

DEPARTMENT OF MINES  
SOUTH AUSTRALIAIron-Ore Deposit  
Near Gladstone.  
(Sect. 182, Hd. Yangya)

by

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ENGINEERING GEOLOGY AND MINERAL RESOURCES SECTION  
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Map ReferenceTitleScale

55-331

Iron-ore Deposit near Gladstone  
(Sect. 182, Hd. Yangya)

40 ft. to 1 inch

Report ReferenceDateGS 373  
41/83

12th October, 1955.

DEPARTMENT OF MINES  
SOUTH AUSTRALIA

Iron-Ore Deposit  
Near Gladstone

(Sect. 182, Hd. Yangya)

1. LOCATION

This deposit is situated approximately 4 miles N.N.E. of Gladstone by road, in section 182, Hd. Yangya (see locality maps 1 and 2). The deposit is on farming property owned by a Mrs. Andrews, known as "The Quarries." The land was formerly owned by Mrs. G. R. Hicks, at whose request the examination of the deposit has been carried out. Mineral rights reside with Mrs. Hicks.

2. HISTORY AND PREVIOUS REFERENCES

The quarry was worked from 1895 to 1903 (inclusive) by the Broken Hill Pty. Co. Ltd. for flux in smelting operations at Port Pirie (Iron Knob production rose sharply in 1903). The total quantity of material considered to have been removed from the deposit was of the order of 71,000 tons (railway estimate).

The deposit is mentioned in H.Y.L. Brown's "Catalogue of South Australian Minerals (1893) and in his "Records of the Mines of South Australia," 4th Edition (1988). It is also mentioned in the list of smaller occurrences in R.L. Jack's "Iron Ore Resources of South Australia," Bulletin 9, G.S.S.A. (1922) where ore occurs in quantities insufficient to justify examination." Since then, the only mention has been a report by L. Mansfield, Inspector of Mines and Quarries, "Ironstone Deposit-Gladstone - Hick's Quarry," dated 25.2.46.

3. GEOLOGY

The land on which the quarry is situated slopes down from a prominent north-south striking quartzite ridge. The latter is situated slightly under half a mile west of the quarry. Immediately east of the quartzite ridge, there are traces of calcareous shales.

4. THE WORKINGS

These are in the form of an open-cut trending approximately north-south. At the time of the visit (21.9.55), the

workings were in use for water storage. The maximum depth of water in the open-cut was about 20 ft. According to Mrs. Andrews, owner of the property, slumping of overburden has occurred from time to time.

Mineralised rock was observed (a) where the creek bed enters the workings at their south end and (b) on the western side of the workings (see accompanying sketch-plan). Apart from these two localised areas, no more ironstone was noted.

## 5. PRESENT INVESTIGATIONS

From an examination of the workings, it was concluded that the ore-body could continue (a) in depth or (b) to the south.

In regard to (a), this could not be determined at present owing to the fact that the workings contain up to 20 ft. of water.

To obtain some idea in regard to (b), an examination of the ground along the strike of the ore-body to the south was made. In the ploughed field next to the quarry, a number of ironstone floaters were observed. These may have arisen through blasting operations in the workings. The continuation of the strike of the ore-body was followed approximately 150 yds. across this ploughed field to a dried-up subsidiary creek-bed (see locality map 2). Here, red-brown clay was noted overlying decompose fine to medium grained sandstone. This subsidiary creek passes into a main creek (also dried-up) where decomposed light brown sandstone outcrops. Occasional ironstone floaters were observed here (about 150 yds. from the workings), but there was no sign of mineralised rock in situ.

An approximate estimate of reserves available per 100 ft vertical depth if mineralisation were to continue in depth is 400,000 tons.

## 6. CONCLUSIONS

Continuity of the ore-body is improbable for any great distance. Its behaviour in depth can not be assessed at present owing to the presence of up to 20 ft. of water in the workings. The strike of the ore-body was followed to the south but no sign of mineralised rock in situ was noted in a dried-up creek-bed

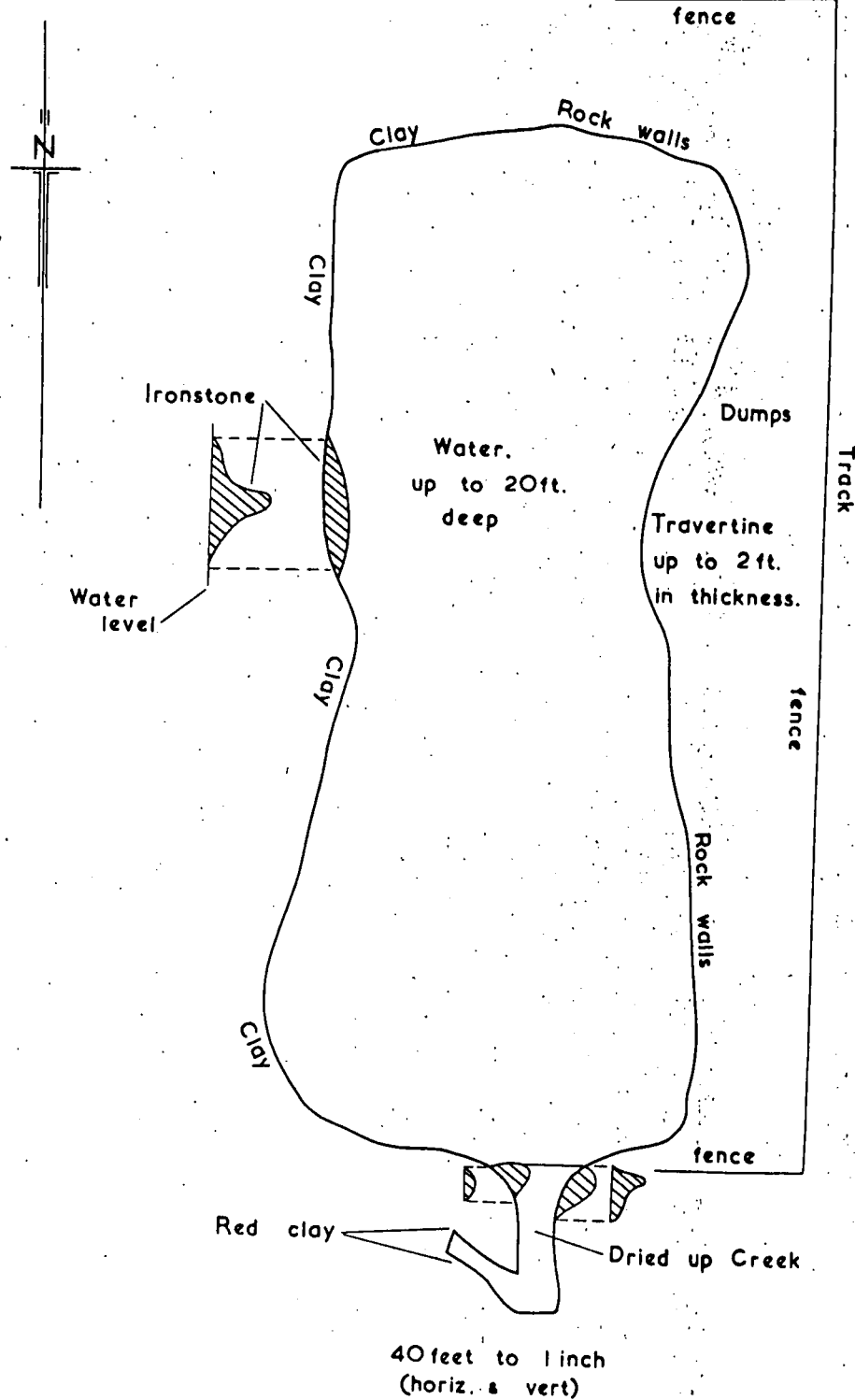
150 yds. away from the workings.

It is considered that the deposit is probably of limited economic value at present, but geophysical work could be carried out to check possible extensions of the ore-body.

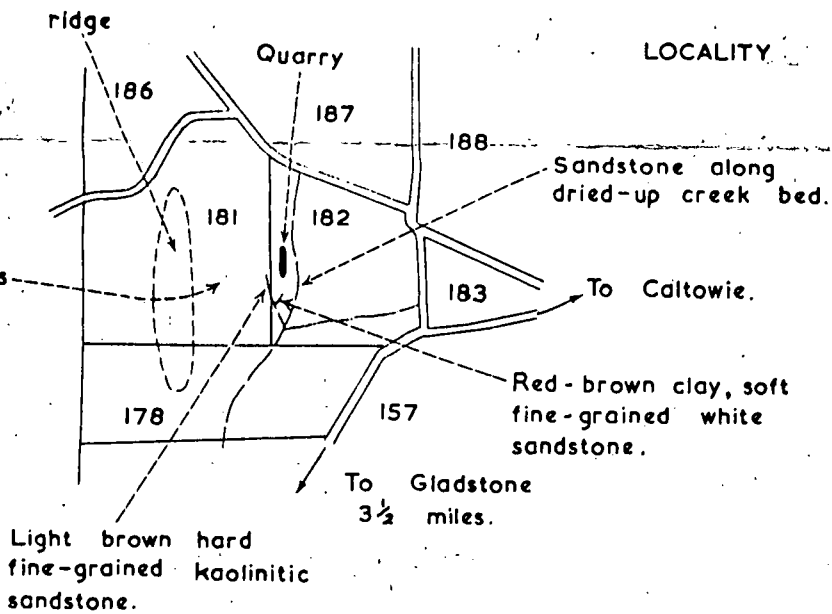
At present, the workings are fulfilling a useful task for water storage purposes.

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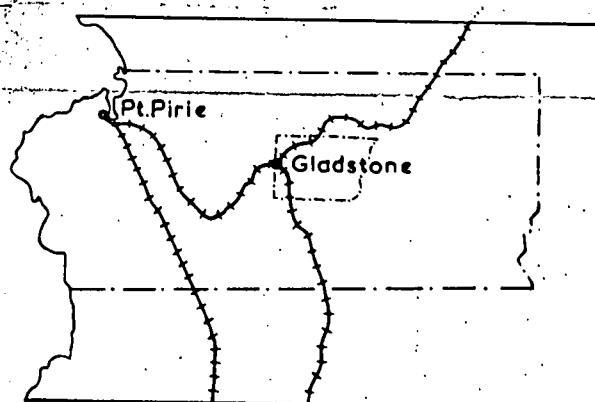
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SECTION.



LOCALITY MAP 2



LOCALITY MAP 1



To accompany report by D.S. BUIST.

S.A. DEPARTMENT OF MINES

IRON ORE DEPOSIT  
near GLADSTONE

Hd. YANGYA Sect. 182

Approved \_\_\_\_\_

Passed \_\_\_\_\_

Scale \_\_\_\_\_

Director

Gen. Mgr.

Asst. Dir.

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2/9/55