028416

MBD 23

FIELD ROCK NAME and general discription over interval marked	ADOPTED INTERVAL (m cm) & ADOPT LENGTH FROM COLLAR m cm	GRAPHIC LOG	BRACKETS & MARKERS (▼)	OBSERVATIONS Commence with length from collar or inner point (relates to marker) or (from) to (relates to brackets) — Attitude of bedding or foliation. Attitude & spacing of joints, Attitude, width & discription of sheared zones. [Attitude = angle of structure to long core axis]	MINERALIZATION	% MINERALIZATION (visual estimate)
SUMMARY DRILL LOG MBD 23				Veins over 50mm.	Mineralisation (excluding veins over 50…	
TRICONE TO 3m - No Core	0 - 3·0		0			
GREY SILICEOUS DOLOMITE. Core broken, with soft brown Fe oxides in fracture zones	3·0 - 7·2 (4·2)	2			Sulphides absent, presumably weathered	0
DOLOMITE SULPHIDE LODE. 7·2 - 13·2 Talcy qtz - carbonate with minor black serpentinite. 13·2 - 16·7 Dark green talc, minor serpentine. 16·7 - 23 Alternating carbonate - talc - qtz and talc - serpentinite on a mm to cm scale. Fine contorted irregular banding.	7·2 - 23·0 (15·8)	8/4 10; 6/4; 8/6 20/12		Broken Contact.	po >> py, trace cp, stan., sp. Sulphides have variable concentrations 10 - 90%. Fluorite variable trace → 5%. 7·2 - 9·5 Patches of f.g. disseminated cassiterite in qtz - carbonate 2%. 16·7 - 23 Fluorite up to 2 - 3%	70%; 10-15%; 15%; 15-20%
GREY SILICEOUS DOLOMITE. Hard, grey, silicified with weak alteration along fine fractures to talc - serpentine, with some minor recrystallization. Some bands show stronger talcy alteration	23·0 - 35·7 (12·7)	2/3 30		Contact indistinct. Finely fractured 40 - 50° LCA. Some crushed zones to 30 cm - minor faulting.	sp, fine trace po and py as blebs. Sparse calcite - fluorite - qtz - py - sp - po veins. Increasing mineralisation towards base.	2-3%
DOLOMITE SULPHIDE LODE. Bluish green talcy serpentinite with minor carbonates	35·7 - 40·5 (4·8)	7/6/5 40		Gradual Change	Fluorite, py, po. Fluorite blue, green, colourless and brown, discrete. Sulphides dissem.	20-25%
SERICITIC SILTY SHALES AND SILTSTONES	40·5 - 44·0 (3·5)	9/10		Interbedded, 40°	po, trace py blebs and stringer qtz - carbonate veinlets	1-2%
END OF HOLE 44·0 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								
97327		3.0	7.3	4.3	360									
28		7.3	9.3	2.6	2.76%		910	110	166	<1	35	70		
29		9.3	11.3	2.0	5.65%		670	230	65	<1	100	80		
330		11.3	13.3	"	1.09%		240	30	250	<1	35	X		
31		13.3	15.3	"	5100		400	X	42	<1	15	X		
32		15.3	17.3	"	1.52%		330	55	150	<1	55	20		
33		17.3	19.3	"	8700		600	55	180	<1	50	30		
34		19.3	21.3	"	1.40%		500	95	85	1	40	120		
35		21.3	23.1	1.8	1.31%		410	25	630	<1	50	230		
36		23.1	25.1	2.0	2200									
37		25.1	27.1	"	1000									
38		27.1	29.1	"	450									
39		29.1	31.1	"	800									
340		31.1	33.9	2.8	720								1050	Re check of check Assay
41		33.9	35.7	1.8	2700		130	150	1600	2	30	90		
42		35.7	37.8	2.1	6900		300	50	550	1	50	270		
43		37.8	40.6	2.8	6000		150	50	600	<1	25	10		
44		40.6	42.6	2.0	560									

Notes :— Sn by XRF Bi Method.

X mean less than detection limit

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 23

SAMPLE TYPE : DRILL CORE FROM 3.0 TO 42.6.

028418

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

MBD-23

Prospect, area, project or mine. Mount Bischoff

HOLE No. MBD 23

COLLAR LOCATION

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

(1) _____ 1939·92 N 939·97 E 642·28 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 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 90°

Total length 44·0 m

Commenced: 29 / 1 / 80
Completed: 29 / 1 / 80

Drilling contractor LONGYEAR AUST PTY LTD

Rig type LONGYEAR BBS 1

Core size and non-coring (NC)

TRICONE	0	TO 3·0 m
NQ	3·0	TO 44·0
		TO
		TO
		TO
		TO

Details of down hole location-survey methods.
TROPARI every 40m.

Purpose of drilling and anticipated lengths to targets.
To investigate possible mineralisation in the dolomite horizon 0–29m. Planned depth of hole 40·0 m.

Comments on drilling. Very fast.

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type Azimuth (Mag.)	DIP
43·0	024	89°

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 G. BROADBENT FROM 0 TO 44·0m. DATE 31/1/80

LOGGED BY _____ FROM _____ TO _____ DATE _____

LOGGED BY _____ FROM _____ TO _____ DATE _____

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD 23
Log sheet 1 of 2

028419

TRICONE TO 3.0 m - NO CORE.

3.0-7.28 DOLOMITE.

Grey fine grained medium hard dolomite, very fractured and broken with soft brown Fe oxides lining fracture planes.

3.0-7.28 Non-mineralised, (possibly removed by weathering.)

Broken contact.

7.28-23.1 DOLOMITE SULPHIDE LODE

7.28-9.85 Almost massive brownish po - 70% with granular qtz - carbonate matrix and some thin carbonate veining. Some soft greenish grey talcy patches

Contact 20°

9.85-13.2 Carbonate-qtz matrix with pale greenish grey talcose alteration and small patches of black (often talcy) serpentinite to 5 cm.

13.2-16.7 pale greenish grey talcy matrix with minor corroded carbonates and granular grey quartz. Serpentinite (black) occurs as small elongated patches, possibly marking fracture planes.

16.7-23.1 Alternating talcy carbonates and quartz with dark green and grey talc/serpentinite. Finely banded 'unglitic' texture in talc serpentinite; the carbonate/qtz patches appear to be a recrystallised breccia. Alternating intervals of the above to 1m, the greenish intervals are roughly twice as abundant as the mottled grey carbonate qtz intervals. Purple and colourless fluorite occurs patchily with carbonates etc, and there is a hard speckled bluish grey material in irregular patches in the talc/serpentinite intervals. It is roughly carbonatic to banding-serpentinite /chondrodite? or a tourmaline?

7.28-9.85 po » py, trace cp, asso. sp. Cassiterite occurs as fine grained aggregates to 5×3 mm - 2%, concentrated 8.9-9.8 m. Py is concentrated along margins of po grains, small $CO_3^=$ veins. — 70%

9.85-13.2 po, py, cassiterite, trace cp. Granular, disseminated - the cassiterite occurs as fine grained aggregates intergrown with qtz, carbonates, to 6×5 mm, 3-4%. Some rare grains asso. interstitially in po aggregates. (also cp) — 15%

13.2-16.7 po, minor py, blebby, granular texture, intergrown with carbonate/qtz patches — 15%

16.7-23.1 po, py, fluorite, strong trace cassiterite, trace cp, sp, asso. Po occurs as disem blebs, grains and massive aggregates to 10 cm, some sections have an unusual 'herringbone' structure - en echelon elongated blebs to 10×2 mm. Fluorite is granular, interstitial, or as grains to 6 mm in carbonates. Cassiterite as h.gr. aggregates to 2×3 mm, most noticeable in carbonate/qtz patches. — 15-20%

Contact indistinct, 40°

23.1-35.7 DOLOMITE weakly recrystallised

Medium hard grey dolomite, very brecciated - early fine dark grey stained fractures < 1 mm and later shearing marked by talcose alteration along fracture planes with attendant weakly recrystallised mottled cream and grey nebules to 2 cm. Well fractured, minor faulting - crushed dolomite zones to 20 cm; fine fractures with thin talcy films as above occur every 5-10 cm on average, 40°-50° to CA. Some creamy white irregular veins dolomite-calcite-qtz to 10 mm

23.1-33 sp, trace po, py, as blebs within calcite-dolomite-fluorite-qtz veining — 2-3%

23.7-24.2 Altered zone - talc-serpentine-carbonate-qtz-fluorite-py-sp, trace po

27.7-28.2 recrystallised zone - pinkish dolomite, calcite-qtz-fluorite-sp, po, py. Minor talc and a heavy hard pinkish carbonate (Mn?)

←31.6 35 mm py-sp vein with blebs talc.

33.1-34.35 DSL - banded blue green and grey green talc, serpentine carbonate-qtz-fluorite surrounding corroded clasts of recryst. dolomite

irregular contacts

33.1-34.35 py, fluorite, trace po in fractures and cavities or finely dissem. in banding — 15%

←34.8

34.35-35.7 sp, fluorite, po, py as above 23.1-33.1 — 2-3%

Contact graduational and irregular.

35.7-40.52 DOLOMITE SULPHIDE LODE.

35.7-31.2 Hard dark green f.gr finely banded serpentinite with talcose patches and small patches of hard dark bluish grey 'fluorite rich serpentinite' (?). Minor patches carbonates, qtz. The whole is finely and irregularly banded 'unglitic'.

37.2-40.52 Greenish white talcose carbonates, interspersed with bluish dark green 'serpentinite'. Some patches creamy white recryst. dolomite surrounding pale blue, purple, brownish and colourless fluorite up to 15×12 mm. Samples 98075 and 98076 taken for petrological study / thin section.

←35.8 ... sample no 98075

35.7-37.2 po, py, fluorite. Sulphides granular, fluorite finely dissem. — 20-25%

←38.8 Sample no 98076

37.2-40.52 py > po ≥ fluorite. dissem as blebs and grains throughout, some aggregates po to 30×20 mm; py to 15×10 mm; fluorite to 12×15 mm (enclosed by dolomite.) — 20%

40.52-44.0 SILTSTONES AND SILTY SHALES

Hard, greenish grey and sericitic shale beds with darker grey siltstones. Thinly bedded, very brecciated and disrupted (soft sediment deformation?) with later minor fracturing and thin veining.

←Contact 40°, bedded.

40.52-44.0 po, py as blebs and fine stringers in sparse veinlets with qtz, fluorite, carbonates — 1-2%

END OF HOLE 44.0 m.

5 cm

DRILL ADVANCE	LOST CORE ZONE	% RECOVERY ESTIMATE — OR — CORE LENGTH RECOVERED	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
2.0		40		4							
0.8											
3.0		27									
0.8											
3.0		31		8		4/8/6					
3.1											
3.0		100		12		8/6/4					
2.9											
3.0		100		16		6/8/4					
3.0											
3.0		100				8/6/7/4					
2.8											
3.0		100		20							
3.2											
2.0		100		24		3/2					
2.0											
1.0		100									
1.0											
1.2		100									
1.2											
1.8		100		28							
2.0											
2.6		100									
2.5											
3.1		100		32							
3.0											
						6/7/8		irregular contacts	33.1-34.35 py, fluorite, trace po in fractures and cavities or finely dissem. in banding — 15%		
						3			34.35-35.7 sp, fluorite, po, py as above 23.1-33.1 — 2-3%		
3.1		100		36		7/6					
3.1											
3.1		100				8/6/7					
3.1											
3.1		100		40		10/9					
3.0											
				44							
				48							

METALS EXPLORATION LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

Prospect or project: Mount Bischoff.
Logged by: G. BROADBENT date: 31/1/80

HOLE No. MBD23
LOG SHEET 2 OF 2
from 0 m. to 44.0 m.

Written up 23/5/80