

TOONGABBIE-1.

WELL ELEMENTARY

REPORT

TOONGABBIE - 1

W320



W320

Mr. J.W.F. Connor, ?

D R A F T

*OK OK Phee*

Dear John,

As you suggested in your letter of the 6th July, I have had the facts relating to early oil drilling in Gippsland checked and the following appears to be the position.

The earliest reference to drilling for oil in East Gippsland is in a report by L.H. Owen dated 23/11/1916 entitled "Supposed Natural Wax at Toongabbie". In this report, published in 1925 in the Records of the Geological Survey of Victoria, ~~XXXXXX~~ Volume 4 part 4, reference was made to the examination of a shaft and to the sinking of a bore "some 30 years ago to a depth of 175 feet .. the object being to strike oil" The date of this bore would therefore be 1886 approx. but its precise position is not known.

The Boola Boola No. 1 oil exploration well, also in the Toongabbie area, commenced drilling in October, 1921 and was completed in August, 1925.

In the Lakes Entrance area, the first oil exploration well was the Lakes Entrance Development (Lake Bunga) No. 1 well drilled in January 1924. This well discovered minor oil. During the next 4 years the only other private well drilled in Gippsland was the Lakes Entrance Development No. 2 well which also discovered minor oil shows.

The first Government well exploring for oil (Colquhoun No.1) was drilled in 1928 on the beach near the northwestern approach to the bridge over North Arm, Lakes Entrance. This latter well, is the one to which you are referring. A plan showing the location of these bores is attached.

I would be pleased to have your reaction to the above information.

Yours faithfully,

MINES DEPARTMENT

Subject "FIRST DRILL HOLE FOR OIL IN EAST GIPPSLAND"

8056/67

The earliest reference to a drill hole for oil in East Gippsland is the report by L. H. Owen (dated 23. 11. 1916) concerning "Supposed Natural Wax at Toongabbie".

*Published?*

In this report he examined a shaft and also mentioned "a bore was sunk some 30 years ago to a depth of 175 feet in sands, clays etc., the object being to strike oil".

*Site of bore?*

The bore can be dated at about 1886.

The Boola Boola No. 1 oil well was drilled in the Toongabbie area from October 1921 to 22nd August, 1925.

In the Lakes Entrance area the first oil well was spudded on 5th January, 1924. This was the Lakes Entrance Development (Lake Bunga) No. 1 well and discovered some oil.

*Where?*

The first Government bore (Colquhoun No. 1) was drilled in 1928 on the beach of the North Arm, north-western approach to the bridge, Lakes Entrance.

P. W. Bollen.

31st July, 1969.

*Mr Bollen,*

*Could we have a plan showing location of these bores please. (Gippsland)*

*RGW  
1/8/69.*

*Mr Bollen*

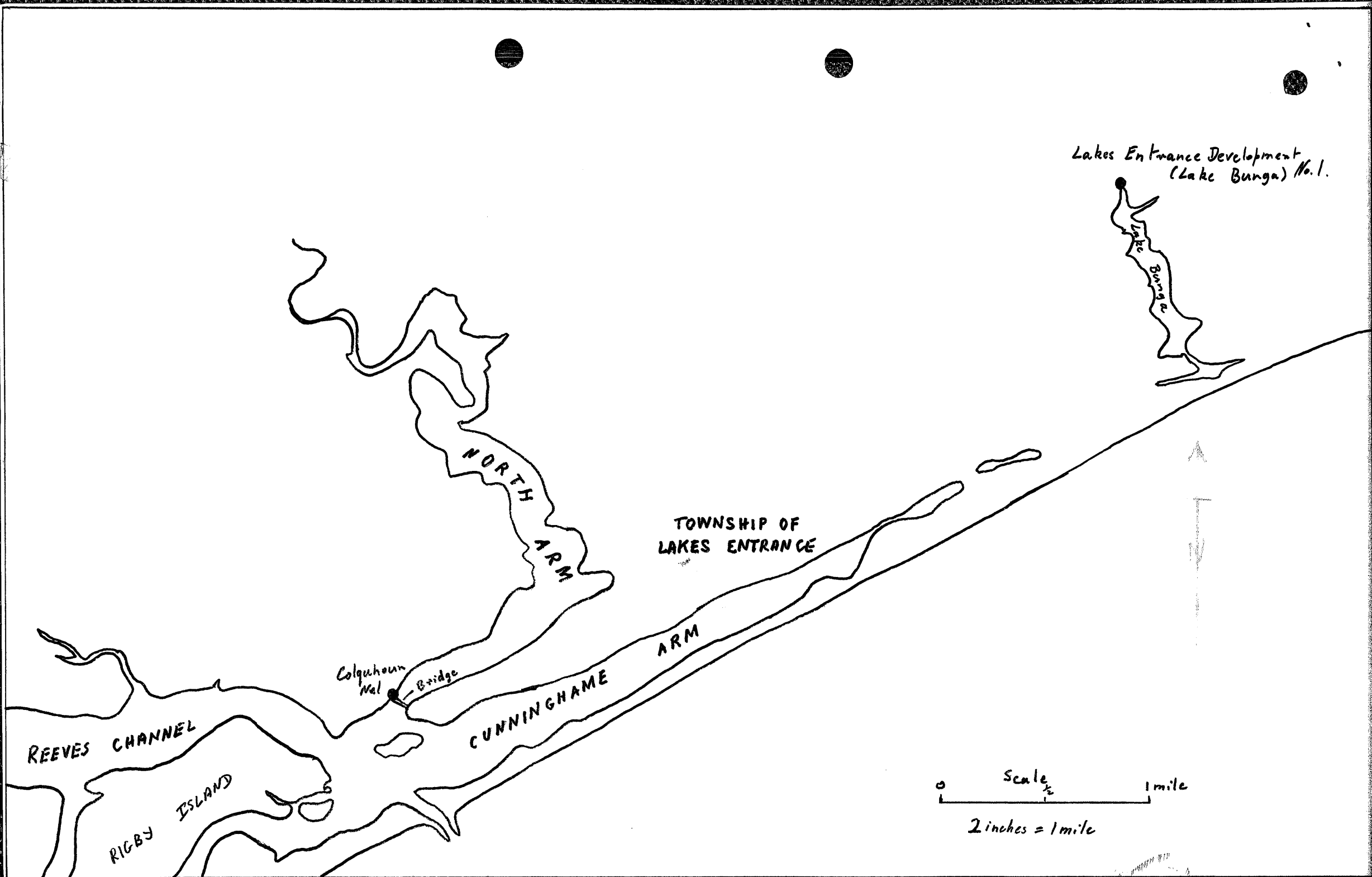
*Any other wells drilled in the period between these*

*two?*

*RGW 19/8/69*

*Lakes Entrance Devel No 2, 26/2/27  
16 15/28*

*in Otway Basin*



**OIL and GAS DIVISION**

SUPPOSED NATURAL WAX AT TOONGABBIE.

By L. H. Ower, Assistant Boring Engineer.

In the bed of Stony Creek, about 1½ miles from Toongabbie, a shaft has been sunk to a depth of about 40 feet. Heavy river shingle predominates in this shaft, and there are several "made" hills of this material in the vicinity. Below the shingle bed are Tertiary clays, more or less ligneous, and from amongst these, I am informed, the wax-bearing clay was obtained. A specimen of supposed natural wax proved on examination to be ligneous material. The shaft was full of water at the time of my visit, and none of the supposed wax was visible on the spoil heap.

Stony Creek here debouches from the ranges, the slates and sandstones outcropping about a quarter of a mile further up the creek. About 10 chains to the westward a bore was sunk some 30 years ago to a depth of 175 feet in sands, clays, &c., the object being to strike oil, but the prospectors were evidently misled by the iridescent iron oxide films on the water, a common occurrence in marshy ground.

A Tertiary hill, about 80 feet above the level of the creek, occurs to the south-westward. On the further slope of this hill there is a shaft 40 feet deep, from which black and brown clays have been obtained. It is reported that, while sinking this shaft, a man was overcome by the gas (probably marsh gas) in it. The material derived from these shafts appears similar to that in the beds passed through while boring for brown coal.

The Geological Survey laboratory report on this material is as follows:—

No. 613 (1916).—The substance was subjected to prolonged treatment with ether to extract wax, if present.

Further extractions have been made with other solvents—benzine, carbon tetrachloride, and benzol.

The result shows that a small amount of bituminous material is present, such as is common to all brown coal. There is no montan wax present.

The amount of bitumen obtained is about 1 per cent. This agrees with the analysis originally made.

ANALYSIS.

H <sub>2</sub> O	..	38.09 per cent.
V.H.C.	..	16.05 per cent.
F.C.	..	5.48 per cent.
Ash	..	40.38 per cent.
		<hr/>
		100.00 per cent.

[23.11.16.]

LOWER, L.H.; 1921  
SUPPOSED Natural Wax at Toongabbie. Rec. Geol. Surv. Vict; Vol 14, Pt 3,  
PP 279 - 280.

Stirling, J 1890. Notes on Alleged Keroscene  
Shale Deposit Near Toongabbie.

Repts and statistics of the Mining Dept. For  
the Quarter ended 30th June 1890, P. 24.

It appears probable from the above that  
the "bore" is probably a shaft.

Even though oil <sup>may be</sup> formed in a clay <sup>or other fine-grained source sediment</sup> it can only become commercially useful through accumulation in a reservoir rock which must be both porous and permeable. It will flow into such rock whenever contact is established between the reservoir and the less porous source <sup>Sediments</sup> ~~clay or marl~~. The oil must then be trapped so that it can accumulate in commercial quantities. Traps may be due to lensing or wedging of the sand in impervious clays or they may be structural. Structural folding may arch the sand, and oil and gas being light and mobile will accumulate in the arch. The driving force which will push the oil up a <sup>generally</sup> drill hole will be either gas pressure above the oil or water pressure below the oil ~~or gravity~~.

I think after reading the explanation the reader can appreciate the ups and downs, the frustrations and disappointments of the early oil drillers in Gippsland. They just weren't over the really ideal conditions for oil in commercial quantities.

The Coorong swamp area of South Australia is credited with having the first oil bore in Australia when one was put down in 1892. There were masses of <sup>rubber-like</sup> coorongite <sup>at the surface</sup> and at that time this was thought to indicate the presence of oil but no oil was found.

<sup>very doubtful</sup> My research uncovered the fact that the Coorong bore was not Australia's first. The <sup>honour</sup> belongs to Toongabbie in Gippsland.

The bore I refer to is mentioned in Richard Mackays "Recollections of Early Gippsland Goldfields" and also in a Toongabbie ~~History~~ written in 1922 by the local schoolteacher.

?  
<sup>embers/</sup> About 1836 a bore was put down on the property of Mr. John Buntine near Stony Creek at the <sup>north</sup> top end of his property. It is understood that a syndicate was formed, of which the Hon. James Service was one <sup>member</sup> "however it was not prolific in oil and the owners did not go on with it", to quote Richard Mackay.

The Gippsland shale Company (1884)

26 years later  
so-called oil shale

The report of the schoolteacher in 1922, who no doubt gathered his information from many early settlers who were then still alive in Toongabbie, states "oil shale was first discovered on his property by Mr. John Buntine in the early Eighties" (the land in 1922 was owned by E.Gadd). Mr. George Hower, who arrived in Toongabbie in 1879 after many years in the North Gippsland Goldfields, and Mr. Townsend both acting under instructions of Mr. <sup>J.</sup> Stirling, Government Geologist, put down a shaft on Buntine's but failed to strike oil.

8/

H. OWER

5/

3/

statement quite incorrect. see Ref. opposite

There is no record under any of Stirling's reports in the Mines Department nor is there a record of any sample taken from the bore for analysis. This is ~~the~~ reason why this bore has never been officially recognised as the first in Australia.

one/

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My research found a report in the Mines Department dated 1916 headed "<sup>Natural</sup> Supposed Wax at Toongabbie" by L. <sup>H. Ower</sup> ~~Owner~~, Assistant boring Engineer. He discussed examination of a shaft sunk to 40ft in the bed of Stony Creek, 1 1/2 miles from Toongabbie and after reporting on this shaft he stated "About 10 chains to the westward a bore was sunk some 30 years ago to a depth of 175 feet in sands, clays etc. the object being to strike oil but the prospectors were evidently misled by the iridescent iron oxide films on the water, a common occurrence in marshy ground". Ten chains westward as mentioned by Mr. Ower places the bore on John

before/

Buntine's land and 30 years ago ~~from~~ 1916 would have been 1886. ~~Therefore no doubts can be held that the Toongabbie oil bore was the first bore put down for oil in Australia. the first put down in Australia.~~ There is thus a <sup>case for claiming this early bore as</sup>

I do believe however, that John Buntine was spurred on to put down a bore by references to oil shale he may have heard of when Mr. <sup>J.</sup> Cosmo New<sup>e</sup>bury was in the Traralgon and Toongabbie areas in 1865. Mr. New<sup>e</sup>bury was a Government Analyst who at one time had done private work. I quote a letter written by Mr. <sup>W.</sup> Baragwanath of the Mines Department in November 1920. "The existence at Traralgon of coal and oil shales was recorded by the late

P. 40



514  
8  
Index apt

Near Toongabbie a shale resembling oil was recorded in 1895 and mentioned in various papers since but efforts to find a continuance of this <sup>bed</sup> were not successful." In the Traralgon district a considerable number of bores have been sunk to date and boring is still in progress there. The total footage of these bores during the past three years is 10,719 ft."

For those readers who do not know the names I mentioned I have a few biographical notes on James Service and John Buntine that may be of interest.

The Hon. James Service was from Ayrshire in Scotland where he was born in 1823. He was a J.P. and M.L.C. in Melbourne. He was well known for his work in politics especially regarding certain Land Acts. He was classified as a Democratic Statesman—probably because his biography states "he respectfully declined a knighthood which was offered to him in recognition of his services".

John Buntine was a member of the famous Buntine family of the early days of Gippsland. He was the eldest son of Hugh Buntine, and was a lad of about 14 when he arrived in this country with his father. He became a member of the Rosedale Council and was made a J.P. in 1878. He visited California with a man named Armstrong whose sister he eventually married. It may have been on this trip that that he saw something of oil in the U.S.A. He also assisted in burying the first man killed by the blacks in Gippsland, a shepherd who was employed by Angus McMillan, on Spring Hill half way between Maffra and Sale.

Source ?

I believe it is possible that the second oil bore in Australia was also put down in Toongabbie. Soon after Buntine's attempt to strike oil John Gillam put down a bore near his hotel but after boring 150ft he had the misfortune to break an auger. Although he failed to find oil he did discover a 5ft seam of good fire clay and other indications of the existence of coal. X.P.T.O

What indication that this bore has for oil?

the Toongabbie Oil Company was formed but nothing eventuated.

I have found no record of this company. I am also unable to find out which hotel the bore was drilled next to. John Gillam married Mrs. Elizabeth Wridgeworth who owned the Club Hotel in 1883. This was destroyed by fire in 1887. She later bought the Toongabbie Hotel which in 1922 was owned by Mr. Hodder. If any reader has information that can prove the bore was drilled before 1892 then Toongabbie can definitely claim both the first and second oil bores in Australia. Mr. Gillam was originally an engineer from England and expert with a diamond drill and no doubt this background gave him sufficient impetus to follow in John Buntines footsteps and try for oil.

Hopelessly out of date  
Delete or update

Oil exploration in this article covers the area roughly from Traralgon to the coast and eastwards to the Weyburn area and includes the sea shelf.

↑  
Hopelessly out of date  
Delete or update

Mines Department  
The map showing Gippsland oil bores records 103 oil bores; 36 of these have been in the North Arm area of Lakes Entrance; 4 Esso Gippsland shelf offshore; and 63 are scattered over the remaining area.

There are too many to discuss in detail so I have chosen several of interest in the early days.

S/  
O/

Owners report from Toongabbie in 1916 pointed out something which fooled many people. In the gold days copper pyrites - fools gold - disappointed many new chum miners. So it was with oil. The presence of iridescent iron oxide films on the water, a common occurrence in marshy ground, literally became "Gippsland's fools oil".

Mr. Vern Langhorne, a local identity at Port Albert, wrote to the Mines Department as long ago as 27th June 1923 about the likelihood of oil in Gippsland. In reply the following report dated 7.7.1923 was prepared by Mr. W.H. Ferguson.

"For some 12 years past Mr. V.W. Langhorne has noticed an iridescent scum on water about  $1\frac{1}{2}$  miles N.W. from Port Albert where there is an extensive peaty mud flat near the mouth of the Tarra River. He considered that it might be mineral oil and asked for an investigation. Pools of water in this locality are covered with floating iridescent scum or films, but they do not act like oil films. When disturbed the scum breaks up into angular fragments which do not unite again as oil films do. I also found that words written in the scum with a sharp stick remained visible. The occurrence is similar to hundreds of others in Gippsland associated with decomposing vegetable matter in mud or swamps and is probably a stage in the formation of bog iron ore. Flocculent iron oxide was noticed in one of the deeper pools; systematic boring for brown coal has been carried out in the neighbourhood of Port Albert but there is nothing in the results to suggest the presence of mineral oil in the locality"

Strong words!

Langhorne's letter shows that an awareness existed among the people that oil may exist in Gippsland. The 20's were to prove an active decade searching for oil in the area.

In September 1920 Mr. Baragwanath who was Director of Geological Survey of Victoria delivered an address to the Chemical Society on "Oil in Victoria". He mentioned Gippsland with its proven layers of lignite and ligneous clay and stated: "so far boring records have shown no evidence of conditions entirely suitable for oil - if oil exists it will probably be found in irregular deposits". Later in 1922, he initiated a line of bores south of Longford. They were not satisfactory but showed that possible good shoreline conditions were obviously further East.

2.

Oil shales were discovered by the early settlers throughout the State before anyone had reported their occurrence in the Northerly States and territories. In 1865 Mr J Cosmo Newbery related to his friends that he had seen iridescent scum occurrences over water holes near Traralgon in Gippsland. The interest of Victoria's mineral propsectors passed to gold - other settlers to whaling - whilst there was discovered in South Australia in 1852, a rubber like substance thought to have originated from oil seeps from saline lagoons, but now known to be a dried residue of an algae. The first oil bore in South Australia was at Robe in 1892 in the vicinity of these oil seeps.

It has been widely reported that this bore in South Australia was the first well drilled for oil in Australia. However, this is now known not to be ~~incorrect~~. Six years earlier, in 1886, a Mr John Buntine put down an oil bore at the top end of his property near Stoney Creek in the Toongabbie area, some 40 kms WSW of Sale.

A syndicate called the Gippsland Shale Company (1884) appears to have been formed but nothing eventuated.

It was reported also that Messrs L H <sup>Over</sup>~~Owen~~ and Townsend acted under instructions from Mr J Stirling, Government geologist to put down a shaft at Buntines but it failed to strike oil. Mr Richard McKay commenting on this first Victorian 'oil endeavour' said: "However it was not prolific in oil and the owners did not go with it."

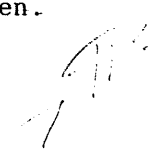
In the records of the Victorian Mines Department there are documented "Notes on alleged Kerosene Shale Deposit near Toongabbie" by Mr John Stirling and dated 1890. In his quarterly report dated June 30 1890, he referred to the kerosene shales and scums near Toongabbie and made the comment that "it appears probable .... that the bore is probably a shaft." However, there is no reference to the borehole samples taken from from Mr Buntine's well, and unfortunately this first Australian oilwell has never been recognised as such.

Mr John Buntine was a member of the family famous in the early years of Gippsland. He arrived in Australia as a lad of 14 with his father, became a member of Rosedale Council, and in 1878 a J.P.

He visited California and it may be this visit that kindled his interest in oil. It has been suggested that Mr Buntine was spurred on to put a bore by the references to iridescent scums and oil shales. He may have heard of from Mr J Cosmo Newbery, a Government analyst, who was in the Traralgon and Toongabbie areas in 1865.

There is a report of a second bore put down by a John Gillam before 1892 near his hotel, but after boring 150 feet he discontinued his activities having found a 5 ft seam of good fire clay and indications of the existence of coal. (The location of the hotel is uncertain.) These two bores both predate the well in South Australia.

Reports of oil shales and iridescent scums continued to be made. In 1895 a shale resembling oil was reported near Toongabbie and mentioned in various papers but efforts to find continuance of the bed was not successful. In the Traralgon area a considerable number of bores have been sunk and boring was proceeding at the time this 1895 report was written.



Reports of oil shales and prospects for oil continued to come in from all over the Colony and it was reported at the turn of the century that the whole of Australia was in the grip of "black-gold" fever. Victoria was affected along with the rest of the country. But oil continued to be elusive and another half century was to pass before the explorer's efforts started to provide the results which ultimately led to the first significant oil flows.

As for gold there is a "fools gold" so it is for oil there is a "fools oil". In 1916 Mr L H Owen described the "fools oil" of Gippsland. He pointed out to his many<sup>1</sup> new 'chum explorers' that the presence of irridescent iron oxide films on the surface of water is a common occurrence in marshy ground. Though this may look like an oil seep he cautioned that it is "Fools Oil". At the same time Mr Owen discussed his examination of a shaft sunk into the bed of Stoney Creek 1.25 miles from Toongabbie. He also reported a bore sunk 30 years earlier ten chains to the West to a depth of 175 ft.

An advertisement in the Telegraph of 8<sup>2nd</sup> August 1921 urged investors to support an oil venture. It described a significant Victorian oil discovery and read:

*"AUSTRALIAN OIL FIELDS MUST BECOME A REALITY"  
 ..... and every indication points to BOOLA BOOLA being  
 the FIRST PAYABLE FIELD. There's little doubt that  
 oil exists at Boola Boola - the geological formation  
 is identical with the rich fields of Rumania, USA, Mexico,  
 Austria, Galicia, etc.*

Just imagine the dividends that will be paid when oil IS struck. Three world renowned experts have expressed the opinion that the oil is there, and Boola Boola shareholders are on the threshold of big responsibilities.<sup>11</sup>

Boola Boola Petroleum NL (1921) drilled the Boola Boola No.1 well ...  
...IT WAS DRY!!!. The promoters had more confidence than success.  
If there is any payable oil at Boola Boola it is certainly elusive.  
Such is the oil industry.

Mr Vern Langhorne, a local identity at Port Albert, wrote to the  
Victorian Mines Department on 27th June 1923 about the likelihood of  
oil in Gippsland. Earlier, in 1922, Mr G W Shirrefs, who was engaged  
in prospecting for silver-lead between Buchan and Nowa Nowa, decided  
to search for oil. \* Later, <sup>Shirrefs</sup> ~~he~~ and his partner, Mr Duncan, leased a  
drilling outfit and crew. On 5th July 1924 the Lake Bunga No.1 was  
spudded. On 25th July 1924 Lake Bunga No.1 STRUCK OIL AT 1070 FEET.  
Analysis of the Lake Bunga oil by Mr J C Watson, Chief Chemist of the  
Mines Department, showed it to be a mineral base heavy crude. This  
marked the first confirmed discovery of an oil accumulation in  
Australia.

\* The oil exploration history of the onshore Gippsland Basin really  
began ~~accidentally~~ in 1924, when a well drilled for water near Lakes  
Entrance found indications of oil. <sup>Shirrefs</sup> This led to the discovery of a  
small Lakes Entrance oil pool which between 1924 and 1956 produced  
1300 cubic metres or 15.7 °APIW oil. This is the only oil that has  
been produced so far in onshore Gippsland.