832099 091

REPORT No.

METALS EXPLORATION LTD.
& SUBSIDIARY COMPANIES

MINERAL EXPLORATION
DIAMOND DRILL LOG

Prospect, area, project or mine. MT. BISCHOFF

HOLE No. MBD 58

COLLAR LOCATION

Grid name | Rectangular space co-ordinates

		PLANAR CO-ORDINATES		ELEVATION
(1)	MBJV	1690.12 N	879.99 E	612.02
(2)		N	E	
(3) Aust. Map Grid (PRECISE / APPROX.)		m E	m N	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

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

Cadastral location and details (CROWN LAND / PRIVATE):

Inclination at collar: VERTICAL

Total length: 150.0 m

Commenced: 25 / 2 / 81

Completed: 28 / 2 / 81

Drilling contractor: LONGYEAR AUST. PTY. LTD.

Rig type: LONGYEAR HC 150

Details of down hole location-survey methods.

EASTMAN - SINGLE SHOT PHOTO

Purpose of drilling and anticipated lengths to targets.

To intersect white Face Porphyry - anticipated 50-80m.

To test the South-West "Buried Dolomite" - anticipated 115-130m.

Core size and non-coring (NC)

TRICONE	0	TO	3.0
NQ	3.0	TO	80.6
BQ	80.6	TO	150.0
		TO	
		TO	
		TO	

Results of down hole location-survey.

LENGTH FROM COLLAR	W.C. BEARING type	DIP
30.0m	331°	88°40'
60.0m	170°	88°
90.0m	228°	88°
120.0m	207°	87°
150.0m	244°	88°40'

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. MORRISON	0	150.00	7/3/81

Company managing exploration programme.

METALS EXPLORATION LTD.

HOLE No. MBD 58

Log sheet 1 of 3

832100 092

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

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.

DEPTH	INTERVAL	DEPTH from-to : ROCK UNIT / Depth : Description and notes	GRAPHIC LOG	MINERALISATION
0	0-3.0m (3.0m)	TRICONE - NO CORE	N/C	
	(3.0-11.5) (8.5m)	WEAKLY TO MODERATELY DOLOMITIC SILTSTONE/MINOR CARBONACEOUS SHALE Mid-dark grey, thinly interbedded, disrupted. Dolomite present as component of sediments. Numerous stringers and veins with Qtz, Carb, Flourite, Sulphides	109c/2	Py>Sp≫Stibnite(?) Jameisonite(?) as stringers and associated with veins - 2-3%. 5.9-6.3m Vein-Carbonate, Stibnite(?)/Jameisonite(?), Py, Minor Sp, Qtz, Flourite + Talc.
10				
	11.5-44.1 (32.6m)	THINLY INTERBEDDED SILTSTONE/QUARTZITE/CARBONACEOUS SHALE Pale-mid-dark grey, disrupted to brecciated. Minor parts foliated appearance. Thinly interbedded to rare thickly bedded Quartzite. All members weakly Dolomitic. Numerous stringers - some Py. Numerous thin veins - <10mm. - Qtz/Carbonate, minor talc, rare Flourite + Sulphides. 26.3-27.8m - carbonaceous shale dominant member - foliated appearance. 28.6-34.0m - Bedding generally less disrupted	10/11/9c	2-3% Py Sp and Stibnite (?)/Jameisonite(?). Py As stringers and thin veins and finely disseminated through sediments in parts. Py, Sp and Stibnite(?)/Jameisonite(?) associated with Qtz/Carbonate veins 28.6-31.4m - Bedding - 60°-70° 33.8m - Bedding - 60° 37.0m - Bedding - 50° 41.1m -50mm thick vein, sub-banded Carbonate, Sp, Py, Jameisonite(?) - 65°
20				
30				
40				
	44.1-75.1 (31.0m)	QUARTZ PORPHYRY Pale to creamy grey matrix - fine grained opaque becoming re-crystallized and glassy with depth. Slightly pitted-minor weathering of Feldspars. Med. grained Qtz. phenocrysts - 20-25%. Fine to medium grained Feldspar phenocrysts - 10-15% Moderately jointed. 55.2m-15mm vein, Sp=Py > Carbonate, Flourite and Qtz — 20°. 65.4m - broken vein - 20° Py > Sp, Lesser Carbonate, Flourite, minor Qtz.	1	Contact approx. 35° 10-15% Py > Sp - as irregular crystal aggregates; in veins and rare pods; disseminated along joint planes. Alternating zones Sp rich (up to 5.0m) and Py rich (up to 5.0m). Total sulphides in Sp rich zones < in Py rich zones. Possible trace S_nO_2 along joint planes. 1% Flourite - in veins, along some joints and as disseminated blebs. 70.4m- 30mm vein - 25° - Py> Qtz and Carbonate. Trace Flourite, Sp.
50				
60				
70				
	75.1-97.4 (22.3m)	SILTSTONE/LESSER CARBONACEOUS SHALE Mid-dark grey, thinly interbedded, moderately to severely disrupted to brecciated. Both members weakly Dolomitic. 75.1-89.0m - Numerous stringers and thin veins. 89.0-97.4 - Moderate stringers and thin veins 92.7-97.4 - less disrupted.	10/9c	Contact - approx. 35° 75.6-75.8 - Qtz Porphyry - very fine grained - Top contact approx. 15°; Bottom approx. 55° 1-2% Py>> Sp - Py as stringers and as finely disseminated in some coarser sediments. Py and Sp in thin veins and associated with Qtz and/or Carbonate ± Flourite veins. 88.2m - 15mm vein - 45° - Flourite, lesser Carbonate and Py. 93.5m - Bedding - 50° 96.0m - Bedding - 45°
80				
90				
	97.4-115.4 (18.0m)	SILTSTONE/CARBONACEOUS SHALE/MINOR QUARTZITE Mid-dark grey, thinly interbedded, moderately to severely disrupted to brecciated - foliated appearance in parts. Carbonaceous Shale proportion equal to Siltstone. Occasional moderately bedded Quartzite units. 97.4-102.0m - rare to moderate stringers and veins 102.0-115.4m - Moderate stringers, numerous veins of Qtz/Carbonate, Sulphides, ± Flourite, ± Talc	10/9c/11	2-3% Py > Po, trace Sp, Marcasite. Py and Po disseminated in sediments in parts and as stringers. Sulphides generally associated with veins. 107.1m - 250mm vein - 70° top contact; 55° bottom contact. Py, Po, Sp, Qtz, Carbonate, Flourite, Talc. 113.5-250mm fine irregular vein network, Py Po + Carbonate + Talcose Sediments.
100				
110				
	715.4-122.4 (7.0m)	DOLOMITE - PARTLY RE-CRYSTALLIZED Pale grey - brecciated(?) in parts. Minor zones Qtz/Carbonate alteration(?). Minor talc throughout.	2/3	Contact 85° - defined by 100mm zone banded talcose sediments, Py, Po,
120				

240m (1:1000), 120m (1:500), 60m (1:250)
AFTER TYPING THIS SIZED FORM WILL BE PHOTO-REDUCED TO A4 SIZE

FIELD COPY
METALS EXPLORATION LTD.
EXPLORATION DEPARTMENT

TO BE SENT TO MELBOURNE FOR TYPING
SUMMARY DRILL LOG
Scale 1:1000, 1:500, 1:250 (when reduced to A4)
Prepared by:
Date:

HOLE No. MBD 58
Sheet 1 of 2

5 cm

832101 093

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

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115.4–122.4 (7.0)	CONT'D. FROM PREVIOUS SHEET 121.8–122.4 – Contorted banded appearance (D.S.L. 8(?)		2/3 8(?)	115.4–120.7 – NO SULPHIDES 120.7–122.4 – 2–3%–Py>>Po	
122.4 137.9 (15.5m)	SILTSTONE/LESSER CARBONACEOUS SHALE AND QUARTZITE Mid-dark grey, minor light grey patches and pods. Thinly interbedded – moderately to severely disrupted to brecciated. Numerous veins and stringers. Veins to 80mm thick – contain Qtz and/or Carbonate ± trace Flourite with light to heavy Sulphide mineralization.		10/9c/11	Contact – 30mm zone of contorted Talc and Talcose sediments. 1–3% – Py > Po – disseminated in sediments in parts; as stringers and associated with veins. Trace Sp, Flourite, Cp and Graphite. 130.0m– 80mm vein – 75° – Py + minor Qtz, Carbonate and Talc; trace Graphite.	
137.9–144.6 (6.7m)	QUARTZITE/MINOR SILTSTONE AND CARBONACEOUS SHALE Pale to mid grey, darker mottley to banded zones. Quartzite weakly re-crystallized and micaceous. Massive to weakly banded to thinly interbedded.		11/10/9c	1–2% Py and Po + Trace Sp – disseminated through coarser sediments, as stringers and associated with veins. 140.1m – Bedding 35° ~~140.7m – 20mm Vein – 65° Qtz/Carbonate~~	
144.6–150.0 (5.4m)	SILTSTONE/LESSER QUARTZITE/MINOR CARBONACEOUS SHALE Mid-dark grey, thinly interbedded, disrupted. Moderate veins and stringers.		10/11/9c	1–2% Py > Po>> Sp – minor disseminated amounts as discrete pods. Also as stringers and in Qtz/Carbonate veins	
	END OF HOLE 150.0m				

5 cm

240 m (1:1000), 120 m (1:500), 60 m (1:250)
AFTER TYPING THIS SIZED FORM WILL BE PHOTO-REDUCED TO A4 SIZE

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TO BE SENT TO MELBOURNE FOR TYPING
SUMMARY DRILL LOG
Scale 1:1000, 1:500, 1:250 (when reduced to A4)

Prepared by: I. MORRISON
Date: 12/3/81

HOLE No. MBD 58
Sheet 2 of 2