

DEPARTMENT OF MINES

SOUTH AUSTRALIA

P I G M E N T

by

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Supervising Geologist

Rept.	Bk.	No.	74/39
G.S.		No.	5355 ✓
D.M.		No.	715/72

31st January, 1974

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PIGMENT

Yellow and red ochres have been won from the oxidised zone of Adelaidean and Cambrian sediments from a few localities in the Flinders and Mt. Lofty Ranges. Production was intermittent and ceased entirely in 1953 when 4062 tonnes valued at \$34 346 had been recorded.

Recent laboratory and pilot scales tests showed that micaceous hematite from a large deposit at Malcolm Creek, 50 km northeast of Adelaide, could be upgraded by flotation and milling to a product meeting the specifications for welding rod coatings, structural paints and a pigment for concrete and ceramic products (Weir, 1968). A company has been formed to develop the deposits.

The old ochre workings are described in detail by Jack (1928).

At the Copper King Mine, 16 km north of Beltana, a massive deposit of siderite with small amounts of copper carbonate occurs in Cambrian limestones. The upper 30 m of the siderite body has been oxidised to yellow, brown and red ochres ranging from 30-60% Fe_2O_3 , 1-30% MnO_2 and CaO generally 1-3% with a ten value up to 20%. An appreciable content of salt was also present. Workings consist of shafts and shallow open cuts. Difficulties were encountered in obtaining products of consistent colour.

Yellow and golden yellow ochres containing up to 80% Fe_2O_3 have been won from an ironstone body to a depth of 10 m at the Maltese Cross Mine near Oodla Wirra. Workings below the 10 m level exposed decomposed slates with small irregular masses of ironstone indicating that

the Ochre deposit results from near surface weathering.

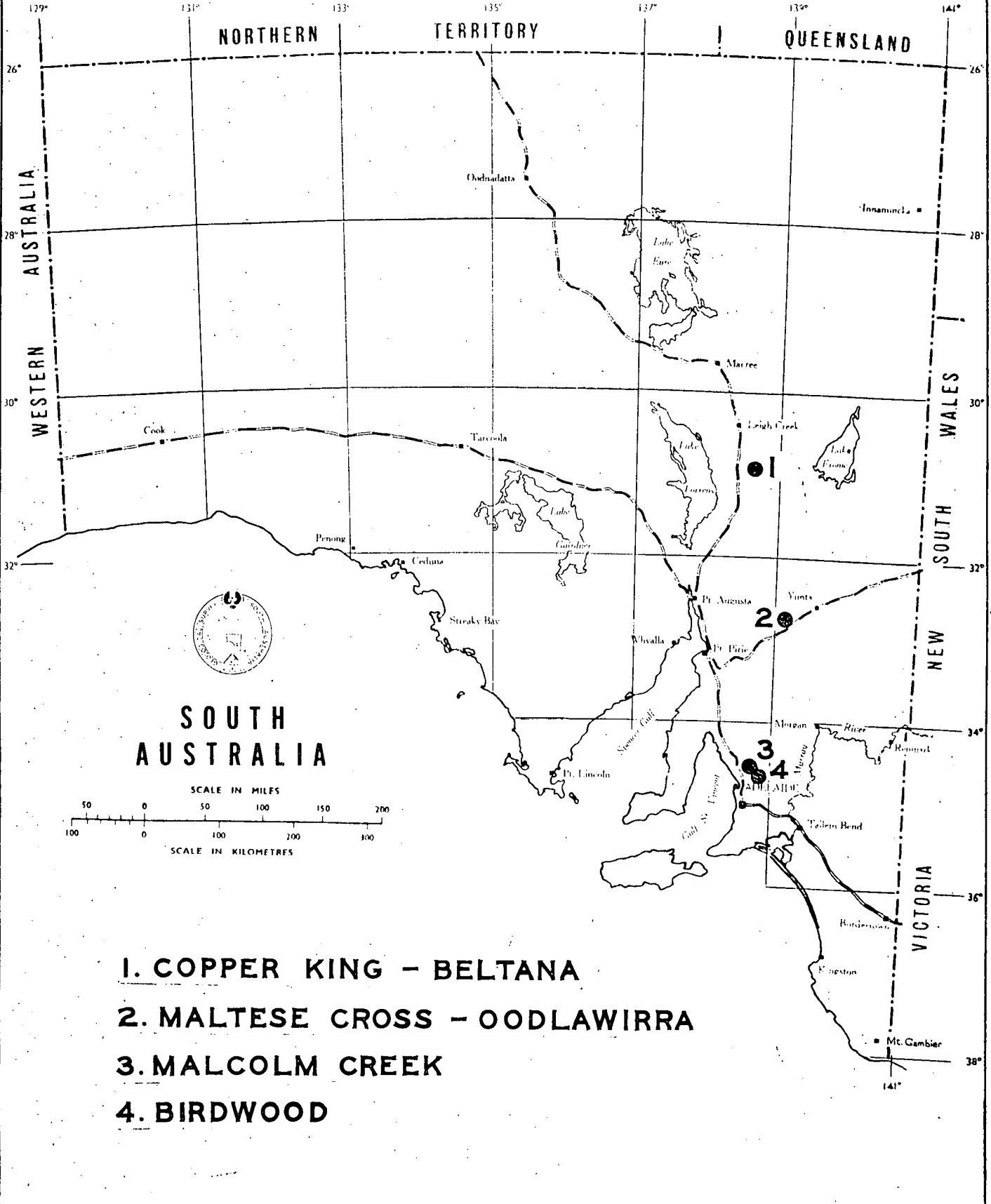
Five kilometres north of Birdwood a ferruginous gossan 150 m long is developed over a pyrite body. Yellow ochre has been won to a depth of 25 m from veins and seams up to 1.5 m wide contained in a moderately dipping oxidised formation up to 6 m wide.

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MNH:TG

REFERENCES

- Jack, R.L. 1928. Pigment minerals in South Australia. Bull. Geol. Surv. S. Aust. 13.
- Weir, L.J. 1968. Preparation of non oxide as a pigment. Min. Rev. Adelaide 125.



- 1. COPPER KING - BELTANA
- 2. MALTESE CROSS - OODLAWIRRA
- 3. MALCOLM CREEK
- 4. BIRDWOOD

DEPARTMENT OF MINES — SOUTH AUSTRALIA		Scale:
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