

EA:1 PROT

57639

57639
REC
REG: 1 DEC 16

1965
Field

1916

Oct 20

Previous Paper.
13948 1/5

Is copy letter from ... advocating boring operations... approaching Union ... with a view to securing services of ... Anderson and personnel for 6 months after War. ... expenses may be made for lease of necessary plant. ... expense will be borne by ...

copy of 1st end, other ends in orig -
to Fred Sawyer on 12 Dec 16
MO
And 891 - copy above sent same - 21 Dec 16 to ...
subsequent Paper
NO bomb 16

Two Buttes

The general location of the district concerned will be seen from the annexed ... map. ... and ...

The Ross's Nkoberris is clearly the Balt's Nkobini; of the other workings featured the first (photo. no: 3186), would appear to be a little to the east of Nkoberris & the second often (the "Black Gorge") may be the "Deep Gorge" east of the north end of L. Meyadi.

The boring scheme ... of ... in relation to the surface water concerned under ... Walt's dam scheme, & it is fairly certain that ...

Underground, the N.Y. springs which
are the subject of the arrangement between
the Mayadi Co. the Mass. & the
Coast of Land owners of the plan is
Gor/40283/13 with the 1000 over work
seems to show that the sources of the
N.Y. springs lie at about the
2000 water level - or higher than
Lake Umbagog.

On the other hand, if Mr. Ross's
idea is correct, the abstraction of the
water at these bores would interfere
with the future deposit of rocks at
L. Mayadi. Perhaps this is too remote
for concern - the Mayadi Co. have
enough to carry on with for a long time.

But I think we need expert advice
before we go further with the scheme, which
seems to me extremely speculative, as
there is no positive reason why the
underground channel should bear any
relation to the surface depression - they
may be far apart. I very much doubt
whether Mr. Ross would put the scheme
forward if P. O. D. money was concerned.

And some idea of the depth
of the depression to the ground being
for stations on the scheme for the
Scientific Dept. of mines. Would be
well to enclose a copy of the 1890
map + Mr. Watt's map with a note

Ask the
Survey of
the
deposit
improvement
H. J.

1894/1/14 is the
date of the

showing as well as we can after the
blows are.

6 Oct 1872

W. Reed

I agree

of B

8.12.16

at once

H. J.

8/22/16

Room 3

57659
REC
OCT 21 1916

October 20th, 1916.

Sir,

I have the honour to transmit herewith for your information a copy of a letter from the Director of Public Works in which he advocates that boring operations should be undertaken at various points in the Rift Valley in search of water for the benefit of the Masai.

Director of
Public Works,
1. 2-9-1916

OSTADHS
GRADE

I enclose also two photographs and two diagrams of the locality.

2. I am informed by the military authorities that the boring plant at present in use in the conquered areas is the property of the Imperial Government, and that the personnel of the Water Supply Corps is due to return to the Union of South Africa at the conclusion of local hostilities.

3. I am approaching the Union Government with a view to securing the services of Captain Anderson and the personnel for two sections for a period

THE RIGHT HONOURABLE
ANDREW BONAR LAW, P.C. M.P.,
SECRETARY OF STATE FOR THE COLONIES,
DOWNING STREET,
LONDON, S. W.

period of 6 months after the war, and shall be glad if you will endeavour to arrange for the loan of the necessary plant for a similar period so that operations may be conducted in accordance with Mr. McGregor Ross's suggestions.

4. All expenditure in connection with the experiment will be paid by the Masai themselves.

I have the honour to be,

Sir,

Your humble, obedient servant,

A. C. C. C.

GOVERNOR.

G.P.

PUBLIC WORKS DEPARTMENT,

HEAD OFFICE,

315

NAIROBI.

NO. 367/23

September 2nd 1916

S.D.
57639
Psc.
Recd 1 SEP 16

BORES IN THE RIFT VALLEY

Sir,

I have the honour to invite the attention of Government to the extreme interest that would attend the execution of deep bores in the Rift Valley where it forms a portion of the Masai Reserve.

2. At the request of the Officer-in-Charge of the Reserve, I recently paid a visit to a water-hole called **HKOBIRRI**, some twelve or fifteen miles West of Ngong Mountain, to advise as to the desirability of installing wind-mill -driven pumps there-which the Masai propose to do at thierown expense. The Masai suggest, I believe, that this water is a re-emergence of the Kedong River. The entire region here consists of a series of parallel valleys divided by rocky fault scarps- details in the enormous fault movement of which the Rift Valley is so notable an example. A region seamed by numerous vertical fault planes is one in which it is only too likely that opportunities exist for running water to leave the surface and go underground. The Rift Valley trends to lower and lower elevations in a series of gigantic steps as one proceeds Southwards, and dominating this descent as is diagrammatically represented in the attached figure, we have a lake of unknown depth and of eighty square miles in area at Naivasha- lake that remains fresh although it has no surface outlet

and-

THE RESPONSIBLE CHIEF SECRETARY,

NAIROBI

and although its banks, and probably its bed, are impregnated with alkali. The evidence as to a subterranean outlet is almost conclusive. It could be absolutely established within a period of twelve months by an extension of evaporation observations which have been conducted at Naivasha, for some eight years past, and by accurate stream gaugings on three rivers. It is an interesting subject of speculation as to whether the existence of the deposits at Lake Magadi may not be attributed to the emergence of underground flows from Lake Naivasha and other surface waters of the Rift Valley which have become heavily charged with alkali in a long and slow passage underground. The points of particular interest that arise in this connection are

that there are fully equipped boring parties in the country with steam driven plant for deep bores,

that enormous areas of Masai Reserve, where theoretical considerations lead one to believe that underground water exists, are practically useless on account of the absence of surface water

that the Officer-in-Charge of the Reserve has copious funds at his disposal derived from Masai fines.

I therefore suggest that Government might enquire from the Military Authorities as to whether Captain A. I. Ison and his boring parties are fully employed at present (I know that for a long time they were entirely unemployed) if they are now, or are soon to be, unemployed, whether one or more of them could be seconded to or employed by this Department, and if so, on what terms. Everything will hinge on the question of cost,

so that even if Government were to contemplate any operations of this sort in the Rift Valley, this information would be required in the first instance. In the event of its being impossible to obtain the services of one of the boring parties on any terms, the Military might still be asked whether they were willing to sell a boring outfit on their departure from the country and if so at what percentage of the original cost.

3. I am communicating on this subject with the Officer-in-Charge of the Reserve who will probably write to Government on the financial and other aspects of the case. I would strongly urge that the first possible opportunity should be taken of putting down at least a dozen bores in the region alluded to, all of them to be carried to a depth of at least 2000 feet unless fresh water were struck at shallower depths.

The sites I should suggest for the first operations would be in the Valley shown in the attached photograph NO. 3185, in the NKOBIRRI VALLEY (see photograph NO. 3185 attached) and in a remarkable feature called OLKEJO NYIRO ("the Black Gorge") two marches South of NKOBIRRI where Hemsted tells me that plain evidence of the action of copious surface water in recent times exists.

4. In past years I have had an investigation conducted as to the possibility of syphoning water over from Lake Naivasha into the Kedong Valley and beyond. This is proved to be out of the question, though water could easily be got there by pumps and pipelines. I am convinced that the next step towards the improvement of water facilities in this part of the Reserve should be for Government to obtain information as to the results

of deep bores.

I have the honour to be,

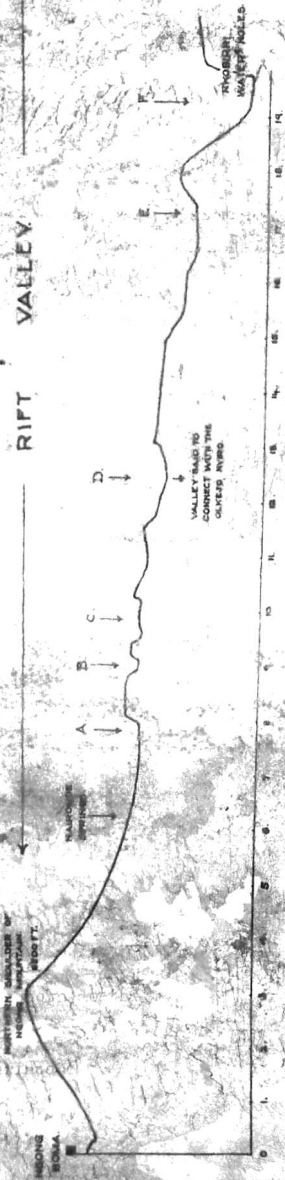
Sir,

Your most obedient Servant,

SD/- W. McGregor Ross,

DIRECTOR OF PUBLIC WORKS

RIFT VALLEY

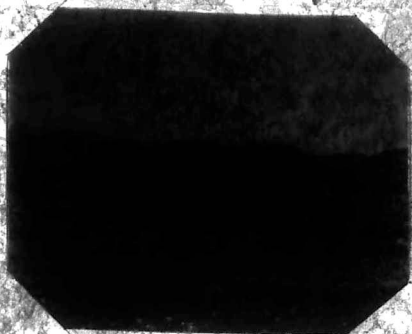


ROUGH SECTION ALONG A MARCH
IN A GENERAL W-EASTLY DIRECTION ACROSS THE RIFT VALLEY
FROM NONG STATION TO RHOBIERI.

SHOWING NARROW VALLEYS RUNNING NORTH AND SOUTH
BETWEEN FAULT SCARPS
AT A, B, C, D, E, F.
HORIZONTAL SCALE, 1/2 INCH = 1 MILE
VERTICAL SCALE, ELONGATED

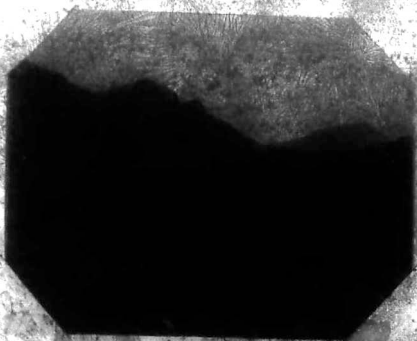
MOUNT LONGMONT.

9 IN. FT.



N^o 3186 LONE VALLEY RUNNING NORTH AND SOUTH
 ABOUT TEN MILES WEST OF NGONG MOUNTAIN.

[IN THE FAR DISTANCE, BEYOND THE HEAD OF THE VALLEY,
 LONGMONT CAN BE FAINTLY SEEN. IMMEDIATELY BEHIND
 IT IS LAKE NANGONGA]



N^o 3185 THE VALLEY OF NGONG. NGONG MOUNTAIN WATER-HOLE L.S.

LAKE NAIVASHA
80 SQUARE MILES
CAPACITY SOME 850 BARRICK
THOUSAND MILLION CUBIC
FEET OF WATER

(NO BOTTOM FOUND IN
CENTER OF LAKE
AT 800 FEET)

DIAGRAMMATIC SECTION OF THE FLOOR
OF THE
RIFT VALLEY
FOR SEVENTY MILES SOUTH OF LAKE NAIVASHA.

SHINT

LONGONCHAKI
LAKE 1.5 MILES
(DIA. 100 FT.)
DORNYO SCORLE
DORNYO LAKE
DIA. 1.5 MILES

KEDONG VALLEY
(AT OLD NAIVASHA ONE
MILE SOUTH OF
LAKE NAIVASHA)

OL DORNYO NYURE
(CHAYEN 3 MILES IN
DIAMETER)
7500 FT.

OL DORNYO ESAYETI
(A SCATTERED VOLCANIC
CLUSTERS)
8000 FT.

INDOOR WATER HOLES
(FRESH)

LONGGASALIN
8700 FT.

LAKE JAGADI
(SPRING FEED BY MOUNTAIN
WITH A REMOVAL OF SOIL)

87 MILES

8250 FT.

8000

5500

5000

4500

4000

3500

3000

2500

2000

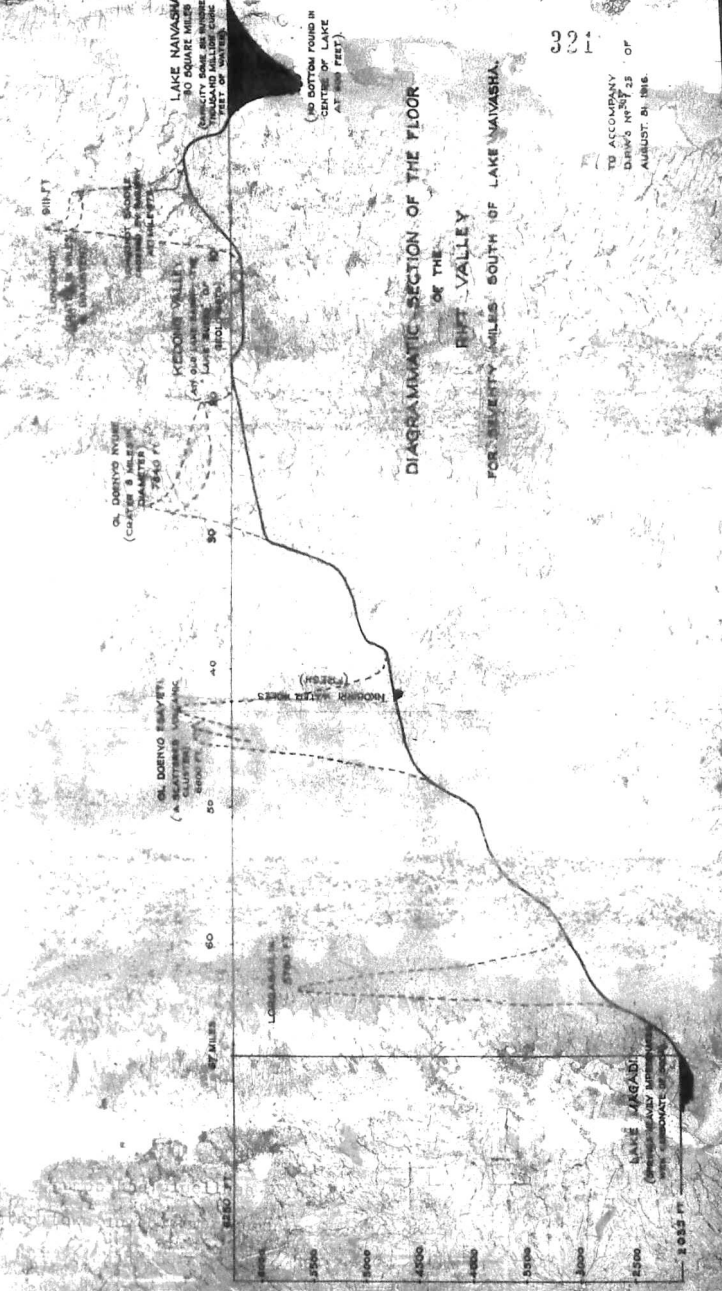
1500

1000

500

0

8035 FT.



Note on places mentioned in the enclosures to the despatch of 20th October 1916 from the Governor of the East Africa Protectorate.

The region between Lake Naivasha and Lake Magadi will be found between $0^{\circ} 40'$ and 2° S. Lat and between 36° and $36^{\circ} 40'$ E. Long. on the 1:11,000,000 map annexed, on which the hills indicated in diagrammatic Section I are marked by pencil circles.

The locality of the proposed boring in the NKOBIRRI Valley is indicated by the name NKOBINI on the sketch map, near the point of disappearance of the Uaso Kedong. The boring in the Long Valley (Photo: No. 3186) would apparently be a little to the east of NKOBIRRI, and the third place, the "Black Gorge" may be the "Deep Gorge" marked on the sketch map about 25 miles east of the north end of Lake Magadi.

The sketch map relates to a scheme for constructing dams to conserve the surface water in the Southern Masai Reserve, and has only a Topographical connexion with the question of deep bores which has now been raised.

Gen. 57639 EAP

323



16
Sd
J
S

12 Dec 1916

Sir

msd 60416

I am to transmit to you, the acc. copy of a leaf from the Gen. of the EAP, with enclosures, relating to a proposal that boring operations should be undertaken at various points in the Rift Valley in search of water for the benefit of the Masai.

2. The Sd. I would be

much obliged if you would favour him with your general views on the proposed scheme, and in particular, the probability or otherwise of the operation being successful, he would be glad to

DEPT.

Director Geological Survey

MINUTE.

- Mr. Swell 11/12/16
- Mr. Borthwick 12/1/16
- Mr. ...
- Mr. ...
- Mr. ...
- Mr. ...
- Mr. ...
- Mr. ...
- Mr. ...

msd 60416

20 Oct 1916
Photos
(resection)
Map 1:11,000,000
by Mr. S.K. Watt
note (in 2 bags)

the proposed...
at being...
contains...
deposits of soda at Lake
Mogadi, would be injuriously
affected by the abstraction of
the water at the place suggested.

3. The contour map of East
Africa on the scale 1:1,000,000

a sketch map of the country
on a larger scale,
neighbourhood containing the Masai

Reserve together with a note indicating
the place within the proposed
with ^{my} no doubt be of assistance.

It is to be requested that the
maps may be returned with your
reply.

Note on plans mentioned in the enclosure
to the Gov. dated 17th 20 Oct. 1916 from
the Gov. of the E.A.P.

The region between Lake Naivasha and Lake
Mogadi will be found between South lat. 0° 40'
and 2' and between the 36° and 38° 40' E. Long.
on the 1:1,000,000 map annexed, a grid the
hills indicated in diagrammatic Section I are
marked by pencil circles.

The locality of the proposed boring in the
Nkobilori Valley is indicated by the name
Nkobori on the sketch map, near the point of
disappearance of the Uaso Kedong. The
boring in the Long Valley (Photo: 40: 3186)
would apparently be a little to the east of
Nkobori, and the third place, the
"Black Gorge" may be the "Deep Gorge"
marked on the sketch map about 25
miles east of the north end of Lake
Mogadi.

The sketch map relates to a scheme
for constructing dams to conserve the surface
water in the Southern Masai Reserve, and
has only a topographical connexion with
the question of deep boreholes which has
not been raised.

Colonial Office
Oct. 1916

11/12/16

Copy to Genl. Swire, no. 12, District 57639/16

the paper suggests ^{it being that the}
continental ^{geological} ^{history of} ^{the}
deposits of soda at Lake
Magadi, ^{since the soda is being worked under lease by a}
would be injuriously ^{company under lease from}
^{the Govt.}

affected by the abstraction of
the water at the bore suggested
3. The enclosed map of East
Africa on the scale 1:1,000,000

is a sketch map of the country to
on a larger scale,
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Reserve together with a note indicating
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well ^{may} ^{be} ^{of} ^{assistance}

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maps ^{may} ^{be} ^{returned} ^{with} ^{you}
very

SECRET

11/12/16

Note on places mentioned in the enclosure
to the Govt. despatch of 20 Oct. 1916 from
the Govt. of the East.

The region between Lake Naivasha and Lake
Magadi will be found between South lat. $0^{\circ}40'$
and 2° and between 36° and $36^{\circ}40'$ E. Long.
on the 1:1,000,000 map enclosed, and the
hills indicated on diagrams. Sections are
marked by pencil circles.

The locality of the proposed boring in the
Nkobilore Valley is indicated by the name
Nkobilore on the sketch map, near the point of
disappearance of the Uaso Kedong. The
boring in the Long Valley (Photo. no: 3886)
would apparently be a little to the east of
Nkobilore, and the third place, the
"Black Gorge" may be the "Deep Gorge"
marked on the sketch map, about 2.5
miles east of the north end of Lake
Magadi.

The sketch map relates to a scheme
for constructing drains to conserve the surface
water in the Southern Masai Reserve, and
has only a topographical connexion with
the question of deep bore which has
not been raised.

Copy to Geol. Survey, no 12 Dec 16 57639/16

Council Office
Dec 1916