

1921

MIN/GEO/1#11

C.S.

Scientific.
(Geological)
Minerals.

No. 509/21

D^r H.A. Baker

SUBJECT.

1921

11th July

Previous Paper.

Report by D^r H.A. Baker.

On occurrence of certain Minerals other than coal and oil.

MINUTES.

Minutes from D^r Baker with report dated 11th July 1921. -----

Encl C

H.E. the Governor,

Submitted.

2. Your Excellency has already received a duplicate copy.

A.C.S.
A.C.S.11/7/21.

Despatch to S. of S. No 524 of 11th July 1921

Encl C

Subsequent Paper.

(1)

CS. 509/2

FALKLAND ISLANDS.

No. 54.

GOVERNMENT HOUSE,

STANLEY,

12th July, 1921.

Sir,

With reference to my despatch, No. 47, of the 20th of June, I have the honour to transmit herewith a report by Dr. H. A. Baker on the occurrence of certain minerals, other than coal and oil, in the Falkland Islands.

In duplicate.

I have the honour to be,

Sir,

Your most obedient,

humble servant,

J. Middleton.

THE RIGHT HONOURABLE

W. L. S. CHURCHILL, M.P.,

SECRETARY OF STATE FOR THE COLONIES.

FALKLAND ISLANDS.

C.S. No.....

MINUTE PAPER.

Departmental Number.

From Government Geologist

XV B

Date 11 July 1921.

To Hon. Col. Sec.

SUBJECT.

Submits three reports dealing with progress of Geological Investigations in the Falkland Islands.

Reference Numbers. }

Sir,

I have the honour to submit herewith copies (3 of each) of the following reports:-

1. Report on the occurrence of certain minerals, other than coal and oil, in the Falkland Islands.
2. Report on the possibility of the occurrence of Coal in the Falkland Islands.
3. Report on the possibility of the occurrence of Liquid Petroleum in the Falkland Islands.

CS. 500/21

CS. 511/21

I have the honour to be
Sir,

Your obedient servant,
Herbert A. Baker,
Government Geologist.

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C.S. 509/21

REPORT ON THE OCCURRENCE OF CERTAIN
MINERALS, OTHER THAN COAL AND OIL,
IN THE HAWAIIAN ISLANDS.

Stanley,

Falkland Islands,

31st May, 1931.

REPORT ON THE OCCURRENCE OF CERTAIN MINERALS, OTHER THAN
COAL AND OIL, IN THE FALKLAND ISLANDS.

Sir,

I have the honour to submit herewith a report on the occurrence of certain minerals in the Falkland Islands.

1. GLASS SAND.

Much good white quartz sand occurs on certain beaches in the Islands. It is produced, usually, by the weathering of the white Devonian-Carboniferous quartzite and sandstone. It varies in coarseness from place to place, but is usually fine-grained and appears to be very well graded (i.e. the sand-grains are very uniform in size). It is not sharp sand, the sand-grains being well rounded. The appearance of much of this sand suggests to me that it would probably serve well for the manufacture of glass, but it is not possible to say definitely until chemical and mechanical analyses of samples have been made. I have myself made a special study of the methods of making mechanical analyses of sands (Geological Magazine, 1928, "On the Investigation of the Mechanical Constitution of Loose Arenaceous Sediments by the method of Elutriation") and am collecting samples of Falkland Islands sands which I propose to examine on my return to England.

Of numerous localities the following are noteworthy as being likely to produce good glass sand:- Yorke Bay near Port Stanley, Elephant Bay (Pebble Island), Carcass Island, New Island, Carcass Point (east of Fox Bay, West Falkland), Port Stephens.

E. KAOLIN.

2. KAOLIN.

Thin seams of impure kaolin, of poor quality, occur in some places, though not abundantly, the usual mode of occurrence being on low ground at the foot of a quartzite ridge. The Devonian-Carboniferous quartzites and sandstones are somewhat felspathic and the decomposition of the feldspars has produced the kaolinitic material. The clay is very gritty from its inclusion of quartz-grains and it is doubtful whether the material is of any commercial value. A sample will be forwarded to the Imperial Institute for examination.

3. IRON ORE.

Red iron-ore occurs in the Falklands. It is seen either as earthy forms of limonite, found mostly in the swamps and bogs of the "camp", or as siderite (chalybite). The latter usually occurs on somewhat arid ground. A sample of siderite from the Falklands has already been analysed at the Imperial Institute and reported favourably upon. The iron-ore of the Falklands is, however, very sporadic in its occurrence, and is found only in small, local patches, not more than a foot or so in diameter, and a few inches in thickness. It would take a long time to collect any quantity of it, and the question of its transport over the "camp" would be a difficult one.

At various times samples of Iron-pyrites have been sent for analysis to the Imperial Institute from the Falklands. This mineral is, however, surprisingly rare, so that specimens of it are regarded as great curiosities. It would appear that, in the past, mineral specimens from the Falklands have been sent to the Imperial Institute for examination, not because the minerals occur in abundance and may possibly be of value commercially, but because they have been regarded as rare specimens likely to interest scientific authorities at home.

4. GRAPHITE

4. GRAPHITE.

I have already discussed the graphitic shale of the Falklands in my report dealing with the possibility of the occurrence of coal. The graphitic material which I have seen is quite worthless, and I have no knowledge of the existence of graphitic segregations.

I have the honour to be,

Sir,

Your obedient servant,

Herbert A. Baker
D.Sc., M.Sc., D.I.C., F.G.S.

Government Geologist.