



EAST AFR. PROT

1607101

REC'D
REC'D 19 APR 51

Governor
Field 261

1913

1 Apr 13

Last Previous Paper.

Govt
1913

MR MOYNAGH

MICA LEASES

589

1st rep
banati now the
and trusts action
for
approved.

Mr. B. Stomby.

The Governor granted Messrs. Moynagh
and Paquelin leases of 320 and 160 acres
respectively, and requests approval.

? approve

and inform Mr. Paquelin officially.

Mr. B. Stomby

W.F.D. 21.5.13

I find nothing here as to royalty. We
had better ask a attorney, say we
assume the 10% on output stipulated on
10.8.3 has been inserted in the leases.

Mr. Stomby stated the Wakanha
with regard to the land would be
a good way if it is done.

Mr. Green should see
and ask for a copy of the
lease for review here. I am H. J. R. 623.5.13
carrying over it). W. 21.5.13 22.5.13 M. 26.5.13

160 154 Wt 20 807-88
41.000- 11/11 A.R.E.W.

Next subsequent Paper.

12931/14

16777
19 MAY 13
~~COLONIAL OFFICE~~
1st AFRICA PROTECTORATE.

GOVERNMENT HOUSE
NAIROBI,
BRITISH EAST AFRICA.

No. 261.

APRIL 12th, 1913.

594

SIR,

*Yours
W.M.S.
Commissioner
Mines
April 8th*

I have the honour to refer to your despatch No. 174 of 7th ultimo, relative to the lease to Mr. Moynagh of certain land in the Protectorate for the purpose of mining for Mica, and to transmit herewith for your information a copy of a report by the Commissioner of Mines on the subject.

2. That officer by a verbal explanation to me has supplemented his report, and, for the reasons given thereto, and with due regard to paragraph 3 of your despatch referred to above, I have sanctioned the grant of leases for the areas recommended, and trust that my action will meet with your approval.

I have the honour to be,

SIR,

Your humble, obedient servant,

H. G. G. Bagnall

1. ARCHIVE, THE, KENYA

2. LIBRARY FOR THE COLONIES

INCLOSURE

In Despatch No 26 of April 18th 1913.

P.



591

COPY.

Sir,

Moynagh - Paqualin Mica finds.

I have the honour to submit the following report on the Mica deposits discovered at Kikamea Hill, Mukaa, Machakos District and which were recently inspected by me.

The mica is found in every case in what are called pegmatite dykes in fine grained mica hornblende schist. As is usual in metamorphic areas the dip and strike of the schist varies a good deal, but the strike may generally be stated as being North and South and the strike of the mica-bearing dykes is generally East and West varying probably 30° to the North and South of that direction and in width they vary from 5ft to 20ft. To make the matter clear it may be well to state that a pegmatite dyke is a vein of granite of a peculiar character. The constituents of ordinary granite are quartz orthoclase, felspar, and mica, and in the ordinary granite we are accustomed to see in Europe, for instance, these three minerals are intimately mixed in the rock in the form of small crystals. In a pegmatite, however the minerals for some reasons take

the Hon. Chief Secy
Nairobi.

take on a macro-crystalline form one finds great masses of pure quartz several feet across in one place, then a great mass of felspar and now and again a large crystal of mica, the volume of the mica being much less than that of other minerals.

The practical result of this is that to extract the mica vast amounts of quartz and felspar have to be removed, and the whole question of profit hinges on the frequency of the mica crystals or as miners term them "pockets, or books" of mica. The majority of minerals (other than those found in alluvial deposits) in various igneous or sedimentary or metamorphic rocks occur in veins or reefs and the usual procedure is to sink a shaft in the reef and follow its downward course by headings or drives and this procedure is adopted in order to minimize the removal of waste material. In mining for mica which occurs under the conditions above described a shaft and headings would be of little use, because a heading only exposes a limited face and a great deal of mica would be missed. The only alternative is to open the face of the hill side and remove the whole of the dyke piece meal to as great a depth as possible, cutting back the face into a series of steps as the quarry face gets too high to work at one operation. When one considers that with luck the mica only constitutes about 1%

of the rock the business is from a commercial point of view. The mineral when extracted is split into slabs about $1/32"$ thick and cut into square pieces as large as the slab will admit, the wastage

in cutting is about 50%. It is possible that the waste may be profitably ground up into mica-dust, which is used for lubricating purposes.

When one digs down into a dyke a considerable amount of weathered mica is usually found in loose slabs within a few feet of the surface and this is due to resistance mica has the usual effects of weathering, the quartz apparently breaks up and the felspar decomposes into clay but the mica remains intact, but badly stained with iron between the layers.

This weathering considerably reduces the value of mica, and is the usual cause of what is called "spotted mica". As one digs down the spots disappear and a good quantity of green Muscovite is found.

A considerable amount of work has been done, most has been put in on the site of the original discovery, which has apparently quite given out for the moment, about 10 other excavations have been made but mostly outside the limits of the original prospecting area, but within the area pegged out for lease, and several are on the prospecting areas pegged out by

With regard to the city can be attributed to the simply opened up the spot upon which Mr. Zeuner ^{earlier} mica some 18 months ago and whose lease, through failure to work, was cancelled. At this ^{time} no saleable mica has been mined by Mr. Moyers and it is

Having regard to the amount of work done, the fact that Mr. Moynagh is ~~the~~ technically the discoverer, the patchy occurrence of the mineral and the number of spots on the area in which they have found the mineral, I would venture to suggest that Mr. Moynagh be offered a lease of 320 acres to be marked out as he wishes and without prejudice to the claims of Mr. Marquadt and the other prospectors who accompanied him and whose claims are to be settled on April 14th at the Provincial Commissioner's Mining Court.

The Mica is at present being worked by Messrs. Tebay and Beaumont who are both old miners. Mr. Tebay is in charge, he is employing Kamba labour and stated that has more applicants for work than he can employ, he pays Rs.8/- to 1s.10/- per mensem. The labour comes from the villages round and returns home to sleep.

I also inspected the area pegged by Mr. Paqualin and found that a considerable amount of work had been done but was temporarily stopped pending the arrival of explosives, the presence of mica has been proved on this area. I would therefore suggest that grant of

only one discovery spot on this prospecting ar

Messrs. Deacon, Grant
believe to have also per

and Cullinan are prospecting areas.



28 May 1913

Sir,

With ref. to the letter from

the Dept. of Proprietary of the

E. of Bengal I enclose

to inform you that the Govt.

Approved the recommendation

of the Govt. of the E. A.P.

that you should be
granted a lease of 160
acres and Mr. Duggar
a lease of 320 acres ofland in the Machakar
District for the purpose

of going to India.

I have the

DRAFT.~~C. Pagodaia Beg~~

MINUTE.

Mr. Duggar 27.5.13
 Mr. B. Begum 6, 7, 9, 10, 11
 Sir G. Fiddes.
 Sir H. Just.
 Sir J. Anderson.
 Lord Emmott.
 Mr. Harcourt.