028412

MBD. 22

FIELD ROCK NAME and general description over interval marked	ADOPTED INTERVAL (m cm) & ADOPT LENGTH FROM COLLAR m cm	GRAPHIC LOG	OBSERVATIONS — Commence with length from collar, either point (relates to marker) or from to (relates to brackets). Attitude of bedding or foliation. Attitude & spacing of joints. Attitude, width & description of sheared zones. [Attitude = angle of structure to long core axis]	MINERALIZATION	MINERALIZATION (visual estimate)
SUMMARY DRILL LOG MBD 22			Veins over 50mm	Mineralization (excluding veins over 50mm)	
TRICONE - 1.0m, No Core.	0-1.0.	0			
HARD GREY QUARTZITE. Well Fractured	1.0-3.0 (2.0)	1 1	← Broken contact.	Very finely dissem? py. weathered	1%
DOLOMITE SULPHIDE LODE serpentinite (talc	3.0-4.5 (1.5)	7 1 5		py, fluorite, trace po, sp, cassiterite(?)	15-20%
GREY SILICEOUS DOLOMITE. Brecciated and weakly recrystallised. Some thin siliceous siltstone bands	4.5-11.62 (7.12)	2 10	← Broken contact. ← Bedding 50°	Sp, trace po associated with weak recrystallisation. Some weak qtz-carbonate - fluorite - py veining	3-5%
DOLOMITE SULPHIDE LODE. 11.6-16.8 Banded talc-serpentinite, with patches of qtz-carbonate to 50cm. 16.8-24 Talc-serpentinite, massive, weakly foliated - po varies 30-40% 24-32.6 Carbonates - qtz - talc - serpentine not obviously foliated, sulphides (po) 50%	11.62-32.67 (21.05)	6 / 7 / 4, 20, 4 / 6, 1 / 8 30	← Contact irregular. ← Foliation in po 55° ← Foliation in po 80° ← Foliation in po 50°	po, fluorite (variable), py, trace arseno, sp, cp disseminated within po as irregular blebs to 1-2mm. Py occurs on the margins of po grains, and as small stockwork-type accumulations within po. Sulphides are weakly banded in talc-serpentinite host rock.	35% 70% 50%
SERICITIC SILTY SHALES AND GREY QUARTZITES Hard, greenish shales qtzites brecciated and contorted.	32.61-36.7 (4.03)	9 / 11	← Contact intermediate transitional 40° Carbonate - fluorite - talc - py - po - sp - arseno breccia zones to 200 mm.	Dissem po, py carbonate - fluorite - talc - py ± po - sp arseno veining in shattered zones.	10%
END OF HOLE 36.7m.		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								
97345		1.0	3.0	3.0	230									
46		3.0	4.7	1.7	5500		230	35	940	<1	30	330		
47		4.7	6.7	2.0	46									
48		6.7	8.7	"	60									
49		8.7	10.7	"	95									
50		10.7	11.6	.9	75									
51		11.6	13.6	2.0	1.21%		300	50	220	<1	40	30		
52		13.6	15.6	"	5900		430	8	140	<1	45	65		
53		15.6	17.6	"	6600		780	X	35	<1	140	800		
54		17.6	19.6	"	6600			55	10	<1	85	300		
55		19.6	21.6	"	2400		690	X	22	<1	70	250		
56		21.6	23.6	"	2100		500	10	10	<1	240	420		
57		23.6	25.6	"	740		950	X	16	<1	30	70		
58		25.6	27.6	"	2250		1100	8	12	<1	15	140		
59		27.6	29.6	"	2100		530	15	65	<1	60	370		
60		29.6	31.6	"	120								120	Re check of check Ass
61		31.6	32.7	1.1	110									
62		32.7	34.7	20	520									
63		34.7	36.7	"	2900									

Notes :— Sn by XRF B, Method.

X Means less than detection limit

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 22

SAMPLE TYPE : DRILL CORE FROM 1.0 TO 36.7

0228411

028414

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. MOUNT BISCHOFF

HOLE No. MBD 22

COLLAR LOCATION

Grid name — Rectangular space co-ordinates

	PLANAR CO-ORDINATES		ELEVATION
(1)	1964·91 N	939·94 E	642·97 m.
(2)	N	E	
(3) Aust. Map Grid PRECISE / APPROX.	mE	mN	m A.H.D.

1:250 000 Sheet No. BURNIE SK 55-3 | 1:100 000 Sheet No. HELLYER 5015 | 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 55°

Total length 36·7 m

Commenced: 30 / 1 / 80

Completed: 31 / 1 / 80

Drilling contractor: LONGYEAR AUST PTY LTD

Rig type: LONGYEAR B35 1

Core size and non-coring (NC)

TRICONE	0	TO 1·0
NQ	1·0	TO 36·7
		TO
		TO
		TO
		TO

Details of down hole location-survey methods.
TROPARI every 30 m.

Purpose of drilling and anticipated lengths to targets.
To investigate mineralisation in the dolomite horizon (planned intersection 0 - 36 m); planned depth of hole 40 m.

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type Azimuth	DIP
36·6 m	309	60°

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 S. BROADBENT	LOGGED BY	LOGGED BY
FROM 0 TO 36·7 m	FROM TO	FROM TO
DATE 31·1·80	DATE	DATE

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD 22
Log sheet 1 of 2

028415

TRICONE TO 1.0 m - NO CORE.

2.0	0.6	3%	1.0–3.0 QUARTZITE. Medium grey, hard, speckled quartzite, well fractured and broken (core losses). Some Fe oxide staining on fracture planes, bedding not visible.	11	Broken Contact.	1.0–3.0 – non mineralised, weathered – possibly originally 1–2% Fe sulphide. Some dark spots may be ultrabasic py.	
1.7	1.2	7%	3.0–4.50 DOLOMITE SULPHIDE LODE. Weakly banded matrix – alternating dark green Serpentinite, greenish talcy carbonates with granular grey qtz intergrown throughout. Minor creamy white dolomite and calcite.	8/7/5		3.0–4.5 py, colourless fluorite, trace po, sp. Pitted by weathering.	15–20%
3.1	3.0	97%	4.5–8.80 DOLOMITE, weakly recrystallised. Grey siliceous granular dolomite with fine dark grey stained brecciation fractures. Later mobilisation of carbonates and qtz has produced irregular zones of creamy coloured dolomite, minor qtz and calcite with weakly mottled recrystallised selvedges 1–2 cm. Some unusual highly irregular stylolitic sutures with fronts of pinkish material and coatings of f.gr sulphides or Mn oxide?	2/3.	↑ Broken Contact ← Contact 50°	4.5–8.8 Fluorite, trace sp, rare po in veining and irregular crystallic patches remobilised carbonates and qtz.	3%
1.0	0.1	10%					
6.5	0.5	10%	8.8–9.3 SILTSTONES AND SILTY SHALES, Palechive green, silicified, thinly bedded and brecciated.	9/10	←90 Bedding 60°	—	
1.7	1.5	88%	9.3–11.62 DOLOMITE, weakly recrystallised. As for 4.5–8.8, but the dolomite has some fine dark laminations which resemble fine bedding. Some minor talcose and serpentinous alteration (of recrystallised material) which increases towards lower contact.	3/2	← Contact 55° ←10.4 ?Bedding 50° Fine laminations in dolomite – bedding? 50–60°	9.3–11.62. sp, trace po and carbonate–fluorite–qtz veining as for 4.5–8.8.	3%
3.0	3.2	100	11.62–32.67 DOLOMITE SULPHIDE LODE. 11.62–16.85 Finely banded 'wrigittic' texture – delicate, irregular and almost dendritic greenish talc and greyish serpentinite with qtz and carbonate occurring patchily – a hard fine grained carbonate, possibly magnesite, is occasionally part of the fine banding. Some serpentinite is a drab greyish green and talcy. The serpentinite banding appears to be weakly concentric about granular qtz–carbonate rich patches. Bronze coloured po occurs finely dissem along the banding and as irregular patches to 3×1 cm in the qtz–carbonate.	6/7/4	← Contact Irregular.	11.62–16.85 po, colourless fluorite, trace py, cassit, sp and rare arseno. ga. Sulphides follow banding, variable 20–90% on a scale of a few tens of cm. Fluorite is sparsely dissem throughout, locally making talc/serpentinite hard by being finely disseminated.	30–40%
3.0	2.8	100	16.85–29.4 Bronze coloured due to pyrrhotite, with greenish grey talc, minor serpentinite. Does not show fine 'wrigittic' banding of previous interval – massive talc to 2cm alternating with blebs and masses of po to 3–4 cm with a weakly foliated appearance.	4/6/7	←19.5 Weak foliation in po, 55°	16.85–27.6 po » py. py occurs along fractures and on margins of po grains. Po varies 30–90% and is weakly foliated – intercalated with talc/serpentinite on ≈ 1 cm scale. Trace cp, arseno and some fine grained cassiterite. Cp and arseno are intergrown with po, cassit is interstitial and mostly < 1mm.	60–70%
3.0	3.0	100			←23.4 Foliation in sulphide 80°		
3.0	3.0	100	25.5–27.6 Some interstitial qtz, to 10%.		←27.1 Sulphide foliation, 50°		
3.0	3.0	100	27.6–29.4 po > py, dissem in serpentinite as blebs and grains, minor fluorite				20%
3.0	3.0	100	29.4–32.67 Bronze coloured pyrrhotite with weakly banded olive green, pale bluish green and grey talc with thin serpentinite alternating with patchy granular grey qtz and carbonates. Some corroded, bleached dolomite as screstones towards base of interval.	4/6/7/8		29.4–32.67 po » py, fluorite weak trace cp, arseno. Finely dissem/granular to 2mm.	50%
					Contact 40°, interbedded.		
3.0	2.9	100	32.67–36.7 m. SILTY SHALES AND QUARTZITES. Hard silicified greenish grey shales interbedded with speckled grey quartzites up to 0.5 m thick. Extensively brecciated – soft pebble conglomerate structure in thinly bedded shales and siltstones – with later fracturing and dolomitic veining.	9/11/(10)	←34.0 200 mm breccia zone – talc – serpentinite – dolomite – fluorite – py–sp–po.	32.67–36.7 dolomite – fluorite – qtz – po – py – sp – talc veining to 8 mm, with larger breccia zones. Minor dissem py, po.	10%
1.7	1.8	100			←35.8 20 mm dolomite–talc–fluorite–py–sp–po. 15–20° ←36.3 200 mm breccia zone as above. ←36.6 50 mm py–dolomite–fluorite–sp Breccia zone.		
			END OF HOLE 36.7 m.				

5 cm

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 | NOTES

METALS EXPLORATION LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

Prospect or project: MOUNT BISCHOFF
Logged by: G. BROADBENT date: 31/1/80
written up 23/5/80

HOLE No. MBD 22
LOG SHEET 2 OF
from 0 m. to 36.7 m.