

Report on

BLUE DOLOMITE DEPOSIT

Sects. 5394, 5548, Hd. Yatala, Co. Adelaide

(Riverview Quarries)

by

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MINERAL RESOURCES SECTION
GEOLOGICAL SURVEY

MINING REVIEW 114 : 131 - 133

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Map No.

61-68

Title

Geological Map
Blue Dolomite Deposit,
Sects. 5394, 5548, Hd. Yatala
Co. Adelaide (Riverview Quarries)

Scale

1" = 200 feet

Rept. Dr. No. 52/32
G.S. No. 1929
D.H. 879/60

20th February, 1961.

DEPARTMENT OF MINES
SOUTH AUSTRALIA

Report on

BLUE DOLOMITE DEPOSIT

SECS. 5394, 5548, RD. Y/ALMA, CO. ADELAIDE

(Riverview Quarries)

1. ABSTRACT

Sediments of the Tertiary Series including the Hentacuta Dolomite Formation and quartzite horizons have been outlined in the eastern portions of the above sections. Beds strike 345° and dip 55° westerly. An easterly striking transcurrent fault in the northern section has shoved the sediments eastwards, displacing the Blue dolomite formation into sec. 5548. Reserves of dolomite in the area outlined are estimated at eight million cubic yards. Further quantities of dolomite exist in sec. 5394.

2. DESCRIPTION

6 A geological and topographical survey of portions of the above sections was carried out for Riverview Quarries between 13-19th December, 1960. A graded and surfaced road gives good access to the existing plant, other tracks give access to most parts of the sections investigated. Topography of the area is youthful consisting of moderately steep spurs in the eastern portions but is rugged at the southern end nearing the Terrens gorge. The drainage is westerly in sec. 5548 and southerly in sec. 5394.

3. GEOLOGY

The general geology of the area is outlined on the Adelaide sheet of the Geological Atlas 1 mile series and on the locality plan included in Map No. 61-68 appended to this report. This survey has outlined the limits of the "lower" dolomite unit, sandwiched between the "upper" and "lower" quartzite horizons in secs. 5394 and 5548. Since this dolomite is the same as the formation mapped in detail and described in a

previous report H.R. 100 pp. 116-123, no detailed mapping of the formation was done.

The upper quartzite and a narrow sedimentary breccia horizon approximately 50 feet above the quartzite were used as marker beds to outline the general structure in the area mapped. The breccia horizon is approximately 2 feet thick with a brown matrix cementing dark grey shivers of chert. The pieces of chert breccia vary from the size of a pinhead up to 3 inches in length and $\frac{1}{4}$ inch thick. Some relatively large pieces of chert (1" diameter) have a discordal shape.

Although the main structure is relatively simple and consists of beds striking 348° dipping 55° westerly, the detailed structure is intricate because of drag folding and minor faults, these factors together with topography make the outcrop pattern complex in places. Flat southerly pitching drag folds are exposed in the quarry faces.

Only one relatively important fault was mapped, this is located in the central portion of Sec. 5548 striking south of easterly having a right handed movement which has shoved most of the "lower" dolomite beds into Sec. 5504 immediately to the east. No useful quantities of dolomite are contained in Sec. 5548 north of the fault.

An access road cut into the centre of Section 5548 from Anstey's Hill road exposed the "upper" dolomite sequence along its entire length to near the eastern boundary of the section.

A minor development of intricate structure can be seen in the road cutting to the north east of Station 14, where a narrow quartzite horizon is repeated by steep thrust faults dipping to the east and having a vertical displacement of about 7 feet.

4. WORKINGS

The main quarry and existing plant are located in the south eastern portion of Sec. 5548. At present the quarry is operated on three benches with the quarry faces averaging 60 feet. All the faces are being advanced southerly.

An access road has been cut into the centre of Sec. 5548 from Anstey's Hill road but possibly because of lack of good quality stone being found in the road cutting further development in the area was stopped.

Some clay was being removed from the creek bed at the time of the survey.

5. RESERVES

Reserves of dolomite in the area between the fence and upper quartzite horizon are estimated at about 8 million cubic yards allowing for a batter of 60° on the perimeter of the area outlined to the 50 foot contour level.

Further large reserves of blue dolomite extend into Secs. 5404 and 5395.

6. CONCLUSIONS

Sediments in the area mapped include the Montezuma dolomite formation with quartzite and phyllites. These sediments are similar to those mapped on the southern side of the Torrens gorge.

The beds strike 348° dip 55° west forming the west limb of a large anticlinal structure on which drag folds and faults have developed which combined with topography produces complex outcrop patterns.

The northern extension of the dolomite horizon has been displaced to the east into Sec. 5404 by a transcurrent fault with right hand movement (i.e. north block has been displaced easterly).

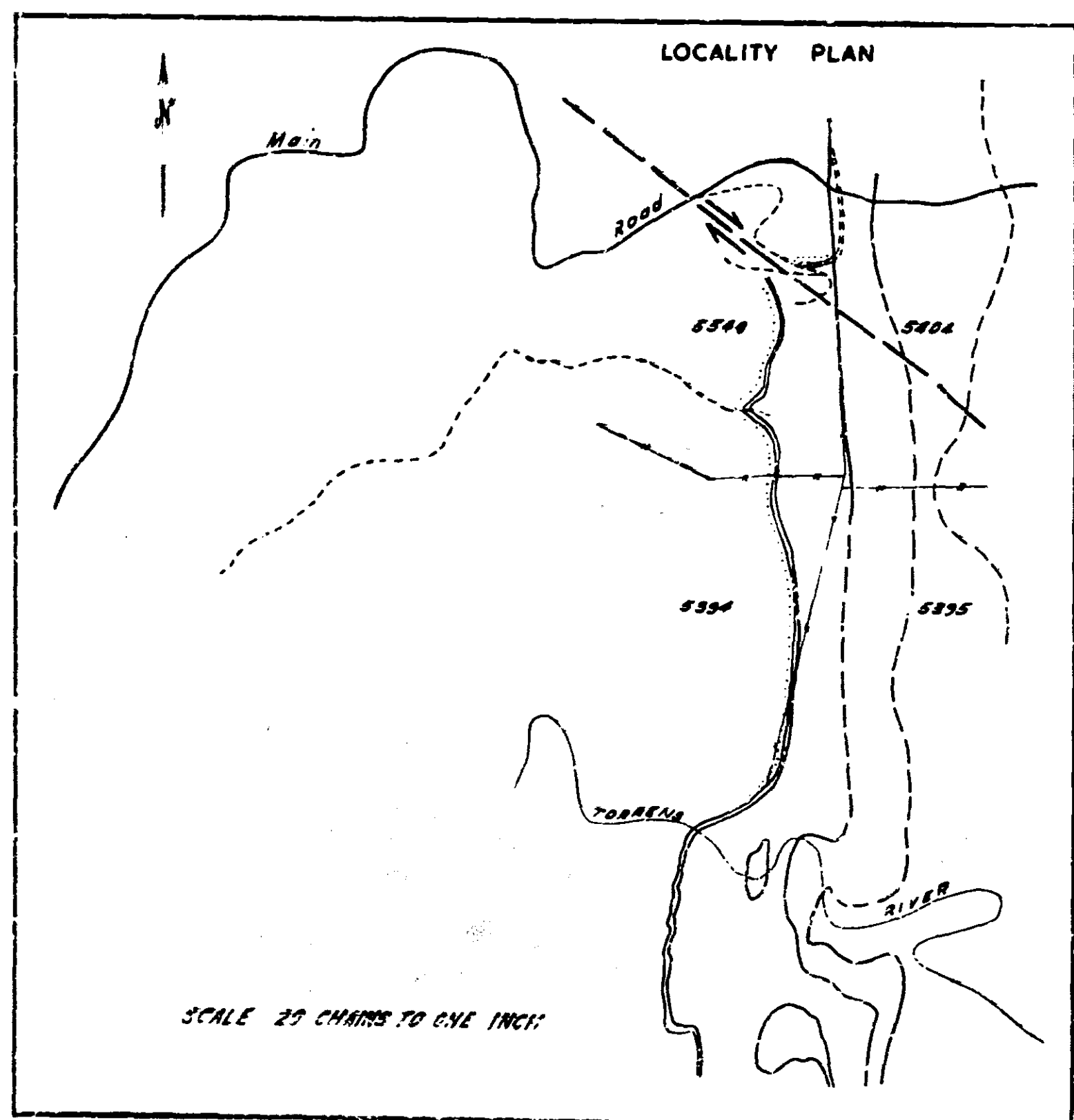
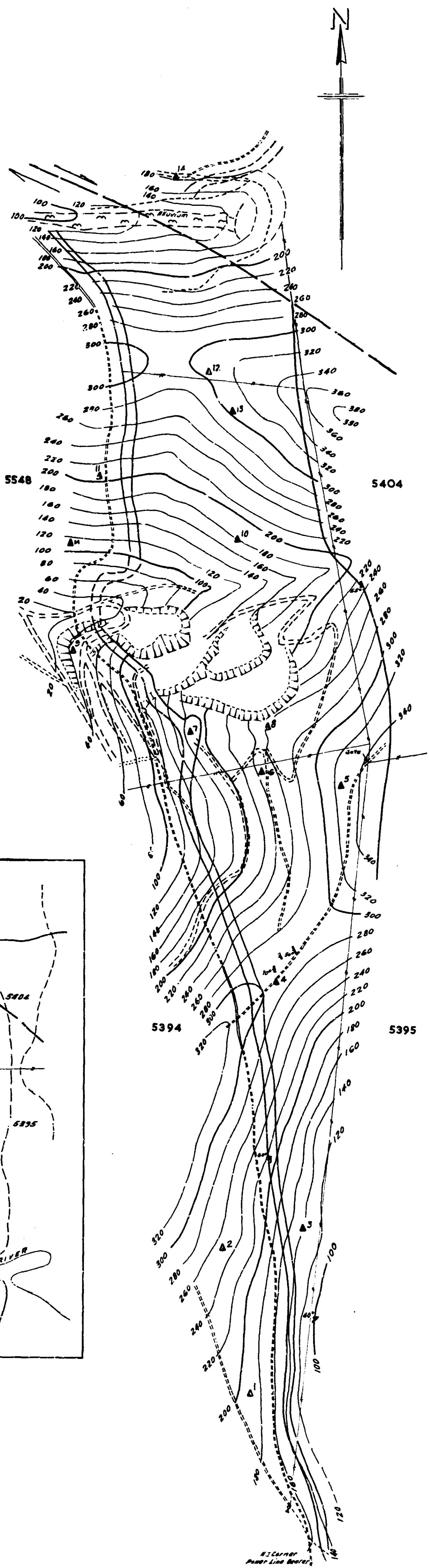
Reserves are estimated at eight million cubic yards;
further quantities of blue dolomite exist in Secs. 5404 and
5395.

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MINERAL RESOURCES SECTION

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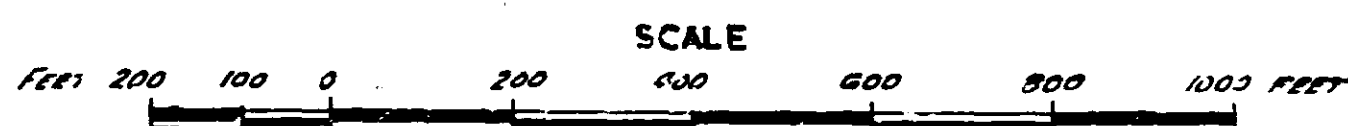


LEGEND

- Upper dolomites and sedimentary breccia.....
- Upper quartzites.....
- Lower dolomites.....
- Lower quartzites.....
- Phyllitic slates.....
- Geological boundary observed.....
- Geological boundary inferred.....
- Quarry or pit.....
- Road.....
- Fault.....
- Fence.....
- Strike and dip of beds.....
- Survey station.....

Contour interval 20'

Ref. S.F.B. 167



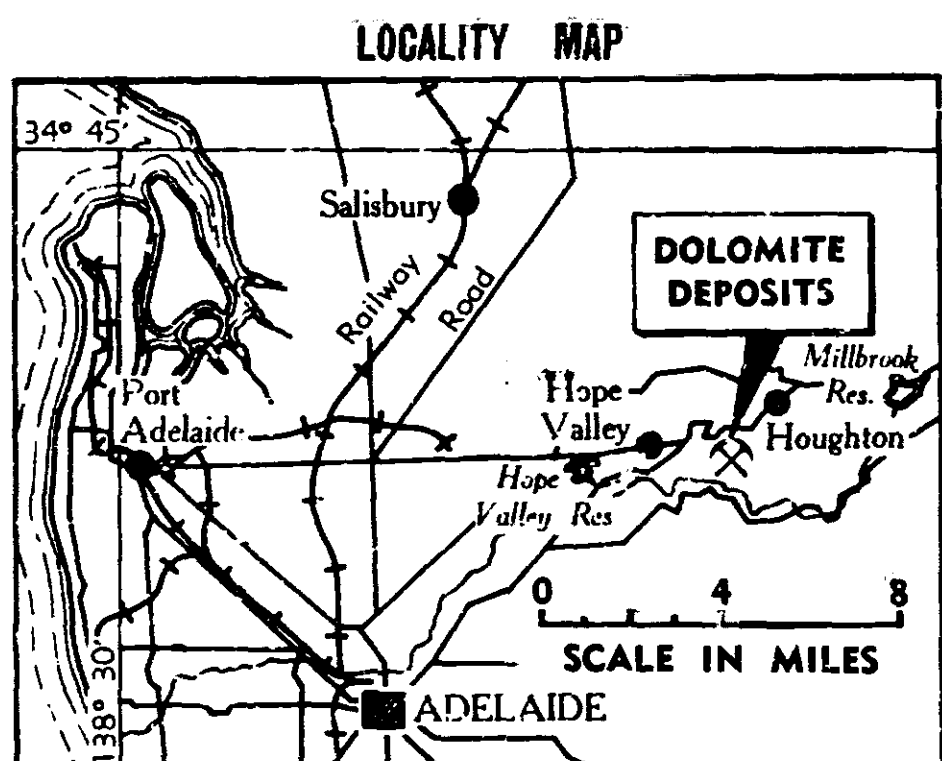
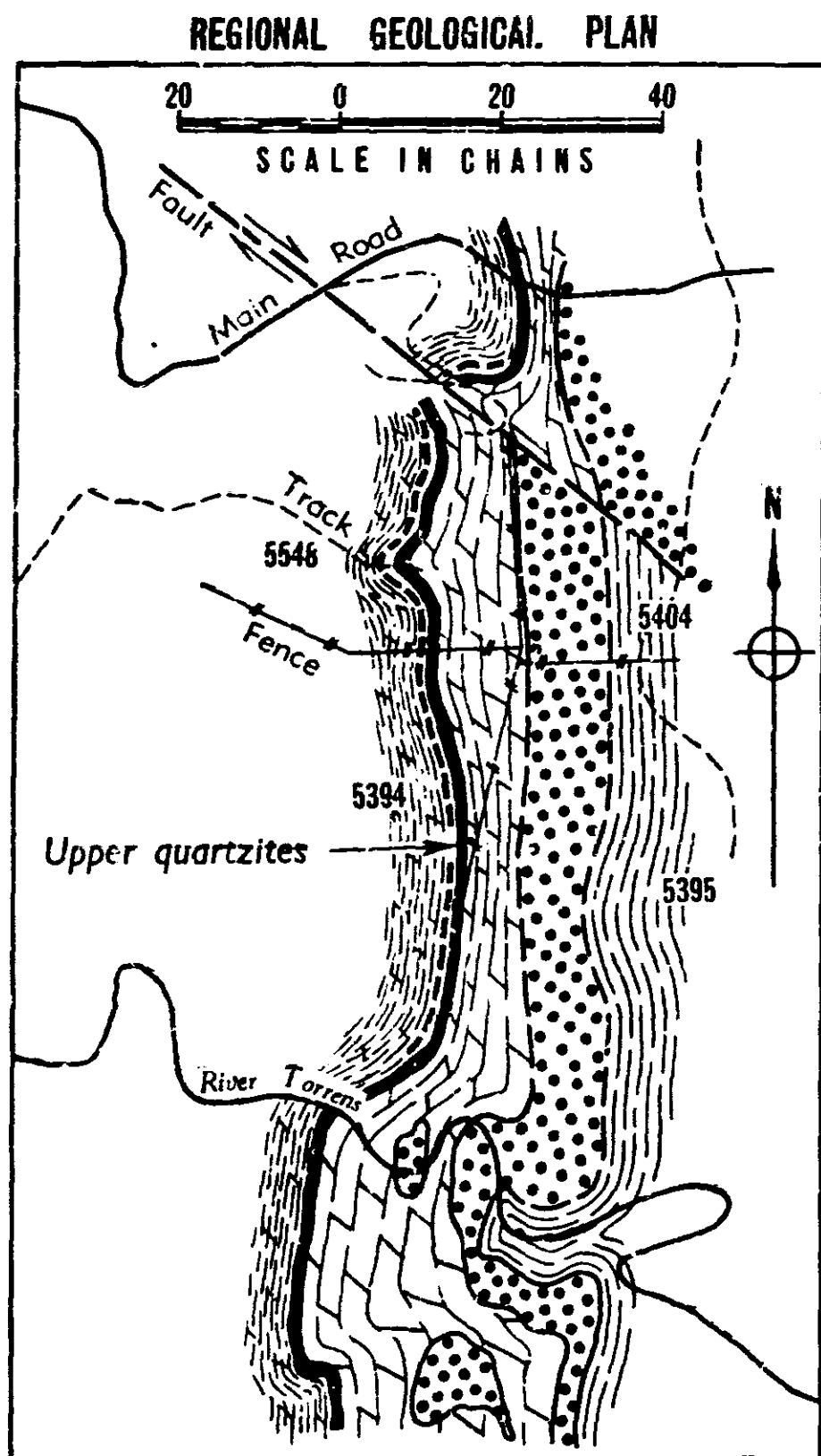
S.A. DEPT. OF MINES

GEOLOGICAL MAP
BLUE DOLOMITE DEPOSIT
SECS. 5394, 5395, 5404, 5548, 5549, 5550, 5551, 5552, 5553, 5554, 5555, 5556, 5557, 5558, 5559, 5560, 5561, 5562, 5563, 5564, 5565, 5566, 5567, 5568, 5569, 5570, 5571, 5572, 5573, 5574, 5575, 5576, 5577, 5578, 5579, 5580, 5581, 5582, 5583, 5584, 5585, 5586, 5587, 5588, 5589, 5590, 5591, 5592, 5593, 5594, 5595, 5596, 5597, 5598, 5599, 5600
(RIVERVIEW QUARRIES)

Approved: _____
Director of Mines

61-68
H.S.

Date 27.2.61



LEGEND

