

DEPARTMENT OF MINES
SOUTH AUSTRALIA

General Report on

BLUE DOLOMITE OCCURRENCES

SECS. 3040, 3036, 1568, 3035, 3041, 1567, 721 & 5571.

RD. YATALA CO. ADELAIDE

(H. & L.G. DEPT.)

BY

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GEOLOGIST

MINERAL RESOURCES SECTION

GEOLOGICAL SURVEY

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Map No.

Title

Scale

68-134

Dolomite Survey
Pt. Secs. 721, 1567/8, 3035, 3041
RD. Yatala, Co. Adelaide
(H. & L.G. Dept.)

100' = 1"

D.H. 300/58
327/58
429/58

G.S. No 998 1008

Report No 46/151

12/5/59

MICROFILMED

General report on

BLUE DOLOMITE OCCURRENCES

SECS. 3040, 3039, 3036, 1568, 3035, 3041, 1567, 721 & 5571.

MR. YATALA CO. ADELAIDE

(H. & L. G. DEPT.)

1. ABSTRACT

Sediments in the above section belong to the Torrensian Series in the Adelaide System. They consist of thin dolomite beds interbedded with dolomitic slates, slaty dolomites and slates. Material occurring in section 3035 is thought to be similar to that in the above sections. This Section (3035) has been drilled for the Adelaide Cement Company and over 2,000,000 cubic yards proved, it is recommended the H. & L. G. Dept. negotiate with that organisation for testing the core.

2. INTRODUCTION

Approximately 500,000 cubic yards of dolomite or dolomitic type rock, reserves are required by the H. & L. G. Dept. for three Hotmix plant at Yatala.

All the above sections were visited and pt. secs. 1568, 3035 3041, 1567, 721 were surveyed by stadia and theodolite.

3. GEOLOGY

Sediments in all the following sections belong to the Torrensian Series in the Adelaide System.

(1) Pt. Secs. 1568, 3035, 3041, 1567, and 721 (D.M.327/58). The area surveyed in these sections is almost completely covered with a capping of travertine of variable thickness, through which the country rock outcrops poorly. Where the country rock was seen it was usually weathered to a yellowish shale. Some narrow quartzite and dolomite beds occur in Sec. 721, but since outcrop is limited these beds could not be followed for more than a few feet, and the structure in the area could not be worked out. Owners of the land have advised the writer that under the travertine capping and the narrow weathered zone, the rock is extremely tough. It is probable that the underlying rock is suitable for use in the Hotmix plant at Yatala, but some exploratory work in the form of pitting and trenching would be necessary before any adequate testing programme could be drawn up.

Section 5571 Two visits were made to this section the first time by the writer alone and the second time when the writer accompanied the Senior Geologist Mineral Resources Section. In the area marked out for geological

examination on the sketch map supplied by the H. & L. G. Dept., the rocks were found to be slates and dolomitic slates. Further east from the shaded portion thin blue dolomite beds were found interbedded with slates and dolomitic slates. No large reserves of blue dolomite were seen in the section, and bulk sampling would be needed to test the quality of the stone for use in the Hotmix plant.

Sections 3036, 3039, 3040. A brief inspection was made, of the rock outcropping in the creek, in section 3039. Sediments consist of slaty and massive dolomite and interbedded slates and dolomitic slates. Here again test samples would be needed.

4. CONCLUSIONS

Sediments in the area inspected belong to the Torrensian Series in the Adelaide and consist of blue dolomites, slaty dolomites, dolomitic slates and shales.

The blue dolomite beds are comparatively thin and are interbedded with more slaty members. Cleavage is strongly developed in all the areas visited, and where outcrop is poor, completely masks the bedding.

Bulk sampling and drilling of these areas would be necessary to obtain samples for testing for suitability for the Hotmix plant at Yatala.

Similar material to that found in these sections is thought to occur in Section 3035.

5. REMARKS

In 1954 Section 3035 was geologically mapped by C.J.K. Kingsbury (Assistant Geologist). In the same year G.F. Whitten (Senior Geologist) submitted a drilling programme for part of Section 3035 to test the area for cement shale. Nine holes in all were drilled totalling 6804 feet. Chemically the rocks were unsuitable, because of the high magnesia content. Reserves proved by this drilling were in excess of 2,000,000 cu yds. It is possible that the rock may prove suitable for use in the Hotmix plant at Yatala, and it is recommended that the H. & L. G. Dept. contact Adelaide Cement Co. with a view to obtaining their consent, to testing some of the remaining cores from the drill holes.

It is proposed to suspend further investigations in the sections listed in the title to this report till results of the proposed recommendation are known.

Mixon

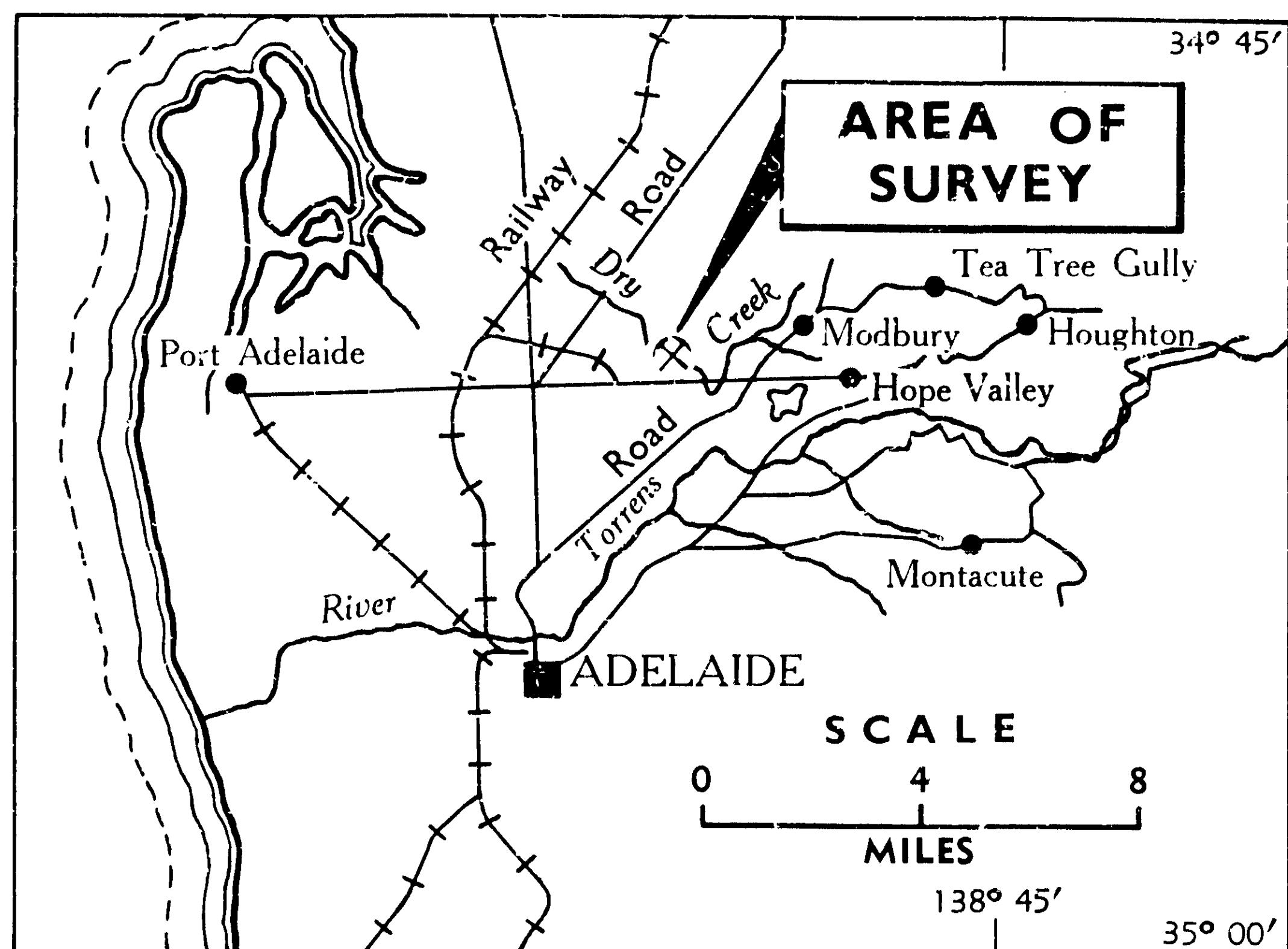
L. G. Nixon

CHIEF OF BUREAU

LEN:JAH.
12/5/60.

LOCALITY MAP

LEGEND



Alluvium

Red loam and clay soil cover

Travertine

Quartzite outcrop

Dolomitic slate outcrop

Strike and dip of bedding

Cleavage

Contours (5ft. intervals)

