028389

% RECOVERY	FIELD ROCK NAME and general description over interval marked	ADOPTED INTERVAL (m cm) & ADOPT LENGTH FROM COLLAR m cm	GRAPHIC LOG	BRACKETS & MARKERS (▼)	OBSERVATIONS Commence with length from collar or other 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
	SUMMARY DRILL LOG MBD 17				Veins over 50 mm	Mineralisation (excluding veins over 50 mm)
	Coring commenced 0 m ; upper 20.70 m mullock.					
	DOLOMITE SULPHIDE LODE. Weathered and badly broken. Pervasive massive sulphide and serpentine fragments	0·3 - 6·10 (5·8)	7/5	0	Poor Recovery <50% to 20.0 m - washed, fractured and broken.	Py (pitted), Fluorite, trace arsen (?)
	ALTERED DOLOMITE. Core broken and washed out - pink heavy mineral with recrystallized sulphide.	6·1 - 11·0 (4·9)	F	10		Py. marcasite, Sp. Fluorite in sludge sample. ?
	FAULT ZONE - yellow and black pugs 11·00 - 13·46 dolomite fragments. 13·46 - 16·75 siltstone ↓	11·0 - 16·75 (5·75)	F			Sparse Py - qtz - Fluorite - Sp - cp fragments (veins?) ?
	QUARTZ - FELSPAR PORPHYRY. Matrix pinkish brown. Phenocrysts variable, up to 50% - sugary texture. Qtz - 10-25%, rounded grains to 5mm Felspar - 3 - 15%, altered to brownish material otherwise creamy white and weathered. Max 3 m. Faulted and broken.	16·75 - 36·1 (19·35)		20	← Contact Broken.	Py, pitted in more fractured intervals rims of marcasite where unweathered. Weak trace cp. cassiterite and arsen, Sp occurs sporadically. Some qtz - Py - cassiterite veining. Proportion of sulphides variable 5 - 30%; blebs and fgr. aggregates.
			1	30	← Small black pug zone - fault.	
	FAULT PUG ZONE. 36·10 - 39·6 Black pugging chlorite laminated 39·6 - 45·3 Recovery poor - siltstone and dolomite fragments	36·1 - 45·3 (9·2)	F	40	← Contact Broken - 40° ?	Sparse fragments of pyrite.
	GREY SILICEOUS DOLOMITE Brecciated, with fine dark grey fractures. Some minor recrystallisation to dolomite - calcite - qtz along fractures. Very thin talc-serpentinite along late fractures	45·3 - 60·00 (14·70)	2	50	← Contact Broken ← Zone of alteration to talc/serpentinite with clasts of dolomite, qtz, calcite, Sp. Py 20% 10 cm Py - sp - arsen - fluorite - tourmaline 40°	Sp trace py weak trace arsen, cp. as blebs and irregular masses along brecciation fractures
	DOLOMITE SULPHIDE LODE Angular fragments of altered dolomite surrounded by bands talc/serpentinite, dolomite, qtz, calcite and sulphides	60·0 - 70·35 (10·35)	3	60	← Undulose contact, 50°	po > py, trace sp, fluorite, cp arsen, marcasite in contorted bands. Other sulphides distributed unevenly in po. Upper 1·5 m 20%
	GREY SILICEOUS DOLOMITE As above, with altered intervals. 76·15 - 78·43 DOLOMITE SULPHIDE LODE. (talc/serpentinite)	70·35 - 79·36 (9·01)	2	70	← Gradual Change.	Py > Po, Fluorite, trace Sp, arsen.
	SERICITIC SILTSTONES AND SILTY SHALES Hard, silicified contorted.	79·36 - 83·1 (3·74)	10/9	80	← Gradual Change ← Bedding 45°	Py, trace Po as thin veinlets and blebs in small fracture zones
	END OF HOLE 83.1			90		

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								
97142		0.0	2.0	2.0	3500		260	105	2500	1	10	600		
43		2.0	4.0	"	5400		590	210	7600	4	50	1750		
44		4.0	6.0	"	6900		400	350	2600	3	60	1950		
45		6.0	8.0	"	480		85	155	7200	3	210	80		
46		8.0	10.0	"	2450		220	1150	6000	5	10	820		
47		10.0	12.0	"	540									
48		12.0	13.9	1.9	270									
97100		13.9	15.9	2.0	920									
01		15.9	17.9	"	1650		490	150	95	2	25	200		
2		17.9	19.9	"	2550		410	34	80	1	25	100		
3		19.9	21.9	"	3000		360	34	50	1	35	520		
4		21.9	23.9	"	6100		510	35	26	1	85	2100		
5		23.9	25.9	"	3100		250	36	20	1	40	860		
6		25.9	27.9	"	5600		490	40	42	21	45	1250		
7		27.9	29.9	"	4600		330	160	210	1	35	3250		
8		29.9	31.9	"	1550		350	48	130	1	15	1150		
9		31.9	33.9	"	900		270	36	570	1	15	330		
110		33.9	36.1	2.2	740		260	30	1450	1	20	70		
11		36.1	38.1	2.0	450									
12		38.1	39.6	1.5	170									
13		39.6	41.6	2.0	100									
14		41.6	43.6	"	100									
15		43.6	45.3	1.7	70									
16		45.3	47.3	2.0	20									
17		47.3	49.3	"	14									
18		49.3	51.3	"	55									
19		51.3	53.3	"	65									
120		53.3	55.3	"	28									
21		55.3	57.3	"	10									
97122		57.3	60.07	2.77	44									

Notes :— Sn by XRF Bi Method.

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT A

ASSAY SUMMARY SHEET HOLE NO. MBD17

SAMPLE TYPE : DRILL CORE FROM 00 TO 60.07

02839

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								
97123		60.07	62.07	2.0	2850		290	X	2.20%	1	25	440		
24		62.07	64.07	"	4550		460	X	190	<1	55	2600		
25		64.07	66.07	"	2100		590	X	600	<1	15	3300		
26		66.07	68.07	"	3650		370	X	6200	1	40	920		
27		68.07	70.11	2.04	6900		560	X	320	<1	60	1400		
28		70.11	72.11	2.0	600									
29		72.11	74.11	"	290									
130		74.11	76.11	"	95									
31		76.11	78.63	2.52	4150		330	X	1.50%	1	50	840		
32		78.63	80.63	2.0	170									
33		80.63	82.63	"	28									

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 17

SAMPLE TYPE : DRILL CORE FROM 60.07 TO 82.63.

B

0288391

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	SLUDGE	m	m	m	SPLIT	SLUDGE								
	97134	2.5	3.5	1.0		4650								
	35	6.1	7.1	"		2950								
	36	7.5	8.5	"		1950								
	37	9.0	10.0	"		1500								
	38	10.0	11.0	"		2450								
	39	11.0	12.0	"		4100								
	140	12.0	13.0	"		4200								
	41	13.0	14.0	"		3700								

26 8 3 9 20

Notes :— SLUDGE by XRF Bi Method.

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 17

SAMPLE TYPE : DRILL CORE FROM 2.5 TO 14.0

SLUDGE

028393

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. MT BISCHOFF

HOLE No. MBD 17

COLLAR LOCATION

Grid name	Rectangular space co-ordinates PLANAR CO-ORDINATES		ELEVATION
(1) MBJV	1901.59 N	1100.44 E	626.39
(2)	N	E	
(3) Aust. Map Grid PRECISE / APPROX.	mE	mN	m A.H.D.

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

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

Inclination at collar VERTICAL

Mineral Tenement EL 13/79 Holder METALS EXPLORATION LTD.

Total length 83.1 m

Cadastral location and details
CROWN LAND / PRIVATE

Commenced: 11 / 1 / 80
Completed: 17 / 1 / 80

Drilling contractor LONGYEAR AUST PTY LTD

Rig type F 38

Details of down hole location-survey methods.
TROPARI

Purpose of drilling and anticipated lengths to targets.
To intersect tin mineralisation in vein/fracture porphyry Dyke from 13-53 m, and to investigate possible tin mineralisation in dolomite below the dyke (53-66 m)

Core size and non-coring (NC)

HQ	0	TO 83.1m
		TO
		TO
		TO
		TO
		TO

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type Azimuth	DIP
39.0	291	89°
81.0	315	88°

Comments on drilling. Bad ground - fractured and broken, poor core recovery in places

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 83.1	FROM TO	FROM TO
DATE 24.1.80	DATE	DATE

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD17
Log sheet 1 of 2

DEPTH from-to : ROCK UNIT (capital letters, underlined) Depth : Detailed rock description and notes (indented about 15mm)	GRAPHIC LOG	STRUCTURAL AND VEIN INFORMATION	MINERALISATION	NOTES
0-0.3 material and material name. 0.3 - 6.10 FAULTED DOLOMITE SULPHIDE LODE. Badly broken core - some friable weathered porous granular dolomite fragments with fluorite and hard green sepechlorite fragments with soft crumbly brown pugjoy matrix and. 6.10 - 11.0 RECRYSTALLISED DOLOMITE, FAULTED Fragments of pale grey recrystallised dolomite with a hard, heavy pinkish mineral (Mn carbonate?) 11.00 - 13.90 FAULTED DOLOMITE? Ochreous yellow silty pug with some sparse dolomite fragments. Some mineral within fibrous material - tremolite? 13.90 - 16.75 FAULT PUG WITH SILTSTONE AND SHALE FRAGMENTS. Fine grained black weakly foliated fault pug with shiny fracture surfaces and some hard grey siltstone and minor shale fragments 16.75 - 36.10 QUARTZ FELSPAR PORPHYRY Matrix pinkish-brown due to weathering, extensively fractured and broken, with minor orange-brown K oxide staining and bleached portions and some pitting by weathering. Upto 20-30cm fine grained - Qtz up to 2mm, 10%; Felspar brownish and altered, some removed by weathering; Fe sulphides (Py-marcasite) 10%, max 2 mm. Phenocrysts: Qtz - milky white and translucent to 5mm 10-20% Felspar - mostly altered to hard brownish translucent mineral, some white and weathered to soft white clay, up to 4 mm, some well formed, variable 10-20%. 25.75 - 29.04 27.5 - 28.10 LOST CORE ZONE. 29.04 - 30.33 matrix grey-brown, weathered, qtz greyish white to 4mm, 15%, Felspar < 2 mm, 3%. 30.33 - 33.5 qtz > Felspar, total 25%, matrix brownish grey and pitted. 33.5 - 36.1 Creamy coloured matrix with some brownish patches. Qtz and felspar decrease in size and abundance in belt 0.75 m to max 2mm, 10-15%. Some patchy greenish yellow alteration of matrix in lower 0.75 m. 36.10 - 39.6? FAULT PUG WITH SILTSTONE AND SHALE FRAGMENTS As for 13.90 - 16.75 39.62 - 45.30? FAULTED THINLY BEDDED SILTSTONES AND SHALES Very broken core - washed fragments with poor recovery. Fragments of grey finely bedded siltstones and shales (clay rich) with brown/grey micaceous siltstones 45.30 - 60.00 DOLOMITE, weakly altered. Medium hard fine grained grey dolomite, brecciated, with fine dark grey fractures. Some minor recrystallisation along fronts parallel to the more penetrative fracture zones, and thin films of talc/sepechlorite along shear (?) planes. 45.3 - 47.1 highly fractured, shattered and bleached to an ochreous yellow-grey colour. Soft and crumbly. 47.1 - 50.00 Zone of later brecciation and weak alteration - large sub angular clasts of grey dolomite in a greenish matrix of talcose dolomite. Margins of dolomite clasts are bleached white and occasionally altered to green talcy material, particularly when there are sulphides in close proximity. 55.5 - 60.0 Medium grey dolomite with black mineral along brecciation fractures and a gradual increase in talc-sepechlorite alteration towards base of interval. 60.00 - 70.35 DOLOMITE SULPHIDE LODE Angular corroded fragments of altered and recrystallised dolomite (greenish talcose in places with minor grey qtz and dark grey sepechlorite) surrounded by finely bedded greenish grey talc and grey sepechlorite with lesser qtz and carbonates. Abundant sulphides - po, Py - to 20% as blebs and granular aggregates concordant with banding 70.02 - 70.35 Some hard blue 'sepechlorite' with finely disseminated fluorite. 70.35 - 76.15 DOLOMITE - weakly altered. 70.35 - 70.45 Brecciated fine grained grey dolomite, weakly recrystallised along some brecciation fractures 70.45 - 71.67 Dark greenish grey talc and sepechlorite surrounding corroded clasts of hard pale grey dolomite. 71.67 - 76.15 As for 60.00 - 70.35, above. 76.15 - 78.43 DOLOMITE SULPHIDE LODE Dark green and grey talc with grey sepechlorite and minor patches of white recrystallised dolomite and calcite with a little qtz. Mottled bronze fleck due to pyrrhotite 78.43 - 79.36 INTERBEDDED SERPENTINITE and SILTSTONES/SHALES. Massive green talcy sepechlorite interbedded with grey-white sericitic shales. 79.36 - 83.10 SILTSTONES AND SHALES. Thinly bedded greenish grey sericitic clay rich siltstones / silty shales. Quite destroyed in places - discontinuous bedding 1-2 cm. Minor fracturing and micro-faulting, and some small discrete breccia zones 1-2 cm. END OF HOLE 83.1 m				

Prospect or project	Mount Bischoff	HOLE No.	MBD17
Logged by	G. BROADBENT date 23/1/80	LOG SHEET	2 OF 2
		from 0 m. to	83.1 m.

Written up 21/5/80

METALS EXPLORATION LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

5 cm