weakly magnetic, medium green mafic volcanics. Massive to poorly foliated. Upper contact marked by quartz-calcite-ankerite veins and clots throughout. Trace fine-grained pyrite. Sharp lower contact at 60 degrees to core axis, marked by 10 cm quartz-calcite-ankerite veins. **14.0: whole rock sample**						
16.2	23.4	(6U 6D por,vsil) **Porphyritic Diorite** As 5.7-8.3, though with slightly coarser-grained phenocrysts (to 1 cm). Significantly more siliceous. Several narrow groundwater-oxidized intervals. Lower contact sharp, at 65 degrees tca. **20.0: whole rock sample**	5458	21.90	23.40	1.50	0.43	
23.4	32.9	(2MS 2MS/2P wSer-wAnk,Qcav,tr Gcb) **Massive to Pillowed Mafic Volcanics** 23.4-25.1: as 11.5-16.2, ophitic 23.5-23.6: 10 cm 1-3% pyrite 25.1-27.8: fine-grained, massive, 1-3% fine-grained disseminated pyrite. 27.8-32.9: possible pillowed flows Typically fine-grained, poorly foliated at 40-55 degrees. 3-5% quartz-ankerite veins. Weak to patchy, moderate sericitization and ankeritization associated with anomalous pyrite mineralization. Alteration gives a yellow-green to tan	5459	23.40	24.40	1.00	0.31	
			5460	24.40	25.10	0.70	0.11	
			5461	25.10	25.80	0.70	0.06	
			5462	25.80	26.70	0.90	1.75	
			5463	26.70	28.20	1.50	0.07	
			5464	28.20	29.70	1.50	0.09	
			5465	29.70	30.70	1.00	0.21	0.25
			5466	30.70	31.70	1.00	0.24	
			5467	31.70	32.90	1.20	0.01	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		colouring to core. Rare specks green carbonate. 25.8-26.7: moderate to strong sericitization, moderate ankeritization, 1-2% fine-grained, disseminated pyrite. 1-3% green carbonate, 2-3% pyrite, ankerite-quartz veins - (26.0-26.4). 29.25-29.5: 5-8% dusty to fine-grained pyrite in fractured, quartz-ankerite veined interval. Veins are barren. 31.1: semi-massive clustered pyrite in quartz-carbonate-ankerite vein-flooded interval (shear). 31.5: graphitic slip 31.7-32.9: porphyritic diorite - minor pillowed mafic flows Appears to be partially digested or diorite-overprinted raft. Several quartz-carbonate-ankerite veins haloed by narrow pyritic bands in wall rock. Lower contact indistinct, marked by quartz-ankerite veins, and green carbonate alteration at 60 degrees to core axis.						
32.9	41.0	(AZ sAZ/2MS m-sSer-m-sAnk,tr Gcb,py) **Alteration Zone** Same mafic volcanic unit as 23.4-32.9. Pervasive moderate to strong sericitization, weak to moderate ankeritization and local green carbonate alteration hosts elevated pyrite mineralization. Patchy moderate to strong silicification. Yellow-green colouration as 25.8-26.7. Moderately well-fractured, quartz-ankerite veined, quartz-carbonate-ankerite veined, and quartz-chlorite veined to 10%. Veins and wall rock haloes typically host 1-3% fine-grained pyrite. Preferential alteration of biotite? to chlorite gives core dark green, speckled appearance (5-8%). **35.0: whole rock sample** 36.0-36.2: strong silicification gives purplish hue; possible pillow selvage.	5468 5469 5470 5471 5472 5473 5474 5475	32.90 34.40 35.40 36.00 37.00 37.80 39.30 40.00	34.40 35.40 36.00 37.00 37.80 39.30 40.00 41.00	1.50 1.00 0.60 1.00 0.80 1.50 0.70 1.00	2.25 0.06 0.22 0.09 0.31 0.32 1.10 0.13	0.13

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		37.8-39.3: graphitic shear/interpillow breccia. Pyritic in matrix. Foliation at 40 degrees to core axis. 39.5-40.0: strong silicification halo around 2-5 cm quartz-ankerite-carbonate vein at 40 degrees to core axis (foliation-normal). 3-5% fine pyrite in wallrock halo. 40.0-41.0: best-altered interval in terms of ankerite, sericite and green carbonate. Trace clustered pyrite. Sharp lower contact at 55 degrees to core axis.						
41.0	57.1	(2U 2U wSer-wAnk,mChl,Qav) **Mafic Volcanic** As 32.9-41.0; relatively unaltered. Very weak, patchy sericite and ankerite alteration. Dark grey to black, moderately chloritic, medium-grained. No magnetic signature. 5-8% Ankerite-quartz veins in foliation at 40 degrees to core axis and as fine, cross-cutting stockwork. Minor green carbonate in occasional ankerite-quartz vein (54.7-55.0). **45.8: whole rock sample** 56.3-56.6: strong ankeritization, moderate sericitization, 3-5% fine-grained pyrite in wall rock. Several specks green carbonate in ankerite-quartz vein.	5476 5477 5478	41.00 54.70 56.30	42.50 56.30 57.10	1.50 1.60 0.80	0.01 0.13 0.15	
57.1	74.0	(AZ m-sAZ/2P/2U/6D-por m-Sil/Ab-m-sSer-mAnk,gc) **ALTERATION ZONE** Similar lithology, alteration mineralogy and intensity as 32.9-41.0. Amygdular pillowed mafic volcanics predominate, with lesser flows as 41.0-57.1. Entire interval weakly to locally strongly silicified/albitized, especially bordering felsite dykes. A central core closely resembles porphyritic diorite in texture. 57.1-60.5: pillowed/amygdular and fine-grained flows Strong silicification/albitization, sericitization and moderate ankeritization. 1-2% fine-grained, disseminated pyrite. Flow contacts/selvages at 40-60 degrees to core axis.	5479 5480 5481 5482 5483 5484 5485 5486 5487 5488 5489 5490 5491 5492	57.10 58.10 59.10 60.50 61.50 62.40 63.90 65.40 66.10 67.70 69.20 70.70 72.00 73.00	58.10 59.10 60.50 61.50 62.40 63.90 65.40 66.10 67.70 69.20 70.70 72.00 73.00 74.00	1.00 1.00 1.40 1.00 0.90 1.50 1.50 0.70 1.60 1.50 1.50 1.30 1.00 1.00	0.23 1.13 0.37 0.47 0.10 0.05 0.01 0.24 0.01 0.04 0.01 0.10 0.04 0.01	0.01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t

58.5-58.7: pale brown felsite dyke; fine-grained, quartz-pyhric, 5-8% dusty, disseminated pyrite. 1 cm hydrothermal breccia at 58.7. Upper and lower contacts at 30 and 40 degrees to core axis, respectively.

59.7: quartz-ankerite vein hosting pyritic, mafic xenolith.

60.2-60.4: dyke as 58.5-58.7

60.5-62.4: porphyritic mafic flow/diorite. Strong sericitization and silicification decreasing in intensity towards 62.4.
1-2% dusty, disseminated pyrite. Several specks green carbonate.

61.0: whole rock sample

62.4-67.7: fine-grained and sheared/flow banded chloritic flows.
Patchy, weak silicification, patchy moderate sericitization, and several specks green carbonate. 1-3% disseminated pyrite.

62.7-62.8: porphyritic dyke?, 3-5% fine-grained pyrite.
63.5-63.6: porphyritic dyke, 2-3% fine-grained pyrite.
64.1-64.5: shear at 25 degrees to core axis, quartz-ankerite swarm, strong ankeritization.
64.8-65.0: porphyritic dyke, no visible mineralization.
65.4-65.6: porphyritic dyke, no visible mineralization.
65.6-66.1: partially digested porphyritic rock; 1-3% disseminated pyrite, several specks green carbonate.

67.7-73.0: medium-grained flow
Moderate silica/albite, strong sericitization, moderate ankeritization. 1-2% disseminated pyrite. 1-3% green carbonate.

68.9:whole rock sample

70.5-73.0: several groundwater-oxidized intervals.
72.4-73.0: brecciated lower contact, quartz-ankerite veins.

73.0-74.0: fine-grained flow, possibly less silicified variety of

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		felsite dykes. 3%, 1-3mm, quartz amygdules.						
74.0	80.0	(2U 2U mfol,f-mg,mAnk-mAqv) **Mafic Volcanic** Fine to medium-grained, moderately well-foliated, dark green. Foliation variable between 40 and 60 degrees to core axis, 5-10% ankerite-quartz veins in F1 (60 degrees) cut by F2 (40 degrees). Several narrow, oxidized, groundwater-leached intervals. No visible mineralization. **75.3: whole rock sample** 80.0 End of Hole Casing left, capped Core boxes: 19, stored at Aunor Minesite, Timmins Assay samples: 36 (Au) Township: Tyrrell NTS: 41P 10/11 UTM: 499912E/5275160N (approx) Claim: collar on 1220370, eoh on same Collar Location: 125m E, 90m S of #4 post of 1220370 Location of eoh: 100W/598.43S, elevation -56.57m DOWN-HOLE SURVEY DATA DEPTH INCLINATION BEARING 60.00 -45.00 0.00 80.00 -45.00 0.00	5493	74.00	75.50	1.50	0.05	

GEOLOGY LEGEND

8U Diabase (U=undifferentiated)

7U Felsic to Intermediate Intrusive
- 7G Granite
- 7Gd Granodiorite, Quartz Monzonite
- 7T Tonalite
- 7S Syenite
- 7M Monzonite
- 7FP Feldspar Porphyry
- 7QFP Quartz-Feldspar Porphyry
- 7PA Pegmatite
- 7A Aplite
- 7F Felsite

6U Mafic to Ultramafic Intrusive
- 6D Diorite, Trondhjemite
- 6G Gabbro
- 6A Anorthosite
- 6P Peridotite, Pyroxenite
- 6L Lamprophyre

5U Clastic Sediments
- 5Ar Argillite
- 5ARGF Graphitic Argillite
- 5GW Greywacke
- 5CG Conglomerate
  - 5CGT Timiskaming Conglomerate
- 5SS Sandstone
- 5ST Ssiltstone
- 5Q Quartzite
- 5A Arkose

4U Chemical Sediments
- 4IF Iron Formation
  - 4IFS Sulphide Facies
  - 4IFC Silicate Facies
  - 4IFO Oxide Facies
- 4C Chert
- 4IGF Graphite

3U Felsic to Intermediate Volcanic
- 3R Rhyolite
- 3D Dacite
- 3A Andesite
- 3T Trachyte

2U Mafic Volcanics
- 2MS Massive
- 2P Pillowed
- 2FB Flow Breccia
- 2HY Hyaloclastite
- 2VAR Variolitic
- 2POR Porphyritic
- 2CA Calc-Alkaline
- 2IT Iron Tholeiite
- 2MT Magnesium Tholeiite

1U Ultramafic Volcanic
- 1TC Talc-Chlorite (altered)
- 1GCB Green-Carbonate (altered)
- 1K Komatiite
- 1BK Basaltic Komatiite

ABBREVIATIONS

Texture

ag, agg	agglomerate
amy	amygdaloidal
FB, fb, fbx	flow breccia
fol	foliated
glom	glomerophyric
gm	groundmass
hy	hyaloclastic
htr	heterolithic
lap	lapilli
ms, msv, mas	massive
p	pillowed
pj	polygonal jointing
por	porphyritic
qt	quench testure
sch	schistose
sfx	spinifex
t	tuff, tuffaceous
tx	texture
tbx, t-bx	tuff-breccia
ves	vesicular
var	variolitic
_phy	_phyric

Alteration

Ab	albitization
Ank	ankeritization
AZ, az	alteration zone
Bi	biotite
Blch	bleached
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Fu	fuchsite
Gcb	green carbonate/fuchsite
Gos	gosson
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Sil	silicification
Tc	talc
Tour	tourmaline

Mineralization

Asb	asbestose
Asp	arsenopyrite
Clpy	cluster pyrite
Cpy, Cp	chalcopyrite
Cry	crysotile
Dspy	disseminated pyrite
Gn, Gal	galena
Gf	graphite
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork
VG	visible gold
MZ	mineralized zone

Veining

Asbv	asbestose
Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qav	quartz-ankerite
Qcv	quartz-calcite
Qtourv	quartz-tourmaline
Tourv	tourmaline

Structural

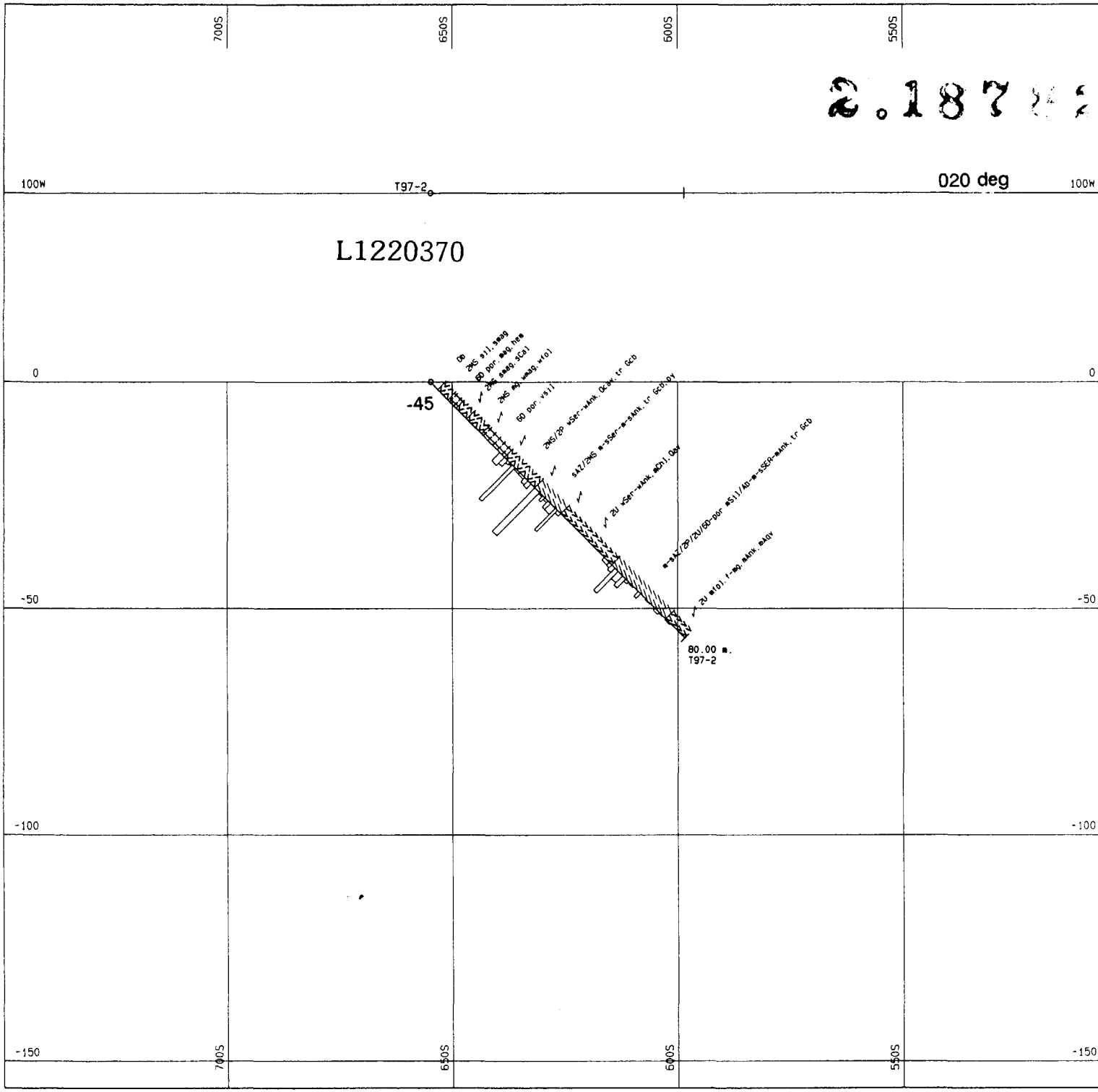
bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
F, f	fault
FZ, fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
pj	polygonal jointing
s, sh	shear
SZ, sz	shear zone
slk	slickenside

Other

bld	boulder
ch, cty	cherty
cg	coarse-grained
fg	fine-grained
int	intermittent
loc, l__	local, locally
mag	magnetic
mg	medium-grained
mnr	minor
mod, m__	moderate
Ob, Ovb	overburden
pv	pervasive
rub	rubble
sil	siliceous
st, s__	strong
tect	tectonized
tr	trace
v__	very
wk, w__	weak

2.187

L1220370



Geological Legend:

- Intrusive - Late
  - Diabase
- Intrusive - Early
  - Felsic
  - Mafic to Ultramafic
- Sediments
  - Clastic
  - Chemical
- Volcanics
  - Felsic
  - Intermediate
  - MAFIC VOLCANICS
    - Undifferentiated
    - Massive
    - Variolitic
  - ULTRAMAFIC VOLCANICS
    - Undifferentiated
  - ALTERATION
    - Undifferentiated Zone
  - MINERALIZATION
    - Undifferentiated Zone

0 25 50
meters

BATTLE MOUNTAIN GOLD

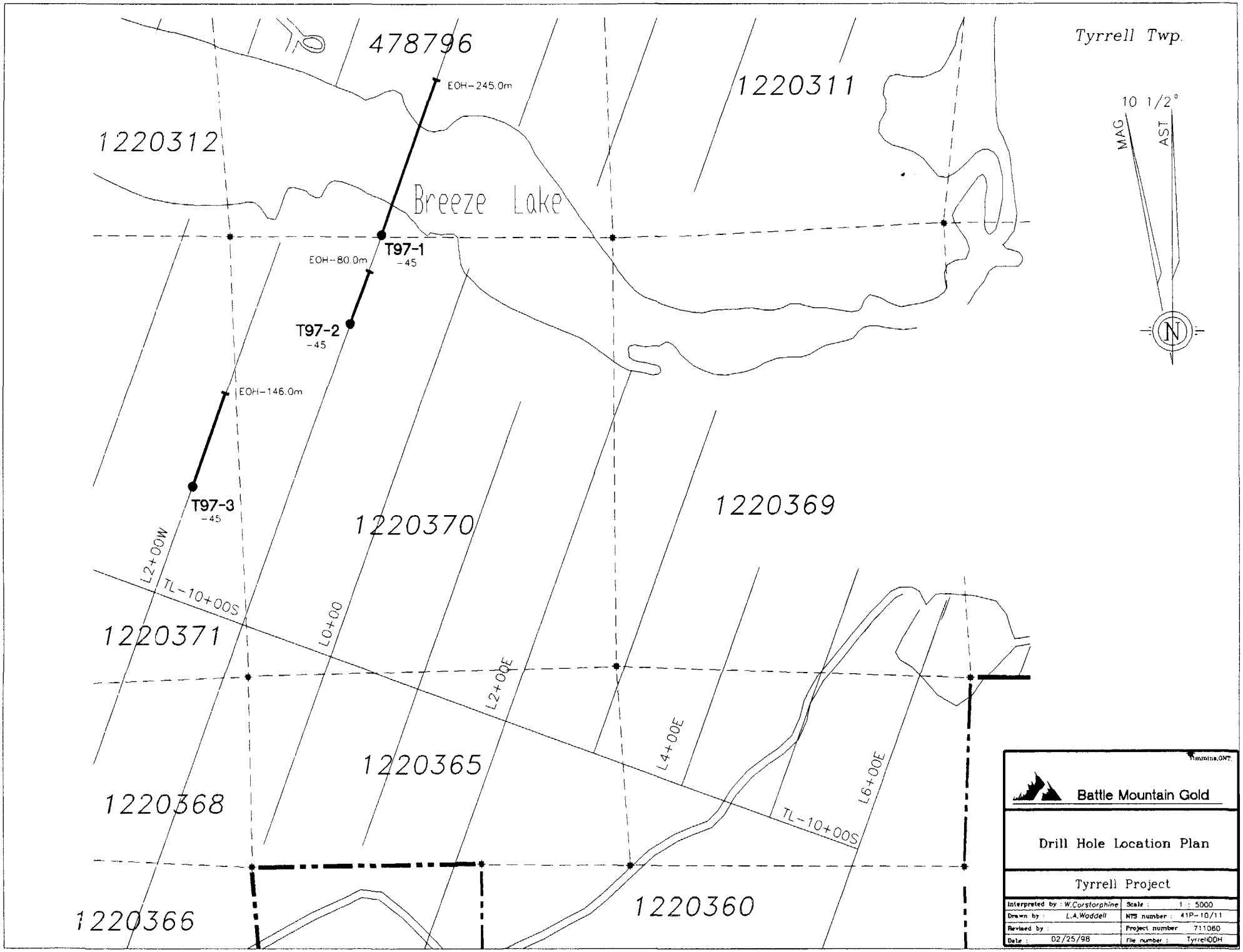
PROJECT: TYRRELL (710060)

SECTION 100W

DRILL HOLE: T97-2

ASSAY SCALE: 1cm=2g/t Au

DATE: 98/02/23 | SCALE: 1/1200


Tyrrell Twp.
478796
1220311
1220312
Breeze Lake
EOH-245.0m
T97-1
-45
EOH-80.0m
T97-2
-45
EOH-146.0m
T97-3
-45
1220370
1220369
1220371
1220365
1220368
1220366
1220360
L2+00W
TL-10+00S
L0+00
L2+00E
L4+00E
L6+00E
TL-10+00S
10 1/2°
MAG
AST
N
Timmins,ONT.
Battle Mountain Gold
Drill Hole Location Plan
Tyrrell Project
Interpreted by : W.Corstorphine
Drawn by : L.A.Waddell
Revised by :
Date : 02/25/98
Scale : 1 : 5000
NTS number : 41P-10/11
Project number 711060
File number : TyrrellDDH

Battle Mountain Canada Ltd

DIAMOND DRILL LOG

PROPERTY: TYRRELL (710060)
HOLE No.: T97-3
Collar Eastings: -200.00
Collar Northings: -875.00
Collar Elevation: 0.00
Grid: BMG 020 DEG
Claim: 1220371

Collar Inclination: -45.00
Grid Bearing: 0.00
Final Depth: 146.00 metres
Log Completed: 30/11/97
Core: NQ/stored at Aunor Minesite, Timmins

Logged by: D Truscott
Date: 28/11/97 to 30/11/97
Down-hole Survey: Acid
Contractor: NDS Drilling

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
0.0	3.6	(Ob) **Overburden** 4.0m casing						
3.6	6.3	(2MS 2MS wHem) **Massive Mafic Volcanic** Medium green to medium grey, fine-grained, massive mafic volcanics. Pale reddish hue suggests weak hematization.						
6.3	46.4	(2U 2U t) **Mafic Volcanic - tuff** Hard, siliceous, dark grey to black mafic volcanics consisting of fine-grained, angular black fragments to 5cm in dark grey, medium to fine-grained lithic tuff matrix. Matrix occasionally host feldspar and quartz? lapilli in addition to dacitic fragments to 1cm. 1% quartz-carbonate-ankerite veins. No significant mineralization except as weakly sericitized, strongly silicified haloes to the occasional quartz vein as follows: 20.9-21.0: 3-5% clustered pyrite 21.5-21.8: 3-5% clustered pyrite 29.1-29.4: 1-2% clustered pyrite 34.7-35.5: weak bleaching, 1-2% disseminated pyrite No distinct foliation, though fragments appear to have a preferential alignment at 45 degrees to core axis. 35.2-42.9: patchy, weak hematite 42.9-46.4: moderate to strong hematization Moderate to strong magnetic signature, increasing downhole. Fragments appear preferentially hematized. **44.7: whole rock sample**	5494 5495	20.70 34.70	22.10 35.70	1.40 1.00	0.30 0.01	

41P10NW2001 2.18782 TYRRELL 030

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		Irregular lower contact at 40 degrees to core axis.						
46.4	49.2	(2MS 2MS w-sHem,mag) **Hematized Massive Mafic Volcanic** medium-grained, massive dark green mafic volcanics. Hematized intervals become dark brown to brick red. 46.4-47.9: strongly hematized, moderate magnetic signature. Alteration and magnetic signature decrease downhole. **47.8: whole rock sample** 47.9-49.2: weakly hematized, weakly magnetic, dark green.						
49.2	54.5	(1U 1U/6P? mTc-Serp,mag) **Ultramafic - peridotite?** Dark grey to bluish-black, medium-grained, moderately talc-serpentine altered, massive peridotite. Joints strongly serpentinized with coarse crystalline talc nucleating at wallrock interface. 1-2%, 1-4 mm calcite veins. 3-5% medium-grained ragged leucoxene. Locally moderately, but generally weakly magnetic. Abrupt, irregular, lower contact.						
54.5	63.9	(2MS 2MS mag,wHem) **Massive Mafic Volcanic** Dark green, medium-grained, variably altered mafic volcanics. 1-3% quartz-calcite veins throughout. Variably weakly magnetic. Individual flows appear uniquely altered. 56.7-59.0: strong hematization, decreasing downhole. Epidote in addition to calcite in veins. Quartz-hematite vein at 58.8, at 45 degrees to core axis. 59.0-63.9: 1-2% ragged leucoxene, fine to medium-grained. 62.3-62.5: strong silicification overprinting bleached, 3-5% green carbonate interval. 3-5% medium-grained pyrite. 63.0-63.9: increasingly altered, from chlorite to silica, towards lower contact. Moderate ankerite. 2-3% disseminated pyrite.	5496 5497	62.00 63.00	63.00 63.90	1.00 0.90	0.70 0.08	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
63.9	67.0	(7U 7F/2MS? dyke,sSil) **Felsite Dyke or Massive Mafic Volcanic?** Hard, siliceous, buff to reddish-brown felsite dyke or strongly altered mafic flow. Intrusive nature based upon decreasing intensity of alteration away from unit. Moderate to weak ankeritization, strong silicification. 3-5% fine to dusty pyrite. Upper contact at 45 degrees to core axis. **65.9: whole rock sample** 66.7-67.0: likely strongly altered mafic volcanic at dyke contact. Lower contact at 60 degrees to core axis.	5498	63.90	64.90	1.00	0.21	
			5499	64.90	65.90	1.00	0.11	
			5500	65.90	67.00	1.10	0.01	
67.0	73.3	(2U 2U/3A? T-bx,loc tr Gcb,loc 1-2% py) **Mafic to Intermediate Volcanic - tuff-breccia** Medium grey-green to dark grey. Subangular to subrounded fragments in fine-grained, similarly-composed medium-grained matrix. Pale green to cream-coloured feldspar crystals in matrix. Unit correlates to interval at top of hole T97-1 (3.7-41.0 m). 2-3% fine sericite/leucoxene in matrix. Trace fine-grained pyrite. 67.0 67.5 (SZ mAnk,mAqv,mGcb) Shear; moderate ankeritization, quartz-ankerite veins of moderate frequency, also green carbonate, and moderate chloritization. 67.5-70.7: decreasing density of quartz-ankerite veins away from shear. Several specks of green carbonate in quartz-ankerite vein at 70.3. **68.5: whole rock sample** 71.1-73.3: 8-10% fine to medium-grained leucoxene in talc serpentine altered peridotite dyke. No magnetic signature. 72.2: minor green carbonate; 2-3% dusty pyrite halo to 5mm quartz vein.	5501	67.00	68.00	1.00	0.08	
			5502	68.00	69.50	1.50	0.01	
			5503	69.50	70.70	1.20	0.01	
			5504	70.70	71.90	1.20	0.01	
			5505	71.90	73.30	1.40	0.08	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
		Lower contact at 70 degrees to core axis.						
73.3	88.4	(2U 2U/1U?? msv,mg,Chl,Tc,wAnk-wSer) **Mafic Volcanic - possible mixed ultramafic** Possible intercalated section of mainly mafic volcanic and what may be ultramafic rock. The mafic flows are fine-grained, dark greenish-grey, and massive. The suspected ultramafic (komatiitic) flows are dark green, medium-grained, moderately chloritic and weakly talcose. Both types are weakly ankerite and sericite altered. The possible ultramafics are moderately to well-foliated with 5-10% quartz-talc-ankerite veins in the foliation - trace fine-grained associated, disseminated pyrite. 81.4-82.0: 2-3% clustered pyrite **86.1: whole rock sample** 86.8-86.9: strongly silicified dyke contact; 5-8% dusty pyrite 86.9-87.3: porphyritic diorite, dark grey to black 87.3-88.4: massive mafic flow; fine-grained, moderately hematized. Lower contact at 45 degrees to core axis.	5506 5507 5508 5509 5510 5511	79.90 81.40 82.90 84.30 85.80 86.90	81.40 82.90 84.30 85.80 86.90 88.40	1.50 1.50 1.40 1.50 1.10 1.50	0.15 0.11 0.01 0.01 0.08 0.01	
88.4	100.0	(6U 6D-por/7FP m-sSil,wpat Hem,tr-8% loc py) **Porphyritic Diorite/Feldspar Porphyry** Medium grey to dark brownish grey, massive, poorly fractured, fine-grained matrix. 10-20% cream to white, euhedral feldspar phenocrysts. Unit resembles dioritic unit texturally (see 16.2-23.4 in T97-2), but is apparently more felsic in composition. Variable moderate to strong silicification, weak saussuritization, patchy, weak hematization. Fine disseminated pyrite - variable, trace to 1%, up to 5-8% in more strongly altered intervals. 3-5% carbonate veining (iron-dolomite) throughout. **97.6: whole rock sample** Lower contact at 55 degrees to core axis.	5512 5513 5514 5515 5516 5517 5518 5519 5520	88.40 89.50 90.50 92.00 93.50 95.00 96.50 98.00 99.20	89.50 90.50 92.00 93.50 95.00 96.50 98.00 99.20 100.00	1.10 1.00 1.50 1.50 1.50 1.50 1.50 1.20 0.80	0.06 0.09 0.27 0.14 0.01 0.28 0.03 0.07 0.26	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t
100.0	103.1	(2MS 2MS mg,bi/chl spot,wpv Hem) **Hematized Mafic Volcanic** Massive, medium-grained, purplish-grey, biotite-chlorite-spotted mafic volcanic. Purplish hue derived from weak, pervasive hematization. 5-10% fine-grained leucoxene. Possibly diabase. Lower contact at 70 degrees to core axis.	5521	102.10	103.10	1.00	0.01	
103.1	118.8	(6U 6D-por/7FP loc sil Qv halo,pat 3-5% py) **Porphyritic Diorite/Feldspar Porphyry** As 88.4-99.8, though darker green in colour. Moderately chloritic. Patchy, strong silicification as haloes to quartz veins. Patchy pyrite mineralization hosted by silicified intervals, 3-5%. 116.7-118.8: strong silicification, moderate fracturing and quartz veining. Partially digested pillowed mafic rafts. Lower contact irregular.	5522 5523 5524 5525 5526	103.10 109.60 111.10 116.30 117.30	104.60 111.10 112.60 117.30 118.80	1.50 1.50 1.50 1.00 1.50	0.08 0.09 0.01 0.15 0.17	
118.8	136.3	(2MS 2MS/2P f-mg,loc fol,w-sSer-w-sAnk) **Massive to Pillowed Mafic Volcanic** Dark grey to dark green, fine to locally medium-grained. Massive to well-foliated in more strongly altered intervals. Intervals often feldsparphyric with foliation - parallel alignment of feldspar phenocrysts. Possibly a mafic tuff. 1-2% quartz-ankerite veins. Generally weak sericite and ankerite alteration. 118.8-120.2: possible ultramafic; moderate chloritization, possibly weak talc?. 120.2-121.0: yellowish-green, strongly sericitized, ankeritized and quartz-ankerite veined interval. Foliated at 65 degrees to core axis. Brecciated/boudinaged quartz veins. An altered shear?. Trace to 1% fine-grained, disseminated pyrite. 121.0-121.8: sericite and ankerite alteration decreasing in intensity downhole. Strongly chloritic with chlorite spots after biotite, to 10%. Pyritic quartz-ankerite stringers.	5527 5528 5529 5530 5531 5532 4690 4691 5633 5533 5534 5535	118.80 120.20 121.00 122.30 123.70 124.50 125.50 126.50 128.00 129.00 130.30 135.30	120.20 121.00 122.30 123.70 124.50 125.50 126.50 128.00 129.00 130.30 131.80 136.30	1.40 0.80 1.30 1.40 0.80 1.00 1.00 1.50 1.00 1.30 1.50 1.00	0.05 0.08 0.11 0.18 0.21 10.45 0.04 0.08 0.06 0.01 0.20 0.01	 11.90

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	FROM	TO	ASSAYS WIDTH	Au g/t	ck g/t
		121.8-122.3: bleached, strongly silicified, 3-5% stringer pyrite. 124.8-125.0: fault structure Quartz-ankerite veins, groundwater leached. 1-2 m wide bleached, strongly ankeritized halo around fault; 1% disseminated pyrite. 128.65-128.75: strongly sericitized and ankeritized core interval of a 1.5m wide, overall moderately ankeritized section. Elevated fine-grained pyrite mineralization to 2-3%. 130.7-131.8: sheared flow contact Strong sericite and ankerite, moderate silica alteration. Quartz-ankerite veins to 10%. Minor graphite, several specks green carbonate. 5-8% vein pyrite. 133.2-135.8: feldspar-phyric flow/feldspar porphyry Massive, salmon-coloured feldspars. 135.8-136.3: moderate ankeritization Quartz-carbonate-ankerite veins at lower contact.						
136.3	146.0	(2U 2U m-sChl,wpat Ser,Qav) **Mafic Volcanic - chloritic** Dark green, fine to medium-grained, massive to flow banded mafic volcanics. Moderate to strong chlorite, patchy weak sericite. Possible komatiitic component. No magnetic signature. Occasional calcite-talc veining. 136.3-137.8: weak to moderate ankeritization, 1-2% ankerite-quartz veins, possible green carbonate. 2-3% quartz-carbonate veins. 137.8-146.0: moderate to strong chlorite +/- talc. Trace medium-grained pyrite. 138.8-141.5: 10-15% quartz-carbonate veins, +/- ankerite +/- green carbonate. Patchy moderate silicification and elevated pyrite to 139.1.	5536 5537 5538 5539 5540	136.30 137.80 138.80 139.30 141.50	137.80 138.80 139.30 141.50 142.50	1.50 1.00 0.50 2.20 1.00	0.08 0.01 0.07 0.01 0.01	

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t	ck g/t

Density of veining decreasing downhole and composition becomes increasingly calcitic. Develops flow banded-look due to veining at 60 degrees to core axis.

139.6: whole rock sample

146.0 End of Hole

Casing left, capped
Core boxes: 34, stored at Aunor Minesite, Timmins
Assay samples: 50 (Au)
Township: Tyrrell
NTS: 41P 10/11
UTM: 499746E/5274987N (approx)
Claim: collar on 1220371, eoh on same
Collar Location: 45m W, 260m S of #1 post of 1220371
Location of eoh: 200W/771.085S, elevation -102.54m

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.00	-45.00	0.00
120.00	-44.00	0.00
146.00	-44.00	0.00

GEOLOGY LEGEND

8U Diabase (U=undifferentiated)

7U Felsic to Intermediate Intrusive
- 7G Granite
- 7Gd Granodiorite, Quartz Monzonite
- 7T Tonalite
- 7S Syenite
- 7M Monzonite
- 7FP Feldspar Porphyry
- 7QFP Quartz-Feldspar Porphyry
- 7PA Pegmatite
- 7A Aplite
- 7F Felsite

6U Mafic to Ultramafic Intrusive
- 6D Diorite, Trondhjemite
- 6G Gabbro
- 6A Anorthosite
- 6P Peridotite, Pyroxenite
- 6L Lamprophyre

5U Clastic Sediments
- 5Ar Argillite
- 5ARGF Graphitic Argillite
- 5GW Greywacke
- 5CG Conglomerate
  - 5CGT Timiskaming Conglomerate
- 5SS Sandstone
- 5ST Ssiltstone
- 5Q Quartzite
- 5A Arkose

4U Chemical Sediments
- 4IF Iron Formation
  - 4IFS Sulphide Facies
  - 4IFC Silicate Facies
  - 4IFO Oxide Facies
- 4C Chert
- 4IGF Graphite

3U Felsic to Intermediate Volcanic
- 3R Rhyolite
- 3D Dacite
- 3A Andesite
- 3T Trachyte

2U Mafic Volcanics
- 2MS Massive
- 2P Pillowed
- 2FB Flow Breccia
- 2HY Hyaloclastite
- 2VAR Variolitic
- 2POR Porphyritic
- 2CA Calc-Alkaline
- 2IT Iron Tholeiite
- 2MT Magnesium Tholeiite

1U Ultramafic Volcanic
- 1TC Talc-Chlorite (altered)
- 1GCB Green-Carbonate (altered)
- 1K Komatiite
- 1BK Basaltic Komatiite

ABBREVIATIONS

Texture

ag, agg	agglomerate
amy	amygdaloidal
FB, fb, fbx	flow breccia
fol	foliated
glom	glomerophyric
gm	groundmass
hy	hyaloclastic
htr	heterolithic
lap	lapilli
ms, msv, mas	massive
p	pillowed
pj	polygonal jointing
por	porphyritic
qt	quench testure
sch	schistose
sfx	spinifex
t	tuff, tuffaceous
tx	texture
tbx, t-bx	tuff-breccia
ves	vesicular
var	variolitic
_phy	_phyric

Alteration

Ab	albitization
Ank	ankeritization
AZ, az	alteration zone
Bi	biotite
Blch	bleached
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Fu	fuchsite
Gcb	green carbonate/fuchsite
Gos	gosson
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Sil	silicification
Tc	talc
Tour	tourmaline

Mineralization

Asb	asbestose
Asp	arsenopyrite
Clpy	cluster pyrite
Cpy, Cp	chalcopyrite
Cry	crysotile
Dspy	disseminated pyrite
Gn, Gal	galena
Gf	graphite
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork
VG	visible gold
MZ	mineralized zone

Veining

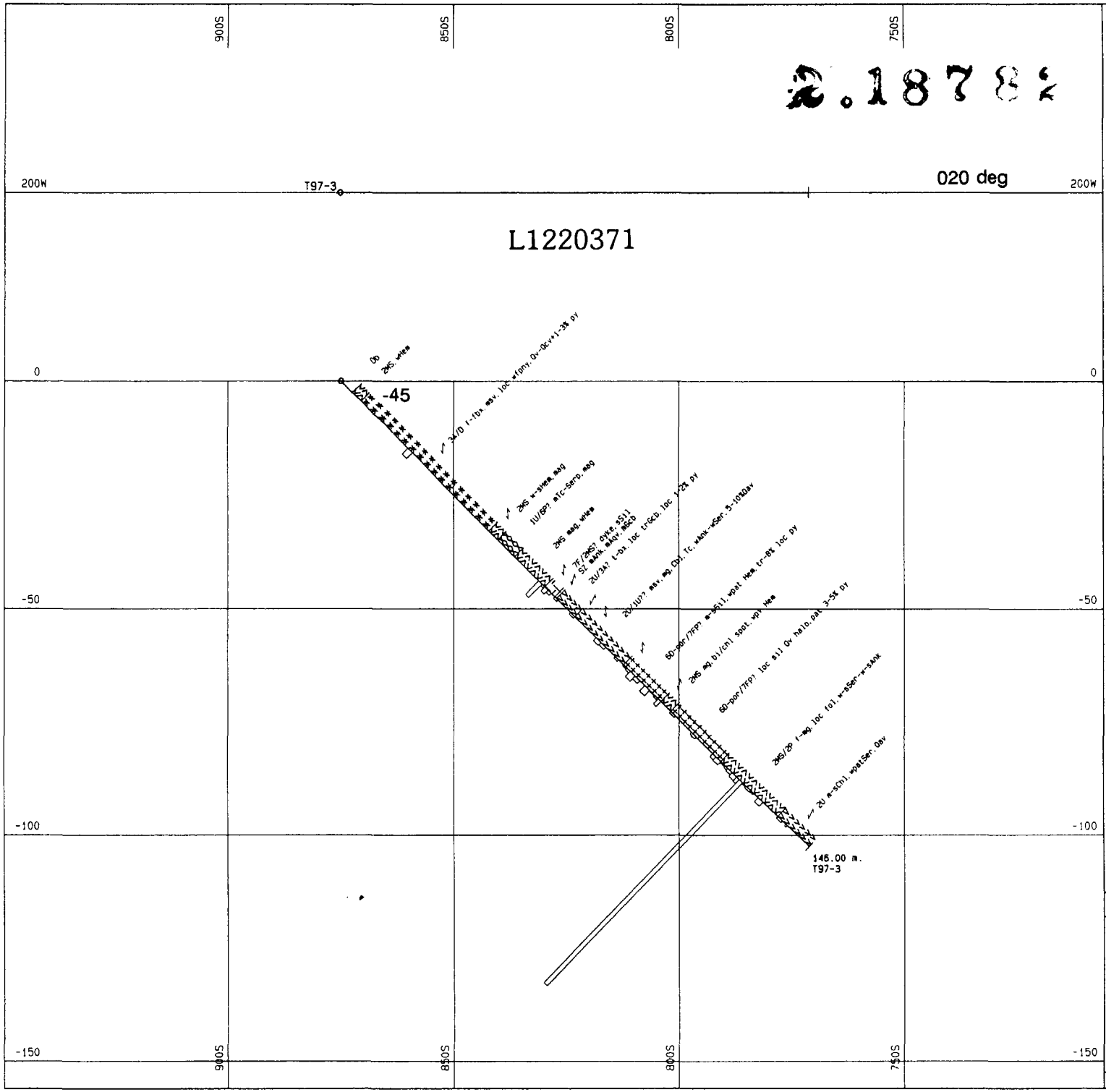
Asbv	asbestose
Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qav	quartz-ankerite
Qcv	quartz-calcite
Qtourv	quartz-tourmaline
Tourv	tourmaline

Structural

bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
F, f	fault
FZ, fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
pj	polygonal jointing
s, sh	shear
SZ, sz	shear zone
slk	slickenside

Other

bld	boulder
ch, cty	cherty
cg	coarse-grained
fg	fine-grained
int	intermittent
loc, l__	local, locally
mag	magnetic
mg	medium-grained
mnr	minor
mod, m__	moderate
Ob, Ovb	overburden
pv	pervasive
rub	rubble
sil	siliceous
st, s__	strong
tect	tectonized
tr	trace
v__	very
wk, w__	weak



Geological Legend:

Intrusive - Late
- Diabase

Intrusive - Early
- Felsic
- Mafic to Ultramafic

Sediments
- Clastic
- Chemical

Volcanics
- Felsic
- Intermediate

MAFIC VOLCANICS
- Undifferentiated
- Massive
- Variolitic

ULTRAMAFIC VOLCANICS
- Undifferentiated

ALTERATION
- Undifferentiated Zone

MINERALIZATION
- Undifferentiated Zone

0 25 50
meters

BATTLE MOUNTAIN GOLD

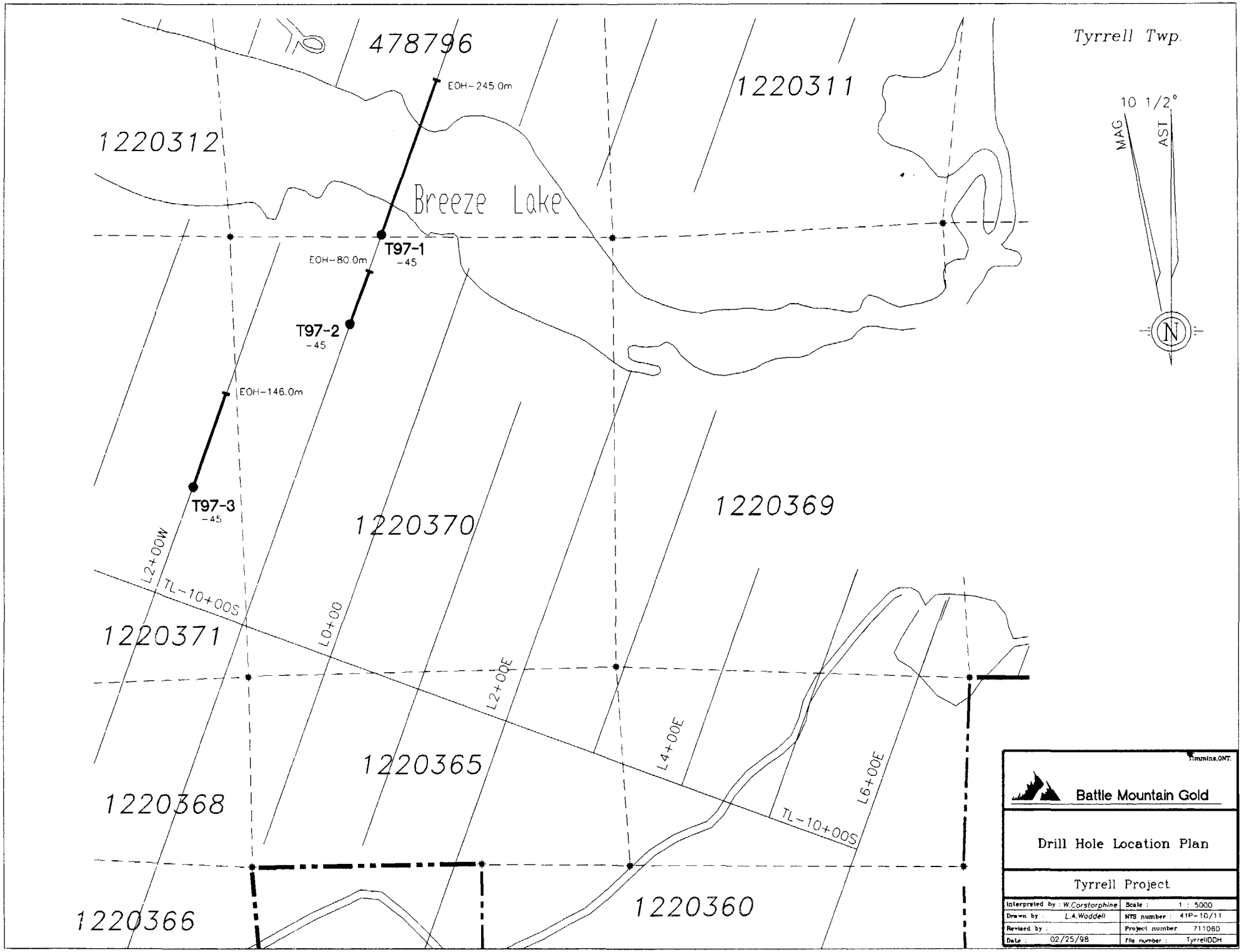
PROJECT: TYRRELL (710060)

SECTION 200W

DRILL HOLE: T97-3

ASSAY SCALE: 1cm=2g/t Au

DATE: 98/02/23 | SCALE: 1/1200


Tyrrell Twp.
478796
1220311
1220312
Breeze Lake
EOH-245.0m
T97-1
-45
EOH-80.0m
T97-2
-45
EOH-146.0m
T97-3
-45
1220369
1220370
1220371
1220365
1220368
1220366
1220360
L2+00W
TL-10+00S
L0+00
L2+00E
L4+00E
L6+00E
TL-10+00S
10 1/2°
MAG
AST
N
Timmins,ONT.
Battle Mountain Gold
Drill Hole Location Plan
Tyrrell Project
Interpreted by : W.Corstorphine
Drawn by : L.A.Waddell
Revised by :
Date : 02/25/98
Scale : 1 : 5000
NTS number : 41P-10/11
Project number 711060
File number : TyrrellDDH

Battle Mountain Canada Ltd

DIAMOND DRILL LOG

PROPERTY: TYRRELL (710060)
HOLE No.: T97-4
Collar Eastings: 900.00
Collar Northings: -2225.00
Collar Elevation: 0.00
Grid: BMG 020 DEG
Claim: 1220098

Collar Inclination: -44.00
Grid Bearing: 180.00
Final Depth: 131.80 metres
Log Completed: 3/12/97
Core: NQ/stored at Aunor Minesite, Timmins

Logged by: D Truscott/S McCann
Date: 30/11/97 to 2/12/97
Down-hole Survey: Acid
Contractor: NDS Drilling

FROM	TO	LITHOLOGICAL DESCRIPTION
0.0	2.0	(Ob) **Overburden** 2.0m casing
2.0	67.9	(2P 2P fg,loc ep,sil) **Pillowed Mafic Volcanic** Medium green, fine-grained, occasionally chlorite-spotted pillowed mafic volcanics. Calcite-quartz-black chlorite, occasional epidote and trace-1% clustered pyrite fill interstices. Minor pillow breccia. Moderately chloritic flows becoming increasingly hard, siliceous downhole. 2-3% quartz-calcite veins +/- epidote at moderate to low core angles (30-60 degrees). 2.8-5.9: 5-8% very fine leucoxene, weak to moderate signature. Sharp lower contact at 20 degrees to core axis. 7.4-8.8: shear/breccia at 20 degrees; quartz-calcite flooded, weakly bleached (sericite ?). Trace fracture chalcopyrite. Tension related fracturing, quartz-calcite flooding +/- black chlorite and elevated py-cpy mineralization as follows: 7.4-8.8 9.1-9.9 10.3-10.4 11.9-12.1 17.0-18.1: interflow greywacke - possibly massive feldsparphyric flow. Irregular upper and lower contacts. 17.8-18.1: Feldsparphyric-lapilli tuff band or porphyritic dyke; closely-packed feldspars in chloritic groundmass. Upper contact and well developed foliation at 60 degrees to core axis. 18.1-36.9: epidote and minor hematite introduced into vein

SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t
5641	7.30	8.80	1.50	0.01
5642	8.80	10.30	1.50	0.04
5643	10.30	11.30	1.00	0.18
5644	11.30	12.30	1.00	0.04
5645	22.80	23.70	0.90	0.01
5646	28.10	29.10	1.00	0.01
5647	29.10	30.10	1.00	0.01
5648	39.00	40.00	1.00	0.01
5649	40.00	41.00	1.00	0.01
5650	41.00	42.50	1.50	0.01
5651	42.50	44.00	1.50	0.35

41P10NW2001 2.18782 TYRRELL

040

Wayne Carstens

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t
		mineralogy. Flows becoming harder, more siliceous below greywacke band. 22.8-23.0: calcitic, epidotized flow contact?; 3-5% fine disseminated pyrite. Well-developed foliation at 40 degrees to core axis. 28.1-30.1: better pyrite-mineralized interstitial calcite-chlorite-epidote material. 36.9-67.9: patchy bleaching, moderate ankeritization with ankerite-quartz veins predominating over quartz-carbonate veins in bleached intervals. 39.3-39.5: shear at 40 degrees to core axis. 41.6-41.8: fault breccia at 60 degrees. Brecciated pillowed flows and 1.5 cm quartz vein in pyrite-graphite matrix. 51.2-51.4: quartz-flooded shear at 55 degrees. 2-3% clustered pyrite. 58.8-67.9: pillows becoming more fractured (tensional). 64.2: 5 cm quartz-calcite flooded shear at 60 degrees. 1-2mm pyrite bands to 5%. 67.6-67.9: dark grey, massive flow Upper contact at 60 degrees to core axis. Well foliated at 40 degrees to core axis.					
67.9	78.2	(2MS 2MS/2FB htbx,lx) **Mafic Flows - Flow Breccia and Hydrothermal Breccia** Mix of dark grey, fine-grained, massive leucoxenitic mafic volcanic (as 2.8-5.9), and medium green, mafic flow breccia. Leucoxenitic unit appears to be hydrothermally brecciated and cemented by ankeritic? matrix. No significant mineralization. Quartz-carbonate veins and angular fragment alignment define core angles of 20-30 degrees. The flow breccia is cemented by calcite, and rounded to subrounded fragments. Lower contact sharp, at 55 degrees to core axis.	5652 5653	75.80 77.30	77.30 78.20	1.50 0.90	0.01 0.01
78.2	83.7	(7U 7QFP sil) **Feldspar Quartz Porphyry** Medium greenish-grey, 30-40% sub- to euhedral, yellowish-green to cream-coloured feldspars, and 10% rounded quartz	5654 5655 5656 5657	78.20 79.70 81.20 82.70	79.70 81.20 82.70 83.70	1.50 1.50 1.50 1.00	0.01 0.01 0.04 0.04

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t
		phenocrysts in fine-grained groundmass. Minor biotite. Massive, moderately fractured with 3-5% quartz-ankerite veins at 50 degrees (rarely at 20 degrees). Trace medium-grained chalcopyrite in quartz veins. Lower contact at ~20 degrees to core axis.					
83.7	104.7	(AZ mAZ/2U/1U? mSer-mSil-mAnk-loc sGcb,2-3% py) **Alteration Zone - mafic to ultramafic protolith** Fine to medium grained, buff colour with yellowish grey intervals and local apple green horizons. Foliation ranges from 10-30 degrees. Moderate silica/ankerite/sericite with local intervals of strong green carbonate alteration. 5% quartz-ankerite veins at 50-60 degrees, minor calcite sometimes associated with veins and stringers. Overall 2-3% disseminated and stockwork pyrite with local intervals up to 30cm hosting as much as 7-10% pyrite. 83.7-86.6: greenish grey, moderate green carbonate, possibly an ultramafic. Carries 2-3% fine disseminated pyrite. 86.6-92.1: buff colour, altered mafic volcanic, 2% pyrite 92.1-96.0: buff to grey colour, sheared, 3-5% pyrite 96.0-97.2: ultramafic, strong green carbonate, 35% quartz-ankerite veins, 1-2% pyrite. 97.2-104.7: buff, yellowish-grey colour, local pinkish hematite alteration seen at 99.4m, 1-2% disseminated pyrite. Lower contact gradational.	5658 5659 5660 5661 5662 5663 5664 5665 5666 5667 5668 5669 5670 5671 5672 5673	83.70 85.20 86.60 87.60 89.00 90.50 92.10 93.50 95.00 96.00 97.20 98.70 99.70 101.00 102.50 103.70	85.20 86.60 87.60 89.00 90.50 92.10 93.50 95.00 96.00 97.20 98.70 99.70 101.00 102.50 103.70 104.70	1.50 1.40 1.00 1.40 1.50 1.60 1.40 1.50 1.00 1.20 1.50 1.00 1.30 1.50 1.20 1.00	0.06 0.19 0.01 0.14 0.01 0.01 0.06 0.01 0.04 0.06 0.43 0.01 0.11 0.01 0.01 0.01
104.7	131.8	(2U 2P loc blch,loc Ser-loc Ank,ep,Qcv) **Pillowed Mafic Volcanic** Fine to medium-grained, green with local bleached intervals. Epidote scattered through the unit. 5-7% quartz-carbonate veins up to 5cm wide, usually associated with dark green chloritic selvages, local amygdules as seen at 113.4m. Local sericite and ankerite alteration associated with bleached intervals. 1% disseminated pyrite	5674 5675 5676 5677 5678 5679 5680	104.70 114.00 115.00 116.50 118.00 119.00 120.00	105.70 115.00 116.50 118.00 119.00 120.00 121.00	1.00 1.00 1.50 1.50 1.00 1.00 1.00	0.01 0.04 0.20 0.01 0.01 0.38 0.01

FROM	TO	LITHOLOGICAL DESCRIPTION	SAMPLE No.	ASSAYS FROM	TO	WIDTH	Au g/t

overall.

115.0-119.7: bleached horizon, moderate ankerite and sericite alteration, 1-2% pyrite, contacts gradational.

131.8 End of Hole

Casing left, capped
Core boxes: 31, stored at Aunor Minesite, Timmins
Assay samples: 40 (Au)
Township: Tyrrell
NTS: 41P 10/11
UTM: 500323E/5273364N (approx)
Claim: collar on 1220098, eoh on same
Collar Location: 260m W, 60m S of #1 post of 1220098
Location of eoh: 900E/2320.31S, elevation -90.03m

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.00	-44.00	180.00
120.00	-43.00	180.00
131.80	-43.00	180.00

GEOLOGY LEGEND

8U Diabase (U=undifferentiated)

7U Felsic to Intermediate Intrusive
- 7G Granite
- 7Gd Granodiorite, Quartz Monzonite
- 7T Tonalite
- 7S Syenite
- 7M Monzonite
- 7FP Feldspar Porphyry
- 7QFP Quartz-Feldspar Porphyry
- 7PA Pegmatite
- 7A Aplite
- 7F Felsite

6U Mafic to Ultramafic Intrusive
- 6D Diorite, Trondhjemite
- 6G Gabbro
- 6A *Anorthosite*
- 6P Peridotite, Pyroxenite
- 6L Lamprophyre

5U Clastic Sediments
- 5Ar Argillite
- 5ARGF Graphitic Argillite
- 5GW Greywacke
- 5CG Conglomerate
  - 5CGT Timiskaming Conglomerate
- 5SS Sandstone
- 5ST Ssiltstone
- 5Q Quartzite
- 5A Arkose

4U Chemical Sediments
- 4IF Iron Formation
  - 4IFS Sulphide Facies
  - 4IFC Silicate Facies
  - 4IFO Oxide Facies
- 4C Chert
- 4IGF Graphite

3U Felsic to Intermediate Volcanic
- 3R Rhyolite
- 3D Dacite
- 3A Andesite
- 3T Trachyte

2U Mafic Volcanics
- 2MS Massive
- 2P Pillowed
- 2FB Flow Breccia
- 2HY Hyaloclastite
- 2VAR Variolitic
- 2POR Porphyritic
- 2CA Calc-Alkaline
- 2IT Iron Tholeiite
- 2MT Magnesium Tholeiite

1U Ultramafic Volcanic
- 1TC Talc-Chlorite (altered)
- 1GCB Green-Carbonate (altered)
- 1K Komatiite
- 1BK Basaltic Komatiite

ABBREVIATIONS

Texture

ag, agg	agglomerate
amy	amygdaloidal
FB, fb, fbx	flow breccia
fol	foliated
glom	glomerophyric
gm	groundmass
hy	hyaloclastic
htr	heterolithic
lap	lapilli
ms, msv, mas	massive
p	pillowed
pj	polygonal jointing
por	porphyritic
qt	quench testure
sch	schistose
sfx	spinifex
t	tuff, tuffaceous
tx	texture
tbx, t-bx	tuff-breccia
ves	vesicular
var	variolitic
_phy	_phyric

Alteration

Ab	albitization
Ank	ankeritization
AZ, az	alteration zone
Bi	biotite
Blch	bleached
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Fu	fuchsite
Gcb	green carbonate/fuchsite
Gos	gosson
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Sil	silicification
Tc	talc
Tour	tourmaline

Mineralization

Asb	asbestose
Asp	arsenopyrite
Clpy	cluster pyrite
Cpy, Cp	chalcopyrite
Cry	crysotile
Dspy	disseminated pyrite
Gn, Gal	galena
Gf	graphite
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork
VG	visible gold
MZ	mineralized zone

Veining

Asbv	asbestose
Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qav	quartz-ankerite
Qcv	quartz-calcite
Qtourv	quartz-tourmaline
Tourv	tourmaline

Structural

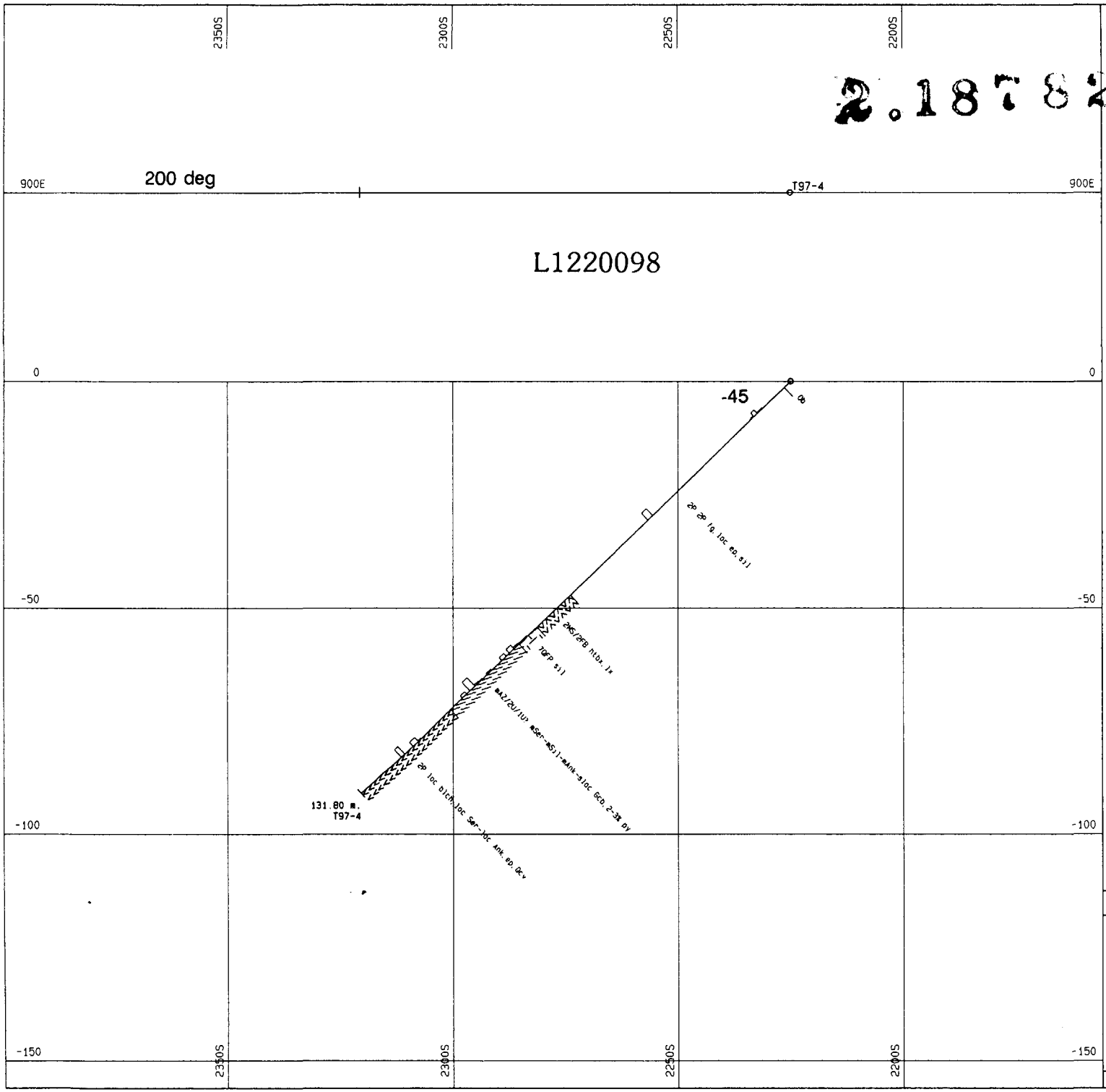
bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
F, f	fault
FZ, fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
pj	polygonal jointing
s, sh	shear
SZ, sz	shear zone
slk	slickenside

Other

bld	boulder
ch, cty	cherty
cg	coarse-grained
fg	fine-grained
int	intermittent
loc, l__	local, locally
mag	magnetic
mg	medium-grained
mnr	minor
mod, m__	moderate
Ob, Ovb	overburden
pv	pervasive
rub	rubble
sil	siliceous
st, s__	strong
tect	tectonized
tr	trace
v__	very
wk, w__	weak

2.18782

L1220098



Geological Legend:

Intrusive - Late
- Diabase

Intrusive - Early
- Felsic
- Mafic to Ultramafic

Sediments
- Clastic
- Chemical

Volcanics
- Felsic
- Intermediate

MAFIC VOLCANICS
- Undifferentiated
- Massive
- Variolitic

ULTRAMAFIC VOLCANICS
- Undifferentiated

ALTERATION
- Undifferentiated Zone

MINERALIZATION
- Undifferentiated Zone

0 25 50
meters

BATTLE MOUNTAIN GOLD

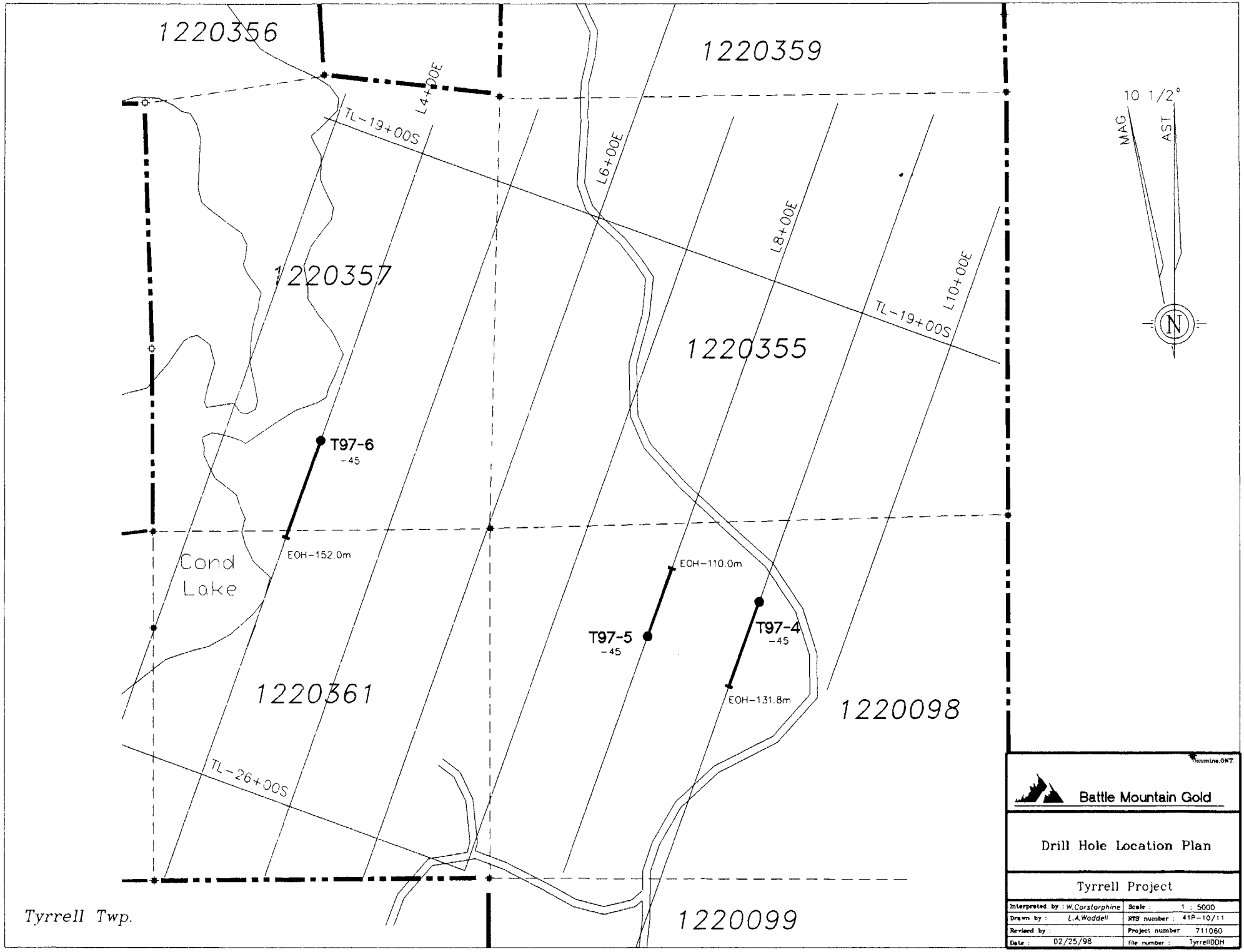
PROJECT: TYRRELL (710060)

SECTION 900E

DRILL HOLE: T97-4

ASSAY SCALE: 1cm=2g/t Au

DATE: 98/02/23 | SCALE: 1/1200



Timmins, ONT.

Battle Mountain Gold

Drill Hole Location Plan

Tyrrell Project

Interpreted by : W.Corstorphine	Scale : 1 : 5000
Drawn by : L.A.Waddell	NTS number : 41P-10/11
Revised by :	Project number 711060
Date : 02/25/98	File number : TyrrellDDH

Battle Mountain Canada Ltd

DIAMOND DRILL LOG

PROPERTY: TYRRELL (710060)
HOLE No.: T97-5
Collar Eastings: 800.00
Collar Northings: -2300.00
Collar Elevation: 0.00
Grid: BMG 020 DEG
Claim: 1220098

Collar Inclination: -45.00
Grid Bearing: 0.00
Final Depth: 110.00 metres
Log Completed: 4/12/97
Core: NQ/stored at Aunor Minesite, Timmins

Logged by: S McCann
Date: 3/12/97 to 4/12/97
Down-hole Survey: Acid
Contractor: NDS Drilling

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS SAMPLE No.	FROM	TO	WIDTH	Au g/t
0.0	4.0	(Ob) **Overburden** 4.0m casing					
4.0	63.1	(2U 2P loc ep,wAnk,10% Qcv) **Pillowed Mafic Volcanic** Fine to medium-grained, green pillows with dark green chloritic selvages. 7-10% quartz-carbonate veins throughout, though generally associated with selvages. Local epidote alteration within fractures and weak pervasive ankeritization. 1% disseminated and clustered pyrite overall, mineralization is related to selvages where pyrite content is up to 3%. 19.4: quartz-calcite vug 34.5: galena and pyrite in 3cm quartz-carbonate vein 56.0 63.1 (2U 20% Qcv) 20% quartz-carbonate veins, 1% disseminated pyrite.	5681	19.00	20.00	1.00	0.01
			5582	32.00	33.50	1.50	0.01
			5583	33.50	35.00	1.50	0.01
			5584	35.00	36.50	1.50	0.06
			5585	36.50	38.00	1.50	0.05
			5586	38.00	39.50	1.50	0.06
			5587	39.50	41.00	1.50	0.01
			5588	56.00	57.50	1.50	0.04
			5589	57.50	59.00	1.50	0.01
			5590	59.00	60.50	1.50	0.01
			5591	60.50	62.00	1.50	0.06
			5592	62.00	63.10	1.10	0.01
63.1	63.8	(1U 1U Chl-mAnk-loc Ser,tr Gcb,30% Qav) **Ultramafic** Fine to medium grained, blackish green, soft, 30% quartz-ankerite veins. Moderate ankerite and local sericite alteration, rare green carbonate, trace to 1% pyrite. Lower contact at 50 degrees.	5593	63.10	63.80	0.70	0.01
63.8	110.0	(2U 2P loc ep,wAnk,loc Hem,loc wmag,10% Qcv) **Pillowed Mafic Volcanic** As described above at 4.0m, locally weakly magnetic. 74.2-74.4: well mineralized pillow selvage and quartz-carbonate veins, 20% stockwork and clustered pyrite. 77.6-77.7: interval of brick red hematization, occasional weak	5594	63.80	65.00	1.20	0.01
			5595	73.00	74.00	1.00	0.01
			5596	74.00	75.50	1.50	0.01
			5597	75.50	77.00	1.50	0.01
			5598	77.00	78.50	1.50	0.11
			5599	78.50	80.00	1.50	0.01
			5600	103.00	104.00	1.00	0.01
			5601	104.00	105.50	1.50	0.16

FROM	TO	LITHOLOGICAL DESCRIPTION	ASSAYS SAMPLE No.	FROM	TO	WIDTH	Au g/t
		hematite alteration seen below this depth at or near selvages.	5602	105.50	107.00	1.50	0.01
		78.0-79.8: moderate pervasive mm-sized, cream coloured leucoxene grains.					
		Contacts within section are gradational.					
		110.0 End of Hole					
		Casing left, capped Core boxes: 25, stored at Aunor Minesite, Timmins Assay samples: 22 (Au) Township: Tyrrell NTS: 41P 10/11 UTM: 500204E/5273330N (approx) Claim: collar on 1220098, eoh on same Collar Location: 380m W, 90m S of #1 post of 1220098 Location of eoh: 800E/2222.22S, elevation -77.78m					

DOWN-HOLE SURVEY DATA

DEPTH	INCLINATION	BEARING
60.00	-45.00	0.00
110.00	-45.00	0.00

GEOLOGY LEGEND

8U Diabase (U=undifferentiated)

7U Felsic to Intermediate Intrusive
- 7G Granite
- 7Gd Granodiorite, Quartz Monzonite
- 7T Tonalite
- 7S Syenite
- 7M Monzonite
- 7FP Feldspar Porphyry
- 7QFP Quartz-Feldspar Porphyry
- 7PA Pegmatite
- 7A Aplite
- 7F Felsite

6U Mafic to Ultramafic Intrusive
- 6D Diorite, Trondhjemite
- 6G Gabbro
- 6A Anorthosite
- 6P Peridotite, Pyroxenite
- 6L Lamprophyre

5U Clastic Sediments
- 5Ar Argillite
- 5ARGF Graphitic Argillite
- 5GW Greywacke
- 5CG Conglomerate
  - 5CGT Timiskaming Conglomerate
- 5SS Sandstone
- 5ST Ssiltstone
- 5Q Quartzite
- 5A Arkose

4U Chemical Sediments
- 4IF Iron Formation
  - 4IFS Sulphide Facies
  - 4IFC Silicate Facies
  - 4IFO Oxide Facies
- 4C Chert
- 4IGF Graphite

3U Felsic to Intermediate Volcanic
- 3R Rhyolite
- 3D Dacite
- 3A Andesite
- 3T Trachyte

2U Mafic Volcanics
- 2MS Massive
- 2P Pillowed
- 2FB Flow Breccia
- 2HY Hyaloclastite
- 2VAR Variolitic
- 2POR Porphyritic
- 2CA Calc-Alkaline
- 2IT Iron Tholeiite
- 2MT Magnesium Tholeiite

1U Ultramafic Volcanic
- 1TC Talc-Chlorite (altered)
- 1GCB Green-Carbonate (altered)
- 1K Komatiite
- 1BK Basaltic Komatiite

ABBREVIATIONS

Texture

ag, agg	agglomerate
amy	amygdaloidal
FB, fb, fbx	flow breccia
fol	foliated
glom	glomerophyric
gm	groundmass
hy	hyaloclastic
htr	heterolithic
lap	lapilli
ms, msv, mas	massive
p	pillowed
pj	polygonal jointing
por	porphyritic
qt	quench testure
sch	schistose
sfx	spinifex
t	tuff, tuffaceous
tx	texture
tbx, t-bx	tuff-breccia
ves	vesicular
var	variolitic
_phy	_phyric

Alteration

Ab	albitization
Ank	ankeritization
AZ, az	alteration zone
Bi	biotite
Blch	bleached
Cal	calcitic
Carb	carbonatization
Cb	carbon
Chl	chloritization
Ep	epidotization
Fu	fuchsite
Gcb	green carbonate/fuchsite
Gos	gosson
Hem	hematization
Lx	leucoxene
Pot	potassic
Ser	sericitization
Serp	serpentinization
Sil	silicification
Tc	talc
Tour	tourmaline

Mineralization

Asb	asbestose
Asp	arsenopyrite
Clpy	cluster pyrite
Cpy, Cp	chalcopyrite
Cry	crysotile
Dspy	disseminated pyrite
Gn, Gal	galena
Gf	graphite
Mt	magnetite
Mo	molybdenite
Po	pyrrhotite
Py	pyrite
Sw	stockwork
VG	visible gold
MZ	mineralized zone

Veining

Asbv	asbestose
Av	ankerite
Cv	calcite
Epv	epidote
Hemv	hematite
Mtv	magnetite
Qv	quartz
Qav	quartz-ankerite
Qcv	quartz-calcite
Qtourv	quartz-tourmaline
Tourv	tourmaline

Structural

bd	bedded
bnd	banded
bx	breccia
bxd	brecciated
ct	contact
F, f	fault
FZ, fz	fault zone
flt	faulting
fl	flow
fr	fracture
g	gouge
pj	polygonal jointing
s, sh	shear
SZ, sz	shear zone
slk	slickenside

Other

bld	boulder
ch, cty	cherty
cg	coarse-grained
fg	fine-grained
int	intermittent
loc, l__	local, locally
mag	magnetic
mg	medium-grained
mnr	minor
mod, m__	moderate
Ob, Ovb	overburden
pv	pervasive
rub	rubble
sil	siliceous
st, s__	strong
tect	tectonized
tr	trace
v__	very
wk, w__	weak

2350S 2300S 2250S 2200S 2150S

2.18782

800E T97-5 020 deg 800E

L1220098

0 0

-45

2P loc ed. wank. 10% Qcv

20% Qcv

5U Qcv-wank-loc Ser.tr Gcb. 30% Qav

2P loc ed. wank. loc Hem. loc wagg. 10% Qcv

110.00 m.
T97-5

-50 -50

-100 -100

-150 -150

2350S 2300S 2250S 2200S 2150S

Geological Legend:

Intrusive - Late

Diabase

Intrusive - Early

Felsic

Mafic to Ultramafic

Sediments

Clastic

Chemical

Volcanics

Felsic

Intermediate

MAFIC VOLCANICS

Undifferentiated

Massive

Variolitic

ULTRAMAFIC VOLCANICS

Undifferentiated

ALTERATION

Undifferentiated Zone

MINERALIZATION

Undifferentiated Zone

0 25 50

meters

BATTLE MOUNTAIN GOLD

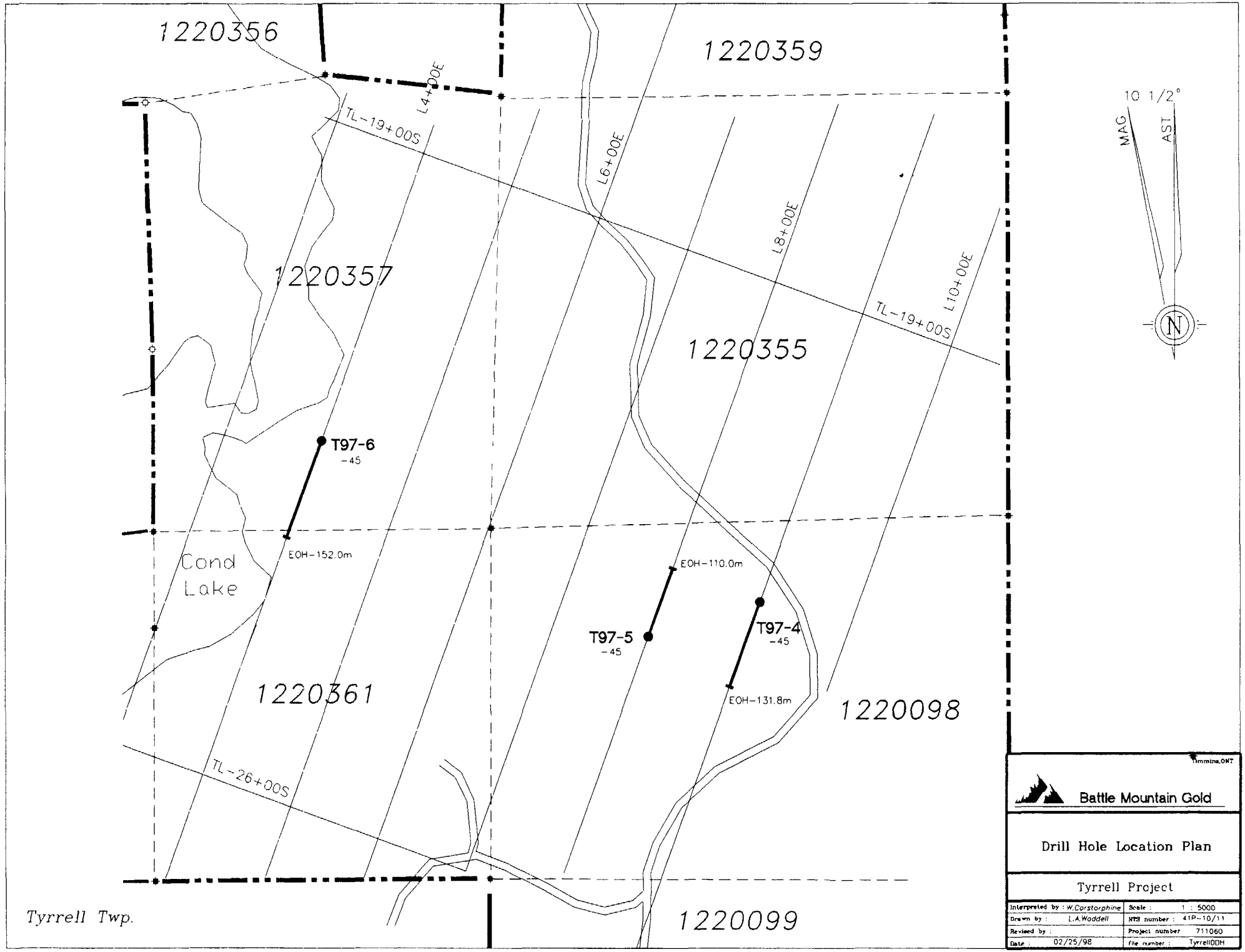
PROJECT: TYRRELL (710060)

SECTION 800E

DRILL HOLE: T97-5

ASSAY SCALE: 1cm=2g/t Au

DATE: 98/02/23 SCALE: 1/1200


1220356
1220359
1220357
1220355
1220361
1220098
1220099
L4+00E
L6+00E
L8+00E
L10+00E
TL-19+00S
TL-26+00S
T97-6
-45
EOH-152.0m
T97-5
-45
EOH-110.0m
T97-4
-45
EOH-131.8m
Cond
Lake
10 1/2°
MAG
AST
N
Tyrrell Twp.
Timmins,ONT
Battle Mountain Gold
Drill Hole Location Plan
Tyrrell Project
Interpreted by : W.Corstorphine
Drawn by : L.A.Waddell
Revised by :
Date : 02/25/98
Scale : 1 : 5000
NTS number : 41P-10/11
Project number 711060
file number : TyrrellDDH

Ontario Ministry of Northern Development and Mines

Declaration of Assessment Work Performed on Mining Land

Mining Act, Subsection 65(2) and 66(3), R.S.O. 1990

Transaction Number (office use): W9880.00599

Assessment Files Research Imaging

41P10NW2001 2.18782 TYRRELL 900

subsections 65(2) and 66(3) of the Mining Act. Under section 8 of the view the assessment work and correspond with the mining land holder. Recorder, Ministry of Northern Development and Mines, 6th Floor,

Instructions: - For work performed on Crown Lands before recording a claim, use form 0240.
- Please type or print in ink.

2.18.02

1. Recorded holder(s) (Attach a list if necessary)

Name: Battle Mountain Canada Ltd.	Client Number: 143550
Address: P.O Box 1205, 60 Shirley Street South	Telephone Number: (705) 268-9600
Timmins, Ontario P4N 7J5	Fax Number: (705) 268-9572
Name	Client Number
Address	Telephone Number
	Fax Number

2. Type of work performed: Check (✓) and report on only ONE of the following groups for this declaration.

☐ Geotechnical: prospecting, surveys, assays and work under section 18 (regs) ☑ Physical: drilling, stripping, trenching and associated assays ☐ Rehabilitation

		Office Use
Work Type: Diamond Drilling - 5 holes T97-1 to T97-5		Commodity
		Total $ Value of Work Claimed: 48,605
Dates Work Performed: From 24 (Day) 11 (Month) 97 (Year) To 04 (Day) 12 (Month) 97 (Year) ✓		NTS Reference
Global Positioning System Data (if available)	Township/Area: Tyrrell Township	Mining Division: Larder Lk
	M or G-Plan Number: G-3725	Resident Geologist District: Kirkland Lake

Please remember to: - obtain a work permit from the Ministry of Natural Resources as required;
- provide proper notice to surface rights holders before starting work;
- complete and attach a Statement of Costs, form 0212;
- provide a map showing contiguous mining lands that are linked for assigning work;
- include two copies of your technical report.

3. Person or companies who prepared the technical report (Attach a list if necessary)

Name: Wayne Corstorphine	Telephone Number: (705) 268-9600
Address: PO Box 1205, 60 Shirley St. South, Timmins On P4N 7J5	Fax Number: (705) 268-9572
Name	Telephone Number
Address	Fax Number
Name	Telephone Number
Address	Fax Number

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4. Certification by Recorded Holder or Agent

I, Wayne Corstorphine (Print Name), do hereby certify that I have personal knowledge of the facts set forth in this Declaration of Assessment Work having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.

Signature of Recorded Holder or Agent: Wayne Corstorphine		Date: September 15/98
Agent's Address: P.O. Box 1205, 60 Shirley St S., Timmins Ont P4N 7J5	Telephone Number: (705) 268-9600	Fax Number: (705) 268-9572

0241 (02/96)

5. Work to be recorded and distributed. Work can only be assigned to claims that are contiguous (adjoining) to the mining land where work was performed, at the time work was performed. A map showing the contiguous link must accompany this form.

	Mining Claim Number. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	Number of Claim Units. For other mining land, list hectares.	Value of work performed on this claim or other mining land.	Value of work applied to this claim.	Value of work assigned to other mining claims.	Bank. Value of work to be distributed at a future date.
eg	TB 7827	16 ha	$26, 825	N/A	$24,000	$2,825
eg	1234567	12	0	$24,000	0	0
eg	1234568	2	$ 8, 892	$ 4,000	0	$4,892
1	L 1189924		See attached schedule.			
2	et al.					
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
		Column Totals				

I, Wayne Corstorphine (Print Full Name), do hereby certify that the above work credits are eligible under subsection 7 (1) of the Assessment Work Regulation 6/96 for assignment to contiguous claims or for application to the claim where the work was done.

Signature of Recorded Holder or Agent Authorized in Writing: Wayne Corstorphine — Date: September 15/98

6. Instructions for cutting back credits that are not approved.

Some of the credits claimed in this declaration may be cut back. Please check (✓) in the boxes below to show how you wish to prioritize the deletion of credits:

- ☑ 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated.
- ☐ 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- ☐ 3. Credits are to be cut back equally over all claims listed in this declaration; or
- ☐ 4. Credits are to be cut back as prioritized on the attached appendix or as follows (describe):

Note: If you have not indicated how your credits are to be deleted, credits will be cut back from the Bank first, followed by option number 2 if necessary.

For Office Use Only

Received Stamp	Deemed Approved Date	Date Notification Sent
	Date Approved	Total Value of Credit Approved
	Approved for Recording by Mining Recorder (Signature)	

Page 1

SCHEDULE FOR DECLARATION OF ASSESSMENT WORK ON MINING LAND

Work Transaction # EASTCAN98.026

* Amendment W9880.00599.

	MINING CLAIM NUMBER. Or if work was done on other eligible mining land, show in this column the location number indicated on the claim map.	NUMBER OF CLAIM UNITS. For other mining land, list hectares.	VALUE OF WORK PERFORMED on this claim or other mining land	VALUE OF WORK APPLIED to this claim	VALUE OF WORK ASSIGNED to other mining claims	BANK. Value of work to be distributed at a future date
1	L 1189924	2	0.00	800.00		
2						
3	L 1190032	1	0.00	400.00		
4	L 1219121	1	0.00	400.00		
5	L 1219122	1	0.00	400.00		
6	L 1219123	1	0.00	400.00		
7	L 1219126	1	0.00	400.00		
8	L 1219130	1	0.00	400.00		
9	L 1219131	2	0.00	800.00		
10	L 1220090	1	0.00	400.00		
11	L 1220098	1	17,829.00	400.00	8,200.00	9,229.00
12						
13	L 1220312	1	0.00	400.00		
14	L 1220313	1	0.00	400.00		
15	L 1220314	1	0.00	400.00		
16	L 1220315	1	0.00	400.00		
17	L 1220317	1	0.00	400.00		
18	L 1220318	1	0.00	400.00		
19	L 1220319	2	0.00	800.00		
20	L 1220355	1	0.00	400.00		
21	L 1220356	1	0.00	400.00		
22	L 1220357	1	0.00	400.00		
23	L 1220358	1	0.00	400.00		
24	L 1220359	1	0.00	400.00		
25	L 1220360	1	0.00	400.00		
26	L 1220361	1	0.00	400.00		
27	L 1220365	1	0.00	400.00		
28	L 1220366	1	0.00	400.00		
29	L 1220367	1	0.00	400.00		
30	L 1220368	1	0.00	400.00		
31	L 1220369	1	0.00	400.00		
32	L 1220370	1	5,550.00	400.00	1,200.00	3,950.00
33	L 1220371	1	9,610.00	400.00	3,000.00	6,210.00
34	L 0478798	1	15,616.00		1,600.00	14,016.00
35	L 1220309	1	0.00	400.00		
36	L 1220310	1	0.00	400.00		
37	L 1220311	1	0.00	400.00		
38	L 1220316	1	0.00	400.00		
	Column Totals		48,605.00	15,200.00	14,000.00	33,405.00

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SEP 18 '98 10:02 705 268 9572 PAGE.02

37	L 1220311	1	0.00	400.00		
38	L 1220316	1	0.00	400.00		
	Column Totals		48,605.00	16,000.00	14,800.00	32,605.00

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Ontario Ministry of Northern Development and Mines

Statement of Costs for Assessment Credit

Transaction Number (office use): W9880.00599

Personal information collected on this form is obtained under the authority of subsection 6(1) of the Assessment Work Regulation 6/96. Under section 8 of the Mining Act, the information is a public record. This information will be used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Chief Mining Recorder, Ministry of Northern Development and Mines, 6th Floor, 933 Ramsey Lake Road, Sudbury, Ontario, P3E 6B5.

Work Type	Units of Work Depending on the type of work, list the number of hours/days worked, metres of drilling, kilometres of grid line, number of samples, etc.	Cost Per Unit of work	Total Cost
Drilling Contractor	741 m.	49.00/m.	36,307
Engineering Labour	16 days	350/d.	5,600
Technician/Core Splitter	8 days	250/d.	2,000
Assay Charges.	217	10.50 ea	2,278
Associated Costs (e.g. supplies, mobilization and demobilization).			
Gas and Heating Fuel. (Core shack)			817
Transportation Costs			
Vehicle cost (rental/lease).			576
Repairs			87
Food and Lodging Costs			
Room + Board - Motel (1-2 men).		~59/d.	940
		Total Value of Assessment Work	48,605

Calculations of Filing Discounts:

1. Work filed within two years of performance is claimed at 100% of the above Total Value of Assessment Work.
2. If work is filed after two years and up to five years after performance, it can only be claimed at 50% of the Total Value of Assessment Work. If this situation applies to your claims, use the calculation below:

TOTAL VALUE OF ASSESSMENT WORK × 0.50 = Total $ value of worked claimed.

Note:
- Work older than 5 years is not eligible for credit.
- A recorded holder may be required to verify expenditures claimed in this statement of costs within 45 days of a request for verification and/or correction/clarification. If verification and/or correction/clarification is not made, the Minister may reject all or part of the assessment work submitted.

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Certification verifying costs:

I, Wayne Corstorphine (please print full name), do hereby certify, that the amounts shown are as accurate as may reasonably be determined and the costs were incurred while conducting assessment work on the lands indicated on the accompanying Declaration of Work form as Agent - Lands Manager (recorded holder, agent, or state company position with signing authority) I am authorized to make this certification.

2.18782

Signature: Wayne Corstorphine Date: September 15/98

0212 (02/96)

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

Ontario

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (888) 415-9846
Fax: (877) 670-1555

Visit our website at:
www.gov.on.ca/MNDM/MINES/LANDS/mlsmnpge.htm

October 1, 1998

Wayne Corstorphine
BATTLE MOUNTAIN CANADA LTD.
P.O. Box 1205
60 Shirley St. South
Timmins, Ontario
P4N 7J5

Dear Sir or Madam:

Submission Number: 2.18782

Subject: Transaction Number(s):		**Status**
	W9880.00599	Deemed Approval

We have reviewed your Assessment Work submission with the above noted Transaction Number(s). The attached summary page(s) indicate the results of the review. WE RECOMMEND YOU READ THIS SUMMARY FOR THE DETAILS PERTAINING TO YOUR ASSESSMENT WORK.

If the status for a transaction is a 45 Day Notice, the summary will outline the reasons for the notice, and any steps you can take to remedy deficiencies. The 90-day deemed approval provision, subsection 6(7) of the Assessment Work Regulation, will no longer be in effect for assessment work which has received a 45 Day Notice. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office within this 45 Day period, otherwise assessment credit will be cut back and distributed as outlined in Section #6 of the Declaration of Assessment work form.

Please note any revisions must be submitted in DUPLICATE to the Geoscience Assessment Office, by the response date on the summary.

If you have any questions regarding this correspondence, please contact Steve Beneteau by e-mail at benetest@epo.gov.on.ca or by telephone at (705) 670-5855.

Yours sincerely,

ORIGINAL SIGNED BY
Blair Kite
Supervisor, Geoscience Assessment Office
Mining Lands Section

Correspondence ID: 12885

Copy for: Assessment Library

Work Report Assessment Results

Submission Number: 2.18782

Date Correspondence Sent: October 01, 1998 **Assessor:** Steve Beneteau

Transaction Number	First Claim Number	Township(s) / Area(s)	Status	Approval Date
W9880.00599	1220098	TYRRELL	Deemed Approval	September 30, 1998

Section:
16 Drilling PDRILL

Correspondence to:

Resident Geologist
Kirkland Lake, ON

Assessment Files Library
Sudbury, ON

Recorded Holder(s) and/or Agent(s):

Wayne Corstorphine
BATTLE MOUNTAIN CANADA LTD.
Timmins, Ontario

Correspondence ID: 12885

Ontario Ministry of Natural Resources

Ministry of Northern Development and Mines

INDEX TO LAND DISPOSITION

PLAN

~~M.253~~

G-3725

TOWNSHIP

TYRRELL

M.N.R. ADMINISTRATIVE DISTRICT

KIRKLAND LAKE

MINING DIVISION

LARDER LAKE

LAND TITLES/REGISTRY DIVISION

TIMISKAMING

Scale 1:20 000

1000 Metres 0 1000 2000 Metres

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000 Feet

Contour Interval 10 Metres

AREAS WITHDRAWN FROM DISPOSITION

MRO – Mining Rights Only
SRO – Surface Rights Only
M+S – Mining and Surface Rights

Declaration	Order No.	Date	Disposition	File
(R) W-L-58/96 NER	SEPT 17/96 SRO			ARCHAEOLOGICAL SITE
~~(R) W-L-15/97 NER MAY 30/97~~				

SYMBOLS

Boundary:
- Administrative District
- Township, Mining Div. or Registry
- Road or Easement: surveyed / unsurveyed
- Lot/Concession: surveyed / unsurveyed
- Parcel: surveyed / unsurveyed
- Right-of-Way: road / railway / utility
- Reservation
- Diff. Pat. Pte
- Contour
- Intermediate
- Approximate
- Depression
- Control Point (Bench Mark)
- Flooded land
- Mine shaft
- Pipeline (above ground)
- Road: all weather / dustless / gravel
- River/Stream/Creek: intermittent
- Road: Railway, country, marsh: access / trail, bush
- Shoreline (original)
- Transmission line
- Wooded area

DISPOSITION OF CROWN LANDS

Patent:
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

Lease:
- Surface & Mining Rights
- Surface Rights Only
- Mining Rights Only

- Licence of Occupation
- Order-in-Council: OC
- Cancelled
- Reservation
- Sand & Gravel
- Land Use permit

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER MINISTRY OF NORTHERN DEVELOPMENT AND MINES. FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HERE.

DATE OF ISSUE
OCT 0 1 1998
PROVINCIAL RECORDING OFFICE - SUDBURY

CIRCULATED AUGUST 15/96

ARCHIVED SEPT 17/96

41P10NW2001 2.18782 TYRRELL 200