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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	1816	Press.
B.P. No.		Mis.
Dated	11.11.1878	197

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Archives 1-5,806-24-2-78.

1816

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

11th November 1878, No. 1,816.

Read the following paper :—

No. 139. From B. BROUGH SMYTH, Esq., Mining Engineer, to the Secretary to Government, Revenue Department, dated Devalah, 5th November 1878.

I HAVE the honor to submit, for the consideration of His Grace the Governor in Council, the fourth report of my Proceedings.

2. I have much satisfaction in stating that on the 17th October gold was found in large quantities in a quartz vein about thirty chains south-easterly from the Alpha Mill near an adit known as "Wright's Level."

3. The strike of the reef at the point where the "run" of gold occurs is nearly north and south, and the vein dips rather rapidly to the east. The average thickness of the vein is about four feet, and throughout a thickness of two feet or more; the stone is veined and stained with sesqui-oxide of iron derived mainly from the decomposition of pyrites. The gold is disseminated throughout the black stone which have been taken out, and it occurs also in well-defined layers associated with the ores of iron. When the blocks are broken numerous jagged pieces of gold are seen, and thin leaf-like forms are found in some parts.

4. The yields of gold from the stone obtained at this spot have been as follows:—

	oz.	dwt.	grs.	
1. No gold visible in the stone	0	11	6.0	per ton of 2,240 lbs.
2. Do. do.	2	16	1.6	do.
3. A little gold to be seen	56	13	19.5	do.
4. Gold visible in the stone	204	11	16.7	do.

None of the richer specimens have been treated.

5. The "run" of gold appears to be transverse to the lines of the dip and strike of the reef, and I anticipate that at a greater depth, and at points north of the places where the rich stone is found, auriferous quartz will be discovered that will give good returns.

6. In an adit below Wright's Level and nearly due east of the point where the richest specimens have been got, parcels of pyritous quartz have given an average yield of 3 dwt. and 23.04 grs. per ton.

7. At the Skull Reef, about twenty-two chains north of Wright's Level, there is a great thickness of quartz. It measures about fourteen feet from the hanging wall to a mass of "floating rock" (country), but the total thickness has not yet been ascertained. Here there is at the face much stone that is practically unproductive. The reef has been carefully tested in five sections (vertical), and the yields per ton of 2,240 lb, were as follow:—

	oz.	dwt.	grs.
No. 1 Section.—Hanging wall one foot in thickness	0	0	16.19
No. 2 do. Do. three feet	0	0	9.92
No. 3 do. Do. four feet	0	1	2.20
No. 4 do. Do. five feet	0	2	2.21
No. 5 do. Do. six inches	0	0	4.25

8. It will be observed that the stone in the fourth section gave a somewhat better yield than that from the other sections, and, on tracing this line northwards along the strike, stone was obtained which yielded at the rate of 1 oz., 4 dwt., and 5 grs. per ton.

9. Here, as in nearly all other cases, the gold is associated with sesqui-oxyd of iron, but clean gold in almost iron-free quartz is seen in some places.

10. The increased yield at the last-named spot appears to indicate the setting in of another band of auriferous quartz.

11. From a reef about forty-five chains south-easterly from the Devalah bazaar I have obtained quartz which yielded in several sections as follows:—

	oz.	dwt.	gr.	
No. 1 Section	...	...	...	Button not weighable.
No. 2 do.	0	0	1 91	per ton.
No. 3 do.	0	2	4 40	do.

The quartz from this reef contained a not very large proportion of pyrites.

12. Due west of this reef and about twenty chains from it there is an outcrop of auriferous quartz, and gold is also found in the soil near the reef.

13. At the Cavern Reef, about twenty-six chains east of the Alpha bungalow, the native miners have made (for them) rather large adits, having evidently followed the direction of the pyritous seams, nests, and joints which are found there somewhat abundantly. These openings, as I am informed and from my own observations believe, have been worked only to a very small extent under the supervision of Europeans. The reef presents good prospects as indicated by the yields, which are as follow:—

	oz.	dwt.	gr.	
1. Quartz	0	2	21 80	per ton.
2. Pyritous quartz (the proportion of pyrites being large)	4	19	3 00	do.
3. Pyritous quartz	0	10	2 59	do.
4. Do.	0	11	4 90	do.
5. Do.	0	8	5 60	do.
6. Do.	0	14	11 00	do.

This reef will be further tested as soon as other urgent work now in hand is disposed of.

14. A sample of pyrites which it is said was taken out of the Ettacul Reef (a portion of which has been laid bare by the Wynad Prospecting Company and which was formerly worked by the natives) has yielded at the rate of 2 oz., 1 dwt., and 7.78 grs. per ton. I have examined the abandoned workings at the Ettacul, and I have failed to find any mineral similar to that which I treated, but I have not yet had any quartz broken out. There is however no doubt, from the evidence I have obtained, that highly auriferous pyrites and pyritous quartz occur at this point.

15. The results here given are to my mind highly satisfactory, but any one result, whether large or small, if considered by itself and without reference to other facts connected with it, would be altogether misleading.

16. There are numerous reefs in the neighborhood of Devalah, reported as auriferous, which I have not yet had the opportunity of examining, but quartz was taken from one reef some miles north of Devalah Bazaar and about four miles west from Nelakotta when I was surveying there, and gold was found in it.

17. I have marked on the lithograph map of the three amshoms of South-East Wynad (scale one inch to the mile), partly from my own observations and partly from information afforded by gentlemen resident in the districts, the position, approximately, of ninety outcrops of quartz veins, and west of Choladi, intersecting a line about fourteen miles in length, there are said to be eleven distinct reefs. It is not to be supposed, however, that during the short time I have been in the Wynad I have been able to ascertain the position of all the reefs. There are many blank spaces on the map.

18. The position of the reefs is being marked down also on the Trigonometrical Survey map (on the scale of four miles to one inch), and from one reef three miles north-north-east from Vellirymulla I am assured by a gentleman resident there, and who is acquainted with the reefs near Devalah, specimens of auriferous quartz have been obtained as rich as any found in this neighbourhood. My informant has been so good as to offer to point out the reef from which the gold was taken.

19. It may be regarded as certain that an area measuring twenty-five miles from east to west and thirteen miles from north to south—three hundred and twenty-five square miles—is intersected by quartz veins in this district alone.

20. The great thickness of many of the veins and the formation of the country—which is such as to admit of the quartz being mined economically, no deep shafts or heavy expenses for the drainage of the mines being necessary,—have to be taken into consideration when the number of reefs is looked at and an estimate of the auriferous resources of the district is to be made.

21. Nor should the extensive, but shallow, workings of the native miners who sought for gold in times past be forgotten. Their small excavations and pits are found all along the lines of outcrops of the quartz veins, and in many places the soil, not usually more than two feet in depth from the surface to the bed-rock, has been carefully washed.

Their "races," the lines of which are now nearly obliterated, and the ruins of their aqueducts, made for the purpose of conveying water to the mines, are to be seen in some parts of this district. All these tend to show that the miners formerly found remunerative employment in mining both in the reefs themselves and in the soils containing the debris and detritus of the reefs.

22. It is not possible as yet to indicate the reefs that are distinct from each other, to show on the maps those that are continuous. Any attempts to indicate the main lines of reefs from a superficial examination of the country must necessarily fail. Such can be done only after a proper survey has been made, and the position, the strike, and the dip of each outcrop ascertained.

23. Korumbars have been at work washing earth by ground-sluicing north and north-east of Devalah, and in some places they have obtained rough gold which indicates the existence of reefs that in all probability will yield well. In one place a "leader" was cut by the Korumbars, a portion of which showed gold, and, if approved of, I shall continue to prospect with the aid of the native miners in order to discover the auriferous reefs.

24. The Korumbars have been working lately near Needle Rock, and I have also commenced box-sluicing in the same locality. There was some delay in obtaining suitable timber for making boxes, but those that have been made will be sufficient for the purpose intended.

25. There are two quartz reefs at Needle Rock which I have examined and which are shown on the key-map, and the proprietor of the estate has informed me that he has sought the permission of His Grace the Governor to name one the "Buckingham Reef" and the other the "Chandos Reef."

26. I have purposely omitted in this progress report all reference to the mineralogical facts observed, and other details which, unless instructed to the contrary, I propose to mention in my final report.

27. The weather during the past month has been favorable and it continues fine, and I have hope that I shall make rapid progress with my field-work. On Saturday next, the 9th instant, I propose to go down the Carcoor Ghaut and to visit the mines near Murdainy. It is said that the season is now favorable and that any delay might result in my finding it difficult to induce persons to accompany me to a locality which is reported to be unhealthy in the succeeding months.

I trust that this proposal, though interfering to some extent with my work here, will be approved of.

28. I continue to receive information and cordial assistance from every one resident in the district who is aware of the nature of the work I am engaged on, and it affords me pleasure to state that Mr. Thomas Laing, the Quartz Miner, and Mr. G. E. Withers, Assistant, perform their duties to my entire satisfaction.

29. On Thursday, the 31st October, His Grace the Governor was pleased to inspect numerous specimens of auriferous quartz obtained from the Alpha Mine, and to observe also the method of testing the stone by amalgamation. On the same day His Grace visited and examined the reef at that point where the rich quartz has lately been discovered.

On Friday, the 1st November, those interested in mining were honored by His Grace's visit to Needle Rock, where gold was got both by box-sluicing and ground-sluicing.

30. On Saturday morning, the 2nd November, I had the honor to take His Grace's wishes respecting the mode in which I should conduct the investigations I have been appointed to make, and I venture to entertain the hope that the final results of my labors may in some measure obtain His Grace's approval.

No. 140. ORDER THEREON, 11th November 1878, No. 1,816.

Miscellaneous.

ORDERED to be forwarded for the information of the Government of India in continuation of letter, dated 17th September 1878, No. 1,703.

Mr. Brough Smyth's proposals in paragraphs 23 and 27 of his letter are approved.

(True Extract.)

(Signed) L. A. CAMPBELL,
Under Secretary to Government.

To R. Brough Smyth, Esq.
" the Wynad Planters' Association.
" the North Wynad Planters' Association.
" the Nilgiri Planters' Association.
" the Southern India Alpha Gold Mining Company.
" C. R. Dawson, Esq., Proprietor of the Needle Rock Estate.
" J. W. Minchin, Esq.
" the Editors' Table.
" The *South Indian* *Revenue*

Exd. J. W. Fischer.

1816
3

REVENUE DEPARTMENT.

No.

From

Mr. Bronght Smith

Dated

5 Nov

1878

FOR ORDERS.

This report will
go on to the G. of I.
in ordinary course
but I think this
G. once wishes it
to be com. to the
Public - which
might be done
by placing it
on the Editor's
Table and send-

The report should
sent to G. of I. - & the
Editor talk at once -
copies to the several
and to the
Alpha Co.
- and send with
13/11

Est. of (1878) Summary

REVENUE.

R. BRONGHT SMITH, Esq.,

Secy.

2nd November 1878.

Printed 15th.

G.O. 11th November 1878, No. 1,000

NOVEMBER.
Nov. 150-140.

During the year in the West - Ordering
the French report's further report on - to be
forwarded to the Government of India, and
the report of the proposals made in paragraph
237.



my copies to the
Alpha & other
mining compa-
nies and to
any individual
planters whom
His Grace might
name.

The proposal
in paragraph
23 to continue
to prospect with
the aid of native
miners may
be approved of
tho' no approval
is really neces-
sary as to doing the

can carry on the
work peacefully
as he decides
most appropriate
course.

Similarly his
trip down the
Caucasus (Paraz)
may
be approved.

Possibly His
Grace might like
to record some
remarks on
this report with
ref: to his recent
visit to Derindere

C/M

1216
nearly North and South, and ^{the vein} dips
rather rapidly to the East. The
average thickness of the vein is
about ~~four feet~~ and throughout
a thickness of two feet or more
the stone is veined and leamed
with ~~sequinox~~ of iron derived
mainly from the decomposition
of pyrites. Fine

gold is disseminated throughout
the blocks of stone which have
been taken out; and it occurs
also in well defined layers
associated with the ones of
~~iron~~ When the
blocks are broken numerous
jagged pieces of gold are seen,
and thin leaf-like forms
are

are found in some parts.

4. The yields of gold from the stone obtained at this spot have been as follows:—

	g.	dwt.	gr.	
1. No gold visible in the stone	0	11	6.0	per ton of 2240 lbs.
2. No gold visible in the stone	2	16	1.6	—
3. A little gold to be seen	56	13	19.5	—
4. Gold visible in the stone	2014	11	16.7	—

None of the richest specimens have been treated.

5. The "run" of gold appears to be transverse to the ^{lines of the} dip and strike of the reef, and I anticipate that at a greater depth, and at points north of the places where the rich stone is found auriferous quartz will be discovered that will

will give good returns.

1816
1817

6. In an adit below Wright's level and nearly due East of the point where the richest specimens have been got, parcels of pyritous quartz have given an average yield of 3 dwts. 23.04 grs. per ton.

7. In the ~~adit~~ ^{mass} of quartz, about twenty two chains north of Wright's level there is a great thickness of quartz. It measures about fourteen feet from the hanging wall to a ~~mass~~ ^{mass} of "floating rock" (country), but the total thickness has not yet been ascertained.

Here there is at the face much stone that is practically unproductive

unproductive.

The reef
has been carefully tested in
five sections (vertical) and
the yields per ton of 2250 lbs
were as follows:—

	3. dist. 9"
No. 1 Section: Hanging wall one foot in thickness	0. 0. 16.10
No. 2 Section: three feet in thickness	0. 0. 9.92
No. 3 Section: four feet in thickness	0. 1. 2.20
No. 4 Section: five feet in thickness	0. 2. 2.21
No. 5 Section: six inches in thickness	0. 0. 4.25

8. It will be observed that the
stone in the fourth section
gave a somewhat better yield
than

1815
than that from the other
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this line northwards, along
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18/5 (7)

from the Devalah Bazaar
I have obtained Quartz which
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as follows:—

	oz.	dist.	gr.
No 1 Section —	"	"	" Button not weighable.
No 2 Section —	0.0		1.91 per ton
No 3 Section —	0.2		4.40 per ton

The quartz from this reef contained
a not very large proportion of
pyrites.

12. Due west of this reef and
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auriferous quartz; and gold
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which are found there ^{somewhat} ~~rather~~
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~~the~~ the supervision of
Europeans. The reef presents
good prospects as indicated
by the yields which

as follows: —

186
3. dec. 1900

1. Quartz ————— 0. 2. 25.80 per ton
2. Pyritous quartz. }
(the proportion of pyrites } 14: 19: 3.00 per ton
being large) ————— }
3. Pyritous quartz — 0. 10. 2.59 — " —
4. Pyritous quartz — 0. 11. 4.90 — " —
5. Pyritous quartz — 0. 8. 5.60 — " —
6. Pyritous quartz — 0. 14. 11.00 — " —

This will be further taken
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10
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816
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1876

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My informant has been so good as to offer to point out the reef from which the a.s.s. are taken.

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14
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1818 (7)
working lately near Needle Rock
and I have also commenced
box-shiving in the same
locality. There was some
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for making boxes, but those
that have been made will be
sufficient for the purpose
intended.

25. There are two Quarts, ~~one~~
at Needle Rock which I have
examined, and which are shown
on the Key-Map; and the
proprietor of the Estate has
informed me that he has sought
the permission of His Grace the
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J

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S

20

1883

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1875
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I venture to entertain the hope
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obtain His Grace's approval.

I have the honor to be,
Sir,

Your most obedient servant,

R Brough

of 1964

Revenue 1964 Report

1964

Ordered to be for

the Government of the United States
the Department of the Interior
Bureau of Land Management
Washington, D.C.

1964 Report of the
Bureau of Land Management
to the Department of the Interior
Washington, D.C.

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