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Geological Inspection of
Iron Ore Prospects Pandurra Station, Iron Knob District,
Cty. Manchester.

by

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Plan reference: Corunna One-mile Geological Map

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(A. V. & R. Kittel.)

INTRODUCTION:

Messrs. A. V. and R. Kittel of 7 Fern Street, Port Augusta reported occurrences of iron ore and ochre on Pandurra Station and suggested they be paid a reward. After an interview at Port Augusta it was arranged that R. Kittel should act as guide in locating the prospects, which he did on 13. 4. 55. Another visit and search was made on 4. 5. 55, and preliminary notes were forwarded to Adelaide office on 27. 4. 55 and 6. 5. 55.

HAEMATITE LODGE:

The first prospect visited was 3 miles south of the Lower Nine Mile Dam on the Eyre Highway, Corunna One-Mile sheet. The dam is 11 miles north-east of Iron Knob and the prospect 10 miles east-north-east (direct) of Iron Knob, at Lat. $32^{\circ} 41' 45''$ S, Long. $135^{\circ} 19' 30''$ E (as scaled from map)

Archaean Archaean Complex argillaceous schists outcrop on a low rise about a quarter of a mile across.

Within them is the indistinct outcrop of a small lode approximately 400 feet long, up to 5 feet wide, striking northwest and of uncertain dip. It consists of massive and micaceous haematite, with vein quartz, some parts appearing to be almost pure haematite. The appearance is that of a hydrothermal fissure vein.

Kittel had not seen the place for 27 years, and could not locate another lode reputed to occur nearby. A quick reconnaissance failed to locate even floaters of iron ore

away from the one lode seen.

The lode is too small to be of value as a source of iron ore. It may find application for use in pigments or flax.

OGRENI

A large deposit of yellow ochre was visited, about 3 miles northeast of the haematite lode, in breakaway country. The ochre is probably a highly weathered amphibolite and is of too poor a quality to be of value.

LIMONITE

Two small outcrops of iron oxides were examined half a mile northwest of the Lower Nine ^{mile} Run (see above). These are close to a small plug of gabbro (shown on the Coruna One-Mile Sheet) in breakaway country, the surrounding rocks being sandstones, shales, and quartzites, mapped as Archaean, but strongly resembling Anelide System types.

The ferruginous outcrops consist mainly of hard brown limonite which is drusey and contains many patches of trover-tine and clay, and cavities. The outcrops have a sheeted structure of approximately horizontal dip and probably are lateritic "cap-rocks" over other plugs of ultrabasic intrusive rocks. The gabbro plug is quite fresh and unaltered and has no "capping".

The limonite would not be of economic value.

The vicinity was cursorily examined, but no further likely outcrops were seen. There are several white clay (shale weath red "in situ") showings which may be worth further investigation.

SUMMARY:

Two iron ore prospects and a yellow ochre deposit were reported by E. W. and E. Kittel of Port Augusta.

The prospects and the area surrounding them, which are adjacent to the Eyre Highway, 8 to 11 miles east of Iron Knob, were cursorily examined. None of the prospect appear to be of value as sources of iron ore or ochre, but several

possible sources of white clay were seen.

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25. 7. 55.