

DEPARTMENT OF MINES
SOUTH AUSTRALIA

REPORTED COPPER OCCURRENCE

Sections 272, 355, 443, 581, 582, Hd. Light, Co. Light

- W.J. Meaney -

by

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PLANS ACCOMPANYING THE REPORT

No.	Title	Scale
S.7813	Reported Copper Occurrence Sections 272, 355, 443, 581, 582, Hd. Light, Co. Light. 6 miles West of Kapunda.	1:250,000

Rept. Bk. No. 70/98
C.S. No. 4486
DM. No. 806/67

9th July, 1970

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ABSTRACT

The finding of a small piece of azurite in about 1890 has been reported and the occurrence investigated. A major regional fault, with which copper is associated further south, passes through the property. Careful examination of the projected fault zone, which cuts Saddleworth Formation shales, did not reveal any mineralisation in situ. Minor amounts of barytes were found near an old pit. The occurrence is of no commercial significance.

INTRODUCTION

Following a request by Mr. W.J. Meaney of Hamley Bridge, an inspection of Sections 272, 355, 443, 581 and 582, Hd. Light was carried out by the authors to investigate the origin of a piece of copper ore reported to have been found on the property. No sample was available, the discovery having been made by Mr. Meaney's father in about 1890, but azurite is reported to have been identified by the Kapunda School of Mines.

Two days were spent in May 1970, inspecting the property which is located about 6 miles west of Kapunda.

Mineral rights are privately owned.

GEOLOGICAL SETTING

The property is located on the Adelaide 1:250,000 map sheet (from which the accompanying plan is drawn) and the Kapunda 1:63,360 map sheet.

Rounded hills are underlain by gently dipping calcareous siltstones and carbonaceous shales of the Saddleworth Formation of Adelaide System Burra Group.

Within these rocks a major regional meridional fault, which forms the eastern margin of a broad alluvial valley near Freeling, passes through the property. Several small copper mines lie adjacent to this structure to the south of Daveyston including the Sheoak Log, Enterprise and the Ukaparinga Mines.

Flat lying Tertiary sands and conglomerates cap low hills to the west of the regional fault around Meaney Hill, a mile or so south of the property, and also in the vicinity of Pine Ridge near Stockport.

ECONOMIC GEOLOGY

No copper mineralisation was located on the property. The ~~strike~~ strike projection of the regional fault was examined closely with negative results. Minor amounts of barytes were found on a spoil heap adjacent to a small quarry in Section 272 near to the projected position of the fault.

SUMMARY & CONCLUSIONS

Sedimentary rocks of the Adelaide System underlie the property. These have been disrupted by a major regional fault with which copper is associated to the south.

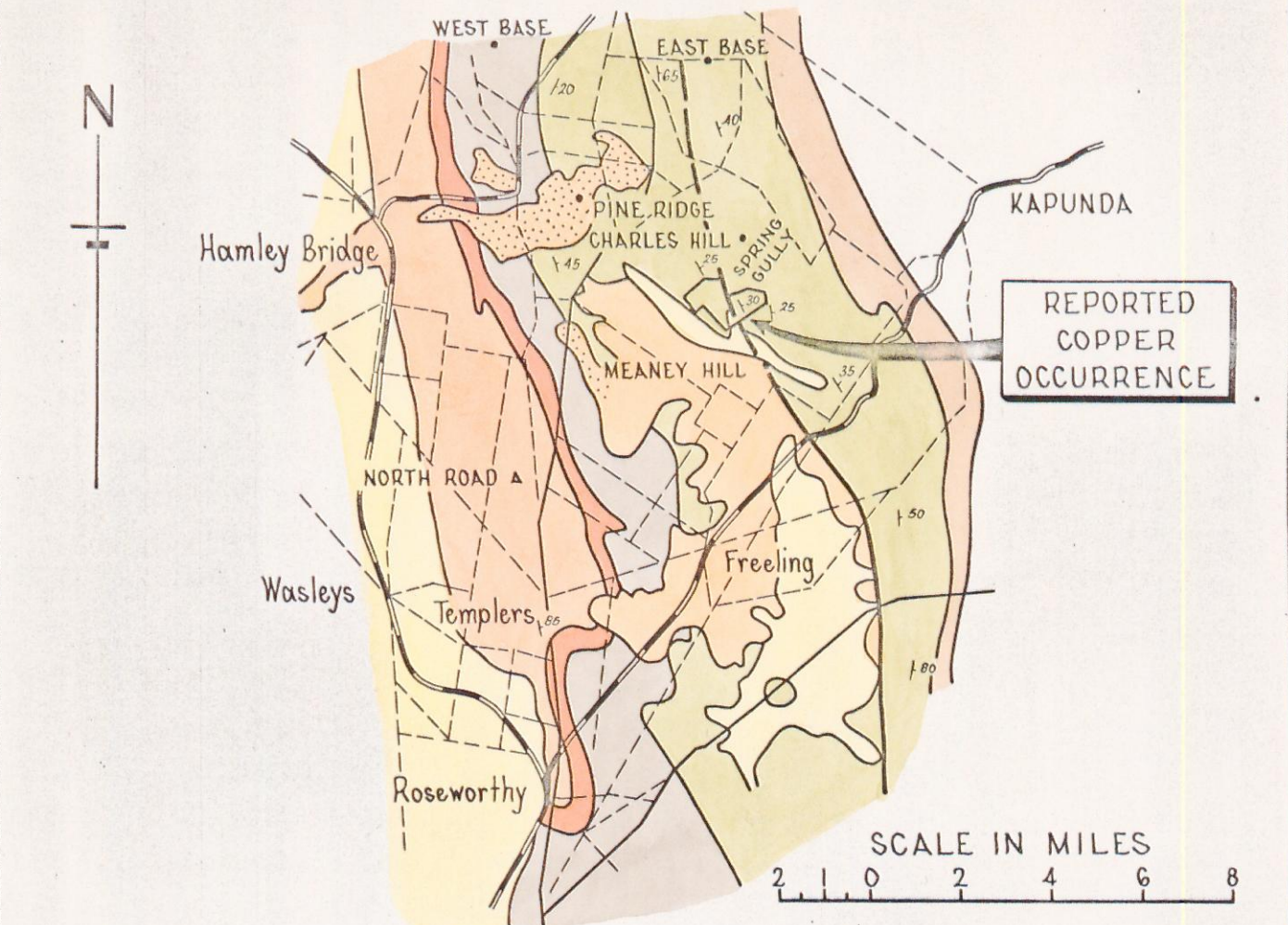
It is possible that minor pockets of carbonate ore exist associated with the fault but significant deposits are unlikely to occur.

Alternatively the specimen could have originated from the overlying Tertiary gravels although this is considered to be an unlikely source.

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SENIOR GEOLOGIST

PGM:MMN:CF:P4A
9.7.70

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LEGEND

CAINOZOIC

QUATERNARY

- Red-brown and pale yellow sand dunes and red-brown sandy clays, undifferentiated
- Undifferentiated white quartz sand and pebbly conglomerate, sandy clays in places. Ferruginous matrix.

QUATERNARY

PROTEROZOIC

ADELAIDE SYSTEM

TORRENSIAN

- Belair Sub-group: grey laminated siltstone, minor quartzites and arkoses
- Saddleworth Formation: Green calcareous siltstone, black carbonaceous shale - dolomite bands
- Woolshed Flat Shale: Grey laminated siltstones, minor quartzites.
- Rhynie Sandstone: Feldspathic fine to coarse grained sandstones & arkoses
- Stradbroke Formation: Laminated grey-green phyllite and schist

WILLOURAN

- Geological boundary
- Observed fault
- Inferred fault
- 1/65 Inclined bedding
- Main road
- Secondary road
- Railway

Geology from Adelaide 1:250000 map

Compiled: <i>M. G. M.</i> Drn. <i>R. H.</i> Ckd. <i>L. V. W.</i>		DEPARTMENT OF MINES – SOUTH AUSTRALIA REPORTED COPPER OCCURRENCE SECS. 272, 355, 443, 581-2 HD. LIGHT GEOLOGICAL PLAN		Scale: 1:250 000
				Date: 3 July 1970 Drg. No. S7813 Gk7