

DEPARTMENT OF MINES
SOUTH AUSTRALIA

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REPORT NO. AB-9

GYPSUM OCCURRENCE - HUNDRED OF HAINES - KANGAROO ISLAND

by

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MICROFILMED

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GYPSUM OCCURRENCE - HUNDRED OF HAINES

KANGAROO ISLAND

LOCALITY:

Mineral lease No. 47, Sections 48A to 48K, Hundred of Haines, 20 miles south of Kingscote, Kangaroo Island.

PREVIOUS REFERENCES:

Geological Survey Bulletin No. 8 "The Salt and Gypsum Resources of S.A." by Dr. R.L. Jack, B.E., Assistant Government Geologist.

MODE OF OCCURRENCE:

A large lagoon approximately 500 acres in extent occurs adjacent to the sea coast separated by a high sand ridge. The lagoon is held under Miscellaneous Salt Lease by the Australian Salt Company, and has been worked for many years as a source of salt.

Dr. Jack, in Geological Survey Bulletin No. 8, makes reference to a thin gypseous crust which forms each season in conjunction with the salt. No reference is made to gypsum underlying the salt. Whilst on a visit to investigate the salt production potential of this locality the writer's attention was drawn to two prospecting pits, one in Section 48G and the other in Sec. 48K, sunk presumably by the holding company many years ago.

These pits are in a well preserved condition, with a timbered collar, and appear to be six feet in depth. At the time of this visit (June, 1954) the lagoon was under twelve inches of water, so that close examination of the pit walls was not possible.

By probing with an auger however, it was found that twelve inches of gypseous mud overlays what appeared to be three feet of hard crystalline gypsum, too difficult to bore by hand augers.

An analysis of the crystalline gypsum taken from the walls of the pits showed a content of 91% CaSO_4 and 1.3% NaCl . Over what portion of the lagoon the gypsum extends it is not possible to tell without test boring or pitting.

RECOMMENDATIONS:

In view of the indicated high grade and potentially wide extent of gypsum occurring in this lagoon it is recommended that closer investigation be made during the dry season.

As the lake surface is in many places soft it is recommended that test pits rather than bores be sunk as a boring plant is likely to become bogged.

Due to the high and uneconomic cost of producing salt and shipping it to the mainland from this source the Australian Salt Company has ceased operations and is now dismantling the plant and buildings. The leases have not yet been surrendered.

16.7.54.

(C.M. Willington)
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