BILLITON AUSTRALIA
THE METALS DIVISION OF
THE SHELL COMPANY OF AUSTRALIA LIMITED

EL 5287 MT TYMN
ANNUAL REPORT FOR PERIOD ENDING 20TH MAY, 1989

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DATE: JUNE, 1989 — COPY NO: 1

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SUMMARY

Mt Tymn (EL 5287), was granted on 20th May, 1987 and forms part of a joint venture (JV) agreement between Billiton Australia, The Metals Division of The Shell Company of Australia Limited, and Mr G. Hamilton of Queensland. Billiton Australia (BAUS) are managers and operators of the joint venture.

The geology is well exposed along the Mt Tymn ridge and comprises of coarse to medium grained sandstone, fine sandstone and siltstone of the Early Proterozoic Burrell Creek Formation. Bedding strikes north north-west (NNW) with steep easterly dips.

Gold mineralisation on Mt Tymn is hosted in sheeted quartz-limonite veins and fine limonite veinlets in the more competent, coarse grained lithologies of the sedimentary package. Veins are generally subparallel to bedding, although minor cross-cutting vein systems have been recorded.

Grid based soil sampling over Mt Tymn defined three gold bearing anomalies. The first anomaly (maximum 121ppb Au) trends NNW over 150m on the northern extension of the ridge. This anomaly is confirmed by rock chip samples which contained grades of up to 7.25g/t Au. The second anomaly strikes NW and occurs on the eastern side of Mt Tymn and appears to be a continuation of the northern anomaly. The third soil anomaly (maximum 62.7ppb Au) is at the base of the Mt Tymn ridge, in the drainage path of old gold workings. This anomaly reflects transported gold bearing gravels and scree rather than in-situ gold mineralisation.

Drilling is proposed over the gold targets to test mineralisation at depth. However, the gold targets have recently been pegged by 19 MCN's (No's. 3022-3040) and thus drilling results will be reported in the Annual Report for the MCN's.

1.0 INTRODUCTION

Mt Tymn (EL 5287), is included in the Mt Tymn joint venture (JV) agreement between Billiton Australia, The Metals Division of The Shell Company of Australia Limited, and Mr G. Hamilton of Queensland. Billiton Australia (BAUS) are managers and operators of the joint venture.

EL 5287 was granted on 20th May, 1987 for a period of two years and expired on 19th May, 1989. The tenement covers 1 block or 3.2km^2, approximately 14km south of Adelaide River (Fig. 1). Nineteen (19) MCN's, three of which are still under application, with 16 granted on 28th March, 1989, have been pegged over the western section of EL 5287 and the eastern portion of EL 4871; also included in the Mt Tymn JV.

This report encompasses a brief description of the geology and mineralisation in EL 5287, previous work, work completed to date, proposed work, results and conclusions.

2.0 PREVIOUS WORK

Exploration activity within the Mt Tymn region began in 1980 by H. Koberstein and G. Scrimegor within EL 2473. From 25th June, 1982 until the end of 1984 exploration was carried out by W.R. Grace Australia Limited (WRG). Western Mining Corporation (WMC) continued exploration from 1985 through until termination of the EL in 1986.

An extensive rock chip and costean sampling programme was undertaken over Mt Tymn by WRG in 1983. The rock chip sampling was grid-based along E-W lines covering the Mt Tymn ridge. The results have been plotted in conjunction with recent rock chip results to produce a contour map of gold grades over Mt Tymn (see Fig. 2). Detailed results of costeaning by WMC have been published in company reports, but were generally of a low tenor.

3.0 GEOLOGY AND MINERALISATION

Coarse to medium grained sandstone, fine sandstone and siltstone units of the Early Proterozoic Burrell Creek Formation are well exposed over Mt Tymn (Fig. 1). Bedding strikes NNW with subvertical easterly dips.

Gold mineralisation on Mt Tymn is hosted in sheeted quartz-limonite veins and fine limonite (after pyrite) veinlets within Burrell Creek Formation. The veins are commonly subparallel to bedding and hosted by more competent, coarse grained lithologies (i.e. sandstone, siltstone). Minor cross-cutting vein systems are also present.

4.0 WORK COMPLETED AND RESULTS

Grid based BCL soil sampling and detailed geological mapping programmes were completed over Mt Tymn in the second half of 1988.

Results from the soil sampling programme identified three anomalies (Fig. 2). The first anomaly (maximum 121ppb Au) trends NNW over 150m of the northern extension of the ridge. The anomaly blankets an area of massive milky quartz veins which cross-cut the NNW trending sedimentary units. Rock chip samples from these veins contained up to 7.25g/t Au (Fig. 3), thus identifying the source of the soil anomaly.

The second anomaly exists as a large NW trending zone of >50ppb Au on the eastern flank of the ridge. This trend lies mainly over alluvials and quartz scree at the base of the hill and is therefore a transported anomaly. However, some assessment of the alluvial potential is warranted. The western portion of this anomaly coincides with mapped high quartz vein densities (Fig. 1), and high gold results from WRG rock chip and costean sampling programmes (Fig. 3).

The third anomaly (62.7ppb Au), located at 9200mE, 10100mN, is on the west side of Mt Tymn and at the base of the ridge, in the drainage path of old gold workings. This anomaly is also thought to reflect transported material rather than in-situ gold bearing rocks.

5.0 PROPOSED WORK

A drilling programme of twelve 100 metre RC holes is proposed over the gold bearing target areas within the nineteen MCN's (which now replace EL 5287) to test the potential of gold mineralisation at depth. Results of the drilling programme will therefore be included in the Annual Report covering the MCN's.

6.0 CONCLUSIONS

Gold mineralisation at Mt Tymn is hosted in quartz-limonite sheeted vein systems within the Burrell Creek Formation. Grid based soil sampling has defined three gold anomalies. The northern anomaly strikes NNW over a quartz vein system. This anomaly is also supported by two rock chip samples which contained 3.92g/t Au and 7.25g/t Au from two north/south striking quartz veins.

The second anomaly occurs on the eastern flank of Mt Tymn and strikes NW, parallel to the northern anomaly.

The third anomaly is located at the base of Mt Tymn in the drainage path of old gold workings. This anomaly reflects transported material rather than gold bearing Burrell Creek Formation.

7.0 EXPENDITURE STATEMENT

	$
Regional office staffing costs	12,873
Support costs	8,776
Tenements costs (includes rent & pegging)	9,317
Analyses	4,897
Aerial Photography	15
Head office management, administration, technical services, engineering/computing	3,426
Total	**$39,304**

SHELL METALS REPORT DATABASE - DATA INPUT SHEET

CHAPTER NAME:
(Office use only)

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TITLE

EL 5287 Mt Tymn - Annual Report for period ending 20.5.89

DATE 20/ 6 / 89 (Publication date in Format dd/mm/yy)

AUTHOR

Scott Marsh

SOURCE (If Non-SCOA)

DESCRIPTOR (Not indexed)

PROSPECT/PROJECT

Mt Tymn joint venture

KEYWORDS

Gold, Proterozoic, Burrell Creek Formation

LOCATION

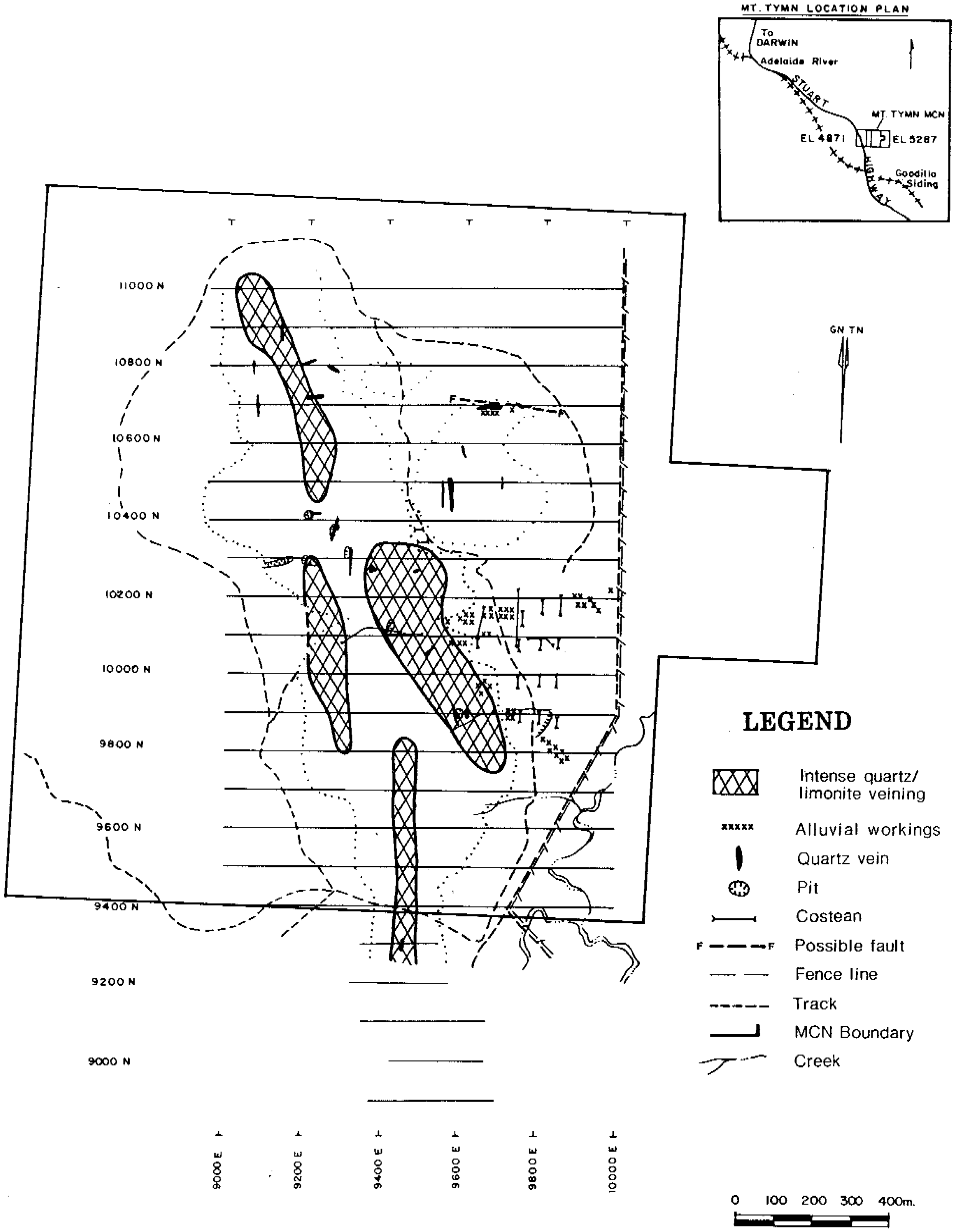
Northern Territory 1:100,000 sheet 5171 - Batchelor

SHEET NAME (1:250,000)

SD52-08 Pine Creek

REPORT No.(Not indexed)

08.4165

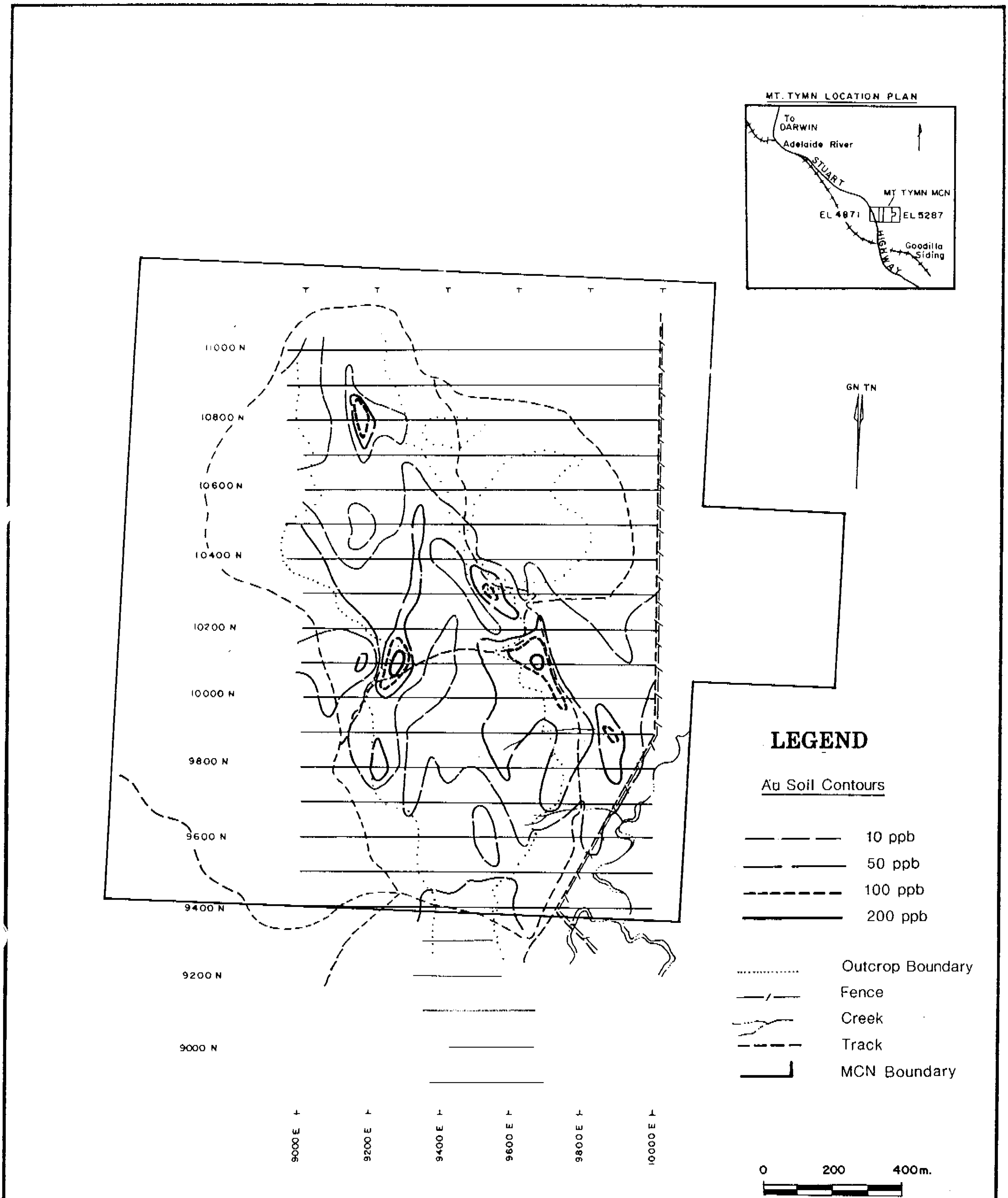


Billiton Australia

The Metals Division of the Shell Company of Australia Limited

Project	MT TYMN J.V. NORTHERN TERRITORY
Title	EL4871 & EL5287 **MINERALISATION/ ALTERATION**

Author S.M.	Date 4/89	Scale 1:15 000
Drawn B.F	Office CNS	Revised / Date
Drawing No C/HJ30/13		Fig. No.



Billiton Australia

Project: MT TYMN J.V.
NORTHERN TERRITORY

Title: EL4871 & EL5287
GOLD CONTOURS
SOIL SAMPLE COMPILATION

Author S.M. Date 4/89 Scale 1:15000
Drawn B.F. Office CNS Revised Date
Drawing No. C/HJ30/12 Fig No.

Map Ref. No. 1:250000 SD52-08
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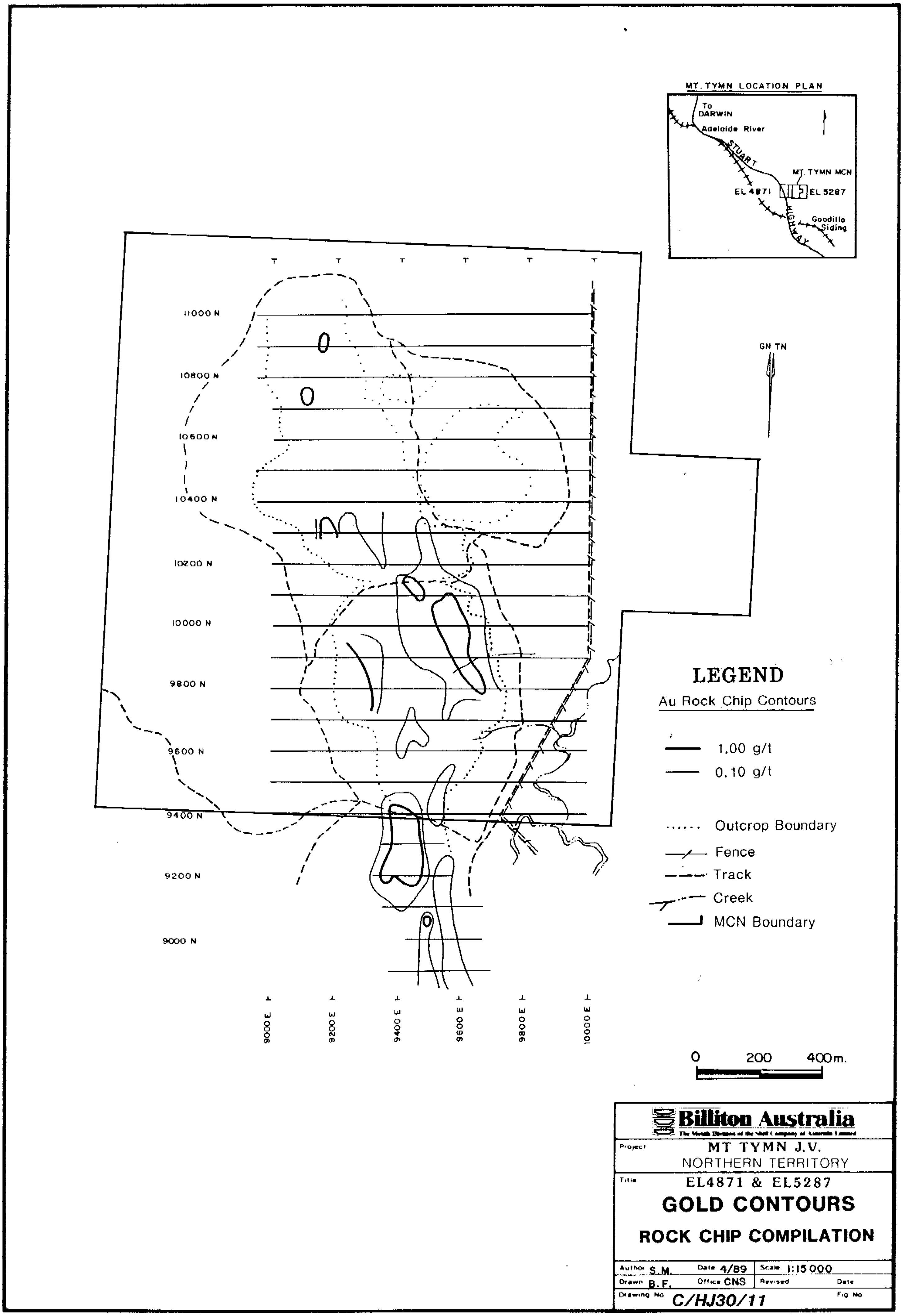

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