028404

MBD 20

FIELD ROCK NAME and general description over interval marked	ADOPTED INTERVAL (m cm) to ADOPT LENGTH FROM COLLAR m cm	GRAPHIC LOG	OBSERVATIONS (Commence with metric from collar or other point relates to marker) Attitude of bedding or foliation (if tuff) & spacing of joints. Attitude, width & description of sheared zones. [Attitude = angle of structure to long core axis.]	% MINERALIZATION (visual est. mode)
SUMMARY DRILL LOG MBD 20			Veins over 50 mm	Mineralisation (excluding veins over 50 mm)
TRICONE TO 1.5 m - NO Core	0-1.5	0		
DOLOMITE WITH QTZ AND CALCITE. Grey siliceous dolomite, more or less recrystallised (dolomite-calcite-qtz) or altered to talc-serpentinite in zones. 9.55-11.45 recrystallised with talcose carbonates and qtz. 11.45-12.86 talc/serpentinite and qtz calcite, Sulphides <1%. 19.1-22.76 - Recrystallised clay fractures. 24.5-27.8 totally recrystallised, talcy.	1.5-27.8 (26.3)	10 2 3 20 3	Core fractured and broken, fine yellow fractures 0-40° CA. ← 300 mm fault zone, shattered.	Po >> Py, sp, fluorite variable, do not usually exceed 10%. More barren portions mainly sp, <1% Most sulphides are localized along fractures as blebs and grains, fluorite with carbonate as discrete grains or finely disseminated talc/serpentinite.	3-5% 10%
DOLOMITE SULPHIDE LODE. Completely altered to talc serpentinite, in places almost massive. Sulphide(s) concentrations variable on a scale of 2m or less, range from 20-90%, banded	27.8 41.3 (13.5)	30 4 7 40	Gradual Change	Po >> Py, trace cp, arsen. sp Fluorite locally abundant. Sulphide intervals of 2 m or less with concentrations 90-20% and in between. Where Py occurs, have trace mercasite	50%
GREENISH SILTSTONES AND GREY QUARTZITES	41.3-44.10	10 11	Gradual Change (interbedded)	Po, trace Py sp, arsen, blebs and grains	1-10%
END OF HOLE 44.1 m		50			

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								
97188		1.5	3.5	2.0	190									
89		3.5	5.5	"	580									
90		5.5	7.5	"	410									
97194		7.5	9.5	2.0	240									
95		9.5	11.5	"	130									
96		11.5	13.5	"	460									
97		13.5	15.5	"	55									
98		15.5	17.5	"	90									
99		17.5	19.18	1.68	55									
97300		19.18	21.18	2.0	8900		360	40	44	<1	110	15		
1		21.18	22.38	1.20	320		550	X	18	1	40	40		
2		22.38	24.38	2.0	480		55	X	12	<1	25	X		
3		24.38	26.38	"	3600		38	28	25	<1	<10	10		
4		26.38	27.84	1.46	9000		46	20	14	<1	30	X		
5		27.84	29.84	2.0	1.27%		540	50	42	1	25	390		
6		29.84	31.84	"	4250		530	X	18	1	25	390		
7		31.84	33.84	"	300									
8		33.84	35.84	"	140									
9		35.84	37.84	"	200									
10		37.84	39.84	"	1050									
11		39.84	41.3	1.46	6900		1400	890	5200	31	160	3.64%		
12		41.3	43.3	2.0	740									

Notes :— Sn by XRF Bi Method.

X means less than detection limit

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 20

SAMPLE TYPE : DRILL CORE FROM 1.5 TO 43.3m.

0284 03

028406

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. MOUNT BISCHOFF

HOLE No. MBD 20

COLLAR LOCATION

Grid name | Rectangular space co-ordinates: PLANAR CO-ORDINATES | ELEVATION

(1)	MGIV	1959.96 N	981.95 E	644.26
(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 8OIS

State TASMANIA

Mineral Tenement EL 13/79

Holder METALS EXPLORATION LTD

Cadastral location and details
CROWN LAND / PRIVATE

W.C. Bearing from collar

	magnetic
360	grid (1)
	grid (2)
	grid (3)
	true

Inclination at collar 50° / 360

Total length 44.9 m

Commenced: 22 / 1 / 80

Completed: 25 / 1 / 80

Drilling contractor: LONGYEAR AUSTRALIA PTY LTD

Rig type: LONGYEAR 38

Core size and non-coring (NC)

TRICONE	0	TO 1.5 m.
HQ	1.5	TO 44.9m.
		TO
		TO
		TO
		TO

Details of down hole location-survey methods.
TROPARI

Purpose of drilling and anticipated lengths to targets.
To investigate mineralisation in the dolomite horizon from 0-46 m. Original (planned) depth of hole 50 m.

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type Mag Azimuth	DIP
43.40	336°	49°

Comments on drilling.

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
FROM 0 TO 44.9m
DATE

LOGGED BY
FROM TO
DATE

LOGGED BY
FROM TO
DATE

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD20
Log sheet 1 of 2

DEPTH from-to : ROCK UNIT (capital letters, underlined) / Depth : Detailed rock description and notes (indented about 15 mm.)	GRAPHIC LOG (see legend on sheet 1)	STRUCTURAL AND VEIN INFORMATION (attitude = angle between feature and long core axis)	MINERALISATION	PERCENT MINERALISATION (visual estimate)	NOTES
TRICONE TO 1.5 m - NO CORE.					
1.5 - 24.8 DOLOMITE, weakly recrystallised. (frequently hard and siliceous.) Very brecciated - grey/ dolomite clasts showing a greater or lesser degree of recrystallisation/remobilisation of dolomite along fracture planes. Margins of clasts commonly have coatings of creamy white dolomite, with sparse patches of qtz and calcite at intersections of cracks. Surrounding these remobilised zones are haloes of faintly mottled crystalline dolomite, with or without a core of fine grained unaltered grey dolomite. Some fine highly irregular dark coloured stylolite-like sutures occur which cut across early brecciation fractures. Two generations of brecciation? - early fine dark fracturing has the recrystallisation as described above overprinted - new brecciation, or reactivation of old planes of weakness?	3/2.		3.0-6.8 Py, trace sp, weak trace marcasite with py as blebs in fracture zones	1%	
			6.8-8.6 po, sp, py trace arseno, fluorite, dissem in recrystallised carbonates, with qtz.	5-7%	
			8.6-9.55 trace py, sp as for 3.0->6.8 m.	1%	
3.0 - 9.55 core extensively fractured and broken, only weakly recrystallised, with minor talc/serpentine alteration along late fractures.	3/6		9.55-11.45 po, finely dissem and as blebs to 10x5 mm, trace py, sp.	5-7%	
9.55 - 11.45 Strongly altered and recrystallised, with talcose carbonate patches (greenish-white) and some black serpentinite.	7		11.45-12.34 trace po as blebs concentrated along foliation direction	<1%	
11.45 - 12.35 Massive foliated greasy black talcy serpentinite.	3/6		12.34-12.86 Py > Po, fluorite	10%	
12.35 - 12.86 Coarsely granular talcose dolomite with serpentine, qtz and calcite	2/3		12.86-19.1 qtz-po-sp-fluorite as rare irregular patches up to 5x10 cm.	1-2%	
12.86 - 19.1 Hard grey dolomite, weak recrystallisation and carbonate deposition along fractures with minor talcose films on later fractures.					
19.1-19.9 Recrystallised dolomite, mottled pinkish cream/grey/white with qtz, calcite and a little talc.	3/4		19.1-19.9 po, py, trace sp, arseno	35-40%	
19.9-20.5 Brecciated fine grained grey dolomite.	2		19.9-20.5 trace po, py	<1%	
20.5-22.36 Brecciated, talcy recrystallised dolomite as for 9.55-11.45, with zones of fine grained unaltered dolomite to 10 cm.	3/2/4		20.5-22.36 po, py, fluorite, trace sp	30%	
22.36-24.8 Slightly bleached grey weakly recryst dolomite as for 12.86-19.1 m	2/3.	← 22.2 - Small fault; broken core 22-24 m Gradual Change.	22.36-24.8 po, sp, trace py as blebs and grains	1%	
24.8 - 27.8 RECRYSTALLISED DOLOMITE. Mottled grey-white - coarsely crystalline (1-2 mm) with some patches of white calcite and quartz. Increasing talcose and serpentinous material towards base of interval	3 Gradual Change		24.8-27.8 po, sp, trace py as blebs to 6x5 mm and finely disseminated. Trace fine grained black cassiterite? and clear/brownish fluorite.	10%	
27.8 - 41.3 DOLOMITE SULPHIDE LODE					
27.8 - 29.37 dark greeny-black talcy serpentinite with bands of bronze pyrrhotite and sparse patches qtz/carbonates.	4/6/7		27.8-29.37 po, trace py, cp, arseno, fluorite. Some small fine grained ?cassiterite aggregates, <2 mm.	20%	
29.37 - 29.9 Virtually massive po - 95%, with small patches talc and serpentinite to 3x1 cm.			29.37-29.9 po, trace cp, py, arseno	95%	
29.9 - 30.7 Weakly foliated po with green and grey talc and black serpentinite.			29.9-30.7 po, trace py, cp, arseno	60%	
30.7 - 31.2 Massive talc serpentinite with 2% sulphides			30.7-31.2 po, as small blebs.	2%	
31.2 - 31.9 Granular qtz-calcite-dolomite and hard bluish green serpentinite (fluorite rich?)			31.2-31.9 po, trace py, weak trace cp and rare arseno	30-40%	
31.9 - 34.35 Almost massive po (85%), with scattered greyish green talc patches			31.9-34.35 po >> py, trace cp, rare grains arseno	85%	
34.35 - 34.95 Dark green talcy serpentinite with pyrrhotite. 50%			34.35-34.95 po, trace py, cp, sp	50%	
34.95 - 35.95 Mottled pale greenish grey talcy carbonates and qtz with 40% granular sulphides.	8/6/4		34.95-35.95 po, py, trace arseno, cp	40%	
35.95 - 37.1 Weakly foliated talcy serpentinite with 20% sulphides	8/6		35.95-37.1 po, trace py	20%	
37.1 - 38.6 greenish talcy carbonates and greyish serpentinite with qtz and recrystallised dolomite, 20% sulphides	8/6/7		37.1-38.6 po >> py, trace arseno with some dark fluorite	20%	
38.6 - 40.8 Black serpentine and dark green talc weakly foliated with pyrrhotite rich bands (60% po)	4/6/7		38.6-40.8 po, trace py, weak trace sp, cp and arseno	60%	
40.8 - 41.3 Sulphides 70% with qtz and granular talcy carbonates. - vein?	qV?	Contact marked by coarsely granular sulphides = vein? - irregular	40.8-41.3 Py, Po, Ga (20%), fluorite, sp, arseno, trace cp, marcasite	70%	
41.3 - 44.90 SILTSTONES, thinly bedded, with QUARTZITES 41.3-42.70 Interbedded serpentinite (altered dolomite) and greenish sericitic siltstones, minor shales, serpentinites decreasa in thickness and abundance with depth. Brecciated - soft sediment?	10/11		41.3-44.90 po, py, dissem in siltstones, and with minor sp in altered dolomites. Some minor qtz-carbonate veinlets.	5-10%	
42.70 - 44.90 Hard greenish grey/ clay rich sericitic (thinly bedded, 1-2 cm) siltstones with very hard bluish grey quartzites to 0.5 m. Brecciated and disrupted - beds discontinuous where thinly bedded - soft sediment disruption.					
END OF HOLE 44.90 m.					

5 cm

0284 0?

METALS EXPLORATION LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

Prospect or project: Mount Bischoff
Logged by: G. BROADBENT date: 28/1/80
Written out 22/5/80

HOLE No. MBD 20
LOG SHEET 2 OF 2
from 0 m. to 44.9 m.