832086

REPORT No. 078

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine: MOUNT BISCHOFF

HOLE No. MBD 54

COLLAR LOCATION

	Grid name	Rectangular space co-ordinates PLANAR CO-ORDINATES				ELEVATION
(1)	MBJV	1887.11	N	1079.92	E	626.12
(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.	1:100 000 Sheet No.	State
BURNIE SK 55-3	HELLYER 8015	TASMANIA

Mineral Tenement: E.L. 13/79 — Holder: METALS EXPLORATION LTD.

Cadastral location and details (CROWN LAND / PRIVATE):

Inclination at collar: Vertical

Total length: 97.0m

Commenced: 4 / 2 / 81

Completed: 9 / 2 / 81

Drilling contractor: LONGYEAR AUSTRALIA P.L.

Rig type: HC 150

Details of down hole location-survey methods:
Eastman single shot camera every 30 metres

Purpose of drilling and anticipated lengths to targets:
To obtain DSL and Porphyry core for metallurgical testing and to test continuity of rock types and tin grades between closely spaced holes.

Core size and non-coring (NC)

HW	0	TO	3.0
HQ	3.0	TO	97.0
		TO	
		TO	
		TO	
		TO	

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type: Magnetic	DIP
30	4°	88°40'
60	283°	88°
96	339°	88°20'

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	FROM	TO	DATE
I.J. MORRISON	0	97.0	11.2.81

Company managing exploration programme:
METALS EXPLORATION LTD.

HOLE No. MBD 54

Log sheet 1 of 2

832087
079

DEPTH (length from collar)	INTERVAL	DEPTH from - to : ROCK UNIT (CAPITAL LETTERS, UNDERLINED) Depth Description and notes, veins over 50mm MOUNTED ABOUT 10mm	GEOL. LOG	MINERALISATION Excluding veins over 50mm. Visual estimate of % mineralisation in brackets	BULKED ASSAYS Sn
0	0-3.0 (3.0m)	TRICONE - NO CORE	NC		
	3.0-15.0 (12.0m)	FAULT PUG - DOLOMITE SULPHIDE LODE Creamy grey to green-grey to black clayey pug. Granular feel due to presence of sand and pebble size fragments of Qtz, Py, Carbonate and lesser Serpentinite	1/5/8/7 ?	3.0 - 13.0 - 10-20% Py - as fine constituent in pug and as fragments. Trace SnO_2 and Sp 13.0 - 15.0 - 40-50% Py - occurrence as for 3.0 - 13.0	
10					
	15.0-42.1 (27.1m)	QUARTZ PORPHYRY Pale to mid grey, med to coarse grained. Matrix fine grained opaque to coarsely crystalline and clear. Generally weathered, pitted and leached, becoming less towards end of interval. 20-25% Qtz. phenocrysts. Feldspars absent to 32.3m - thereafter 5-10%. Numerous zones pale to dark grey to black clayey granular pug	1	15.0-25.7 - 5-10% Py - as pitted crystalline blebs and as fine particles and fragments in pug. 22.0-23.2 (?) Fault zone Fault zone 25.7-42.1 - 10-20% Py - Trace only Sp, Arsenopyrite , Fluorite. Occurrence as for 15.0-25.7. (?) Fault zone 36.4-38.5 (?) Fault zone
20					
30					
40		(?) Fault zone Bottom Contact 75°			
	1.4m	42.1 - 43.5 FAULT PUG - clayey multi-coloured	F	20-30% Py	
	43.5-58.6 (15.1m)	FAULT PUG - DOLOMITE SULPHIDE LODE Multi-coloured pale to black. Clayey texture, to sandy and granular due to presence of rock fragments	F/5/8/7 ?	5-10% Py. Trace only Sp. As fragments, within fragments and as fine particles in pug	
50					
60	58.6-65.8 (7.2m)	DOLOMITE - WEAKLY RE-CRYSTALLIZED Pale mid grey, massive to weakly banded, mildly to moderately brecciated. Qtz/Carbonate D.S.L. patches at 61.1-61.4, 61.8-62.1	2	3-5° Py > Sp - Disseminated in thin irregular veins and irregular crystalline masses - mainly in D.S.L. patches	
	65.8-91.5 (25.7m)	DOLOMITE SULPHIDE LODE Wriggly banded Serpentinite rich with lesser Qtz/Carbonate grading to Qtz/Carbonate rich with lesser Po rich and minor talc 70.1-81.9m Mottled appearance Po rich ≅ 60%, Qtz/Carbonate ≅ 40%. Major Qtz - minor Carbonate. Occassional Talc	?/8/4 8/4/6 4/8	65.8-70.1m - 30% Po > Py coarsely disseminated. Trace only Sp and Fluorite ?Fault zone ?Fault zone 70.1-81.9m - 60% Po >> Py - massive to coarsely disseminated. Minor Py and marcasite. Trace only Cp, arsenopyrite, Fluorite	
70					
80		(?) Fault zone 81.9-91.5m Mottled to weakly to moderately contorted banding. Rare veins. Qtz/Carbonate rich grading to Po rich grading to Qtz/Carbonate rich. Talc increasing to ≅ 10% at end of interval. Carbonate increasing to ≅ 20% at end of interval.	8/4 4/8 8/4/6	81.9-91.5m - 40% Po >> Py. Trace only Cp, arsenopyrite, Fluorite, Tourmaline. Weakly banded, coarsely disseminated to massive. Py content increases to 10% at end of interval	
90					
	91.5-97.0 (5.5m)	QUARTZITE/MINOR SILTSTONE Medium grey, fine to medium grained quartzite with minor coarse siltstone. Moderately to mildly brecciated.	11/10	3-5% Py >> Po - occure in veins and stringers. Trace Sp and Fluorite. Banding (bedding?) 30°	
		END OF HOLE 97.0m			
100					

FOR LEGEND SEE DRAWING NO.

5 cm

METALS EXPLORATION LIMITED

SUMMARY DRILL LOG Scale

Prospect or project: MT BISCHOFF TIN

HOLE No. MBD54

LOG SHEET 1 OF 1

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
98380		3.0	3.9	0.9	6000									
81		3.9	4.9	1.0	6200									
82		4.9	5.9	1.0	4350									
83		5.9	6.4	0.5	1.35%									
84		7.4	8.4	1.0	1.17%									
85		8.4	9.4	"	1.43%									
86		9.4	10.4	"	1.69%									
87		10.4	11.4	"	6500									
88		11.4	12.4	"	2950									
89		12.4	13.7	"	1.29%									
390		13.7	14.7	1.3	5500.									
91		14.7	15.7	1.0	5800									
92		15.7	16.7	"	1900									
93		16.7	17.7	"	1650									
94		17.7	18.7	"	2050									
95		18.7	19.7	"	1700									
96		19.7	22.0	2.3	1250									
97		22.0	23.0	1.0	1700									
98		23.0	24.0	"	3500									
99		24.0	25.0	"	4450									
900		25.0	26.0	"	5700									
01		26.0	27.0	"	3250									
2		27.0	28.0	"	3650									
3		28.0	29.0	"	1500									
4		29.0	30.0	"	1650									
5		30.0	31.0	"	1950									
6		31.0	32.0	"	1050									
7		32.0	33.0	"	3050									
98408		33.0	34.0	"	2150									

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 54

SAMPLE TYPE : DRILL CORE FROM 3.0 TO 34.0

SAMPLE NO.	SAMPLE NO	FROM	TO	INTER-VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
98909		34.0	35.0	"	4200									
910		35.0	36.0	"	2050									
11		36.0	37.0	"	3200									
12		37.0	38.0	"	3650									
13		38.0	39.0	"	3800									
14		39.0	40.0	"	4500									
15		40.0	41.0	"	2400									
16		41.0	42.1	1.1	1550									
17		42.1	43.1	1.0	1.20%									
18		43.1	44.1	"	5100									
19		44.1	45.1	"	5500									
920		45.1	46.1	"	3300									
21		46.1	48.3	2.2	2950									
22		48.3	49.3	1.0	1300									
23		49.3	50.3	"	190									
24		50.3	51.3	"	140 ?									
25		51.3	52.3	"	370									
26		52.3	53.3	"	250									
27		53.3	54.3	"	44									
28		54.3	55.3	"	380									
29		55.3	56.3	"	250									
930		56.3	57.3	"	520									
31		57.3	58.6	1.3	190									
32		58.6	59.6	1.0	4									
33		59.6	60.6	"	14									
34		60.6	61.6	"	540									
35		61.6	62.6	"	1300									
36		62.6	63.6	"	80									
37		63.6	64.6	"	95									
98938		64.6	65.8	1.2	660									

Notes :— Sn by XRF Bi Method.

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 54

SAMPLE TYPE : DRILL CORE FROM 34.0 TO 65.8

98909 98938

SAMPLE NO. SPLIT CORE	SAMPLE NO GROUND CORE	FROM m	TO m	INTER-VAL m	Sn SPLIT	Sn GROUND	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
98939		65.8	66.8	1.0	4350									
940		66.8	67.8	"	4800									
41		67.8	68.6	0.8	1200									
42		68.7	69.7	1.0	1150									
43		69.7	70.7	"	7900									
44		70.7	71.7	"	1.40%									
45		71.7	72.7	"	1.76%									
46		72.7	73.7	"	1.13%									
47		73.7	74.7	"	1450									
48		74.7	75.7	"	920									
49		75.7	76.7	"	420									
950		76.7	77.7	"	580									
51		77.7	78.7	"	1050									
52		78.7	79.7	"	1150									
53		79.7	80.7	"	1900									
54		80.7	81.7	"	620									
55		81.7	82.7	"	1200									
56		82.7	83.7	"	1000									
57		83.7	84.7	"	940									
58		84.7	85.7	"	660									
59		85.7	86.7	"	580									
960		86.7	87.7	"	1.06%									
61		87.7	88.7	"	6000									
62		88.7	89.7	"	200									
63		89.7	90.7	"	20									
64		90.7	91.5	0.8	110									
65		91.5	92.5	1.0	1.65%									

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 54

SAMPLE TYPE : DRILL CORE FROM 65.8 TO 92.5