METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine: MT. BISCHOFF TIN

HOLE No. MBD 81

COLLAR LOCATION

Grid name	Rectangular space co-ordinates PLANAR CO-ORDINATES		ELEVATION
(1)	1805.21 N	1000.05 E	625.27
(2)	N	E	
(3) Aust. Map Grid PRECISE / APPROX.	mE	mN	m A.H.D.

Magnetic bearing of true and grid norths at collar (* = observed)

G.N.(1) _____ mag
G.N.(2) _____ mag
G.N.(3) _____ mag
T.N. _____ mag

1:250 000 Sheet No. SK55-3
1:100 000 Sheet No. 8015
State Tasmania

Mineral Tenement: E.L. 13/79
Holder: Metals Exploration Ltd.

Cadastral location and details: Mt. Bischoff mine area, on crown land northerly of Waratah.

Inclination at collar: -55°
Total length: 133.6 m
Commenced: 12 / 5 / 81
Completed: 19 / 5 / 81

Drilling contractor: LONGYEAR AUST. PTY. LTD.
Rig type: LONGYEAR 44

Details of down hole location-survey methods: Eastman Single Shot Camera.

Purpose of drilling and anticipated lengths to targets: To obtain additional DSL for metallurgical testing.

Core size and non-coring (NC)

TRICONE	0	TO	1.6
HQ	1.6	TO	54.0
NQ	54.0	TO	133.6
		TO	
		TO	
		TO	

Results of down hole location-survey.

LENGTH FROM COLLAR	MAGNETIC BEARING (Whole Circle)	DIP
AT COLLAR		
30 m	in casing	54½
60 m	329°	54°
90 m	338°	54°
133 m	327°	54°

Comments on drilling: Very bad ground for first 48 m. Cemented (twice).

Legend for graphic log column

FIELD ROCK NAME, ETC.

1	Porphyry.
2	Dolomite
3	Recrystallised dolomite
4	Dolomite sulphide lode - pyrrhotite rich.
5	Dolomite sulphide lode - pyrite rich.
6	Dolomite sulphide lode - talc rich.
7	Dolomite sulphide lode - serpentinite rich.
8	Dolomite sulphide lode - quartz/carbonate rich.
9 / c	Shale / carbonaceous.
10	Siltstone.
11 / s	Quartzite / sandstone.
12	Tuff.

Symbols and abbreviations

LOGGED BY D. COMPSTON — FROM 0 TO 133.6 — DATE 25/5/81
LOGGED BY _____ — FROM _____ TO _____ — DATE _____
LOGGED BY _____ — FROM _____ TO _____ — DATE _____

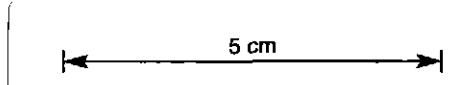
Company managing exploration programme: Metals Exploration Ltd.

SUMMARY LOG

HOLE No. MBD 81

Log sheet 1 of 3

NOTES: 1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (EDS), MONOGRAPH NO. 9 - AUSTRALAS. INST. MIN. METALL. - 1976
2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE. 3. LENGTH IS GIVEN AS METRES OR MILLIMETRES

DEPTH (length from collar)	INTERVAL	DEPTH from - to : ROCK UNIT (CAPITAL LETTERS, UNDERLINED) Depth Description and notes (INDENTED ABOUT 10mm)	POINTER & CODE	GRAPHIC LOG	POINTER & CODE	MINERALISATION	ASSAYS AVAILABLE	BULKED ASSAYS Ni
0	1.6	0 - 1.6 TRICONE. No core.						
	37.1	1.6 - 38.7 DOLOMITE SULPHIDE LODE, RECRYSTALLIZED DOLOMITE. 1.6 - 6.0: DSL - 50% qtz-carbonate, 20% fluorite (wrigglite), 30% py } very poor recovery 6.0 - 12.0: clay - very poor recovery. 12.0 - 15.6: DSL - very poor recovery. 65% qtz-carbonate, 30% py, 5% recrystallized dolomite. 15.6 - 21.3: clay, poor recovery. 21.3 - 27.3: recrystallized dolomite, very poor recovery. 27.3 - 31.8: no core. 31.8 - 38.7: recrystallized dolomite.				py - 30% in irregular veins and aggregates. sph - minor in veins. py trace in veins and stringers.		
20								
40	8.1	38.7 - 46.8 PORPHYRY. Matrix off-white to grey, translucent 7% qtz phenocrysts.		1		15% py>>po>gal. py coarsely dissem. and in veins. po ! gal - minor in veins.		
	1.1	46.8-48.7 DOLOMITE SULPHIDE LODE. Mainly "wrigglite"		8/7/5		py> po - irregular veins		
	2.3	48.7-51.0 NO CORE.						
	11.7	51.0 - 62.7 DOLOMITE, minor RECRYSTALLIZED DOLOMITE. Pale grey dolomite with minor veins of recrystallized dolomite.		2/3		py trace in occasional veins.		
60								
	16.9	62.7 - 79.6 PORPHYRY. Matrix off-white, translucent lustre 15% qtz phenocrysts to 8 mm diam. Feldspars replaced by sulphides. Rare dissem. fluorite.		1		po>> py po, py coarsely disseminated py also in veins.		
80	4.2	79.6 - 83.8 DOLOMITE. Pale grey, well-bedded dolomite.		2		po> py? gal - trace (~1%) all in veins.		
	2.3	83.8-86.1 PORPHYRY - translucent white matrix.		1		po> py 15% coarsely dissem.		
	27.8	86.1 - 113.9 SILTSTONE, lesser QUARTZITE. 86.1 - 88.9: transition zone - abundant qtz carb.-py veins. 88.9 - 113.9: siltstone with lesser grey qtzite. Moderately to strongly disrupted in parts.		10/11		py > po trace in veins and stringers. Minor py disseminated in some qtzite beds.		
100								
	13.7	113.9 - 127.6 DOLOMITE, SHALE. Interbedded silicified dolomite and shale. Strongly disrupted and brecciated in most parts. 		2/9		po > py > sph all in veins and stringers, sometimes with carbonate.		

CONTINUED ON NEXT PAGE.

FOR LEGEND SEE DRAWING NO.

METALS EXPLORATION LIMITED

SUMMARY DRILL LOG Scale

Prospect or project: Mt. Bischoff Tin

HOLE No. MBD 81

LOG SHEET 1 OF 2

DEPTH (length from collar)	INTERVAL	DEPTH from - to : ROCK UNIT (CAPITAL LETTERS, UNDERLINED) Depth Description and notes (INDENTED ABOUT 10mm)	POINTER & CODE	GRAPHIC LOG	POINTER & CODE	MINERALISATION	ASSAYS AVAILABLE	BULKED ASSAYS Ni
		CONTINUED FROM PREVIOUS PAGE.						
120								
	6.0	127.6 - 133.6 SHALE, SILTSTONE, QUARTZITE. Strongly disrupted and slumped.		9/ 10/ 11		po, py trace in veins and stringers.		
		END OF HOLE 133.6 m						
140								

NOTES: 1. FOR ABBREVIATIONS SEE "FIELD GEOLOGIST'S MANUAL", D.A. BERKMAN & W.R. RYALL (ED.), MONOGRAPH NO. 9- AUSTRALAS. INST. MIN. METALL. - 1976
2. ATTITUDE OF BEDDING, VEIN, ETC. IS ANGLE BETWEEN PLANAR STRUCTURE AND LONG AXIS OF CORE 3. LENGTH IS GIVEN AS METRES OR MILLIMETRES.

5 cm

FOR LEGEND SEE DRAWING NO.

METALS EXPLORATION LIMITED

SUMMARY DRILL LOG
Scale

Prospect or project: Mt. Bischoff Tin

HOLE No. MBD 81

LOG SHEET 2 OF 2

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								
121439		1.6	2.6	1.0	1.08%									
40		2.6	4.6	2.0	141									
41		4.6	6.0	"	1350									
42		6.0	7.5	1.5	360									
43		7.5	9.0	1.5	30									
44		10.5	12.0	2.0	500									
45		12.0	13.5	1.5	4900									
46		13.5	15.6	2.1	4500									
47		15.6	17.2	1.6	840									
48		17.2	18.3	1.1	1200									
49		19.8	21.3	1.5	30									
450		21.3	22.8	1.5	20									
51		22.8	24.3	"	30									
52		24.3	26.0	1.7	10									
53		26.0	28.8	2.8	100									
54		31.8	32.8	1.0	160									
55		32.8	33.8	"	200									
56		33.8	34.8	"	470									
57		34.8	35.8	"	2150									
58		35.8	36.8	"	5410									
59		36.8	37.8	"	230									
460		33.0	34.5	1.5	180									
61		34.5	36.0	"	860									
62		36.0	37.0	1.0	15550									
121463		37.0	38.0	"	2410									

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 81

SAMPLE TYPE : DRILL CORE FROM 1.6 TO 38.0

8322244

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								
121464		38.0	38.8	0.8	6450									
65		38.8	39.8	1.0	820									
66		39.8	40.8	"	600									
67		40.8	41.8	"	170									
68		41.8	42.8	"	920									
69		42.8	43.8	"	280									
470		43.8	44.9	1.1	1500									
71		44.9	45.9	1.0	880									
72		45.9	46.9	"	6550									
73		46.9	47.9	"	9200									
74		47.9	48.7	"	4650									
75		51.0	52.9	1.9	170									
76		54.0	55.0	1.0	80									
77		55.0	56.0	"	215									
78		56.0	57.0	"	150									
79		57.0	58.0	"	800									
480		58.0	59.0	"	1150									
81		59.0	60.0	"	4910									
82		60.0	61.0	"	1500									
83		61.0	62.0	"	2.10%									
84		62.0	62.7	0.7	1.27%									
85		62.7	63.7	1.0	2050									
86		63.7	64.7	"	3350									
87		64.7	65.7	"	1800									
88		65.7	66.7	"	1350									
89		66.7	67.7	"	680									
490		67.7	68.7	"	2950									
121491		68.7	69.7	"	3900									

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 81.

SAMPLE TYPE : DRILL CORE FROM 38.0 TO 69.7.

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								
121492		69.7	70.7	1.0	1700									
93		70.7	71.7	"	1650									
94		71.7	72.7	"	3250									
95		72.7	73.7	"	4000									
96		73.7	74.7	"	3600									
97		74.7	75.7	"	2350									
98		75.7	76.7	"	2200									
99		76.7	77.7	"										
120800		77.7	78.7	"										
01		78.7	79.5	0.8										
02		79.5	81.5	2.0										
120803		82.9	83.9	1.0										
04		83.9	84.9	"										
05		84.9	86.0	1.1										
06		86.0	87.0	1.0										
120807		80.5	81.5	1.0										
08		81.5	82.9	1.4										
120811		112.9	113.9	1.0										
12		113.9	115.4	1.5										
13		115.4	116.4	1.0										
14		116.4	117.4	"										
15		117.4	118.2	0.8										
16		118.2	118.9	0.7										
17		118.9	119.9	1.0										
18		119.9	121.0	1.1										
19		121.0	122.2	1.2										
120		122.2	122.8	0.6										

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 81

SAMPLE TYPE : DRILL CORE FROM 69.7 TO 122.8

832246 238

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								
B0&B1		122.8	123.8	0.4										
B2		123.2	124.6	1.4										
B3		124.6	125.3	0.7										
B4		125.3	126.3	1.0										
B5		126.3	127.7	1.4										
B6		127.7	128.7	1.0										

Notes :—

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT

ASSAY SUMMARY SHEET HOLE NO. MBD 81

SAMPLE TYPE : DRILL CORE FROM 122.8 TO 128.7

832247 239