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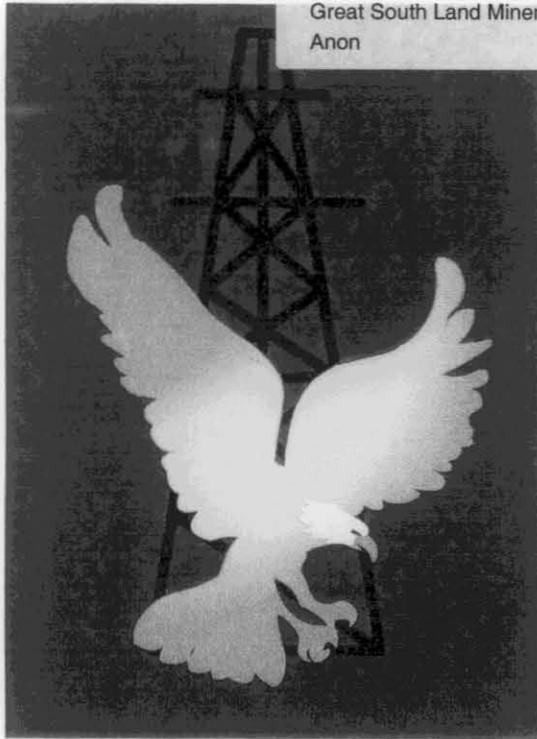
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History of Oil Exploration in Tasmania and TB01
Seismic Survey - Tasmania Basin - SEL 13/1998
Great South Land Minerals Limited*
Anon

SEL13/1998

Vol 1 of 2



GREAT SOUTH LAND MINERALS

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FICHE No. 015669 -

November 2001



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GREAT SOUTH LAND MINERALS

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Disclaimer: GSLM has taken all reasonable care in preparing and publishing the information contained in this document. The information is not a substitute for your own detailed investigation or analysis on particular issue.

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Malcolm Bendall
Chairman

Mr Bendall was the founder of a project in 1977 that led to establishment of GSLM

He is a majority shareholder in GSLM.



David Tanner
Managing Director, Chief Executive Officer
Chartered Professional Engineer

Previously GSLM Exploration Manager

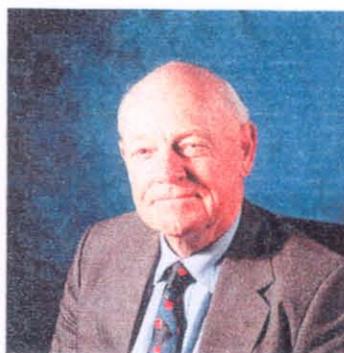
Over 30 years experience in the development of major resource projects in Australia and overseas



Mr Stephen Powell
Director

Managing Director of the Hartz Group (Tasmania based mineral waters and soft drinks producer)

Expertise in export markets



Mr Richard Watson
Director

Chairman of Tassal Ltd (Tasmania based aquaculture group)

Chairman of the Haas group of companies (USA)

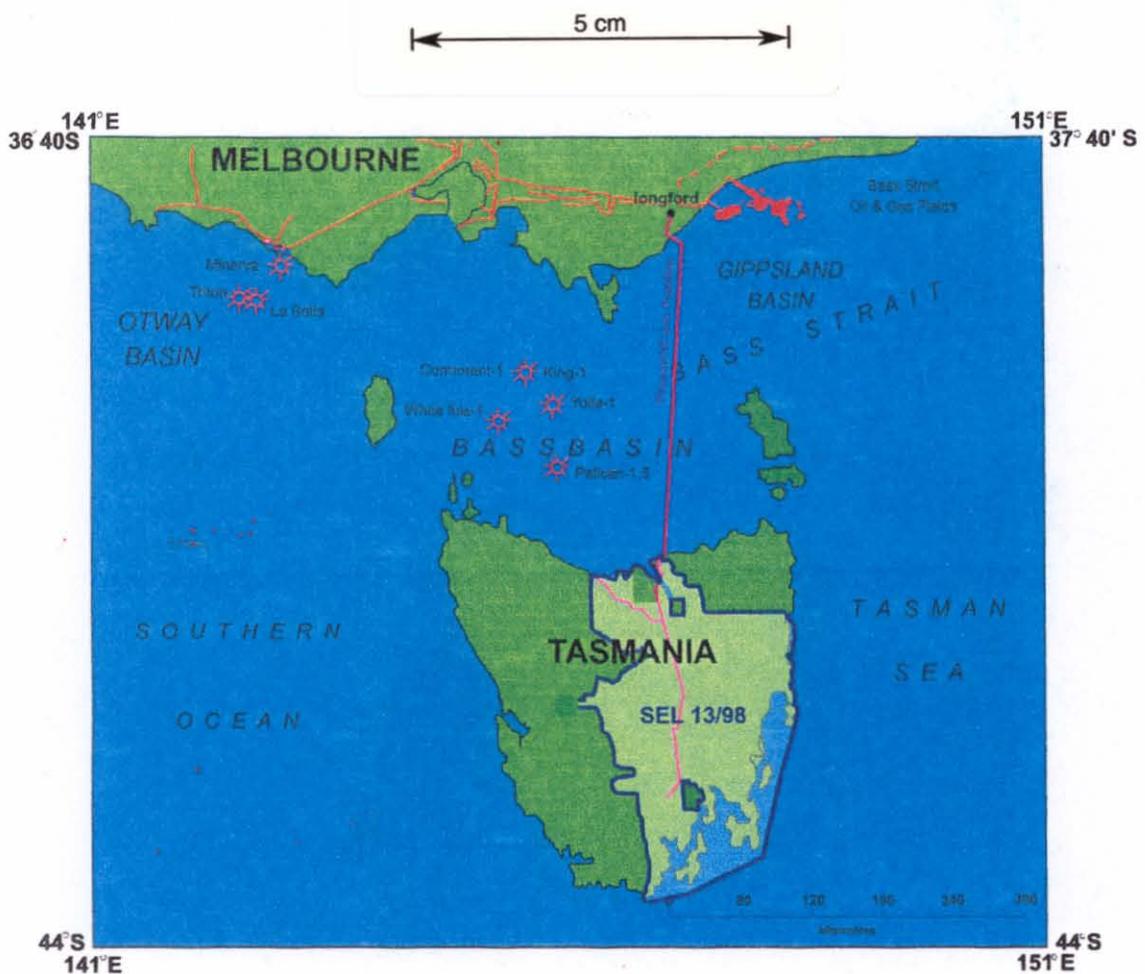
Extensive CEO experience



Dr Clive Burrett
Chief Geologist

Head of the School of Earth Sciences at the University of Tasmania 1996 - 2000, currently Reader in Geology, University of Tasmania

Studied petroleum systems in over 20 countries

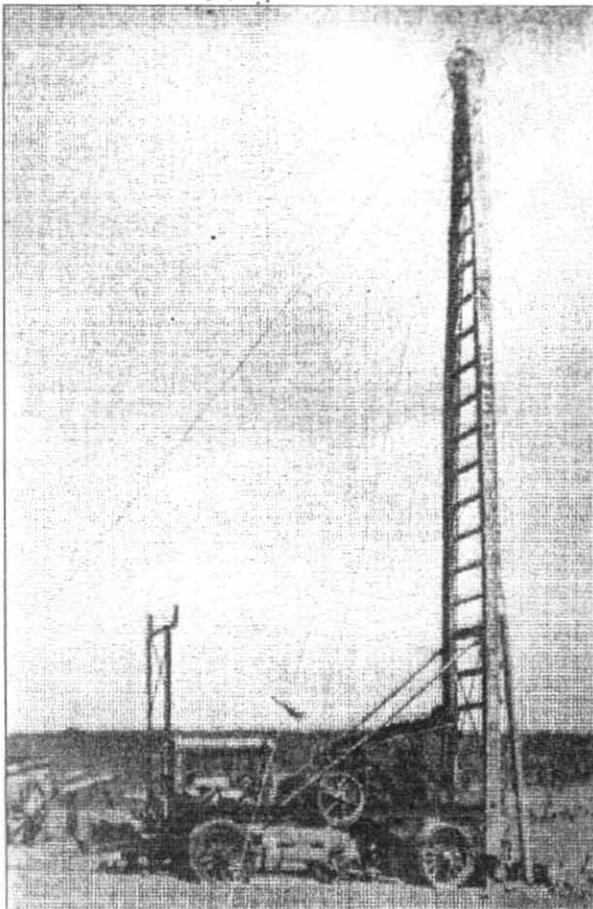


Great South Land Minerals Limited was formed by a group of people interested in oil and gas exploration in the Tasmania Basin.

In 1995 GSLM acquired an existing oil exploration licence (Condor Oil), then took out two further licences which were incorporated into the existing SEL 13/98 issued in June 1999, covering all the accessible parts of the Tasmania Basin.

Over a 20 year period the Company and its predecessors have researched the potential for oil and gas discovery in onshore Tasmania and have shown the Tasmania Basin as being similar in geological terms to major oil producing regions.

History of Oil Exploration in Tasmania



Petroleum exploration commenced in Tasmania in the early 1890's.

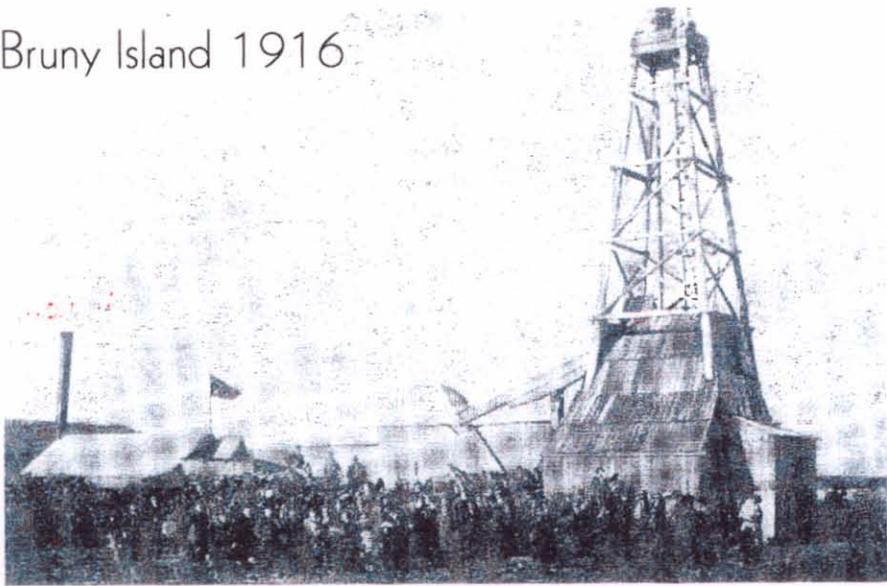
Drilling was sporadic with wells being located without any direct knowledge of the subsurface structure.

Negative "no oil in Tasmania" opinions actively discourage exploration.

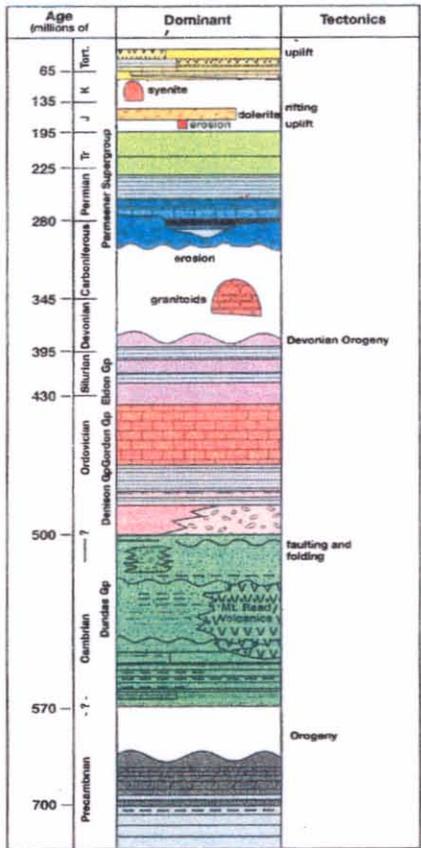
1991 Condor reviews petroleum potential in Tasmania.

New data, stratigraphic drilling, geochemistry and geophysics, allow a re-assessment of the petroleum prospectivity of onshore Tasmania.

Bruny Island 1916



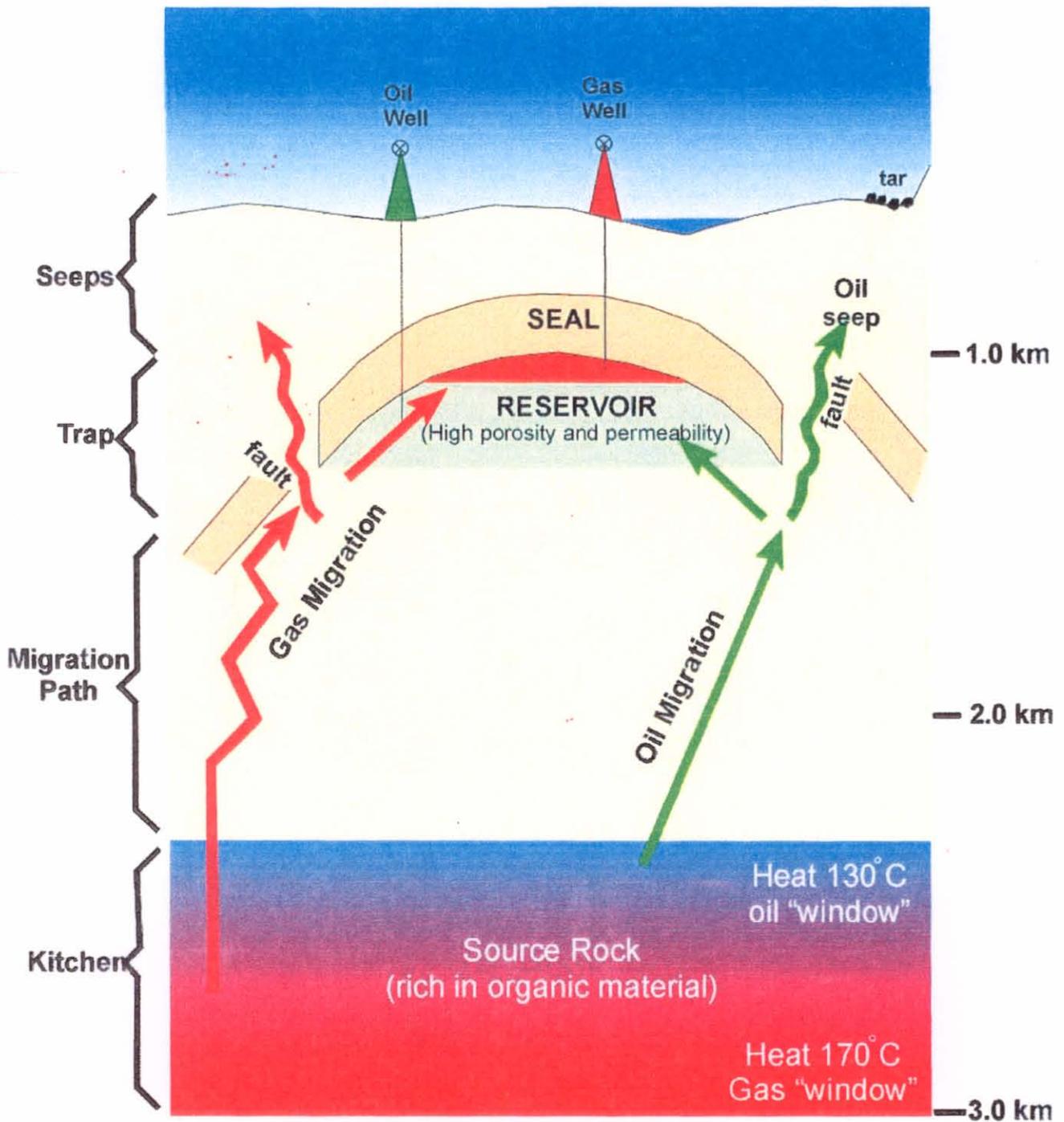
Generalised Stratigraphy of Tasmania



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- Rock Types
-  conglomerate
 -  mudstone
 -  volcanics
 -  siltstone
 -  limestone
 -  granitoids
 -  oil shale
 -  dolomite
 -  intrusions at shallow depth

Cooking in the kitchen



Petroleum System

In order to form an economic accumulation of petroleum all of the elements of a petroleum system must be present and in the correct chronological order.

These are:

Source Rock

Maturation

Migration

Reservoir (a porous rock)

Seal rock (an impermeable cap rock)

Trap (usually a structure such as a dome or anticline)

Petroleum Source

The Tasmanite Oil Shale was quarried in outcrop and oil was distilled from the shale near Latrobe (North Tasmania) in the 1920's and 1930's.

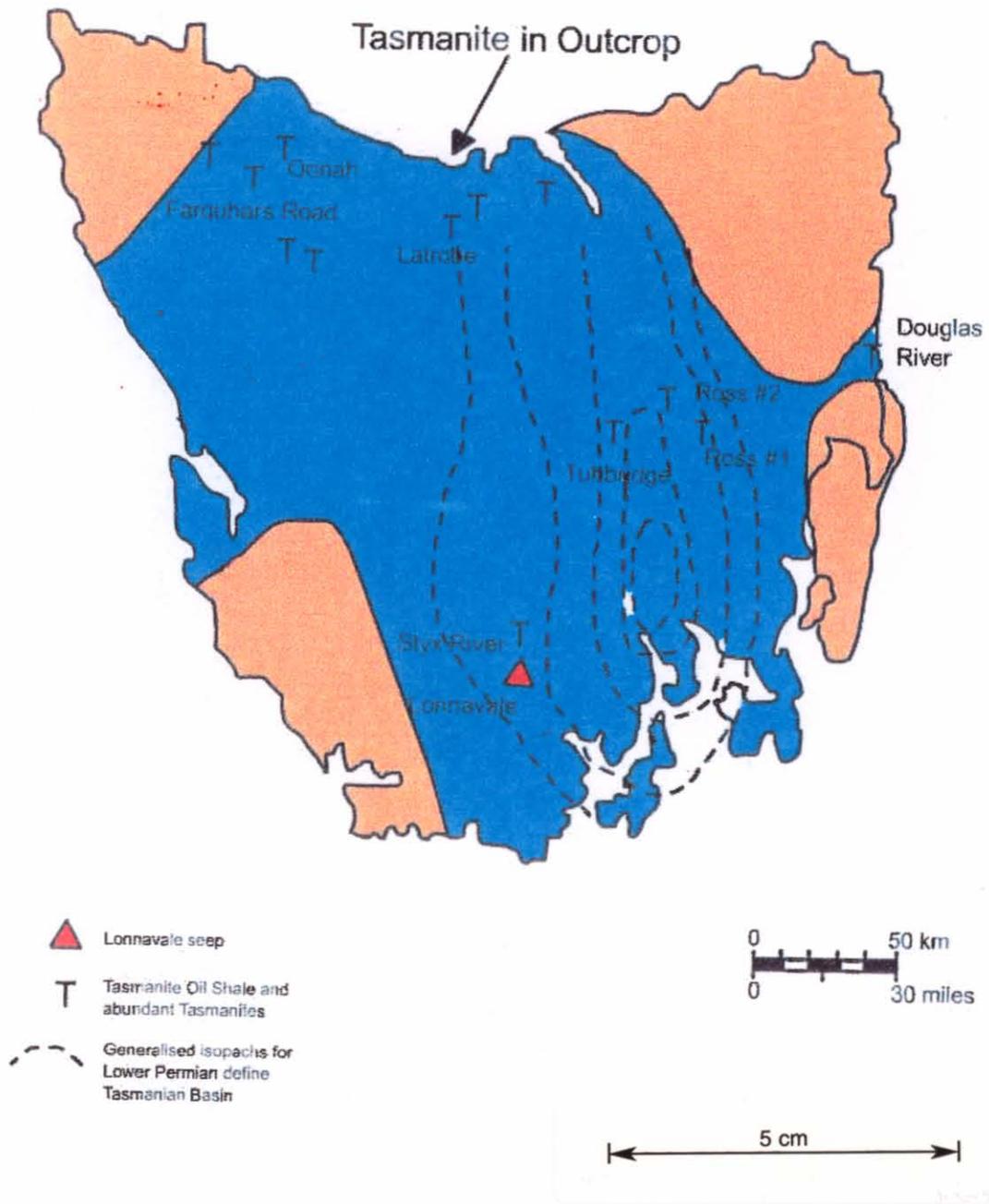
This is an excellent source rock and is found at depth in the Tasmania Basin.

A surface area of one square metre (10 square feet) of Tasmanite oil shale is capable of generating 100 gallons of oil.

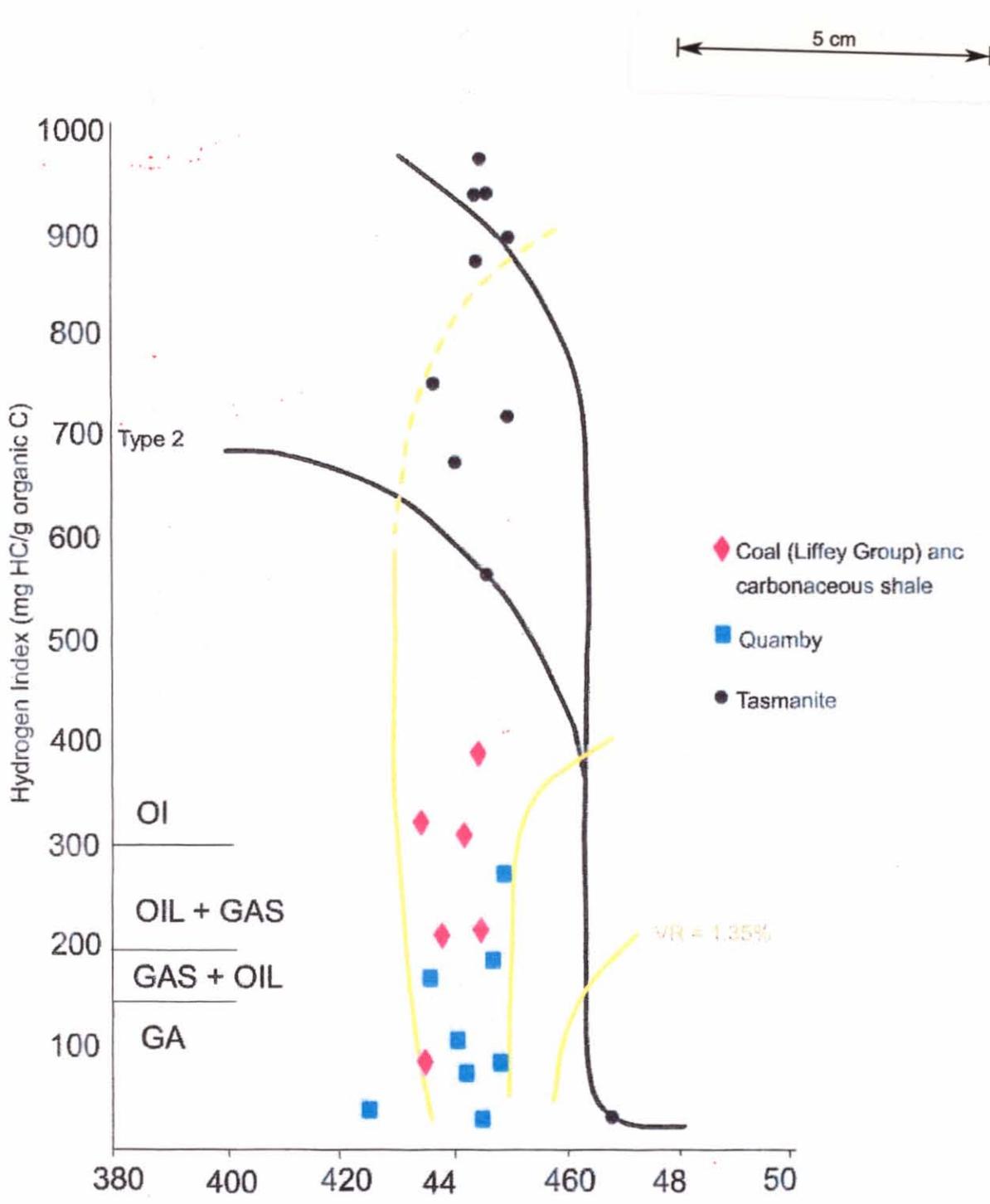
Estimated generation potential of the Quamby Formation (including the Tasmanite) is 140 billion bbls of oil or 980 Tcf of gas, taken over 2/3 of the basin.

If 99% of oil and gas generated in the Quamby Formation has escaped, the remaining one percent would be 1.4 billion barrels of oil or 9.8 trillion cubic feet of gas.

Distribution of Tasmanite Oil Shale



Tasmanian Source Rock Characteristics based on Rock Evaluation data



Hydrogen Index vs Tmax (°C) for Tasmanian Source

Petroleum Source - Seep

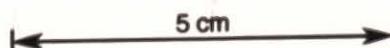
In the 1940's loggers at Lonnvale used oil for lubricating saws and for sliding logs. Loggers bucketed the oil out of a pit and kept it in a drum near their mill.

In the 1960's oil was reported flowing from an area just south of the quarry.

In 1996 Dr Ralph Bottrill (Tasmanian Mines Department) found oil and bitumen in joints in dolerite ("blue metal", diabase) at Lonnvale. This was analysed by CSIRO and AMDEL and found that the seep is a migrated, low sulphur heavy crude oil sourced from the Tasmanite Oil Shale.



Tasmanite Sourced Oil Seep at Lonnvale

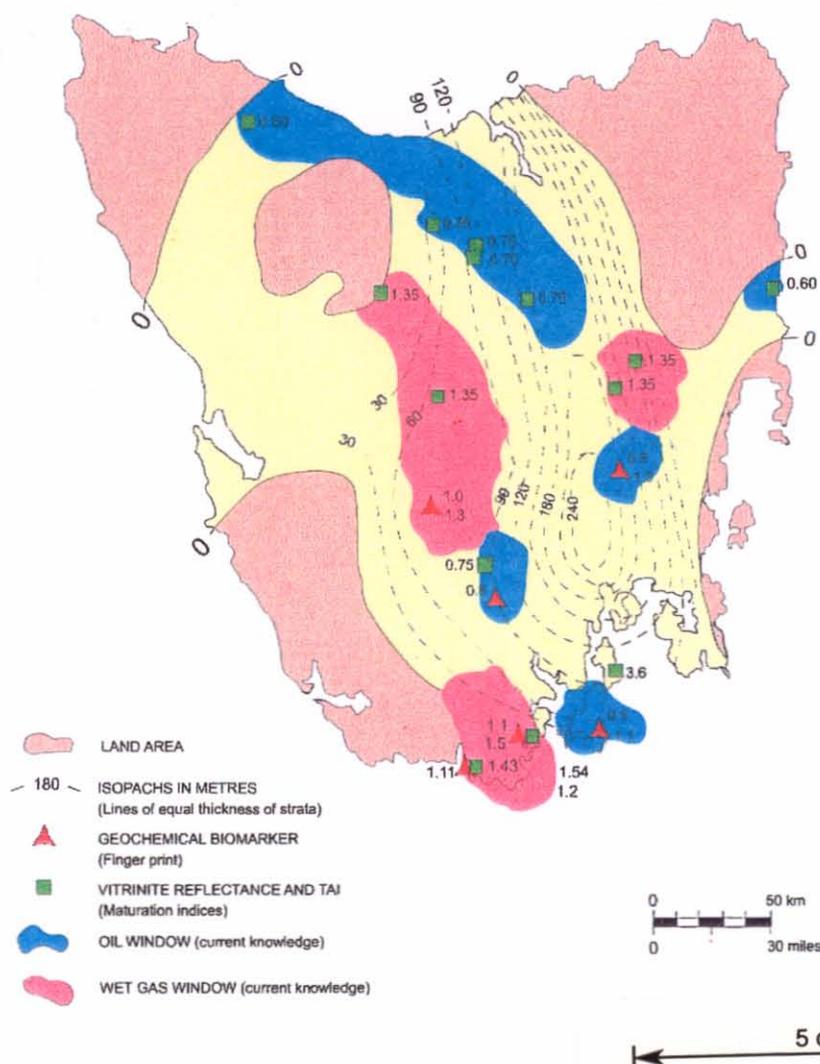


Maturation (Heating)

In order to form oil the source rock has to be heated at about 130° C (oil window) and to form gas at about 170° C (gas window).

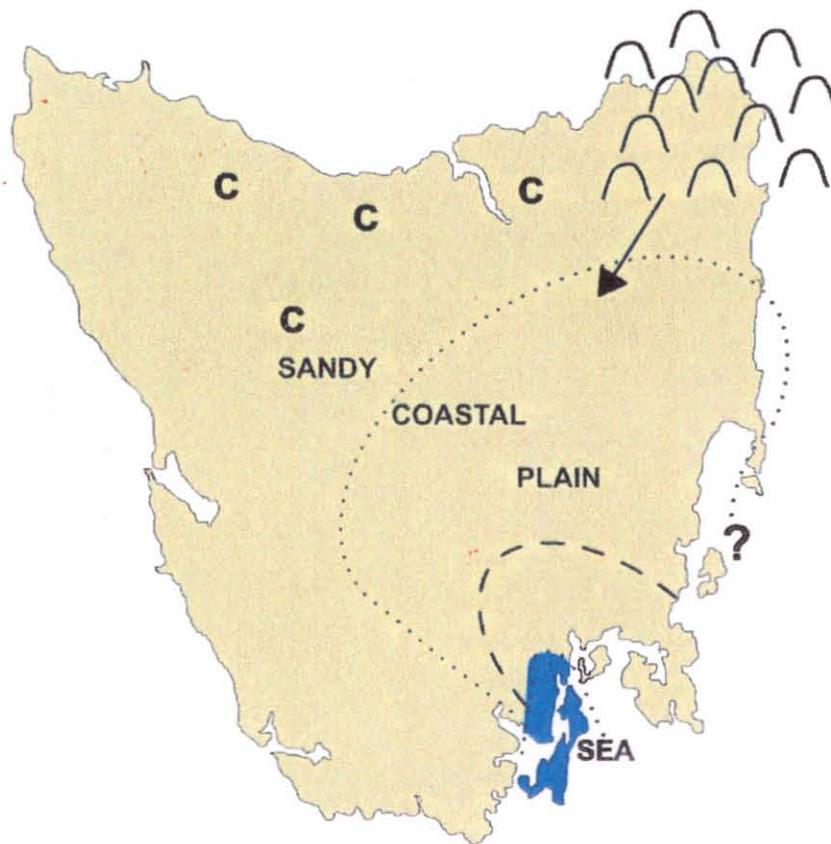
Studies of organic material in the sedimentary rocks of the basin show that it is all in either the oil or gas windows.

Summary of Vitrinite Equivalent and Vitrinite Measurements of Lower Permian Super GP. Rocks



Reservoir

During the middle part of the Permian the sea retreated and porous sands of the Liffey Faulkner Groups were deposited across most of the basin (except Bruny Island - Margate area where marine conditions continued).

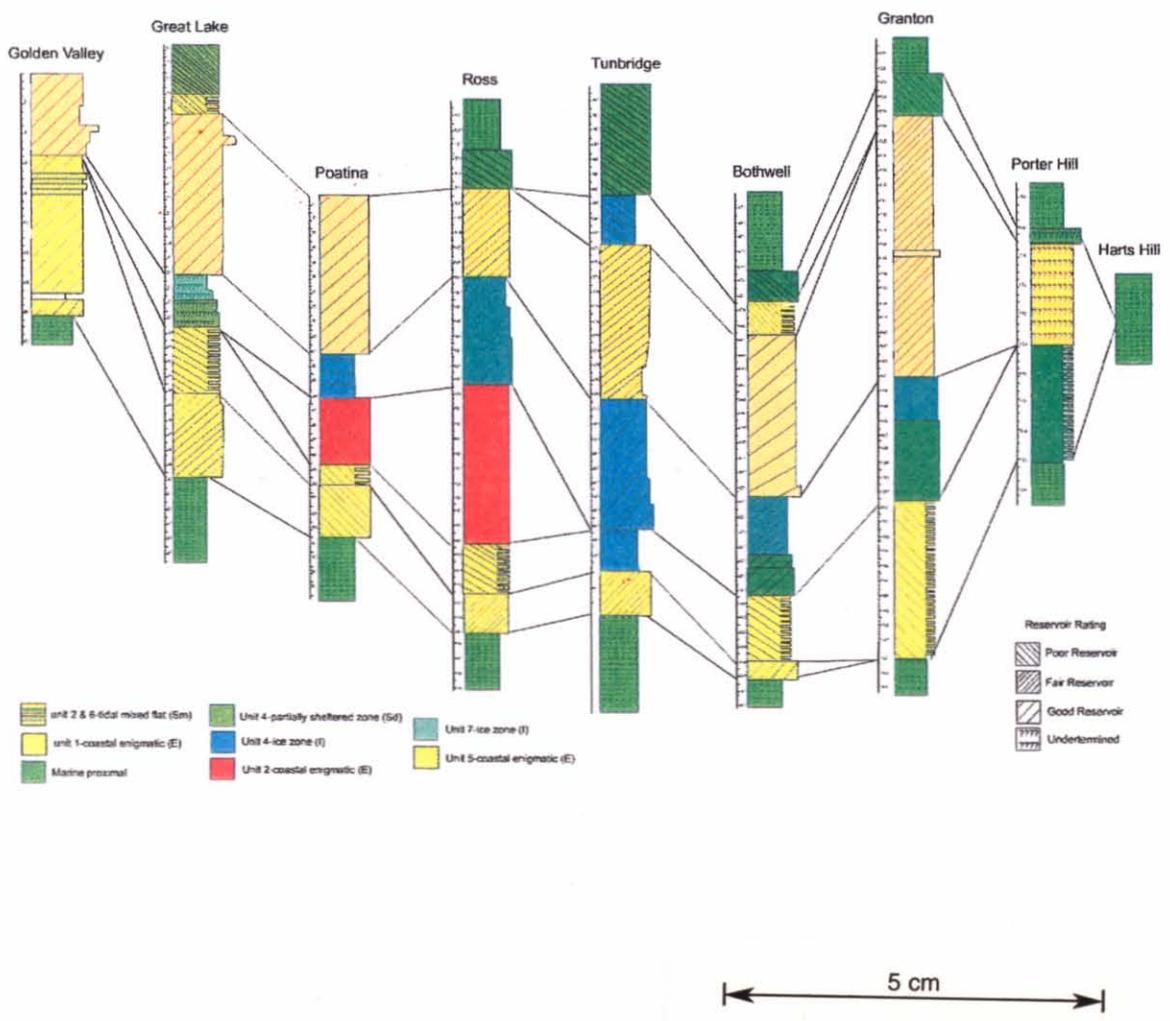


..... **Approximate maximum extent of brief marine incursion**

C **Principle Coal Development**

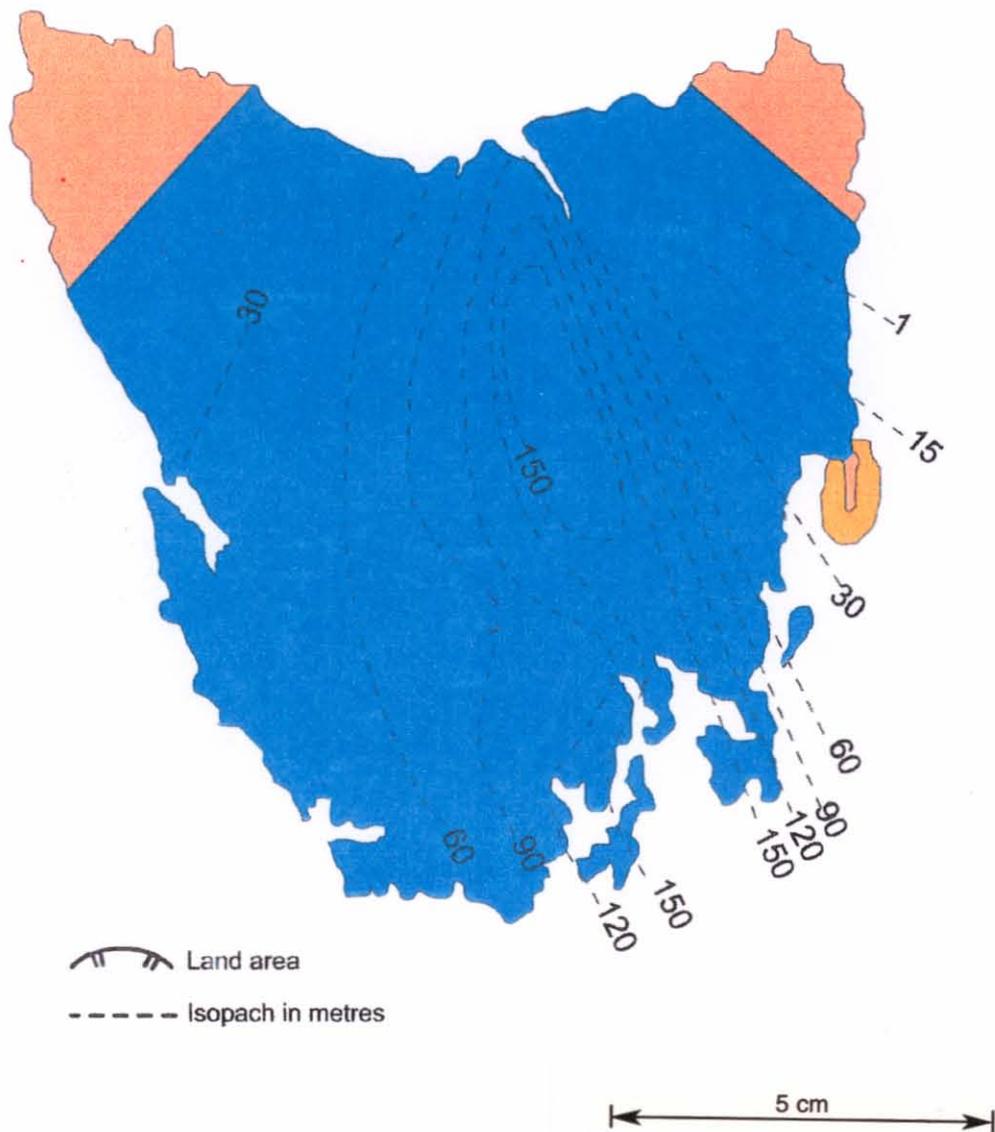
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Reservoir Rocks of the Liffey/Faulkner Group across the Tasmania Basin



Seal Rocks within the Tasmania Basin

In the late Permian the Fernree Mudstone Formation was deposited over most of Tasmania and forms a very effective regional seal.



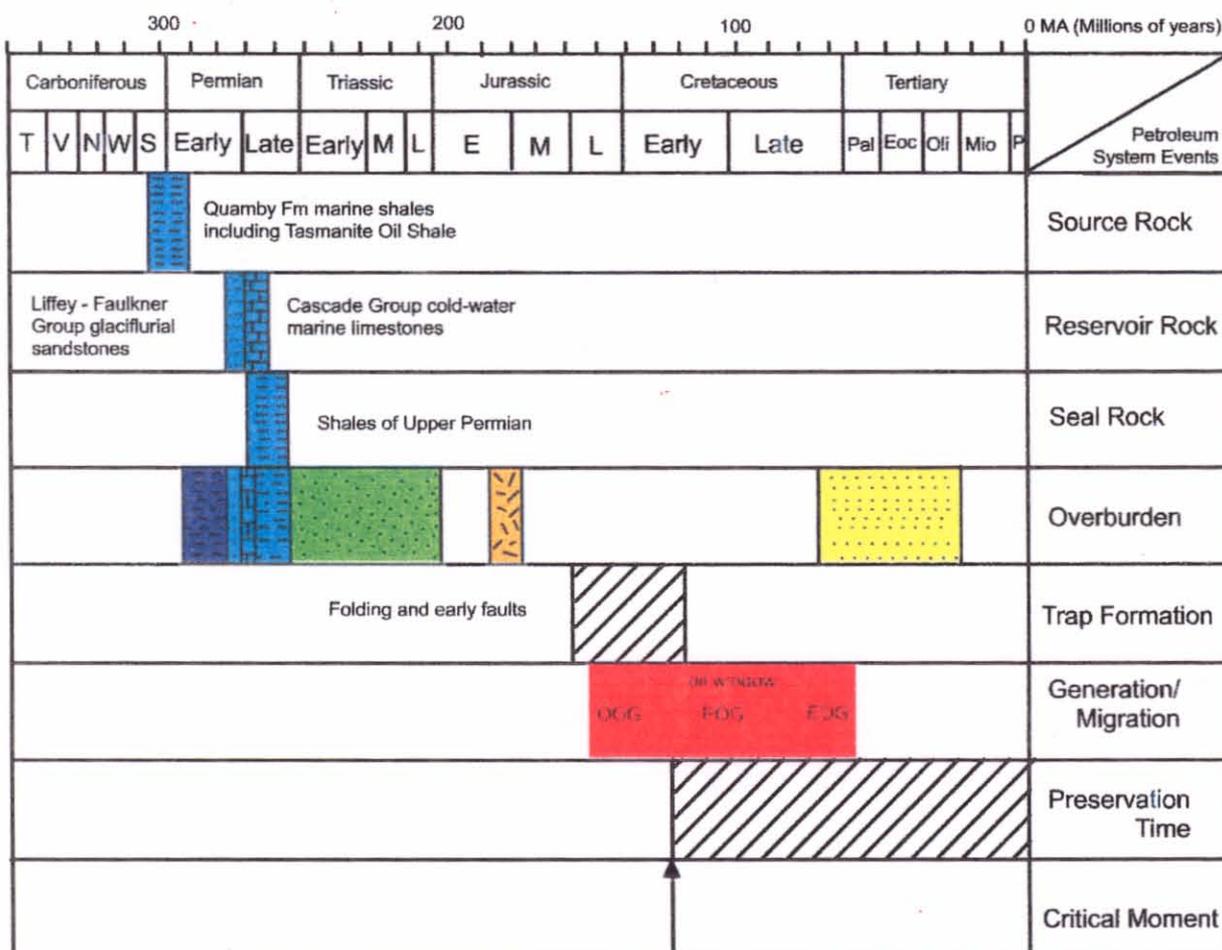
Traps

During the Cretaceous and early Tertiary anticlinal, domal and fault were formed as the Hunterston Dome.

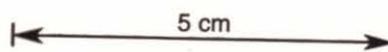
Petroleum System (Permian)

Twenty years of research by the company and the University of Tasmania has shown that all the elements of a petroleum system are present in the Tasmania Basin and are in correct chronological order.

Time-Risk Chart for the Gondwana Petroleum System



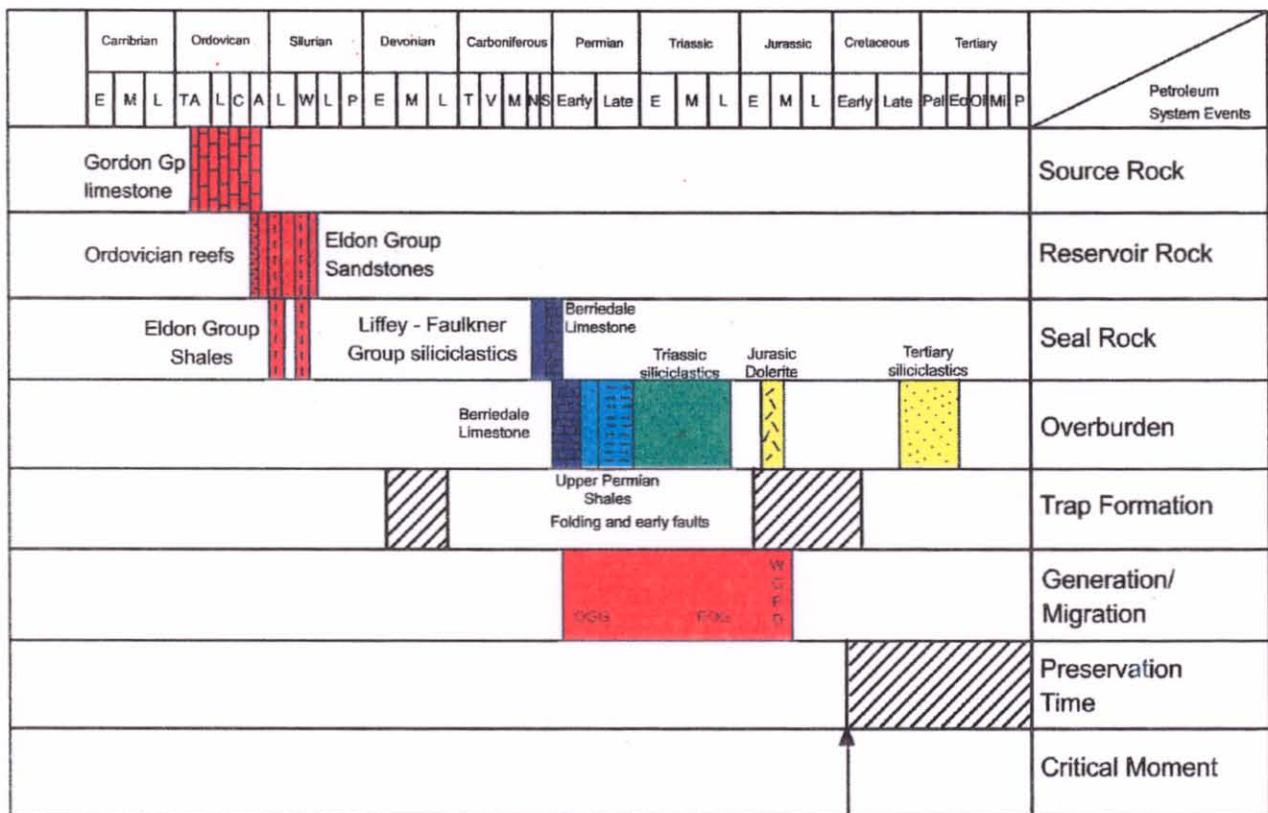
OOG = onset oil generation
 POG = peak oil generation
 EOG = end oil generation



Petroleum System (Ordovician)

Another petroleum system is present under the Tasmania Basin based on the Ordovician Gordon Group limestone as source and reservoir and the Siluro-Devonian sandstones of the Eldon Group as reservoir

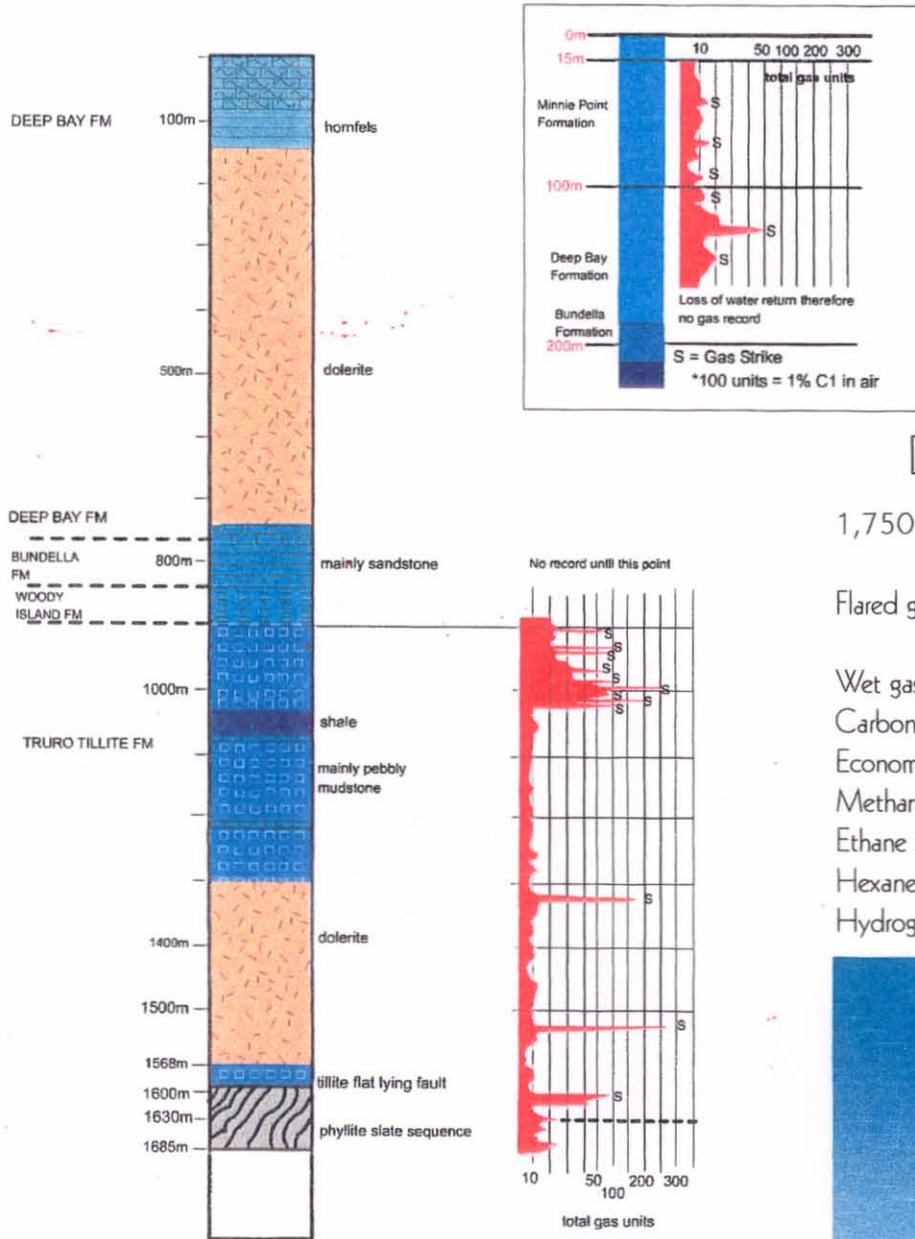
Time Risk Chart for the Ordovician a Petroleum System



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Bruny Island Drill Hole

Jericho #1 well log, North Bruny Island



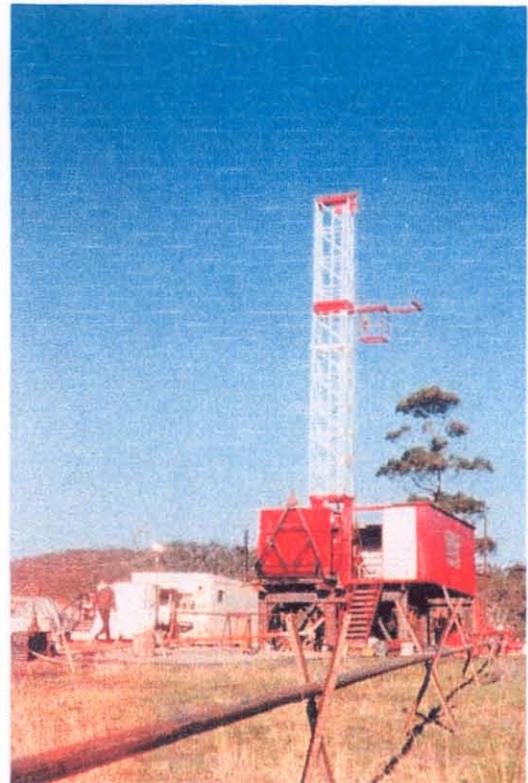
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Drilling Results

1,750 m (5,740 ft) deep hole

Flared gas composition

- Wet gas up to octane
- Carbon isotopes show gas is thermogenic (not bacterial)
- Economic helium up to 4.8%
- Methane up to 31%
- Ethane up to 2%
- Hexane up to 0.5%
- Hydrogen up to 8.8%



Seismic Operations

Trace Energy Services has completed nearly 660 km (413 miles) of seismic over the Central Highlands and the Longford Basin.

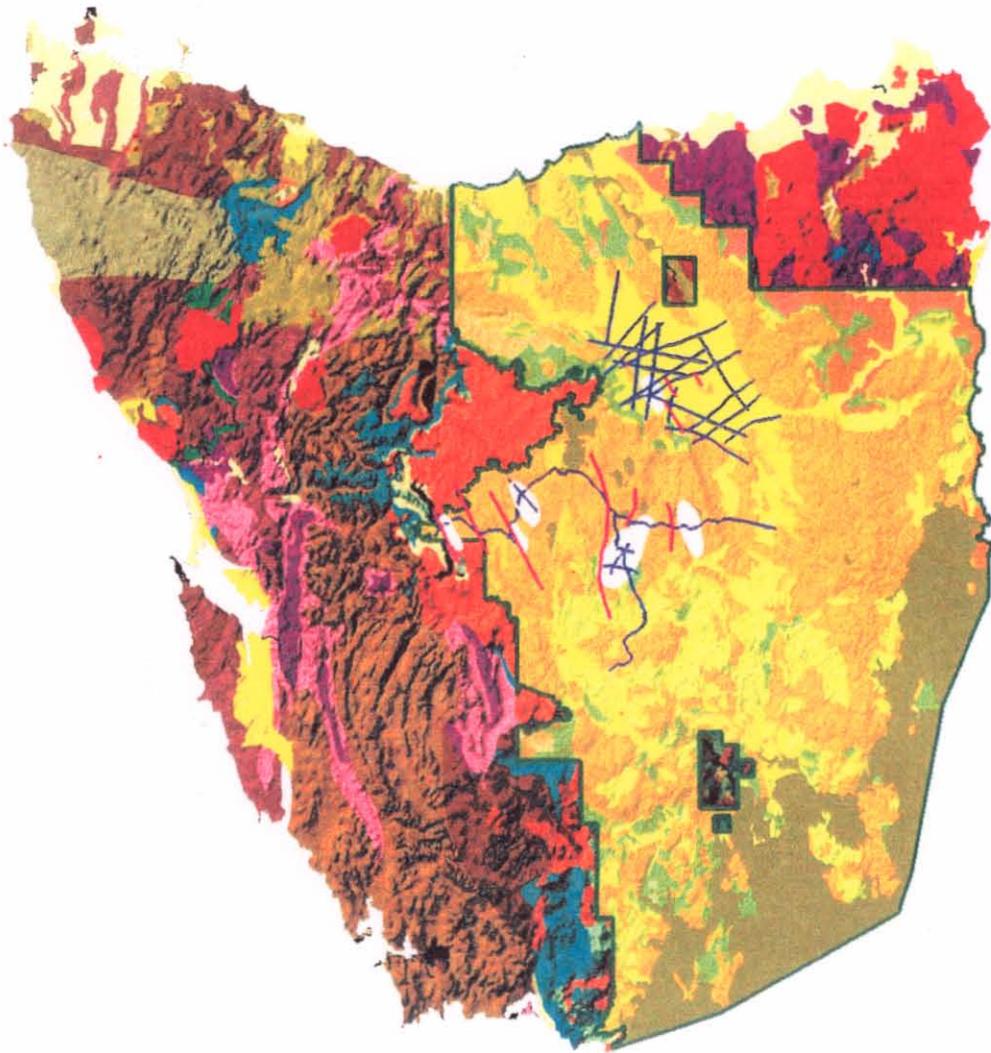
Additional regional seismic surveys are planned for the summer (2001-02).

Potentially hundreds of structural and stratigraphic traps and at least 15 stacked major anticlinal structures have been defined.



Trace Energy Seismic Truck

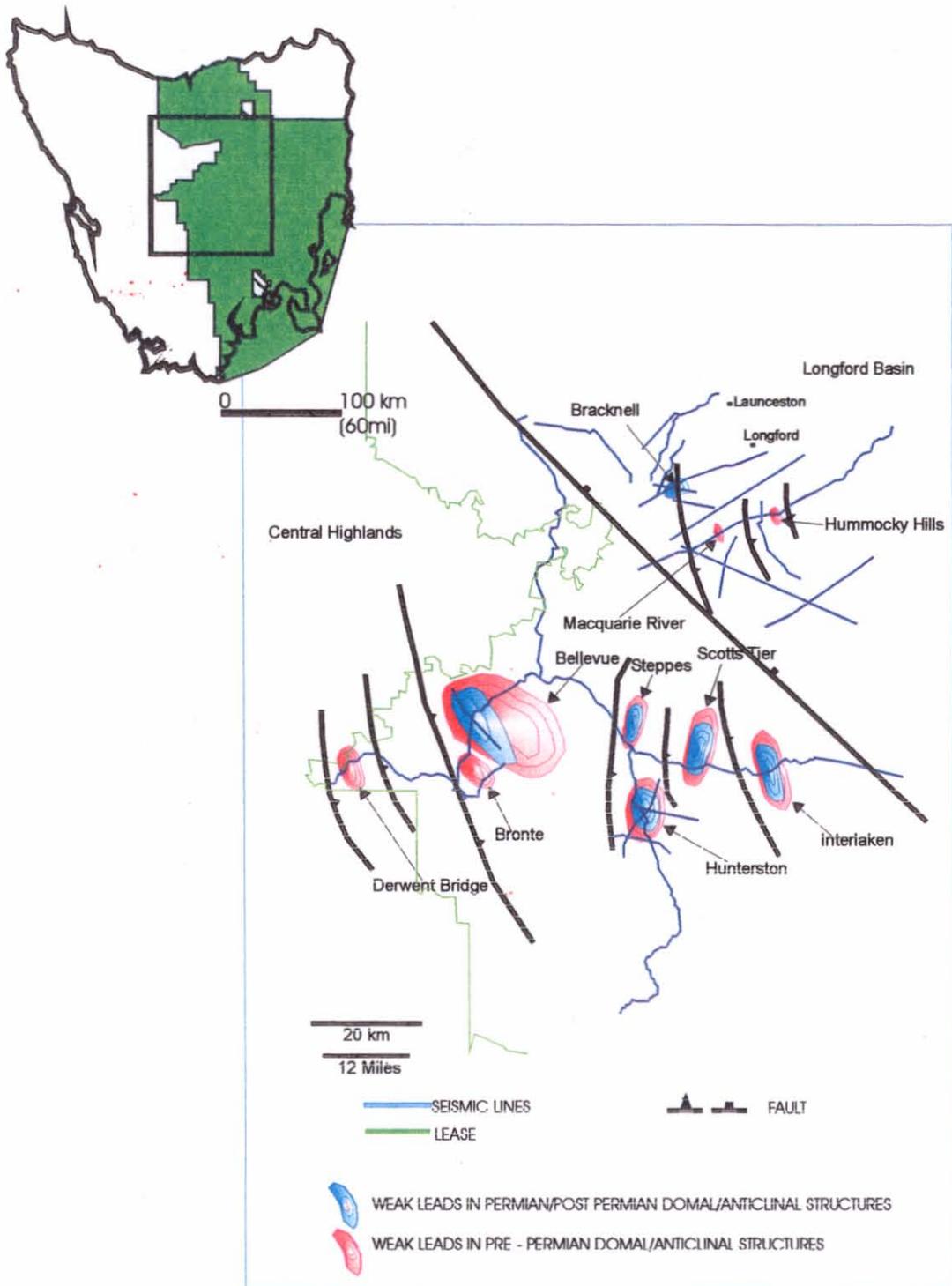
Exploration Lease, Seismic Lines and Major Structures



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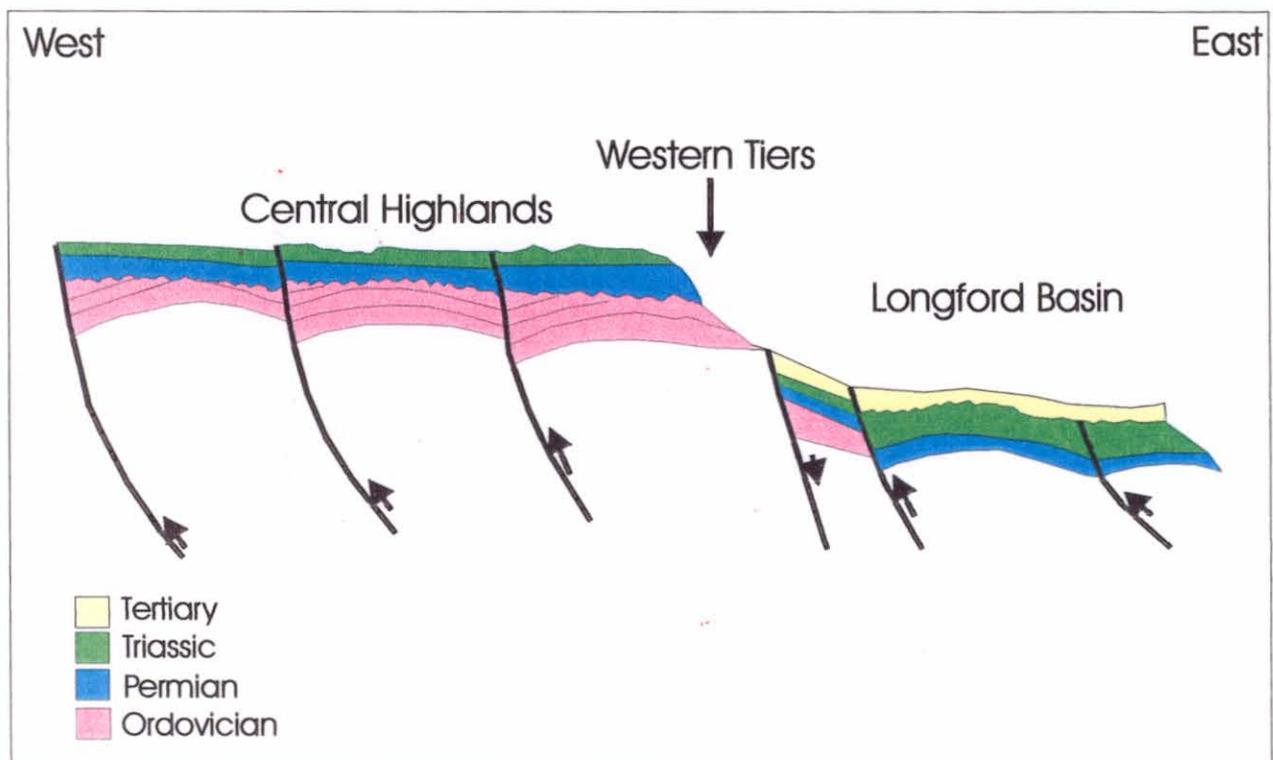
*This geological representation is a preliminary interpretation only and is based on recent seismic or other data. It may not be representative of the final defined structure.

Tasmania Basin Survey



*This geological representation is a preliminary interpretation only and is based on recent seismic or other data. It may not be representative of the final defined structure.

Conceptual Cross Section

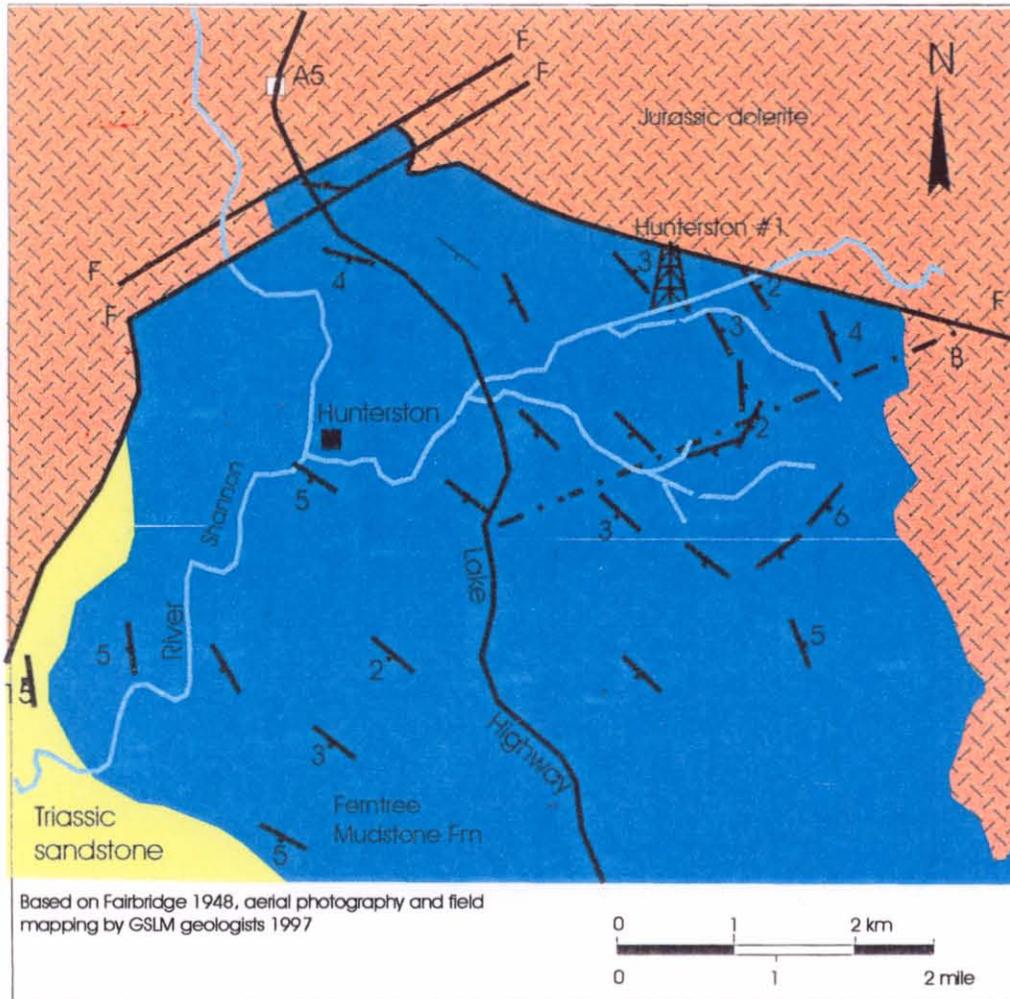


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Hunterston Dome

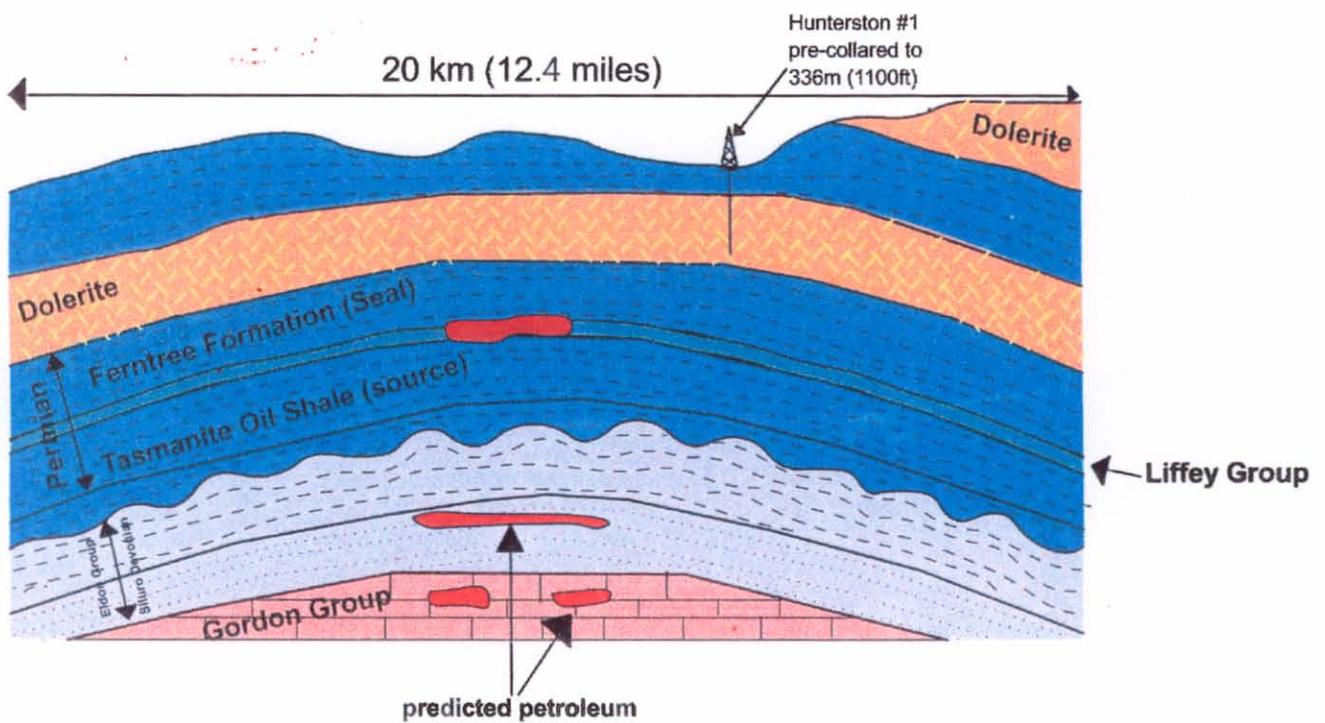
The Hunterston Dome has been verified as a dome at depth by the seismic program.

Geological Map of the Hunterston Dome



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Hunterston Dome



Hunterston Stratigraphic Hole

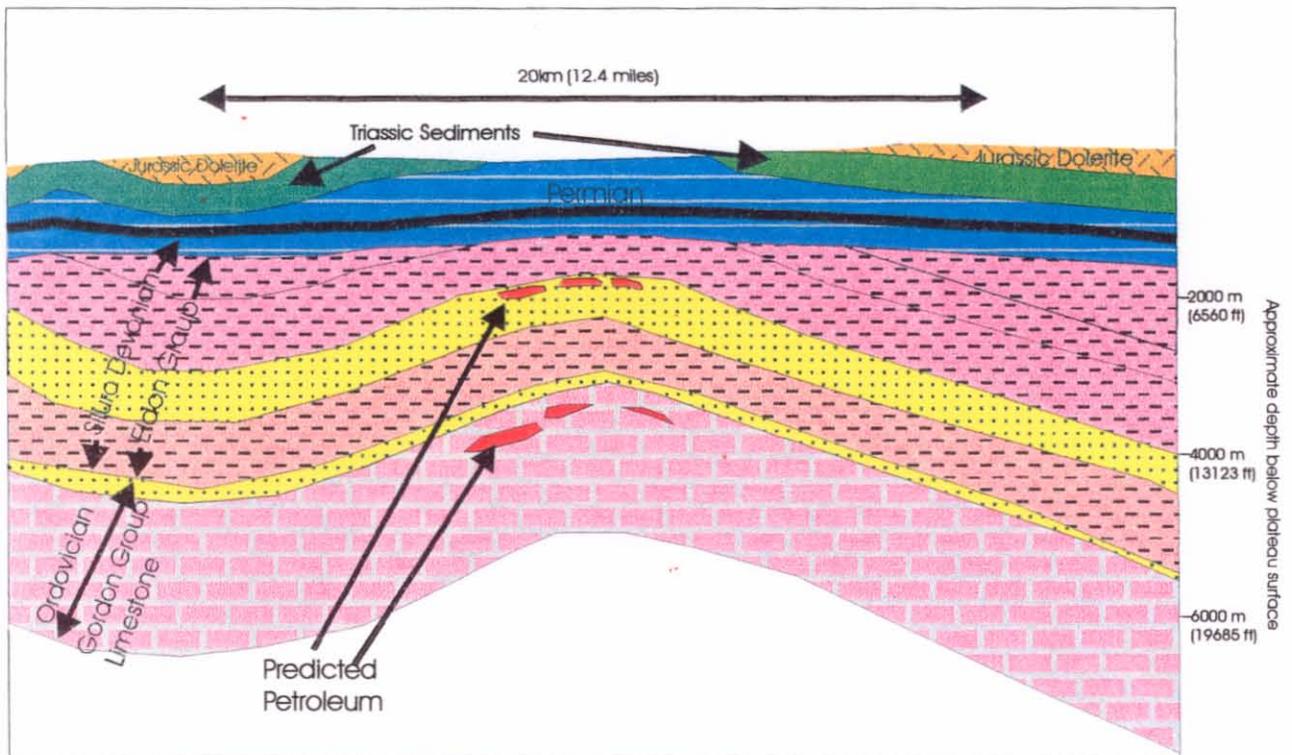
- Placement: 1.8km (1.1 miles) off-structure
 Type: Slimhole
 Purposes:
 - Provide core samples
 - Velocity control for seismic interpretation
 - Aid in planning larger diameter discovery wells

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Bellevue Anticline

The Bellevue Anticline has been identified just north of Bronte Park in the Central Highlands. This reveals a very thick sequence of Palaeozoic strata from the Permian (at surface) to the Ordovician at depth.

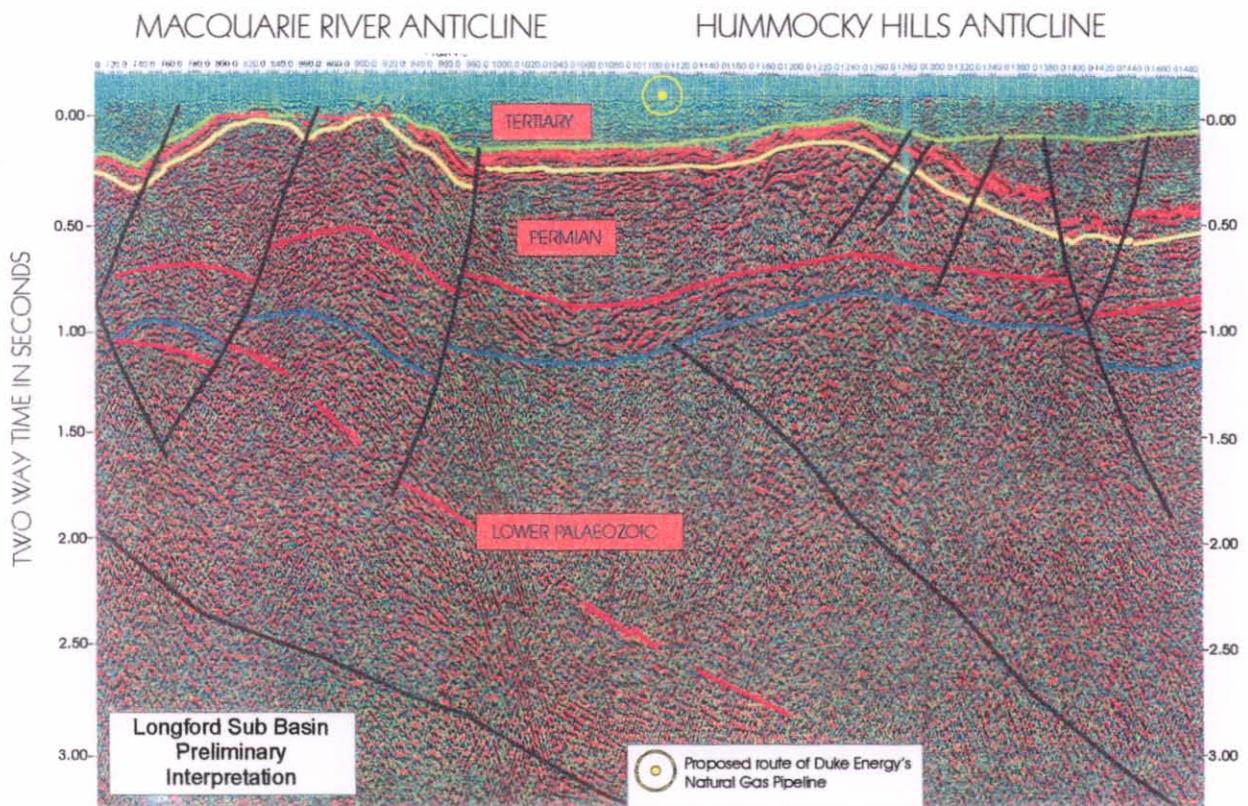
"Bright Spots" on the seismic may indicate hydrocarbons.



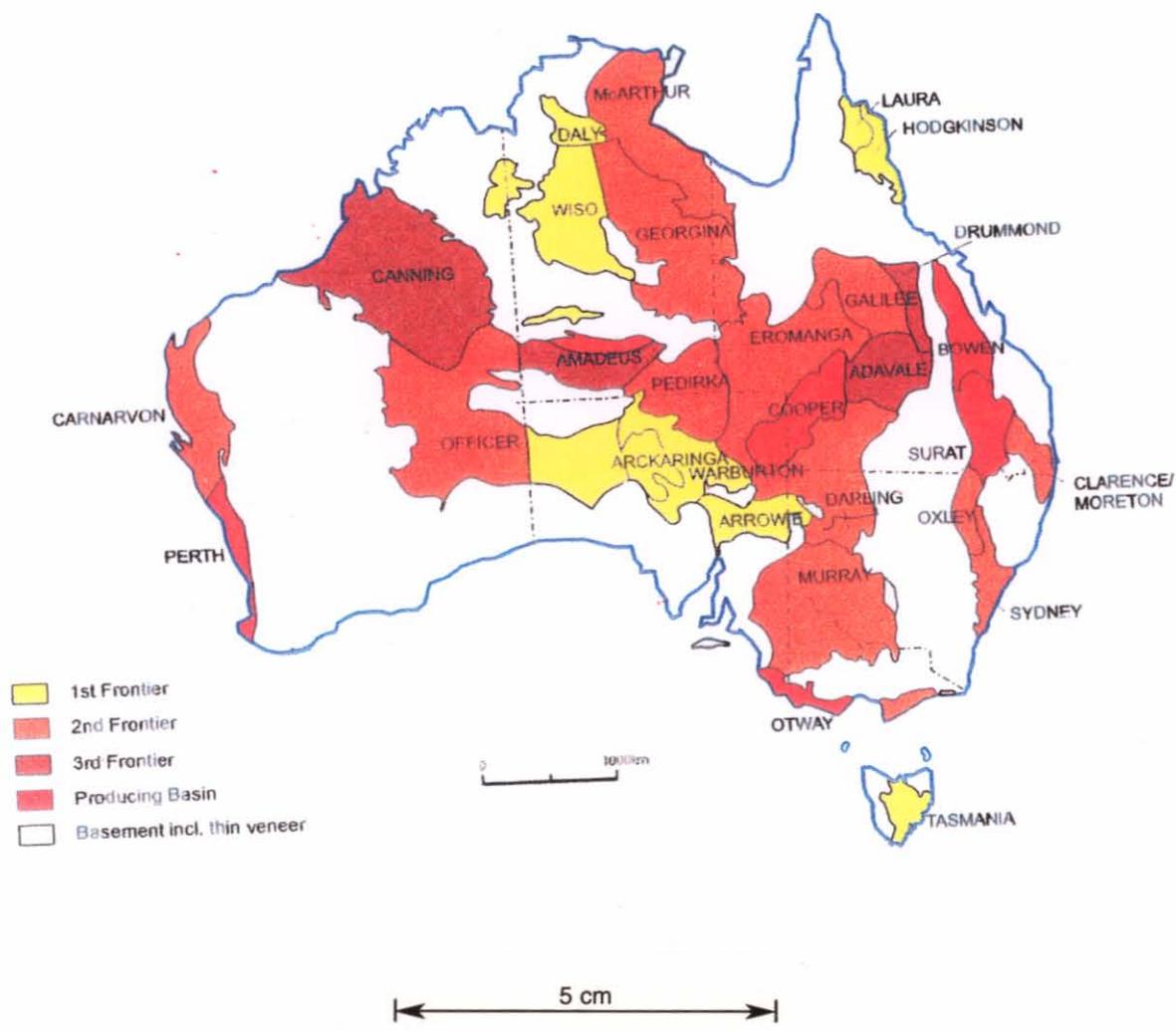
*This geological representation is a preliminary interpretation only and is based on recent seismic or other data. It may not be representative of the final defined structure.

Longford Basin

Seismic across the Longford Basin (Tertiary) shows two newly recognised anticlines (Macquarie River and Hummocky Hills) within the Permian Underlying the Tertiary Basin.



Frontier Basins - Onshore Australia



Immediate Commercial and Community Benefits from the Seismic Survey

Groundwater - old river channels, structural plays (irrigation)

Minerals - Mt Read Volcanic, gold mineralisation on thrust planes

Permian - oil and gas play

Pre-Permian - oil and gas play (Ordovician/Precambrian)

Coal bed methane (Central Highlands)

Gas storage capacity in anticlinal structures in the Longford Basin

Helium

Future Benefits

For shareholders

For the Tasmanian economy

Tasmanian State Government receives royalty of 12%

If commercial gas reserves can be established in the Tasmania Basin a reliable market exists within Australia for natural gas

Potential for bitumen and heavy crude oil for Australian market (currently imported)

Potential for LPG production

Helium

Understanding Shareholding

The lease is valued at A\$50 million, represented by a total of 57,735,000 million shares on issue.

Directors and Associates control approximately 60% of the Company.

Outlook

Confidential discussions underway with potential investors and customers.

Australian Federal Government Grant of \$400,000 to fund research on Petroleum Systems Modelling.

August 11, 2001

AROUND TASMANIA

THE S

Oil hunters take the plunge with big rig

By DANNY ROSE

A 24-TONNE drill has been put in place to make or break Great South Land Minerals' dream of a Tasmanian oil strike.

The drill was erected yesterday at the company's Hunterston prospect, north of Bothwell, and drilling can begin in weeks.

It will take 40 days to drill the well from its present 337m depth to more than 1km.

However, exploration manager Rod Tabor said there was little likelihood of striking oil with this well.

"The idea is to deliberately try not to strike anything," he said. "This is being drilled for stratigraphic reasons rather than discovery."

The well is, in fact, being drilled to miss a suspected oil-bearing rock structure.

It will, however, produce a core sample vital to interpretation of seismic data collected from sites across mid and eastern Tasmania.

In that \$3 million exercise, trucks used large vibrating

pads to shock the ground and chart the seismic response.

It took in areas such as Deloraine, Tunbridge, Campbell Town and Ben Lomond.

Once interpreted, it is hoped the data will pinpoint large "anti-clinal" rock structures — like an upturned bowl — that could trap oil.

Five sites would then be chosen for more drilling this summer.

"The future is discovery-well drilling," Mr Tabor said.

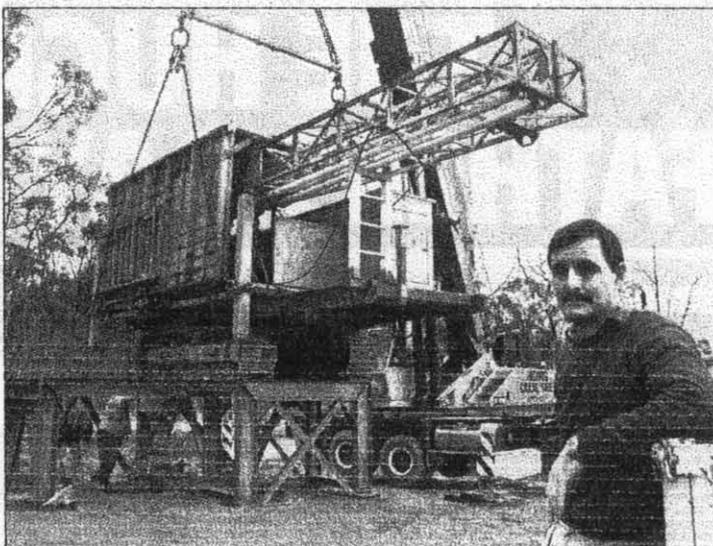
These would be drilled to a depth of 2500m, in search of oil strikes.

He said there was still doubt in the industry about whether oil would be struck in Tasmania.

"But there's been scepticism over almost every basin in the world before oil is found," Mr Tabor said.

"There's some fairly famous quotations around that there's no oil in Saudi Arabia.

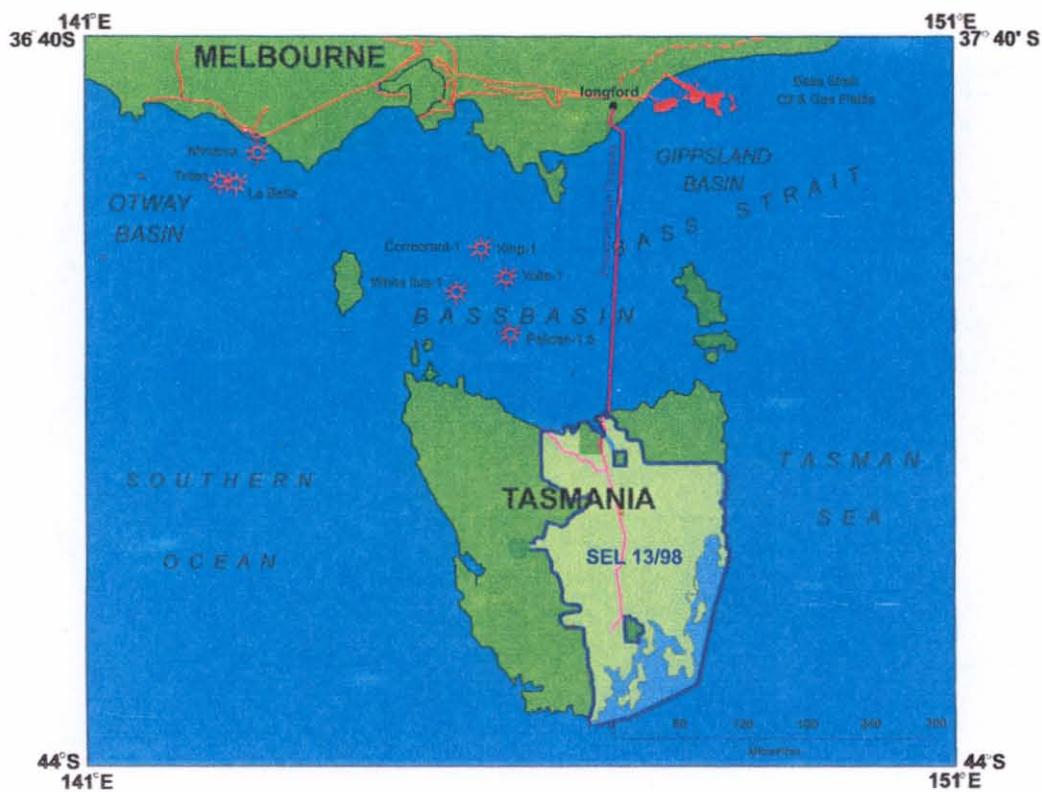
"Yes, there's confidence — but this is exploration."



GOING DOWN: Exploration manager Rod Tabor with the 24-tonne drilling rig at the Hunterston prospect, north of Bothwell, yesterday. Picture: JAMES KERR

Pipeline to Tasmania

Duke Energy is building a gas pipeline across Bass Strait that will link major industrial and population centres of Tasmania to the Australian national gas pipeline network.



Future Work Program

Ongoing seismic for prospect definition.

Hunterston Dome - Drilling of stratigraphic hole.

Drilling of discovery holes on defined structures.

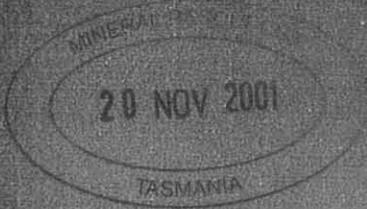
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TASMANIA BASIN

TB01 SEISMIC SURVEY

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History of Oil Exploration in Tasmania and TB01
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Anon

SEL13/1998 Vol 2 of 2

TASMANIAN BASIN SEISMIC SURVEY**CONTENTS**

LOCATION MAP

GEOLOGY MAP

TIME-SPACE DIAGRAM

PERMO-TRIASSIC

SURVEY AREA

GRAVITY FIELD

DTM AND BORES

TB01-PG

BELLVUE LEAD

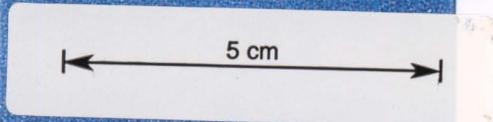
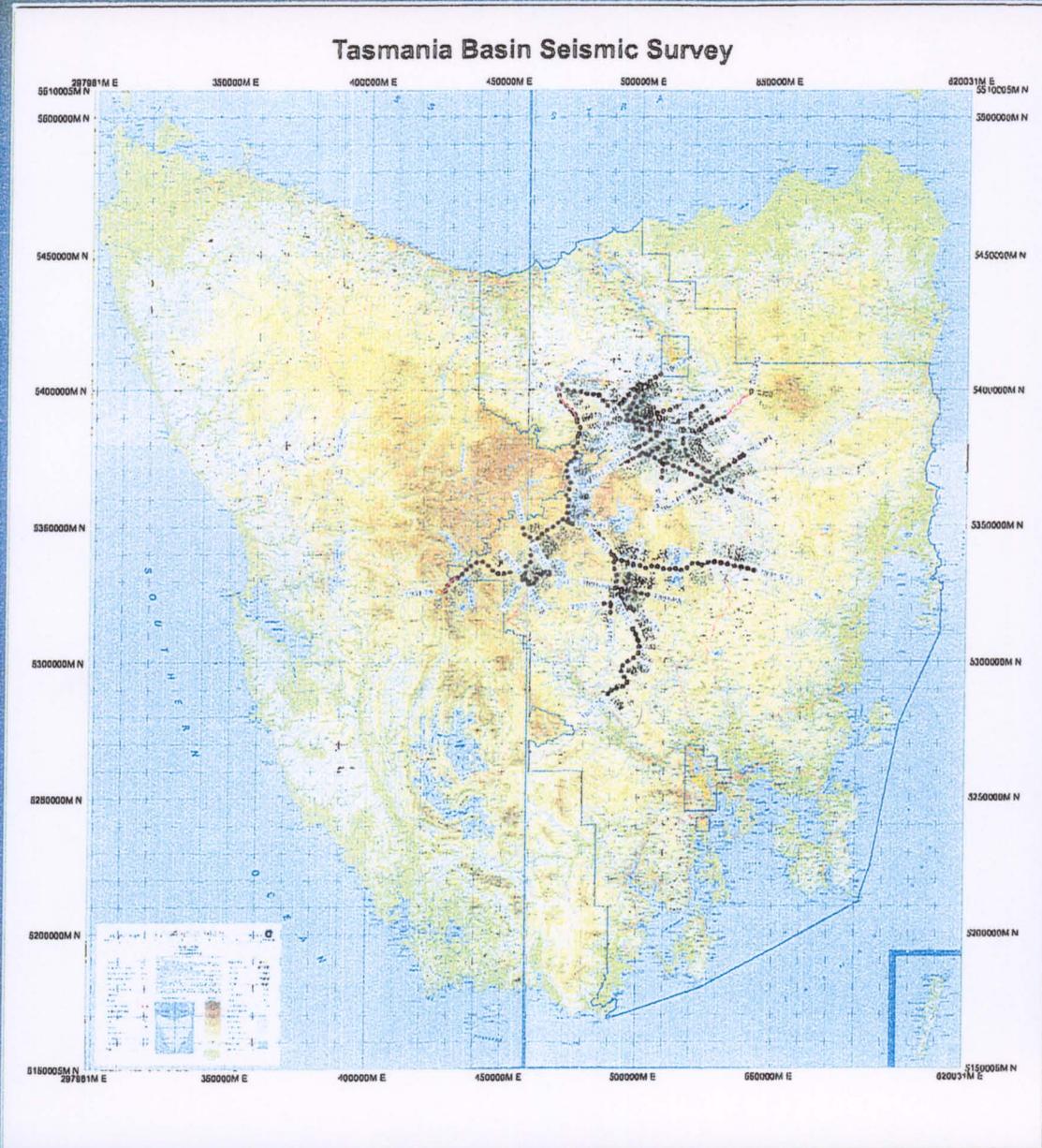
HUNTERSTON PROSPECT

HUNTERSTON MAP

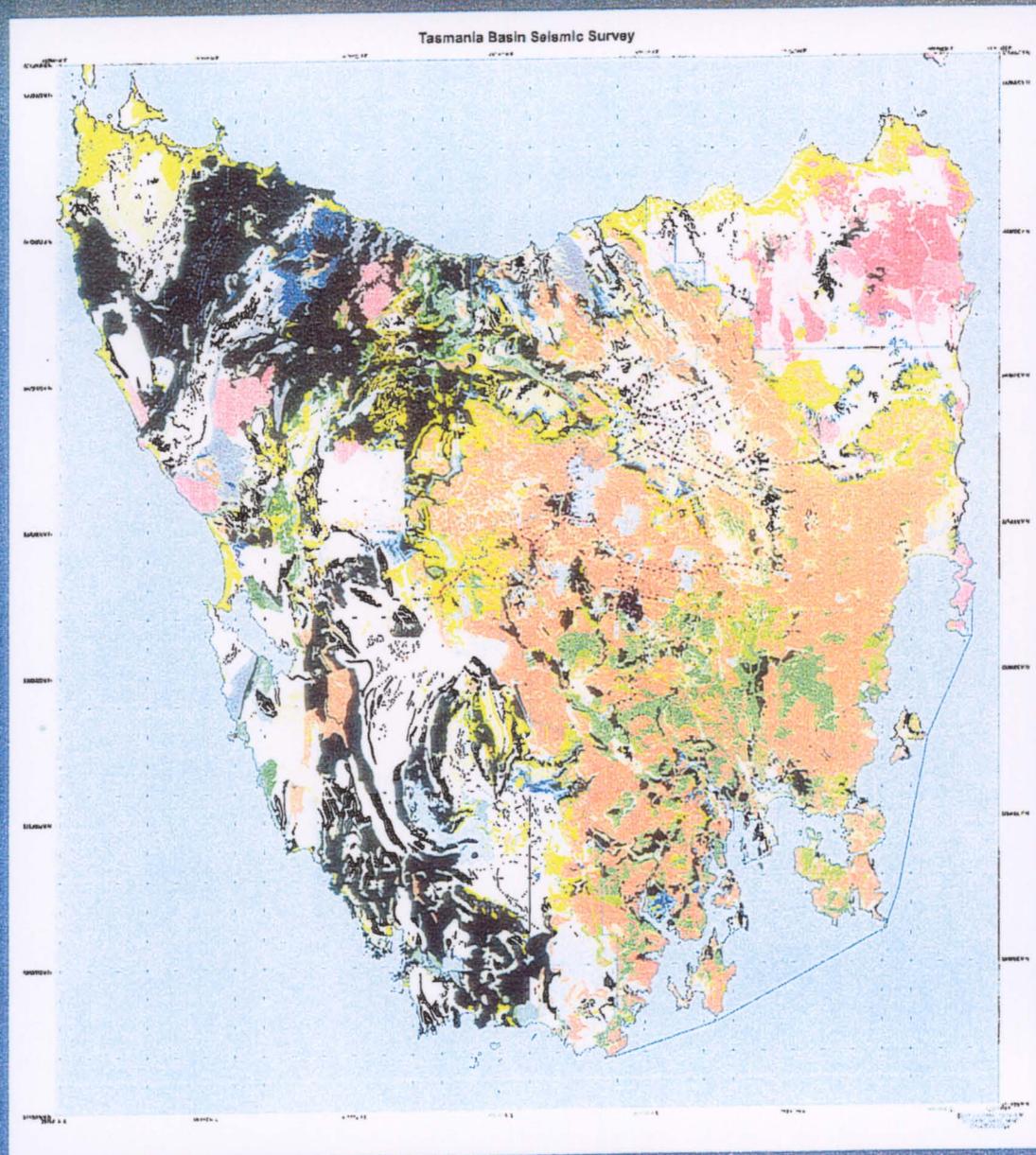
LEADS

LOCATION MAP

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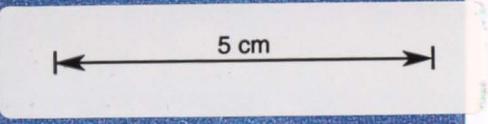
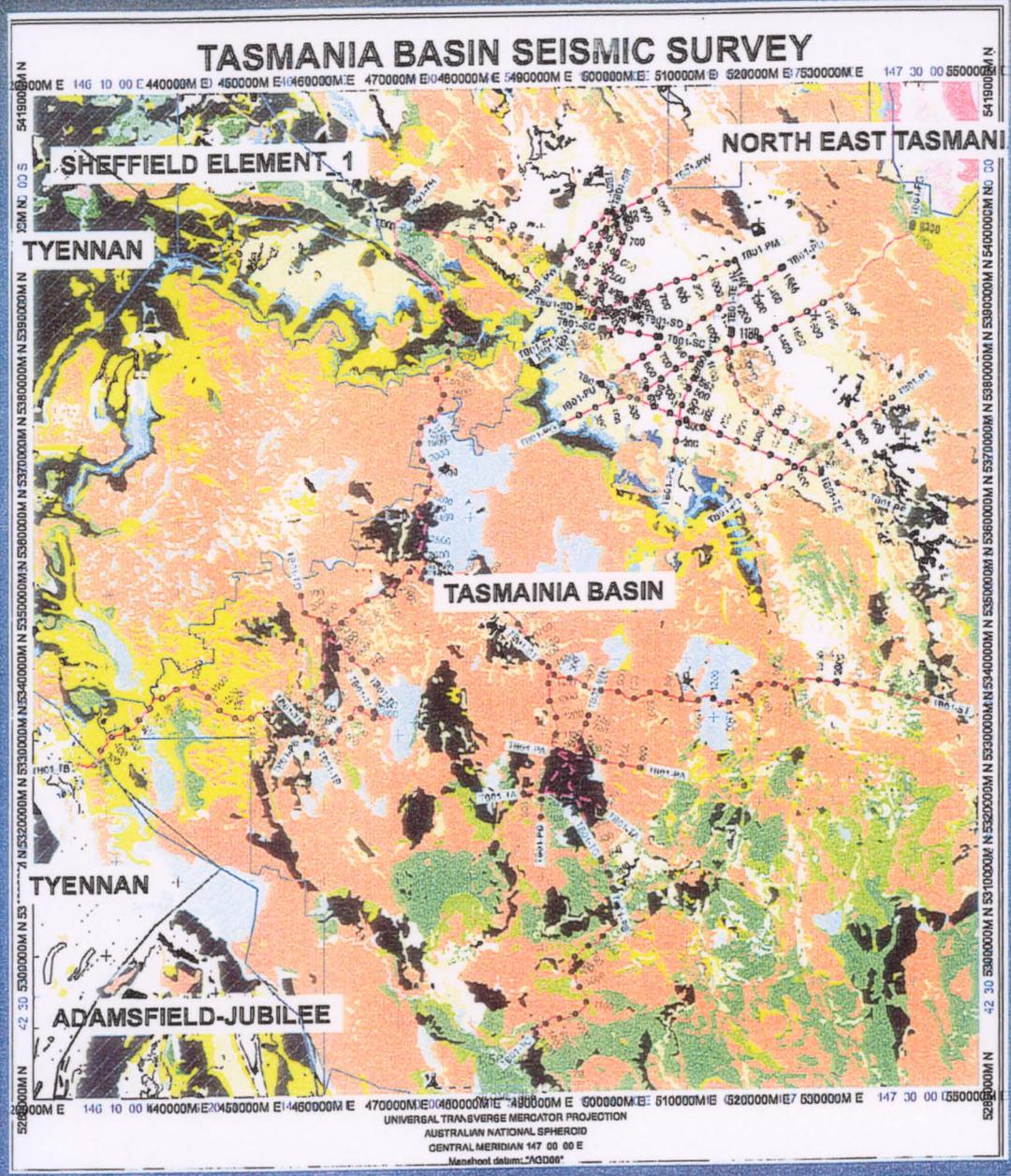
GEOLOGY MAP



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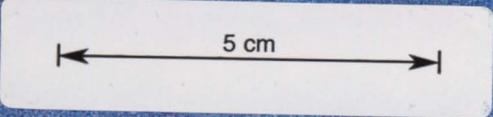
SURVEY AREA



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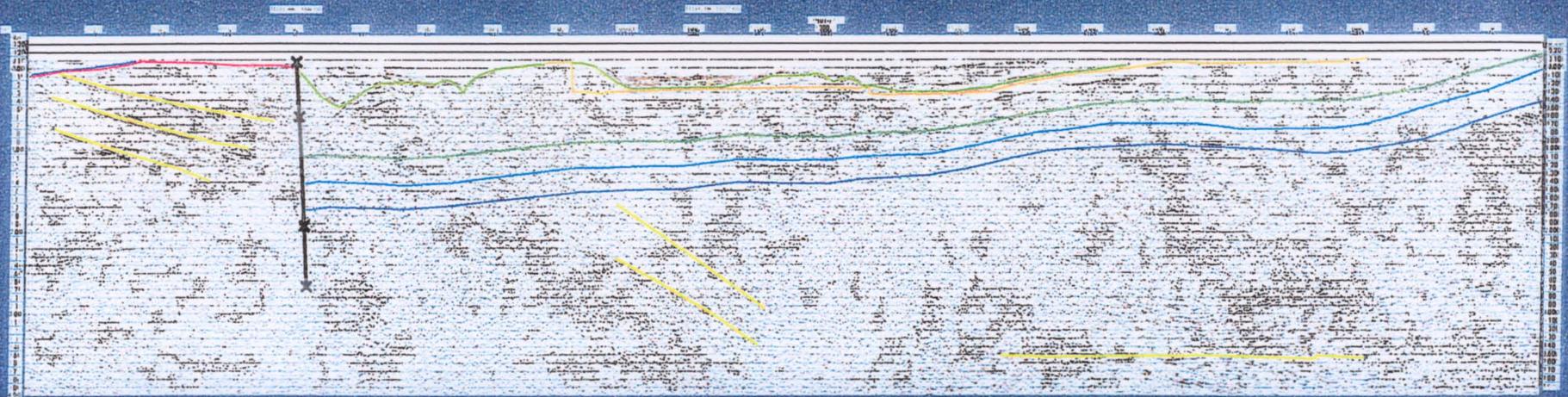
DTM AND BORES

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TB01-PG

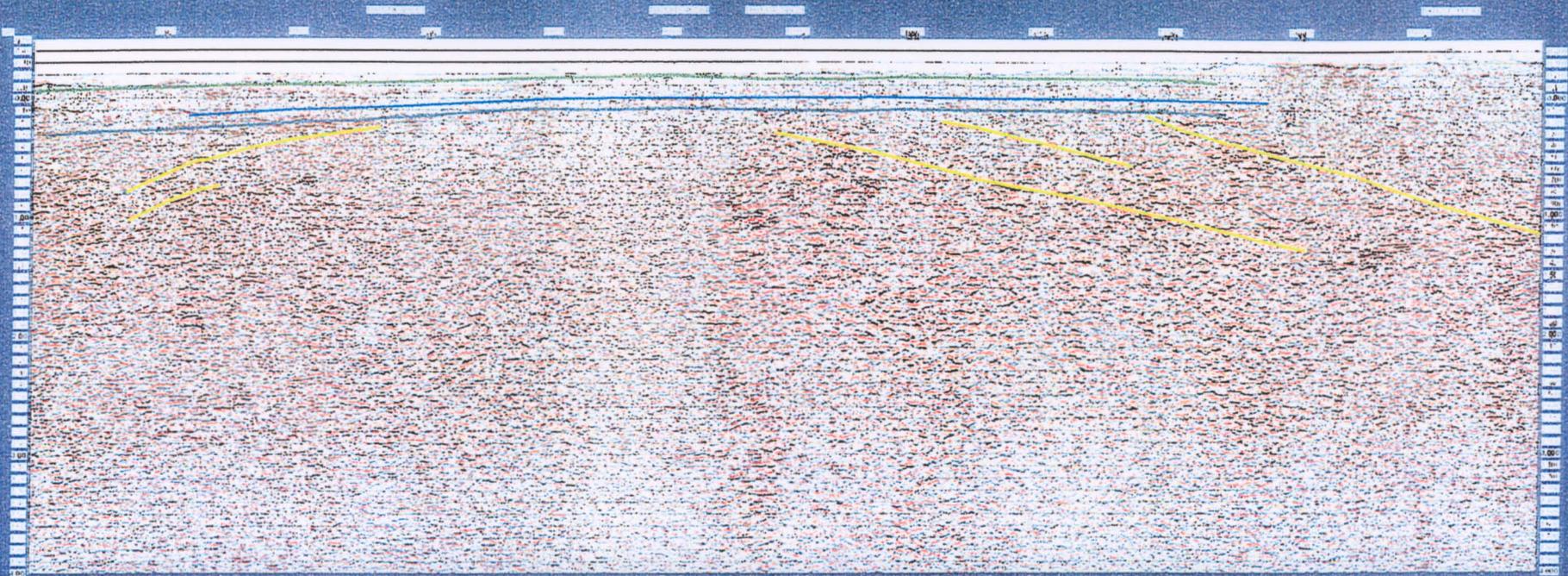
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HUNTERSTON PROSPECT

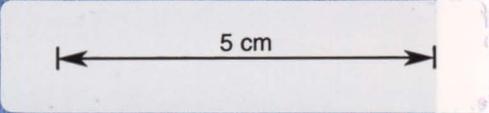
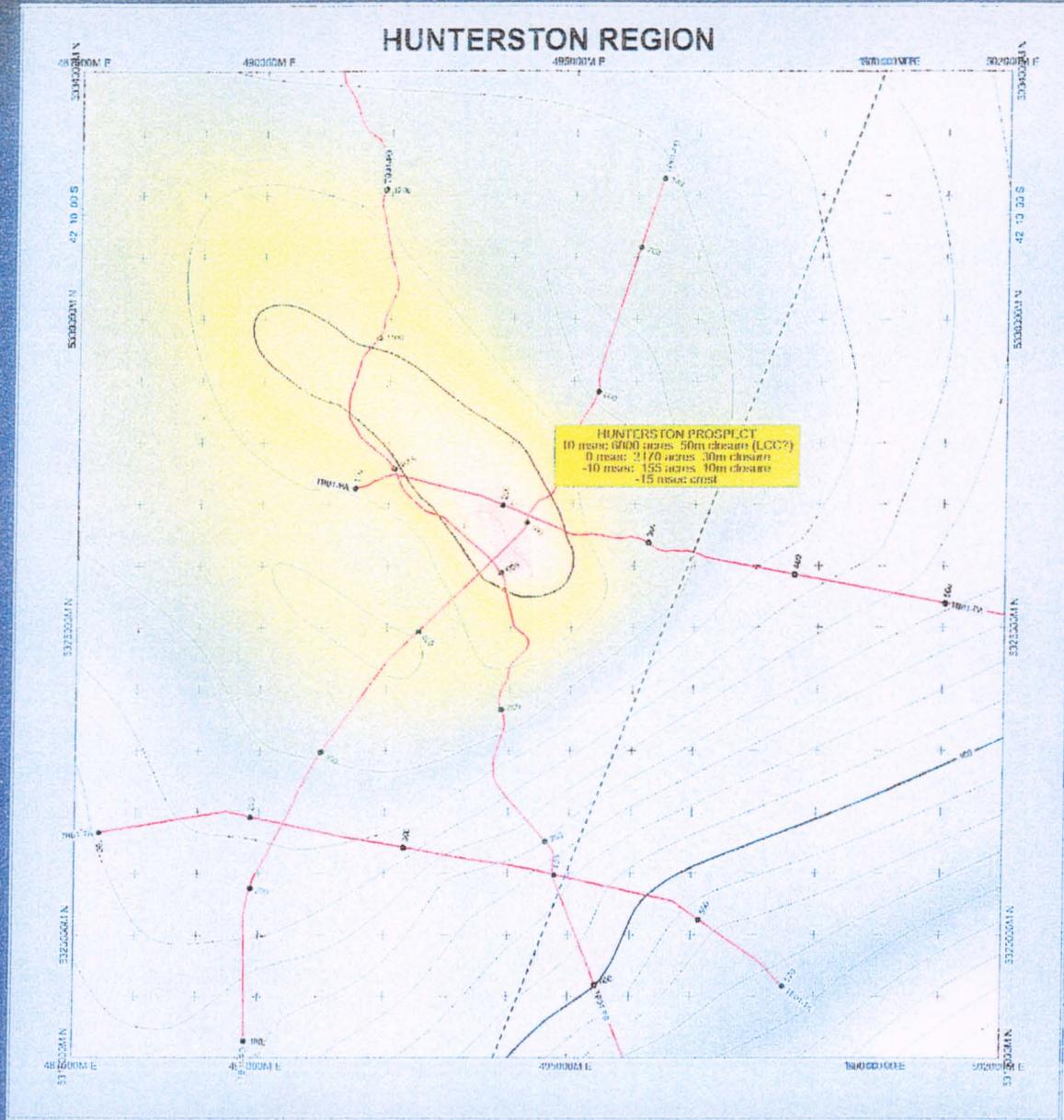
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HUNTERSTON MAP

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LEADS

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