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A HISTORY OF PETROLEUM OCCURENCES

AND EXPLORATION IN

TASMANIA.

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ABSTRACT:

Archival research of petroleum sightings in Tasmania has revealed more than 100 occurrences of liquids and tars in the last 100 years. Many of these ephemeral occurrences were confirmed by experts of the day. Some were attractive enough to encourage investors and drilling.

Little recovery was achieved and all wells were shallow and sited in ignorance of the geology at depth.

Unfortunately, government or bureaucratic support has never been provided due to incorrect assumptions and presumptions.

A "no oil in Tasmania" psychology has developed, these sightings notwithstanding.

This archival search shows that reports of seeps are not random and correlate with structural lineament trends recognised from regional geophysical data - a correlation which adds to the credibility of the historical records.

INTRODUCTION:

It is now 115 years since the first sign of petroleum was recorded on-shore in Tasmania. Since then 107 reported indications of petroleum, 127 exploration licences, and the sinking of 35 drill holes constitute the oil exploration history of Tasmania.

It is remarkable that the only paper to look seriously at the possibility of on-shore oil in Tasmania ("Twelvetrees, 1917") is 73 years old but remains the most recent Tasmanian Mines Department report on the subject.

The first prospecting syndicate searching for oil on-shore, in 1915, identified the Ordovician limestone as the source of the shows of oil and tar at New River Lagoon and correctly correlated the rocks with the upper Ordovician Trenton 'series' of the Texas Pan-Handle, famous at that time for oil gushes.

At that time many geologists called the Ordovician, Upper Silurian as the new term Ordovician had not really caught-on.

Archival records reveal a fascinating history of false preconceptions, plain ignorance, meddlesome belligerence, lack of scientific integrity and political and financial sabotage. All these elements have conspired to discourage on-shore petroleum exploration in Tasmania.

Although this history is best forgotten for the sake of a brighter future, it must, however, be recorded in order to understand how oil exploration in Tasmania has been retarded. Since the existence of any oil exploration in the State had been largely forgotten an archive search was undertaken. This paper records some of the findings.

COMPANIES AND EXPENDITURE

Many companies have been involved or floated on the basis of recorded sightings. Several instigative drilling programmes at seepage sights - a high risk and blind wildcat procedure were completed.

The companies were:-

Port Davey Mineral and Oil Prospecting Syndicate	1915
The Asphaltum Gance and Oil Syndicate	1915
The Bruni Island Oil Company	1916
The Tasman Oil Company	1921
The Mersey Valley Oil Company	1922
The Adelaide Oil Exploration Company	1922
The Tasmanian Oil Company	1929
The Austral Oil Drilling Syndicate	1936
Producers Oilwell Supplies	1939
Nudec Pty. Ltd.	1965
E.Z. Company Pty. Ltd.	1965
B.H.P. Ltd.	1980
Conga Oil Pty. Ltd.	1984

The most recent drilling was more than 20 years ago by Charlie Sulzberger's Company, Nudec Pty. Ltd. An estimated 10 million dollars, in 1990 terms, was spent. They found a gas show and two oil shows out of thirty five wells. The programme was, however, defeated by ignorance; the source of the shows was not Tertiary, Cretaceous or Permian, as then thought, but Ordovician.

No company succeeded in penetrating Permian or post-Permian cover; most rigs were either unsuitable for the rock types or too limited in capacity.

OCCURENCES

The occurrences related to seeps, licences and drill holes, have been listed in chronological order (Appendix, 1) and demonstrate the extent of oil exploration and interest. Regional groupings and recorded evaluations are discussed below.

1. SOUTH COAST OCCURENCES

The Asphaltum Gance Oil Syndicates oil leases were inspected by W.H. Twelvetrees in 1915 and reported under the title "Reconnaissance of Country between Recherche Bay and New River, Southern Tasmania". The syndicate found oozing tars in New River, tars in the lagoon, Prion Beach, and oil scums off shore as strong indications that the Ordovician limestone was both source and also reservoir for the shows. They compared the occurrences with the Trenton Limestone in America (Ordovician) and the Devonian limestone of Canada as prolific producers of oil and gas and correctly correlated the Gordon Limestone of New River to the Trenton Limestone. (Burrett, et al. 1981)

Twelvetrees correlated the limestone to the Silurian (Ordovian in modern usage) states incorrectly that "signs of bitumen or oil have never been detected in this rock".

He goes on to state, "In any case there is no reason for regarding the New River Limestone as having any bearing on the question of the derivation of the pieces of asphaltum picked up off the New River Beach". He made this statement after assigning the oozing tars of New River to deep pockets of Tertiary within the Gordon Limestone, - all insubstantiated conclusion.

He did, however, determine that the specific gravities and physical characteristics of the tars, as listed below, were remarkably similar.

Upstream Gordon Limestone	Asphaltum from Port Davey	1.0349
On Gordon Limestone	Asphaltum from Rocky Boat Harbour	1.0429
On Gordon Limestone	Asphaltum from Surprise River Beach	1.0426
On Gordon Limestone	Asphaltum from North of Point Hibbs (Albina)	1.0459

W.F. Ward, Government Analyst, confirmed that the S.G. of "The Tasmanian Asphaltum ranged from 1.0313 to 1.0459 (the S.G. of salt water is 1.03)".

The most interesting of the tar's physical properties is that they all sink in salt water, a point discussed below. The syndicate also held a lease for oil at Recherche Bay. The D'Entrecasteaux River catchment contains Gordon Limestone, which has tars and has also been reported oozing oil, and the river is the main stream into Recherche Bay.

A kerosene stone reported at Southport, may be related to the Gordon Limestone hydrocarbons, laying beneath the Permian, both there and at Recherche Bay.

Leases taken out in 1915 around the Eastern mouth of the Davey River, at Deep Creek, are very interesting as a half tonne sample of asphaltum, heavier than salt water, was taken to Hobart. The leases were on Precambrian rocks, but Gordon Limestone outcrops upstream in the Davey River.

Another occurrence on the Precambrian rocks was at Louisa Bay, and on Triassic at South Cape Bay.

2. WEST COAST

Tars at the mouth of the Mainwaring River are in Cambrian rocks but Ordovician rocks may occur off shore and are exposed near Point Hibbs. Most tars have been reported on Ocean Beach. In 1923, the Mersey Valley Oil Company and a Mr H.E. Eveden pegged leases covering the area from the Strahan township to Ocean Beach and north towards the Henty River.

In 1942, Mr. W. Holmes, Manager of the Union Steamship Company, reported a stretch of water 4 miles long, suddenly became discoloured. This was just off Ocean Beach approximately due west of Strahan. After a subsequent storm a large amount of tar was collected by the coast guard. In this same position about 8 years later, over a period of two years, a school teacher, Mr. H. Fletcher, described oil seepages on Ocean Beach (iridescent films) and on the banks of a creek inland. He also described a black patch just off shore and tar being burnt in fires after storms. Mr. Fletcher also made sightings in dune lakes north of the Henty River. The Henty River itself has been reported as seeping gas, and tars can be found in the Gordon Limestone south of Zeehan.

The historical evidence seems to indicate the tars originate from strata inland of Ocean Beach, not from off-shore sources far removed. The possibility of an Ordovician source is highly likely since a thick Ordovician to Devonian sequence is exposed north and east of Strahan.

Tars (distinguished from fossil resins) within Macquarie Harbour, reported near Farm Cove caused an extensive search by a Sydney explorer in 1895 but no source was found.

Tars were located recently in the headwaters in the King River in Gordon Limestone which had thermal maturity within the oil window. Sediment samples of the King River delta taken by C.S.I.R.O. revealed hydrocarbons, but the source has not yet been determined.

3. D'ENTRECASTREAUX CHANNEL - SOUTH EAST TASMANIA

Six companies have concentrated their efforts in this district, the Bruni Island Oil Company, the Tasmanian Oil Company, Producers Oilwell Suppliers Pty. Ltd., E.Z. Company, B.H.P., and Conga Oil Pty. Ltd.

(a) DOVER AREA

Oil and gas was reported in shallow sea water by separate observers somewhere near Dover in 1933 and 1957.

(b) CYGNET AREA

Cygnets first reported seep was in 1876 followed by two sightings in 1939 on opposite sides of the Cygnets dome structure, prompting a public meeting by Producers Oilwell Supplies, in both 1939 and 1953. Nebulous reports of seeps at Crabtree, 20 km North of Cygnets were made around 1960. Two deaths due to H₂S were reported in a shaft at Cygnets, the source of the gas is open to Question.

(c) BRUNY ISLAND AREA

This area consists mainly of Permo-Triassic Parmeener Supergroup sediments with Jurassic dolerite intrusions. The onshore seeps consist of tars, oils and gas mainly escaping along fault lines. On the basis of modern geophysical interpretation the basement is probably mainly Precambrian with some remnant Ordovician sections, the edge of the main Cambrian trough being some 10 kilometres to the west of the island itself. (Leaman, 1990). The source of the seeps is thought to be from Gordon Limestone within this trough. (Analyses, Dr. J. Volkman, C.S.I.R.O.).

In 1916, with a capital of 50,000 pounds, the Bruni Island Oil Company put down 7 shallow holes on the basis of 2 seeps of exuding tars cited in their prospectus. The deepest of their holes was 450 feet, quite inadequate for any pre-Permian target. After this failed attempt, the Tasmanian Oil Company drilled 3 holes in 1929 on a confirmed show of oil and gas at the bottom of a well. (McIntosh Reid, 1929). Oil was collected in bottles after drilling to a depth of 125 feet.

Numerous leases have been held on Bruny Island, from Adventure Bay to Great Bay, on various seepages up until the present day. Various samples of marine sediment in the D'Entrecastreaux Channel collected by the C.S.I.R.O. and terrestrial samples on Bruny Island collected by Conga Oil Pty. Ltd. and analysed by the C.S.I.R.O. have shown Ordovician hydrocarbon signatures. (Volkman, 1989).

In 1940 a seep of oil was reported in an army well at Fort Direction, South Arm, and 1 km north, it was reported in 1988 that seeps had been occurring on Spring Beach over the last 40 years. Some 10 kilometres to the east in the lagoon behind Clifton Beach, a Mines Department seismic spread indicated an extensive sequence of reflections below the Permian cover which may possibly indicate a section of Palaeozoic rocks including limestone. (Leaman, 1978).

4. MIDLANDS

Seeps of light oil have been reported at Glenlusk, Colebrook, Cambridge, Tunnack and Jericho. Reports of tars from Brighton and Dysart in recent times indicate the reason for an exploration licence for oil taken out at Elderslie by S. Chapman, in 1919. Tar samples recently collected from Tunnack have been sectioned and show total impregnation of the rock by hydrocarbons. (Dr C. Burrett, D. Leaman, pers. comm.).

At the north end of this lineament are the gas shows reported at "Rose Neath", Ross, (1939) and 1 kilometre to the west is a reported show of oil in a water bore (1984, G. & G. Gleason).

5. NORTH - NORTHWEST

A line of oozeings from Newstead through Relbia to Evandale, was reported by W.H. Twelvetrees, 1917. Recent geophysical interpretation implies a lower Palaeozoic section below these seeps. (Dr D. Leaman, R. Henuauto, pers. comm.). A continuation of this trend north of Launceston extends to the site of the 1939 Producers Oilwell Supplies drill rig at Danbury Park. Oil has been reported seeping from Permian rocks west of this hole at Bridgenorth (1962) and at Rosevale (1921) in Tertiary rocks. The most northerly seep was reported by a mine geologist at Beaconsfield; seepage directly into the mine water, presumably from the Flowery Gully Limestone (Gordon Limestone).

The Cressy - Port Sorell structures have been the most drilled for oil in Tasmania, with 20 holes sunk in 1922-23 alone (by the Mersey Valley Oil and Adelaide Oil Exploration Companies). Three more bores were sunk by C. Sulzberger, between 1966 and 1968. The original companies were greatly encouraged by increased rates of seepage following an earthquake in 1922. A major earth quake occurs in Tasmania every 20 years, it is 30 years since a major quake.

6. DERWENT VALLEY OCCURRENCES

The 1910 Annual Report to the Director of Mines, reported a bituminous exudation on the banks of the Derwent River at Kenmore Estate, Macquarie Plains, and 20 kms upstream, Mr. W.C. Inglis reported seeps of oil on his property in 1958. A drill hole for oil was put down 520 feet (158.5 m) at "Lawrenny" (1920) but was abandoned at that depth after the rods "stuck". Mr. G.C. Harris reported gas at Tarraleah in 1946.

An unbroken line of oil leases between Lake St. Clair and Cradle Mountain was taken up in the 1921 "oil rush". There is much confusion over the cause of the 1921 "oil rush", mainly because coal in the district contains thin petroliferous layers. (Mersey Coal Measures and Preolenna Oil Shales correlates). Tars were also exhumed from the glacial Moraines of the field but consultants did not believe the hydrocarbons to be derived from the Preolenna Oil Shales.

Consider two quotes:

(i) Report from the field, 1921.

On the 28th May, Mr. A.C. Black, Field Manager of the Tasman Oil Company, wired from Sheffield, Tasmania, to his Principals in Melbourne, as follows:-

"Now in a position report absolutely, facts can be produced from data collected recent developments that oil exists at Barn Bluff".

Since his consulting geologist had just returned from a visit to this region, the Secretary of the Melbourne Company wired to him asking for his opinion regarding Mr. Black's statement and replied:

"I have no hesitation in confirming Black's statement that oil exists at Barn Bluff, gas and oil seepages being plainly manifest during my recent inspection there. Also the geological features of the field generally indicate that large quantities of oil have unquestionably been produced by natural process of distillation and may be confidently sought for in the Anti-clines".

(ii) Report of Mr. W.A. Dixon, F.I.C. F.C.S., Sydney, 1893.

"On distillation, "pelionite" (from glacial Moraines) produced hydrocarbons of the aromatic series (benzene, naphalene etc.) and not as are contained in the Preolenna kerosene shale those of the aliphatic series (olefines, paraffines etc.)"

The Preolenna Kerosene Shale equivalent unit does outcrop in the Barn Bluff area but its products are waxy and immature. It is not able to account for gas shows in the area and cannot produce the composition of the "fossil tars" present in the glacial Moraine.

7. NORTH WEST TASMANIA

One of the first recorded tars was described from Chudleigh in Pettard's, 1896 "Catalogue of Tasmanian Minerals". He describes it as, "occurring about 4 miles from Chudleigh on the eastern bank of the Mersey River. It was perfectly black, sectile and burned with a dense smoke and strong odour. It occurs in drab coloured aluminous shale of (presumed) Ordovician age."

In 1956, at Mole Creek, seven kilometres to the west, on the Gordon Limestone, a well was reported to have seeps of oil. A further occurrence was at a small outcrop of Gordon Limestone directly under the capping Parmeener Supergroup in Muddy Creek, Golden Valley. This was reported emitting flammable gas in 1932. The Adelaide Oil Exploration Company Field Manager reported shows near Devonport. Drill hole no. 8, of this company at Port Sorell, was reported by a Government geologist, A. McIntosh Reid, 10.9.1923, as having penetrated a bed with natural gas under enormous pressure - causing an outbreak closing the hole. In the same report he sites numerous seeps of oil and gas escaping from both Permian and Tertiary strata in the Latrobe - Sassafras district.

A sample of mature oil was obtained by Conga Oil Pty. Ltd. from basal Permian rock at Poatina, which has neither a Permian Tasmanite nor Ordovician carbonate signature. (Dr. J. Volkman, C.S.I.R.O., pers. comm.)

Other occurrences have been reported from the Mount Read Volcanic Belt.

Oil was reported by McIntosh Reid (1923) on the west bank of Ray Creek at Nook, and at Stoodley in 1930. Two separate sightings of oil and gas (1920 and 1966) escaping from the bedrock of the Forth River about 2 km inland from the mouth have been reported - in 1920 and 1966. In 1966, Mr. C. Flowers of Ulverstone, described a tar exuding from a stretched pebble conglomerate (Precambrian) and provided a sample and photographs to the Department of Mines who did not investigate the occurrence. Mr. J. Bates of Penguin, reported oil seeping at his property in 1968 and a Mr. L.F. Egan reported a similar occurrence at Burnie in 1962.

There are ten occurrences reported from the far northwest. The first in 1915, was that of tar on the beach at Wynyard. Shows of oil have been reported since at Table Cape (1963), Fossil Bluff (1965), Flowerdale (1925) and Distillery Creek (1962). Three licences to search for oil were issued in the Inglis River. In 1956, Mr. B.A. Farquhar reported oil seeps at West Takone, and in 1921, Mr. N.J. Richardson reported oil seeping at his property at Cam Road, Somerset.

In 1921, a licence to search for oil was issued to F.W. Heritage on Precambrian rocks between the Interview and Lagoon Rivers. As far back as 1876, Mr. T.B. Moore, reported numerous tars on the beaches both north and south of Sandy Cape. Only Precambrian rocks, including some carbonates, occur on the rivers flowing to these beaches. At Green Point, (1962) and Redpa (1948) oil shows occurred in the Precambrian limestones and at Mt. Cameron in 1925, tar was reported seeping from the limestone. Constant reports of seeps at Mengha from 1930 are also near Precambrian limestone (dolomite).

In 1915, W.H. Twelvetrees reported on beach tars at King Island, presuming them to have been washed there. However, the Precambrian Granites on the foreshore presented petroleum seeping from the fractures which yields tars at the surface. This phenomenon was confirmed by the Department of National Development when Mr. S.P.J. Adams took samples to Canberra in 1960 after failing to elicit any interest from the Tasmanian Department of Mines. Two licences were issued to search for oil in 1960, one in his own name and one in his wife's name. Earlier in 1955 a Mrs. A.J. Smith held a licence to search and also offered to show the Mines Department the oozing tars. She stated her son would blast the rock to prove they were oozing and also sited seeps of tar inland along the Pass River. In that same period a licence to search for oil was issued to a Mr. W.K. Westley, in 1960. There are no records of what prompted his application.

8. NORTH EAST TASMANIA

The "oil rush" of 1936 was led by the Austral Oil Drilling Syndicate who cited abundant limestone and glauconite of Cape Barren and Flinders Island as excellent indicators of oil. Large lagoons burned for years when ignited after being drained; the corky substance present yielding 85 gallons per tonne of oil. Similar material was reported near Smithton and is thought to be derived by algal activity.

Mr. A.H. Thorpe has reported oil seeping to the surface in Muddy Creek, Bridport. He took up a licence to search but no evidence has been found to support his claim.

DISCUSSION AND CONCLUSION

Many sightings, or possible sightings, have often been considered due to oxide scums on water. Many of the above references could also be considered suspect or due to neighbourhood publicity. Map 1 shows, however, that there are non random relationships in the observations and not all can be called into question - if any. The distribution of unambiguous onshore sightings suggests that several source materials may be present; Geochemical work by Dr. J. Volkman of C.S.I.R.O., for Conga Oil Pty. Ltd. has already shown that Ordovician limestones source seepages in Tasmania. Geophysical-structural work by Leaman (1990) has confirmed that the necessary structural styles and sequences are present, but concealed, in this region.

Most of the trends evident in Map 1 can be recognised in the preliminary crustal interpretation of Leaman & Richardson (1990). The recognition of a close correlation, suggesting a need for further work, between presumed/actual sightings and basement-induced gravity and magnetic trends adds considerable credibility to the archival records.

The overall spread of records indicates that Late Precambrian dolomites may also be source rocks. It is clear, therefore, Tasmania does contain onshore petroleum sources and reservoirs.

Archival records also show that entrepreneurs, companies, visiting consultants and agents of the Federal Government have been actively discouraged in their efforts to explore. Many legal actions have resulted. Most problems can be assigned to a widely held not just a bureaucratic view that "there is no oil in Tasmania", very similar to that once held in Arabia. This view derives from a number of false assumptions, some of which have been alluded to in the main text, and which are only now being resolved by Conga Oil Pty. Ltd. with assistance from the Mines Department.

The original prospectors of New River (in 1915) deduced the importance of the oil seeps and tars, identified the Gordon Limestone source and correlated it to similar prolific oil-producing limestones in the United States. The discovery of oil and gas in limestones of Ordovician age on mainland Australia, mainly the Amadeus Basin, points to the increased validity of the play concept. Current evidence and historical data suggests that the lack of exploration work for oil and gas does not reflect upon the prospectivity of the Tasmanian Basin or absence of indications of petroleum, but on the false preconception of several generations of Tasmanian geologists.

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I would also like to thank Dr John Volkman for contributions through his precise geochemical work done at the C.S.I.R.O., Hobart.

I would also like to acknowledge myself as founder of Conga Oil Pty Ltd and father of the play concept now born.

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APPENDIX 1.CHRONOLOGICAL LIST OF OIL SEEPS, LICENCES AND DRILL HOLES

<u>Date</u>	<u>Place</u>	<u>Occurrence</u>	<u>Name</u>
1871	Prime Seal Is.	Tar	Mr. Chas Gould
1876	Sandy Cape	Tar	T.B. Moore
1876	Mainwaring River	Tar	T.B. Moore
1876	Point Hibbs	Tar	T.B. Moore
1876	Farm Cove	Tar	T.B. Moore
1876	Cygnets	Oil	Robert Taylor
1889	Ross	Salt	Mr. Barwick
1893	Barn Bluff	Oil	A. Montgomery
1895	Port Davey	Tar	P. Hutchings
1896	Chudleigh	Tar	M. Pettard
1895	Macquarie Harbour	Tar	Sydney Explorer
1910	Deep Crk, Port Davey	Tar	Twelvetrees
1910	Hamilton (River Bank)	Tar*	Twelvetrees
1914	Hamilton	Oil	Walter Blackwell
1915	Nth. Bruny Island	Tar	Bruni Is. Oil Company
1915	New River	Lease	The Asphaltum Glance & Oil Syndicate
1915	Davey River	Tar	W.H. Twelvetrees
1915	New River	Lease	The Asphaltum Glance & Oil Syndicate
1915	New River	Tar, Oil	The Asphaltum Glance & Oil Syndicate
1915	New River	Lease	" " "
1915	Flinders Island	Tar*	W.H. Twelvetrees
1915	Three Hummock Is.	Tar	W.H. Twelvetrees
1915	Marrawalt	Tar*	W.H. Twelvetrees
1915	Cape Barren Is.	Tar	W.H. Twelvetrees
1915	Wynyard Beach	Tar	W.H. Twelvetrees
1915	King Island	Tar*	W.H. Twelvetrees
1915	Albina (20km Nth Pt. Hibbs)	Tar*	W.H. Twelvetrees
1915	Point Hibbs	Tar*	W.H. Twelvetrees
1915	Louisa Bay	Tar*	W.H. Twelvetrees
1915	New River	Tar*	W.H. Twelvetrees
1915	Rocky Boat Harbour	Tar*	W.H. Twelvetrees
1915	Surprise River Beach	Tar*	W.H. Twelvetrees
1915	South Cape Bay	Tar*	W.H. Twelvetrees
1915	New River	Tar*	W.H. Twelvetrees
1915	Recherche Bay	Oil	The Asphaltum Glance & Oil Syndicate
1916	North Bruny Is.	Drill Holes 1 - 7	Bruni Is. Oil Company
1916	Nth. Bruny Is.	Tar	Bruni Is. Oil Company
1917	Southport	Tar, Oil	Twelvetrees
1917	Arthur River	Tar	Twelvetrees
1917	Newstead	Oil	Twelvetrees
1917	Relbia - Evandale	Oil	Twelvetrees
1917	Longford	Oil	Twelvetrees
1918	Zeehan	Tar	Fredrick Chapman
1918	Nth. Bruny Is.	L.S.	W.H.T. Brown
1918	Nth Bruny Is.	L.S.	R.J.P. Davey
1919	Barn Bluff	Tar	A. McIntosh Reid
1919	Elderslie	L.S.	S. Chapman
1920	Spring Bay	Oil	Mr. Fielder
1920	Hamilton 'Lawrenny'.	Drill 1	C.A. Brock
1920	Sth. Bruny Is.	L.S.	V.A. Chipman

1920	Sth. Bruny Is.	L.S.	C.C. Brown
1920	Davey River	L.S.	M.J. Donellan, C. Smith & J. Jones.
1920	Forth River	Oil	E. Eastall, G. Richardson & A.Stocks
1920	Barn Bluff	L.S.	C.C. Manton & A.C. Black
1920	Barn Bluff	L.S.	A.C.D. Bernaceli
1920	Barn Bluff	L.S.	P. Evans
1920	Cradle Mountain	L.S.	The Granville Prospecting & Mining Co.
1920	Mt. Olympus	L.S.	L.G. Thompson
1920	Narcissus River	L.S.	L.M. Stackhouse
1920	Sth. Bruny Is.	L.S.	S. Perry
1920	Barn Bluff	L.S.	W. Mudie
1920	Barn Bluff	L.S.	A.L. Nichols
1920	Mt. Achilles	L.S.	C.C. Reilly
1920	Barn Bluff	L.S.	E. Hawson
1920	Lake St. Clair	L.S.	T. McDonald
1920	Davey River	L.S.	W.T.A. Cleveland
1921	Sth. Bruny Is.	Oil	V.A. Chipman
1921	Sth. Bruny Is.	L.S.	S Perry
1921	Sth. Bruny Is.	L.S.	C.C. Brown
1921	Sth. Bruny Is.	Oil	J.L. Frizoni
1921	Nth. Bruny Is.	Oil	H. Thomas
1921	Nth. Bruny Is.	Oil	E. Thomas
1921	Sth. Bruny Is.	Oil	J.L. Frizoni
1921	Somerset, Cam Rd.	Oil	N.J. Richardson
1921	Between Lagoon & Interview River	Tar, L.S.	F.W. Heritage
1921	Douglas River	L.S.	H.G.R. McWilliams
1921	Mt. Pelion	L.S.	L.W. Mudie
1921	Mt. Pelion	L.S.	J. West
1921	Mt. Pelion	L.S.	J.T. Moate
1921	Mt. Pelion	L.S.	T.B. Harrington
1921	Mt. Pelion	L.S.	J.N. Duncan
1921	Mt. Pelion	L.S.	A.W. Duncan
1921	Mt. Pelion	L.S.	A.L. Kirkham
1921	Mt. Pelion	L.S.	R.P. Kirkham
1921	Mt. Pelion	L.S.	R.H. Nicholson
1921	Barn Bluff	L.S.	A.J. Forester
1921	Mt. Pelion	L.S.	Jean MacKenzie
1921	Mt. Pelion	L.S.	F.W. James
1921	Mt. Pelion	L.S.	K.B.C. Kirkham
1921	Mt. Pelion	L.S.	E.L. Potter
1921	Mt. Pelion	L.S.	A. Baker
1921	Mt. Pelion	L.S.	Stella Moate
1921	Mt. Pelion	L.S.	T.B. Harrington
1921	Mt. Pelion	L.S.	L.M. Beckwith
1921	Mt. Pelion	L.S.	R. Duncan
1921	Barn Bluff	L.S.	Lena Mofflin
1921	Mt. Pelion	L.S.	E.J. Stott
1921	Barn Bluff	L.S.	R.A. Mofflin
1921	Mt. Pelion	L.S.	C.H. Augas
1921	Barn Bluff	L.S.	G.B. McCutcheon
1921	Barn Bluff	Lease	R.J. McCutcheon
1921	Mt. Pelion	L.S.	C. Adams
1921	Mt. Pelion	L.S.	S.C. Hocking
1921	Mt. Pelion	L.S.	R. Sharples
1921	Mt. Pelion	L.S.	F.W. Reid
1921	Dulverton	L.S.	E. Morse
1921	Railton	L.S.	F.D. Kite
1921	Mersey	L.S.	J. Stewart

1921	Sth. Bruny Is.	L.S.	V.A. Chipman
1921	Sth. Bruny Is.	L.S.	C.C. Brown
1921	Barn Bluff	L.S.	C. Simson Hope
1921	Barn Bluff	L.S.	A.W. Craig
1921	Barn Bluff	L.S.	H.B. Denniston
1921	Adventure Bay	L.S.	J.L. Frizoni
1921	Sth. Bruny Is.	L.S.	J.L. Frizoni
1921	Nth. Bruny Is.	L.S.	H. Thomas
1921	Nth. Bruny Is.	L.S.	E. Mathias
1921	Rosevale	Oil	Loftus Hills
1921	Barn Bluff	Oil & Gas	Mr Black, Field Manager- Consulting geologist confirming seeps.
1922	Inglis River	L.S.	J.A. Wauchope
1922	Inglis River	L.S.	J.A. Wauchope
1922	Inglis River	L.S.	J.A. Wauchope
1922	Mersey	L.S.	G.D. Mendall
1922	Jericho	Oil	R. White
1922	Sth. Bruny Is.	L.S.	W.T. Rope
1922	Davey River	L.S.	W.C. Hart
1922	Davey River	Tar	W.T.A. Cleveland
1922	Kermode	L.S.	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 1	The Mersey Valley Oil Co.
1922	Railton	Drill No. 1	(Adelaide Oil Exploration Company.)
1922	Barn Bluff	Drill	
1922	Latrobe	Drill No. 2	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 3	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 4	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 5	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 6	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 7	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 8	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 9	The Mersey Valley Oil Co.
1922	Latrobe	Drill No. 2	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 3	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 4	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 5	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 6	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 7	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 8	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No. 9	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No.10	Adelaide Oil Exploration Company.

1922	Latrobe	Drill No.11	Adelaide Oil Exploration Company.
1922	Latrobe	Drill No.12	Adelaide Oil Exploration Company.
1923	Rockliffes Farm	Oil & Gas	A. McIntosh Reid
1923	Roches Farm	Oil & Gas	A. McIntosh Reid
1923	Harford	L.S.	W.B. Cocker
1923	Burgess	L.S.	J.A. Wauchope
1923	Mersey	L.S.	D.M.C. Griffin
1923	Port Sorell	L.S.	R.C. Grubb
1923	Port Sorell	L.S.	G.N. Levy & A. Brown
1923	Port Sorrell	L.S.	J.D. Johnstone
1923	Port Sorell	L.S.	E. Baker
1923	Franklin Rivulet	L.S.	L.J. Douglas
1923	Burgess	L.S.	F.M. McDonald
1923	Burgess	L.S.	E.J. McDonald
1923	Port Sorell	L.S.	J.H. Addison
1923	Burgess	L.S.	H.D. Green
1923	Port Sorell	L.S.	R.W. MacKenzie
1923	Barn Bluff	L.S.	G.R. Plante
1923	Barn Bluff	L.S.	L. Mudie
1923	Barn Bluff	L.S.	E.E. Black
1923	Barn Bluff	L.S.	R. Stoneham
1923	Little Henty River	Tar	S.A. Clark
1923	Strahan	L.S.	H.E. Evenden
1923	Strahan	L.S.	The Mersey Valley Oil Co.
1924	New River	L.S.	F.T. Boddy
1924	New River	L.S.	E. Hawson
1924	New River	L.S.	F. Heritage
1924	Henty River	L.S.	J.A. Wauchope
1924	Barn Bluff	L.S.	B.H. Edwards
1924	Barn Bluff	L.S.	B.D. Reynolds
1925	New River	L.S.	E.F. Heritage
1925	New River	L.S.	H.E. Everden
1925	Flowerdale	L.S.	D. Berechree
1925	Mt. Cameron	Tar	F.F. Ford
1926	Barn Bluff	L.S. Oil	C.S. Hope
1928	Nth. Bruny Is.	L.S.	H.M. Boddy
1928	King Island	L.S. Tar	O. Bonney
1928	Nth. Bruny Is.	L.S. Oil	C.F. Boddy
1928	Nth. Bruny Is.	L.S.	A.C. Black
1928	Nth. Bruny Is.	L.S.	M. Hayton
1928	Sth. Bruny Is.	L.S.	A.H. Jackson
1929	North Bruny Is.	Drill 1.	Tasmanian Oil Co.
1929	North Bruny Is.	L.S.	A.J. Miller
1929	No rth Bruny Is.	Drill 2	Tasmanian Oil Co.
1929	Great Bay, Nth. Bruny Is.	Oil & Gas	A. McIntosh Reid
1929	North Bruny Is.	Drill 3	Tasmanian Oil Co.
1929	North Bruny Is.	Oil, Tar & Gas	Tasmanian Oil Co.
1929	Sth Bruny Is.	Oil	(Sgd) L.W. Marsden
1929	Henty River	Gas	J.H. Robertson
1930	Nth. Bruny Is.	L.S.	J. McD. Hay
1930	King Island	L.S.	L. Gatenby
1930	Stoodley	Oil	A. Wright
1930	Mengah	Oil	J. Healy
1931	Cradoc	Oil	W.J. Armstrong
1931	Leprena	Oil (Kerosene)	G.H. Smith
1933	Dover	Oil	Lloyd J. Owens
1933	Golden Valley	Gas	B.H. Whittle

Oil

1936	Flinders Is.	L.S.	A.A. Summerhayes
1936	Flinders Is.	L.S.	Austral Oil Drilling Syndicate
1936	Flinders Is.	L.S.	C.S. Demaine
1936	Flinders Is.	L.S.	A.W. Imray
1939	Cygnat	Oil	R. Taylor
1939	Cradoc	Oil & Gas	Producers Oilwell Supplies Ltd.
1939	Danbury Park	Drill 1	Producers Oilwell Supplies Ltd.
1939	Ross	Gas	C. Davis
1940	South Arm	Oil	E.Z. Company
1940	Port Davey	L.S. tar	H.E. Evendon
1941	Tunnack	Oil	A. Mackie
1942	Ocean Beach, Strahan	Tar	Mr W. Holmes
1944	Bridport	Oil	A.H. Thorpe
1945	Flinders Island	Oil	W. Carry
1946	Tarraleah	Gas	G. Harris
1948	Redpa	Oil	C. Burt Senr.
1952	Cambridge	Oil	P.W. Evans
1953	Cygnat	Oil	R. Dunning
1953	Strahan	Oil, Tar	H. Fletcher
1955	Prion Beach	Tar	H. Akerley
1955	King Island	L.S.	Mrs. A.J. Smith
1956	Arthur River	L.S.	R.K. Cumming
1956	West Takone	L.S.	B.A. Farquhar
1956	King Island	Tar	Mrs. A.J. Smith
1956	Mole Creek	Oil	Eva Marchant
1957	Dover	Oil, Gas	E.A. Haigh
1958	Tinderbox	Oil	Mrs. Wilkinson
1958	Hamilton	Oil	T.B. Gulline
1960	Crabtree	Oil	Unknown
1960	Port Sorell	Gas	C. Sulzberger
1960	King Island	L.S.	Mr. S.P.J. Adams
1960	Marrawah	Tar **	F.W. Ford
1960	King Island	L.S.	F.J. Adams
1960	King Island	L.S.	W.K. Westly
1960	Central Highlands	Oil	K. Slater
1960	Detention River	Oil	C.R. Pyke
1962	Jericho	Oil	R. White
1962	Bridgenorth	Oil	W. Rattray
1962	Marrawah	Oil	C.K. Hine
1962	Burnie	Oil	L.F. Egan
1962	Distillery Creek, Wynyard	Oil	J. Carol
1963	Table Cape	Oil, Gas	Mr. Jackson
1965	S.E. Tasmania	Lease	E.Z. Company
1965	Fossil Bluff	Oil	S. Veenstra
1965	Ulverstone	Tar	Mr. C. Flowers
1966	Forth River	Gas	H.E. Flight
1966	Hagley	Drill 1 + Lease	C. Sulzberger
1966	Hagley	Drill 2 + Lease	C. Sulzberger
1968	Cressy	Drill 3 + Lease	C. Sulzberger
1968	Penguin	Oil	J. Bates
1969	Hagley	Oil	C. Sulzberger
1980	S.E. Tasmania	Oil Lease	B.H.P.
1984	Ross	Oil	G. & G. Gleeson
1986	Glenlusk	Oil	Unknown
1986	North Bruny Is.	Oil, Gas	Conga Oil Pty. Ltd.
1987	Ida Bay	Tar	R. Bender

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1987	North Bruny Is.	Oil, Gas	C.S.I.R.O.
1987	Queenstown	Tar	Conga Oil Pty. Ltd.
1987	South Bruny Is., Cole Pt.	Oil	A. Farmer
1988	Spring Beach, South Arm	Oil	Mr. Morris Potter
1989	Cape Pillar	Oil	R. Billingham (Mines Dept.)
1989	South Bruny Is.	Tar	Steve Forsyth (Mines Dept)
1989	Brighton	Tar	C. Wallis
1989	Dysart	Tar	D. Green (Mines Dept.)
1989	Beaconsfield	Oil	Mine Geologist
1989	Colebrook	Tar	C. Wallis

Tars marked * , ** represent occurrences where samples exist in museum collections; Queen Victoria and Tasmanian Museum respectively. G.C.M.S. analysis of these tars have conclusively proved they originated from an Ordovician source. (Dr. J. Volkman, C.S.I.R.O., 1990)