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1917-18

(Second Session)

Brought up by  
*Senator E. G. ...*

*Clerk of the Senate*  
17-1-18

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

R e p o r t

of the

JOINT COMMITTEE OF PUBLIC ACCOUNTS.

Upon the

PAPUAN OIL FIELDS.

1.881

Harrison

MEMBERS OF THE COMMONWEALTH PARLIAMENARY JOINT  
COMMITTEE OF PUBLIC ACCOUNTS.

Second Committee.

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Matthew Charlton, Esquire, M.P., Vice-Chairman.

Senate

House of Representatives.

Senator the Honorable John Earle.

Llewelyn Atkinson, Esquire, M.P.

Senator George Fairbairn.

James Howard Gatts, " "

Senator Allan McDougall.

James Edward Fenton, " "

The Honorable Alexander Poynton, M.P.

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*J. R. A.  
10/1/11*

**PROCEEDINGS OF THE COMMITTEE.**

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In connexion with the enquiry into the Papuan Oil Fields  
evidence was given by the following witnesses :-

- Hunt, Atlee Arthur, Secretary, Department of Home and Territories, Melbourne.
- Mudell, George Dick, Mining Agent, Melbourne.
- Murphy, James Francis, Acting Accountant, Department of Home and Territories, Melbourne.
- Wade, Arthur, D.Sc., Director of Papuan Oil Fields, Department of Home and Territories.
- Wagstaff, Ernest Edward, Manager for Australasia, The British Imperial Oil Co. Ltd. Melbourne.

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10/1/11

R E P O R T

of the

JOINT COMMITTEE OF PUBLIC ACCOUNTS.

Under the "Committee of Public Accounts Act 1913."

Upon the

PAPUAN OIL FIELDS.

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I n t r o d u c t o r y .

As a period of six years has elapsed since the first indications of Petroleum were discovered in British New Guinea (or Papua), and Commonwealth operations have extended over practically all of that period, the Public Accounts Committee deemed it advisable to elicit information concerning the expense, and extent of Commonwealth activities in its search for Oil; the production of which has become so essential.

HISTORY OF DISCOVERY.

The first indication of Petroleum was the accidental discovery of a gas spring by Mr. G. A. Thomas at Opa in August 1911. Mr. Thomas and his partner (Mr. Lett) immediately grasping the immense possibilities of the discovery, followed the clue it afforded, and discovered similar phenomena in other localities. Their action and report to the local and Commonwealth Authorities led to the actual discovery of Oil on the 22nd February 1912 at Akanda, which is near the Vailala River in the Gulf of Papua about 180 miles west of Port Moresby.

At first it was intended by the Commonwealth Government to permit development by private enterprise, and acting on this, the British New Guinea Development Company engaged a driller, named F. C. Grebin, who reached the Commonwealth in 1912 en route to Papua. He had with him a small hand-boring plant for the purpose of testing the oil areas.

Subsequently it was determined to develop the field as a national undertaking.

COMMONWEALTH OPERATIONS.

STAFF.

In consequence of the determination of the Government not to permit private operations, and in order that the examination of the field should be expedited, the services of Mr. Grebin were secured by the Commonwealth in August 1912. Another driller, Mr. Locke, was appointed in September 1912.

In November 1913 another driller Mr. Cypher was engaged to work the new plant which had been purchased.

At this stage it was decided to get a geologist specially trained in regard to petroleum for the purpose of investigating the field, and on the recommendation of the High Commissioner Dr. Arthur Wade was selected.

Dr. Wade reached Papua from England in October 1913 in order to investigate the geological features of the oil bearing areas, and to report any conclusions as to the method of development, which, in his opinion, should be adopted on these areas. His report was submitted in 1914.

In October 1914 Mr. Grebin left the service of the Commonwealth, and in April 1915 Dr. Wade was appointed Director of Oilfields, a position which he retains at the present time. Under the supervision of the Director is engaged a staff of 17 white men comprising Drillers, Surveyors, Accountant, Foremen, and Master and Engineer of the Scow "Vailala", also about 160 natives employed on bush clearing, road and track making etc.

**BORES:** Boring operations were commenced early in 1913, and are still being continued. The following schedule shows details of the bores sunk :-

Bore No.	Commenced	Person responsible.	Depth	Result
1	16-1-'13	Grebin	242 feet	Oil at 224 ft.
2	8-4-'13	Grebin	133 "	Gas only.
3	2-4-'13	Locke	460 "	Little Oil at 320 feet.
4	19-2-'14	Locke	312 "	Gas only.
5	6-8-'14	Cypher	395 "	Small Production
5 Re-drilled	May '15	Wade	-	-
6	28-9-'15	Wade	500 "	Little Oil
7	23-10-16	Wade	1800 "	" " " at 190 feet.

The sites of the bores run from East to West, and are covered by a distance of approximately 1650 yards in length, Nos. 3 and 4 being on the East side of Vailala River and the remaining bores on the West side.

The quantity of oil raised, to the present, amounts to about 2000 gallons.

#### P L A N T:

The boring plant at first in use by Mr. Grebin was that taken over from the British New Guinea Development Co. and with which the first two bores were drilled, this plant was found to be unsuited for any depths over 300 feet. A new plant was constructed in Melbourne by which bores Nos. 3 and 4 were put down under the supervision of Mr. Locke.

A further plant was purchased with which bore No.5 was put down under the supervision of Mr. Cypher.

Upon the appointment of Dr. Wade he found that the plant in use was not adapted for the particular work that was required to be done, and he remodelled it as an interim measure pending results of further experience.

With this plant No.5 bore was then re-drilled and bores

Nos. 6 and 7 were put down.

As the difficulties connected with the boring through the mud strata did not diminish, Dr. Wade recommended that a more powerful plant be obtained; this was accordingly ordered and is now being installed. It is considered that this plant will bore to a depth of 4000 feet.

Four different plants have been purchased for use on the field. Particulars as to the cost of each are :-

- |   |          |        |
|---|----------|--------|
| (1) Plant taken over from British New Guinea<br>Dev. Co. (now obsolete) | at       | £559.  |
| (2) Drilling Machine with boiler and equipment                          | at       | £2300  |
| (3) Victoria Boring plant complete                                      | at .. .. | £1193. |
| (4) Rotary Drilling Plant (now being installed)                         | at       | £7000. |
- 

ACCOUNTS. Details are kept on the fields, although the main accounts are kept in Melbourne. The annual salaries amount to £7342; exclusive of the payment of an amount of about £900; for native labor, to which must be added another £900 for their sustenance, clothing, etc.

The total sum expended on all services, Labour, material, etc: from the commencement of operations to 30th June 1917 was £64,955.

LOCAL CONDITIONS:

The cost of drilling oil wells is naturally contingent on many factors, viz., accessibility, transportation, labour, timber, loss of tools in bore etc.

The first two of these apply particularly to Papua. Dr. Wade in describing local conditions said :-

"In Papua the great part of our expenses was entailed by the clearing of the land; the trees there are thicker than any I have seen in Australia. Then there are Swamp lands that have to be got round, and, altogether, the general conditions are pretty bad. The transport of heavy plant, stores, etc., over this country has proved a serious undertaking. Further, we have to take into consideration the fact that sometimes our communications with Port Moresby are out off for three months, and we have to live on native foods. There are very few boats, and nearly all old ones. At this very moment the field is isolated, dry rot having been discovered in the "Vailala." During these occasions the work goes on just the same, but there have been times when we have been delayed as the result of being held up for parts or supplies. We have had to wait even longer than nine months for them."

"There are disabilities which the staff labour under, as, being absolutely isolated, and after being there for a couple of years, they grow very discontented. After twelve months at such an isolated place a man does not get sick exactly, but he is ailing and irritable."

Mr. Atlee Hunt in referring to the climatic conditions said,

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"The main difficulty with which we have to contend is the health of the men employed, as their breakdown has frequently occasioned very long and serious delays."

The nearest medical man is stationed at Port Moresby, 180 miles away, and a sick man is dependent entirely for transport upon the launch which may or may not be at hand when required.

#### PROSPECTS AND DEVELOPMENT OF THE FIELD.

The opinion of one experienced witness was to the effect that the prospects of obtaining Oil in Papua are distinctly good. At the same time, he added, "we have to remember that oil, being liquid, and able to migrate, its accumulation comes under very different laws from those applying to any other mineral, it is the biggest gamble on earth. The thing is to be able to locate the place where the geological conditions are suitable for the accumulation of oil in the pools, and then to bore for it. But in one of those places some little accident in the geological structure underground may have led up to the escape of the oil and its migration elsewhere."

For this reason the witness thought that "there ought to be as many people as possible trying to get oil. The more people there are in New Guinea putting down boxes and trying to develop the field, the more likely is it to hit the place for a big supply."

The urgency and necessity for an early supply of oil was recognised, and one witness considered that the object might be expedited and facilitated by the Government while carrying on its own operations inviting Co-operation of persons or Companies willing to explore and develop the field, - sufficient safeguards being effected to protect the interests of the public.

Non-departmental witnesses speaking of the aspect of private enterprise operating in Papua believed that if the Government would permit private operations some of the largest oil people could be induced to enter into the business.

Other witnesses stated that if private Companies were allowed to come into this field it would be necessary to institute safeguards against the working of an inexperienced Company whose actions might ruin the whole field.

The Committee received evidence relative to the conditions under which private concerns could be admitted to assist in the development of the Oil bearing territory, but this being a question of Policy, it does not come within the purview of this Committee. It would appear, however, to be essential, that, under existing conditions no time should be lost in the development of the industry.

In answer to a question as to whether the industry had been developed as rapidly as it should have been, seeing that six years had elapsed since the Commonwealth commenced operations Dr. Wade stated that:-

"We ought to have had better results. We have, however, to take into consideration the fact that when our people went into this part of the country it was absolutely unknown in every respect. There were not even any maps of it. Our people went into the bush, found these oil seepages, and had to do much to make the place fit to live in. If a proper plant had been obtained in the first instance we could have saved two years."

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The disabilities under which work is carried on in regard to supply of machinery parts caused by depending on private work-shops for careful inspection is shown by Dr. Wade in his evidence. He said "The material we are obtaining is too shoddy. For instance, jars should have a life of at least three or four years, whereas we have broken five sets in six months."

Question:- "Were you working in extra bad country when these breaks occurred ?

Answer:- No, they were due to faulty material. The position is the same in regard to all our heavier tools. We had made for us a wrench weighing about 4 cwt; and it should have been made of cast steel. At the first pull put upon it by the natives, however, it broke in two. Upon examination we found in the metal a big blow hole that had been filled up. We could not go on with the particular work in hand at the time until we got another wrench for the size of tool we were using. We were held up for over three months."

"My complaint will apply to all firms. Some of their output is equally bad, and some of it is equally good."

Question:- "In regard to the inspection of material could you not educate a local man up to your requirements?"

Answer:- Our requirements are varied, and a knowledge of what we require is largely a matter of experience. An ordinary engineer would be able to tell whether any material manufactured to our order was good, but he would probably lose sight of some small, but nevertheless important details. For instance, some time ago we had some drive-heads on order, and we found that the hole drilled through them was far too small for our purpose. We had to return them, and there was a delay of eight months."

If it should be determined that oil exists in payable quantities a very large expenditure will have to be undertaken.

Refineries will need to be constructed and the question of shipping the products will be one of no small difficulty, but until the presence of substantial bodies of oil is assured no plans for its disposal need be formulated.

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RECOMMENDATIONS.

URGENCY OF PRODUCTION.

The Committee is of opinion that the urgent requirements of Australia demand that prospecting work in Papua should be prosecuted with greater vigor; that investigations as to supplies of "Well-Oil" throughout the Commonwealth should be undertaken, and that the shale oil deposits of the Commonwealth should be developed without delay.

MATERIAL AND REPAIRS.

As considerable expense and loss of time has been incurred in getting parts and repairs to machinery owing to inferior work and faulty material, the Committee recommend a stricter system of inspection, and where practicable the work be done in one of the Government Workshops.

TRANSPORT.

Serious consequences are attached to the isolation of the Field in regard to maintaining the health of the men, and in view of the urgent necessity for the early treatment of cases of sickness and accident, and also for the transport of materials, stores and plant, the Committee recommend that better transport facilities be provided between the field and Port Moresby.

ACCOUNTS.

The Committee recommend that a statement in detail of all Expenditure (including Labor and Material) should be kept at the Head Office in Melbourne.

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17<sup>th</sup> January 1918

John Thomson  
Chairman. 10x

1917-18.

For proof, please  
R.A. Bronowski.

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

17-1-18.

P. 881

Report  
from the  
Joint Committee of Public Accounts  
upon the  
Papuan Oil Fields.

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