MBD. 39

DEPTH	INTERVAL	DEPTH from-to : ROCK UNIT (capital letters, underlined) Depth : Description and notes (indented about 10mm)	POINTER	GRAPHIC LOG	POINTER	MINERALISATION	ASSAYS AVAILABLE	BULKED ASSAYS

FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED), MONOGRAPH No. 9 AUSTRALAS. INST. MIN. METALL. - 1976

028508

0-3.0 (3.0m)	TRICONE TO 3.0m - NO CORE.			
3.0-20.4 (17.4m)	3.0 - 20.4 QUARTZITES AND SILTSTONES, minor SHALES. Quartzites medium grey, brecciated, up to 1m thick, some sand-size beds in thinly bedded siltstones. The siltstones are finely bedded, dark and light greys in intervals up to 2m alternating with the quartzites. Overall well fractured and broken, with minor soft-sediment brecciation and contortion, some small pugga faults < 5cm. 40° →	11/10		3.0-16.0 py. finely dissem and in stringers and veinlets with qtz. 2%. 16.0-20.4 As above + some thinbedded py laminae 1-2%.
20.4-22.4 (2.0)	20.4-22.4 QUARTZ FELSPAR PORPHYRY. 40° →	1		py, marcasite, trace sp. 10%.
22.4-42.3 (19.9m)	22.4-42.3 QUARTZITES AND SILTSTONES, minor SHALES. As for 3.0-20.4, slightly more brecciation and contortion and some rare black shales with more clay rich siltstones	11/10		22.4-26.4 py, qtz, veinlets, bedded laminae 3-5% 26.4-39.5 py, finely dissem, minor qtz-py veining 1%.
	32.5-34.8 Some mottled grey 'TUFF' beds to 8cm thick, bedded	10/12		
		11/10		39.5-42.3 Increased qtz-py veining. 5%
42.3-56.1 (13.8)	42.3-56.1 QUARTZ FELSPAR PORPHYRY. 60° → Matrix is creamy white and fine grained where unweathered, but highly fractured - bleached and stained grey-brown and orange browns (limonite) from subsequent weathering. Qtz - rounded and subhedral phenocysts to 5mm, 7-10% Felspar - altered to hard brownish mineral or weathered. Originally 5-7%? 65° →	1		py. pitted and weathered, occasionally with thin marcasite rims as rounded grains to 4mm or fine aggregates. Variable concentrations 3-15%. Some minor qtz-py veining. Trace cerussite 50.4-51.3m.
56.1-66.0 (9.9m)	56.1-66.0 QUARTZITES and SILTSTONES As for 3.0-20.4	11/10		py + qtz + marcasite - arsen - sp - rare cerussite veining, stringers + blebs. Some dissem py in qtzites and thin bedded laminae in siltstones 10%.
	END OF HOLE 66.0m.			

5 cm

AFTER TYPING THIS SIZED FORM WILL BE PHOTO-REDUCED TO A4 SIZE

FIELD COPY - COPY TO BE SENT TO MELBOURNE FOR TYPING.

METALS EXPLORATION LTD.
EXPLORATION DEPARTMENT

SUMMARY DRILL LOG
Scale 1:1000, (1:500), 1:250

Prepared by: G. BROADBENT
Date: 10.4.80

HOLE No. MBD 39
Sheet of

028509

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

MBD·39

Prospect, area, project or mine. MOUNT BISCHOFF

HOLE No. MBD 39

COLLAR LOCATION

Grid name	Rectangular space co-ordinates PLANAR CO-ORDINATES		ELEVATION
(1) MBJV	2081·24 N	1420·14 E	701·24
(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
- 180 grid (1)
- grid (2)
- grid (3)
- true

Inclination at collar 60°

Total length 66m

Commenced: 25 / 3 / 80
Completed: 27 / 3 / 80

Drilling contractor: LONGYEAR AUST PTY LTD

Rig type: LONGYEAR 38

Core size and non-coring (NC)

TRICONE	0 TO	3·0 m
NC	3·0 TO	66·0 m
	TO	
	TO	
	TO	
	TO	

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

Purpose of drilling and anticipated lengths to targets.
To intersect tin mineralisation in 'Stratheyr' porphyry
sighe 35-52 m. Planned depth of hole 60 m

Comments on drilling.

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type (magnetic)	DIP
31·5 m	140°	61°
64·5 m	140°30'	63°

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 J. BROADBENT | FROM 0 TO 66·0m | DATE 1/4/80
LOGGED BY | FROM | TO | DATE
LOGGED BY | FROM | TO | DATE

Company managing exploration programme.
METALS EXPLORATION LTD

HOLE No. MBD 39
Log sheet 1 of 2

028510

TRICONE TO 30 m - NO CORE

30 - 160 QUARTZITES with thinly bedded SILTSTONES, minor SHALES.

Medium grey quartzites to 1m thick; brecciated with dark grey staining along fine fractures.
The siltstones are dark grey, thinly bedded 1-2 cm with some medium grey, quartzose siltstones and rare grey silty shale laminae to 5 mm. Intervals up to 0.75 m thick separate the quartzite beds.
Well bedded, only minor disruption; on the core it is well broken by both fractures and small pugging zones 60-70° to CA. The upper 4-2 m is weathered and bleached.

11/10/4
- 37.1 Bedding 30°
- 46.6 Bedding 70°
- 49.2 Bedding 65°
- 51.9 Bedding 40°
- 56.3 Bedding 45°
- Gradual Change.

30 - 160 Pg, very finely disseminated in quartzitic beds and as thin irregular stringers and veinlets with qtz.

2%

160 - 204 THINLY BEDDED SILTSTONES, SHALES.

Dark grey thinly bedded clay rich siltstones and minor silty shales 1-2 cm, with some finely laminated (1-2 mm) siltstone/silty shale beds.
Well bedded, fractured and broken in a similar fashion to 30 - 160, above.

10/9
- 164.5 Bedding 20°
- 171.7 Bedding 65° (lower 40°)

160 - 204 Pg as thin veinlets and stringers, disseminated and finely disseminated in siltstone beds.

1-2%

204 - 228.45 QUARTZ FELDSPAR PORPHYRY.

Fine grained greyish cream matrix pitted and weathered with Fe oxide staining and bleaching along fracture planes.
Qtz - rounded grains to 5 mm, 10%; Feldspar - small white laths to 1 mm, 15%.

1
- Contact 0-20° from horizontal

204 - 212 Pg with associated veins to 3 mm, trace ? sp.

212 - 228.4 As for 204 - 212, but mostly obscured by weathering.

10%

1%

228.45 - 264 THINLY BEDDED SILTSTONES, SHALES.

See 160 - 204 for description.

10/9
- 228.8 Bedding 65°

228.45 - 264 Pg as thin veinlets and stringers, sparse bedding laminae and finely disseminated in siltstone beds.

3-5%

264 - 423 QUARTZITES with thinly bedded SILTSTONES, minor SHALES.

Medium grey quartzite beds to 1m thick, massive but disrupted and brecciated, intervals of thinly bedded dark grey clay rich siltstones, medium grey quartzose siltstones and rare dark grey silty shale laminae, some of which are black and carbonaceous.
Not as fractured - a greater proportion of core retained disruption and brecciation.

11/10/9
- 267 Bedding 60°
- 295 Bedding 50°
- 325 Bedding 50°

10/12
- 348 Bedding 40°

11/10
- 374 Bedding 60°
- 408 Bedding 55°
- Contact undulose, 60°

264 - 346 Pg, finely disseminated in quartzitic and as sparse veinlets with qtz.

346 - 423 Pg, finely disseminated in siltstone, + granular proportion of qtz - Pg veining

1%

5%

323 - 560 QUARTZ FELDSPAR PORPHYRY.

323 - 465 Matrix pinkish grey, fractured, and bleached by weathering with some deposition of brown limonite.
Qtz - subhedral, to 3 mm, 7-10%
Felspar - removed by weathering, originally 5%?

465 - 504 Matrix mottled brown & grey (weathered), pale creamy colour and fine grained where unweathered.
Qtz - rounded pale grey phenocrysts to 5 mm, 10%.
Felspar - altered to hard brownish material, well formed to 3 mm, 5-7%.
Overall, fractured and bleached by weathering.

504 - 531 Matrix white fine grained, minor pitting and weathering
Qtz to 5 mm, 15%, Felspar - trace in matrix ground

531 - 560 Matrix mostly grey colour, gradually becoming less grey/pinkish, towards base of interval.
Qtz - rounded, to 4 mm, 7-10%
Felspar - recognised, 2-3%.

1

423 - 465 pitted pg with thin associated veins, + one trace cassiterite.
Originally 10-15%? - holes in matrix to 2-3 mm

3-5%

465 - 504 Pg, pitted to 5 mm, with associated veins on larger grains in the less weathered portions. Weak trace sp - cassiterite.

504 - 513 trace remnant cassiterite

513 - 531 Pg, minor remnant trace cassiterite. Banded veins, some irregular, fine grained aggregates to 3 mm

531 - 560 Pg, pitted and weathered, strong trace cassiterite 531 - 534 m Pg in patchy fine grained aggregates to 20 x 3 mm, some banded veins, small breccias.

10-15%

7-10%

10%

560 - 660 QUARTZITES with thinly bedded SILTSTONES.

Medium grey and brownish grey hard quartzites in massive, brecciated beds to 2-3 m. Siltstones are thinly bedded, mostly dark grey and clay rich, non weakly sericitic in places.
Extensively fractured and brecciated to 63 m with some minor silt sediment disruptions.
The shearing was been healed by thin pg-qtz veins.

- 567 90 mm wispy Pg, minor qtz - trace sp - qtz - cassiterite veins 45°
- 623 10 mm wispy Pg-qtz-cassiterite veins veins 40°
- 63 m Bedding 60°
- 658 Bedding 65°

560 - 602 Pg, disseminated in quartzitic and as numerous small qtz-pg veinlets which host brecciation fractures (?Pg)

10%

END OF HOLE 660 m.

5 cm

DEPTH from-to : ROCK UNIT capital letters, underlined
Depth : Detailed rock description and notes indented about 15 mm

GRAPHIC LOG as exactly as possible

STRUCTURAL AND VEIN INFORMATION
ATTITUDES: ( ) angle between fracture and core axis

MINERALISATION

NOTES

METALS EXPLORATION LIMITED

MINERAL EXPLORATION
DRILL LOG
Scale 1:100

Prospect or project: MOUNT BISCHOFF
Logged by: G. BROADBENT date: 1/4/80 - Prepared 9/6/80

HOLE No. MBD 39
LOG SHEET 2 OF 2
from 0 m to 660 m

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								
997871		20.4	22.5	2.1	1800									
72		40.3	42.3	2.0	320									
73		42.3	44.3	"	2000		300	55	98	1	25	160		
74		44.3	46.3	"	3700		190	96	36	<1	15	25		
75		46.3	48.3	"	2650		270	50	65	1	20	70		
76		48.3	50.3	"	4050		350	55	28	1	25	150		
77		50.3	52.3	"	4500		320	70	50	<1	30	140		
78		52.3	54.3	"	7400		340	100	65	1	30	140		
79		54.3	56.1	0.8	2200		450	65	95	1	25	360		
80		56.1	58.1	2.0	5200								0.28%	check assay

Notes:— Sn by XRF Bi Method.

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 39

SAMPLE TYPE : DRILL CORE FROM 20.4 TO 58.1