

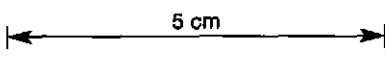
REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES



MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. <u>MOUNT BISCHOFF</u>		HOLE No. <u>MBD 64</u>
COLLAR LOCATION		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
Grid name	Rectangular space co-ordinates	
PLANAR CO-ORDINATES		
ELEVATION		
(1) _____ N _____ E _____		
(2) _____ N _____ E _____		
(3) Aust. Map Grid _____ mE _____ mN _____ m A.H.D.		
PRECISE / APPROX.		
1: 250 000 Sheet No. _____	1: 100 000 Sheet No. _____	State _____
Mineral Tenement <u>EL 13/79</u>	Holder <u>METALS EXPLORATION LTD.</u>	
Cadastral location and details _____ CROWN LAND/PRIVATE _____		Inclination of collar <u>90°</u>
Details of down hole location-survey methods. <u>EASTMAN Single</u> <u>Shot Camera</u>		Total length <u>150.0 m</u>
Purpose of drilling and anticipated lengths to targets. <u>Exploration drilling to investigate "buried dolomite" to south west of Mt. Bischoff.</u> <u>Anticipated depth of target (dolomite) at about RL 475 m.</u>		Commenced: <u>1 / 4 / 81</u> Completed: <u>5 / 4 / 81</u>
Results of down hole location-survey.		Drilling contractor <u>LONGYEAR AUST. PTY. LTD.</u>
LENGTH FROM COLLAR	MAGNETIC BEARING (Whole Circle)	DIP
<u>30 m</u>	<u>in casing</u>	<u>89°</u>
<u>60 m</u>	<u>-</u>	<u>90°</u>
<u>90 m</u>	<u>280°</u>	<u>88° 30'</u>
<u>120 m</u>	<u>237°</u>	<u>88°</u>
<u>150 m</u>	<u>273°</u>	<u>85° 20'</u>
Comments on drilling. <u>HC 150 broke down (mud pump) at 62.50. Exchange for Longyear 44 on 3/4/81. 2 shifts last.</u>		Rig type <u>LONGYEAR HC 150</u> <u>LONGYEAR 44</u>
Legend for graphic log column (see drill log for Hole No. _____) DERWENT PENCIL NO. _____ FIELD ROCK NAME, ETC. _____		Core size and non-coring (NC) TRICONE <u>0</u> TO <u>4.5</u> <u>NO</u> <u>4.5</u> TO <u>62.5</u> <u>BO</u> <u>62.5</u> TO <u>150.0</u> TO _____ TO _____ TO _____
LOGGED BY <u>D. COMPTON</u> FROM <u>0</u> TO <u>150 m</u> DATE <u>7/6/81</u>		Symbols and abbreviations for drilling notes column.
LOGGED BY _____ FROM _____ TO _____ DATE _____		
LOGGED BY _____ FROM _____ TO _____ DATE _____		
Company managing exploration programme. <u>METALS EXPLORATION LTD.</u>		HOLE No. <u>MBD 64</u> Log sheet 1 of <u>3</u>

DEPTH (length from collar)	INTERVAL	DEPTH from - to : ROCK UNIT Depth Description and notes, veins over 50mm. INDENTED ABOUT 10mm	CAPITAL LETTERS, UNDERLINED	P O I N T E R B C O D E	G R A P H I C L O G	P O I N T E R B C O D E	MINERALISATION Excluding veins over 50mm. Visual estimate of % mineralisation in brackets.	BULKED ASSAYS Sn
0	4.5	0 - 4.5	Tricone drilling - no core					
	10.8	4.5 - 15.3	SILTSTONE, lesser CARBONACEOUS SHALE. Mainly mid-grey siltstone with lesser black carbonaceous shale. Strongly disrupted and slumped. Common carbonate veins and stringers.		10/9/C		py trace in thin veins and stringers.	
20	18.0	15.3 - 33.3	CARBONACEOUS SHALE, lesser SILTSTONE. Moderately to strongly disrupted in parts. Occasional pyritic siltstone layers. Occasional carbonate veins and stringers. Rare quartz veins.		9/C/10		py - 1% disseminated in pyritic siltstone beds (1 - 10 mm thick). Also in carbonate veins and stringers.	
40	18.0	33.3 - 51.3	SILTSTONE, lesser CARBONACEOUS SHALE. Strongly disrupted slump brecciated in most parts. Common quartz and carbonate stringers, rare veins.		10/9/C		py trace in veins and stringers. Rare disrupted beds of pyritic siltstone.	
60	10.6	51.3 - 61.9	CARBONACEOUS SHALE, SILTSTONE, minor QUARTZITE. Strongly disrupted (slumped) for most part. Occasional pyritic siltstones. Occasional carbonate veins and stringers.		9/C/10/11		py - trace occasional siltstone beds with disseminated py. Also in thin carbonate veins.	
	11.5	61.9 - 73.4	TUFF, tuffaceous SILTSTONE. 61.9 - 67.7: Tuff - coarse grained at top to fine grained 20% feldspars, 20% rock fragments up to 25 mm 67.7 - 69.0: Tuffaceous siltstone interbedded with siltstone. 69.0 - 73.4: Tuff - medium grained.		12/10		py - trace disseminate throughout, generally associated with sedimentary rock fragments.	
80	11.4	73.4 - 84.8	SILTSTONE, CARBONACEOUS SHALE, lesser QUARTZITE. Strongly disrupted and slumped for most part. Occasional thin carbonate veins, rare fluorite veins.		10/9/C/11		py - trace trace in thin siltstones and quartzite beds. Also in carbonate veins and stringers.	
	8.5	84.8 - 93.3	PORPHYRY. Slightly glassy white matrix, 10% qtz phenocrysts 15% feldspars. Py replacing feldspar in parts. Minor disseminated sphalerite.		1		py > sph ~10% py: replacing feldspar and as occasional veins. sph: disseminated through porphyry.	
100	11.4	93.3 - 114.7	SILTSTONE, minor CARBONACEOUS SHALE QUARTZITE. Moderately to strongly disrupted in most parts. Occasional brecciated zones. Mainly thin siltstone beds (1 - 5 cm) with minor shale and quartzite. Occasional carbonate veins and stringers. Rare fluorite veins. Rare quartz stringers.		10/9/C/11		py - trace trace in carbonate veins and stringers.	
								
120	9.6	114.7 - 124.3	PORPHYRY. Altered, semi-translucent matrix - off-white to pale greenish grey. 7% qtz phenocrysts.		1		py, sph - 10% py - occasional veins, and replacing feldspars.	

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.

CONTINUED NEXT PAGE.

FOR LEGEND SEE DRAWING NO.



METALS EXPLORATION LIMITED

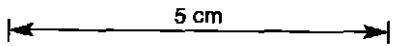
SUMMARY DRILL LOG
Scale

Prospect or project MT BISCHOFF TIN	HOLE No. MBD 64 LOG SHEET 1 OF 2
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DEPTH	INTERVAL	DEPTH from-to : ROCK UNIT	MINERALISATION	ASSAYS AVAILABLE	BULKED ASSAYS
		<i>capital letters, underlined</i> Depth : Description and notes <i>indented about 10mm</i>			

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.

120	<p><u>114.7 - 124.3 Porphyry (Cont).</u> 10% feldspars, replaced in part by pyrite. Sphalerite dissem. through rock. Fluorite-trace dissem. & veins.</p>			<p>sph - disseminated through porphyry sph > py</p>	
140	<p><u>124.3 - 150.0 CARBONACEOUS SHALE, SILTSTONE QUARTZITE.</u> Weakly to strongly disrupted in parts. 2.4 m of quartzite (massive) from 125.5 - 127.9. Mainly well-bedded, thin quartzite, siltstone and carbonaceous shale. Occasional carbonate veins and stringers.</p>			<p>py - trace disseminated through siltstone layers. Also trace in carbonate veins and stringers.</p>	
160					



FOR LEGEND SEE DRAWING NO.

METALS EXPLORATION

SUMMARY DRILL LOG

Project or project
 MT RISCHOFF TIN

HOLE No. MBD 64

AFTER TYPING THIS SIZED FORM WILL BE PHOTO-REDUCED TO A4 SIZE
 2 (1:1), 12 (1:5), 60 (1:25)

SAMPLE NO.	SAMPLE NO	FROM	TO	INTE -VAL	Sn	Sn	Cu	Pb	Zn	Ag	W	Au	Check Sn	Bulked Assays
SPLIT CORE	GROUND CORE	m	m	m	SPLIT	GROUND								
115328		83.9	84.9	1.0	180									
29		84.9	85.9	"	2600									
30		85.9	86.9	"	1050									
31		86.9	87.9	"	370									
32		87.9	88.9	"	200									
33		88.9	89.9	"	120									
34		89.9	90.9	"	220									
35		90.9	91.9	"	370									
36		91.9	93.0	1.1	420									
37		93.0	94.0	1.0	180									
38		113.7	114.7	1.0	240									
39		114.7	115.7	"	120									
840		115.7	116.7	"	150									
41		116.7	117.7	"	180									
42		117.7	118.7	"	170									
43		118.7	119.7	"	190									
44		119.7	120.7	"	130									
45		120.7	121.7	"	150									
46		121.7	122.7	"	150									
47		122.7	123.7	"	160									
48		123.7	124.3	0.6	130									
49		124.3	125.3	1.0	35									

Notes:— XRF Bi method for Sn.

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT
 ASSAY SUMMARY SHEET HOLE NO. MBD 64
 SAMPLE TYPE : DRILL CORE FROM 83.9 TO 94.0
 113.7 125.3

15120141

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								
	120748	4.5	6.5	2.0	15									
	49	6.5	8.5	"	X									
	50	8.5	10.5	"	X									
	51	10.5	12.5	"	10									
	52	12.5	14.5	"	20									
	53	14.5	16.5	"	30									
	54	16.5	18.5	"	20									
	55	18.5	20.5	"	15									
	56	20.5	22.5	"	15									
	57	22.5	24.5	"	10									
	58	24.5	26.5	"	20									
	59	26.5	28.5	"	20									
	760	28.5	30.5	"										
	61	30.5	32.5	"										
	62	32.5	34.5	"										
	63	34.5	36.5	"										
	64	36.5	38.5	"										
	65	38.5	40.5	"										
	66	40.5	42.5	"										
	67	42.5	44.5	"										
	68	44.5	46.5	"										
	69	46.5	48.5	"										
	770	48.5	50.5	"										
	71	50.5	52.5	"										
	72	52.5	54.5	"										
	73	54.5	56.5	"										
	74	56.5	58.5	"										
	75	58.5	60.0	"										

Notes:— XRF by A14 method for Sn...

METALS EXPLORATION LTD - MT BISCHOFF TIN PROSPECT
 ASSAY SUMMARY SHEET HOLE NO. MBD 64
 SAMPLE TYPE : ^{GROUND} DRILL CORE FROM 4.5 TO 28.5
 60.0

822153 146