028400

MBD-19.

FIELD ROCK NAME and general discription over interval marked	ADOPTED INTERVAL (m cm) & ADOPT LENGTH FROM COLLAR m cm	GRAPHIC LOG	OBSERVATIONS — Commence with angle from core or other point relates to marker) [illegible] Attitude of bedding or foliation, Attitude & spacing of joints, Attitude, width & direction of sheared zones. (Attitude = angle of structure to long core axis)	MINERALIZATION	MINERALIZATION %
SUMMARY DRILL LOG MBD 19.			Veins over 50 mm	Mineralisation (excluding veins over 50 mm.)	
TRICONE TO 3m - No Core.	0 - 3.0 m	0			
DOLOMITE WITH QUARTZ AND CALCITE. Mottled dark grey siliceous dolomite with patchy creamy white dolomite. Mottling is due to partial recrystallisation	3.0 - 15.75 (12.75)	2/3 10	← Gradual Change.	Po > py. trace sp, arseno. Concentrated along fracture zones in intervals → 5.95 - 8.7 m, 12.4 - 13.65 m, together with serpentine/talc, qtz, calcite	3-5%
DOLOMITE SULPHIDE LODE	15.75 - 16.93 (1.18)	4		Po, fluorite trace arseno, py, sp	30%
ALTERED DOLOMITE. Recrystallised - dolomite, white calcite and qtz.	16.93 - 21.05 (4.12)	3 20	← 25°, irregular	po >> py. discontinuous aggregates and blebs along brecciation cracks	10%
DOLOMITE SULPHIDE LODE. qtz - carbonate, talc/serpentinite } mixed on a metre scale	21.05 - 27.10 (6.05)	7/8/4	← Gradual Change.	po >> py. trace sp and arseno. Variable proportions 10 - 70%, dissem.	40%
THINLY BEDDED SERICITIC SILTSTONES AND GREY MASSIVE SANDSTONES. Hard, greenish siltstones with grey quartzites (silicified). Brecciated and contorted.	27.10 - 39.2 (12.10)	30 10/11	← Gradual Change (interbedded) ← Bedding 70° ← Bedding 45° ← Bedding 75°	Trace po, py. finely dissem in sandstones small blebs in siltstones	<1%
END OF HOLE 39.2		40			

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	As	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
97173		3.0	5.0	2.0	640									
74		5.0	7.0	"	34									
75		7.0	9.0	"	65									
76		9.0	11.0	"	22									
77		11.0	13.0	"	8									
78		13.0	15.0	"	10									
79		15.0	15.87	0.87	55									
180		15.87	16.72	0.85	7600		550	40	1500	2	35	2000		
81		16.72	18.72	2.0	980									
82		18.72	21.2	2.48	1000									
83		21.2	23.2	2.0	140									
84		23.2	25.2	2.0	170									
85		25.2	27.1	1.9	12									
86		27.1	29.1	2.0	44									
87		29.1	31.1	"	32									
SLUDGE														
97193		0.0	3.0	3.0	5300									

Notes :— Sn by XRF Bi Method

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 19

SAMPLE TYPE : DRILL CORE FROM 3.0 TO 31.1

0284011

028402

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. MOUNT BISCHOFF

HOLE No. MBD 19

COLLAR LOCATION

	Grid name	Rectangular space co-ordinates PLANAR CO-ORDINATES		ELEVATION
(1)	MBJV	1943.15 N	1056.99 E	641.60
(2)		N	E	
(3) Aust. Map Grid PRECISE / APPROX.		mE	mN	mA.H.D.

1:250 000 Sheet No. BURNIE SK 55-3. | 1:100 000 Sheet No. HELLYER 8015 | State TASMANIA

Mineral Tenement EL. 13/79 | Holder METALS EXPLORATION LTD

Cadastral location and details
CROWN LAND/ PRIVATE

W.C. Bearing from collar
- magnetic
- grid (1)
- grid (2)
- grid (3)
- true

Inclination at collar 60°/360

Total length 39.2 m.

Commenced: 20 / 1 / 80

Completed: 22 / 1 / 80

Drilling contractor: LONGYEAR AUST PTY LTD

Rig type: LONGYEAR 38

Core size and non-coring (NC)

TRICONE	0	TO 3.0 m
HQ	3.0	TO 39.20
		TO
		TO
		TO
		TO

Details of down hole location-survey methods.
TROPARI.

Purpose of drilling and anticipated lengths to targets.
To investigate mineralisation in dolomite horizon 0 - 48m;
planned depth of hole 60 m.

Comments on drilling.

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type mag / Azimuth	DIP
37.70m	338°	59°

Legend for graphic log column (see drill log for Hole No. _____)

'DERWENT' PENCIL NO. | FIELD ROCK NAME, ETC.

Symbols and abbreviations for drilling notes column.

LOGGED BY C. BROADBENT	LOGGED BY	LOGGED BY
FROM 0 TO 39.2 m	FROM TO	FROM TO
DATE 26.1.80	DATE	DATE

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD 19
Log sheet 1 of 2

028403

DRILL ADVANCE	LOST CORE ZONE	CORE LENGTH RECOVERED	% RECOVERY ESTIMATE OR
1.2		0.4	33
0.5		0.4	80
1.5		1.4	93
1.4		1.4	100
1.6		1.6	100
1.6		1.6	100
1.1		1.1	100
1.5		1.5	100
1.5		1.5	100
1.6		1.6	100
1.6		1.6	100
1.6		1.6	100
1.5		1.6	100
1.6		1.5	
1.5		1.5	100
1.6		1.6	100
1.5		1.5	100
1.0		0.7	100
·2		·5	
1.6		1.6	100
1.5		1.5	100
1.5		1.4	93
1.5		1.5	100
1.5		1.5	100
1.5		1.5	100
1.5		1.5	100

TRICONE TO 3·0 m – NO CORE

3·0 – 15·75 Recrystallised DOLOMITE

Mottled grey/white siliceous dolomite, extensively brecciated, with patches of creamy coloured recrystallised dolomite, grey and white qtz and calcite concentrated along fracture zones (up to 5 cm in size). Some very fine fractures are coated with black (?)serpentine.

15·75 – 16·93 DOLOMITE SULPHIDE LODE.

Banded bronze pyrrhotite, hard bluish green fluorite rich serpentinite, greenish talc with patches grey qtz white carbonates and dark grey serpentinite. 'Wrightic' texture.

16·93 – 21·05 RECRYSTALLISED DOLOMITE.

Creamy white recryst. dolomite with qtz and calcite surrounding clasts of hard faintly mottled pale grey dolomite. Occasional patches of greenish black talcy serpentinite and greenish talcose haloes about fine fracturing. Finely fractured and quite well broken, with yellow clay on greasy feeling fracture surfaces.

20·02 – 21·05 Relatively unaltered grey dolomite, brecciated, with minor qtz-recrystallised carbonate veining and thin stringers of talc/serpentinite

21·05 – 27·10 DOLOMITE SULPHIDE LODE

Bronze coloured due to pyrrhotite with patchy greyish green talc/grey serpentinite and grey qtz/white carbonate intervals. Occasional large corroded clasts of remnant grey and white dolomite to 10 cm. Fluorite is variable from trace to 10%, and is bottle green and finely dissem.

22·6 – 26·6. grey-green talc and almost black serpentinite weakly foliated – intercalated with bronze pyrrhotite.

26·6 – 27·1 talcy carbonates & qtz in a mottled grey/white matrix with a little creamy coloured crystalline dolomite

27·10 – 39·2 THINLY BEDDED SILTSTONES WITH SANDSTONES.

Thinly bedded greenish sericitic siltstones with minor dark grey shales and hard grey fine grained quartzites. The quartzite beds may be very fine grained (quartzose siltstones) or as beds to >1·1 m. Brecciated and disrupted – soft sediment deformation with later fracturing.

27·10 – 28·4 Thinly bedded greenish and grey siltstones, minor black shales and rare thin serpentinite beds to 2 cm.

28·4 – 29·1 Massive hard grey fine grained silt rich quartzite.

29·1 – 38·1 Interbedded greenish clay rich sericitic siltstones and dark grey quartzose siltstones. Brecciated – soft sediment disruption, later microfaulting.

38·1 – 39·2 Massive grey sandstone – hard and silicified, with some thin greenish siltstone laminae

END OF HOLE 39·20 m.

Depth	GRAPHIC LOG
3·0	3
15·75	4/6/7/8
16·93	3
20·02	2/3
21·05	4/6/7/8
23·3	4/6/7
26·6	8/5
27·10	10/11/9

Mineralisation
Including veins over 10 mm.

- ← 11·0 50 mm po, qtz, calcite, py, talc, asseo vein, 60°.
- ← 11·4 30 mm serpentinite vein surrounded by dissem po, py, sp, asseo 100 mm, 60°.
- ← 14·5 40 mm qtz, calcite, fluorite, po vein, 45°
- ← Contact indistinct, gradual over 10 cm.
- ↖ Contact irregular, 25°
- Gradual Change over 10 cm.
- ↖ Gradual change (bedded, 45°)
- ← 30·1 Bedding 70°
- ← 32·4 Bedding 50°
- ← 35·4 Bedding 45°
- ← 38·0 Bedding 75°
- ← 39·0 Bedding 50°

~~Mineralisation~~ Excluding veins over 10 mm	PERCENT MINERALISATION Visual estimate
3 – 5·95 po, py as blebs along fracture zones; py veinlets	1%
5·95 – 8·7 po>>py as granular aggregates with traces sp, asseo in qtz-calcite veining etc.	10%
8·7 – 12·9 trace po, py with qtz, calcite.	<1%
12·9 – 13·65 po>py, trace sp, asseo with calcite, qtz, fluorite.	15%
13·65 – 15·75 trace po, py with qtz, calcite	<1%
15·75 – 16·93 po>>fluorite (finely dissem) trace, asseo, py, sp. Granular texture – in places massive po to 10 cm.	50-60%
16·93 – 20·02 po>>py as blebs and discontinuous aggregates to 15×8 mm along hair fine brecciation cracks. Trace sp.	10%
20·02 – 21·05 po, trace py, cp, asseo on larger fractures	1%
21·05 – 22·6 po, trace asseo, cp, py granular, variable 15 – 90%. Fluorite finely dissem, variable trace to 10%.	40%
22·6 – 23·3. py, po, trace sp, asseo (weathered & pitted), fluorite	10%
23·3 – 26·6 po, minor py, trace cp, asseo, sp. Massive & granular, interleaved with talc/serpentinite.	70%
26·6 – 27·1 py>po trace sp, asseo	10%
27·1 – 28·4 po as rare blebs to 1 cm, sparse qtz-carbonate-py-po stringers	1%
28·4 – 29·1 very rare fine grains py	
29·1 – 33·9 trace dissem po, rare thin veinlets py	<1%
33·9 – 38·1 po finely dissem in grey siltstones, some small blebs to 2×3 mm, rarely dissem in shaley beds. Sparse py-qtz-fluorite-carbonate-po veinlets to 5 mm.	1%
38·1 – 39·2 trace py (weak)	<<1%

5 cm

DRILL ADVANCE	LOST CORE ZONE	CORE LENGTH RECOVERED	% RECOVERY ESTIMATE OR	**DEPTH from-to : ROCK UNIT** capital letters, underlined Depth : Detailed rock description and notes indented about 15 mm.	DRILL LOG DEPTH TAG	DEPTH POINTER ▶	GRAPHIC LOG SEE LEGEND ON SHEET 1	DEPTH POINTER ◀	STRUCTURAL AND VEIN INFORMATION ATTITUDE = Angle between feature and LONG CORE AXIS	MINERALISATION	PERCENT MINERALISATION Visual estimate	NOTES

METALS
EXPLORATION
LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

Prospect or project Mount Bischoff
Logged by G. BROADBENT date 26/1/80
Written out 22/5/80.

HOLE No. MBD 19
LOG SHEET 2 OF 2
from 0 m. to 39·2 m.