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Independent Report

Prepared for Exoma Energy Limited on the

Hydrocarbon Geology

of

Queensland ATPs 991, 996, 999, 1005 & 1008

**Awarded to
Stardrift Pty Ltd
Petroalbion Pty Ltd and
MSJ Capital Pty Ltd**

And which, subject to appropriate governmental approvals,

are to be transferred into

Longreach No 2 Pty Ltd

31 May 2009

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INTRODUCTION

This study examines Coal Seam Gas prospects from within the coal measures of the Galilee Basin and gas and/or oil recovery from the Toolebuc Formation of the Eromanga Basin in exploration Applications - which includes Authorities to Prospects (ATP) 991, 996, 999, 1005 and 1008 - held by Stardrift Pty Ltd, Petroalbion Pty Ltd and MSJ Capital Pty Ltd (see Figure 1).

These APTs, subject to approval by the Queensland Mines Department, will be transferred to Longreach No 2 Pty Ltd (LNG2).

The adjacent Cooper Basin to the south west produces considerable volumes of oil and gas and the Bowen Basin to the east has oil and both conventional and Coal Seam Gas (CSG) production from the Permian section.

The Galilee Basin has recorded only minor oil and gas shows and has yet to produce economic volumes of CSG although appraisal continues in the Rodney Creek area. No previous exploration has been made to obtain hydrocarbons from the Toolebuc Formation in the subsurface.

DATA AVAILABLE:

We have relied on information made available by LNG2, together with certain public domain data.

LNG2 provided G.P. and R. J. McDonagh with data relating to the Application areas, published and unpublished geological reports on the basins, location maps and previous independent experts' reports on much of the areas.

We have also accessed QDEX, the Queensland Mines Department reports available online and held discussions with Department.

RISK AND LIMITATIONS

It is to be emphasized that exploration for hydrocarbons is inherently risky. There is as yet no direct means by which commercial quantities of oil or gas can be detected from the surface without drilling an exploration well.

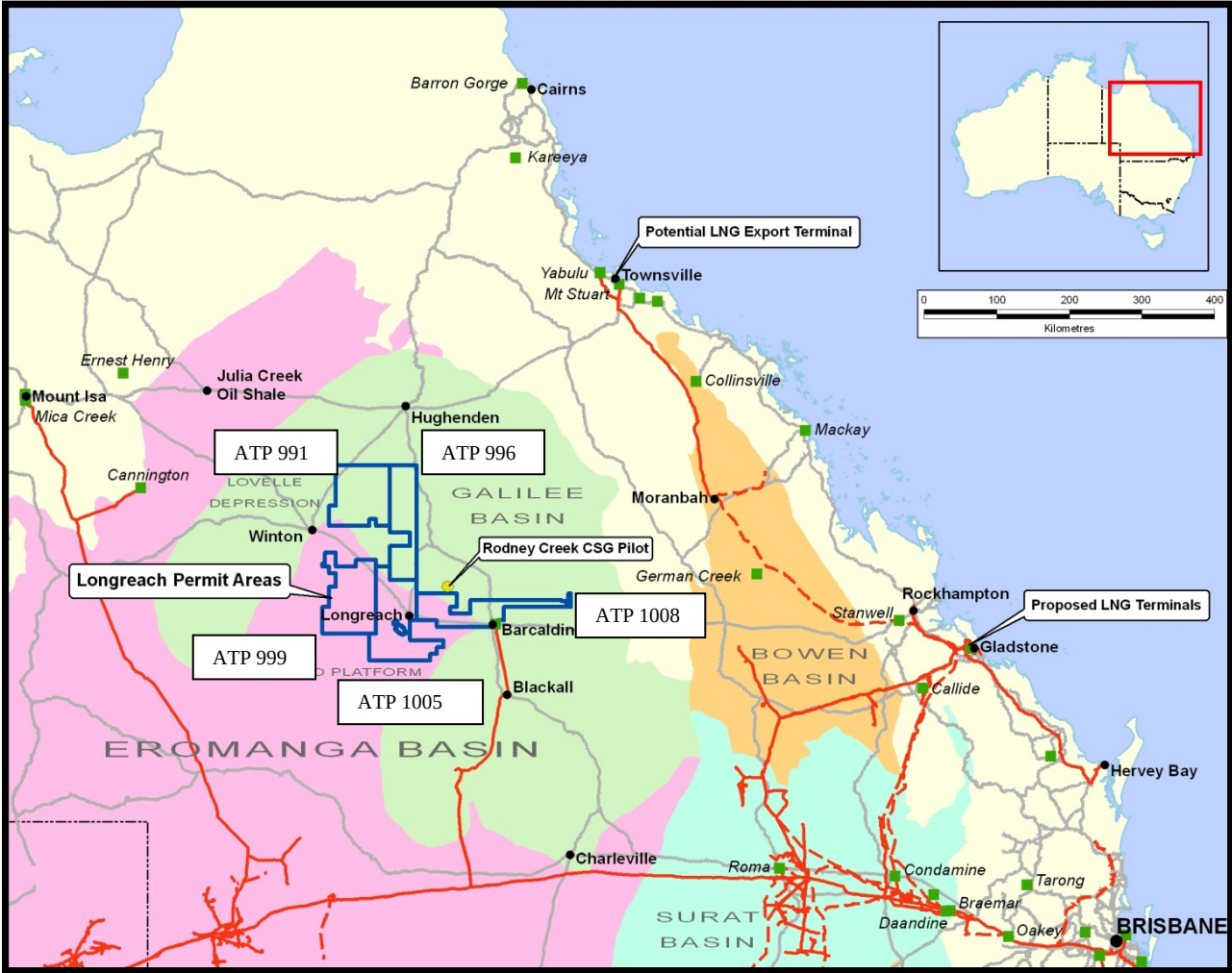
Although the extent of the formations of interest is known, the risk that the coals or shales targeted by an exploration well cannot be made to give up the hydrocarbons present or do so in sub-commercial quantities because of the failure of any one of the key factors required for success. These include the physical properties of the formations such as porosity and permeability, cleating of the coal seams and jointing and fracturing of both coal and shale.

QUALIFICATIONS

Geoffrey P McDonagh of G. P. and R. J. McDonagh received his B.Sc degree from the University of Queensland in 1961 and post-graduate Honours the following year. He has had over 35 years experience in hydrocarbon exploration in Australia, the United Kingdom, Portugal, France, Pakistan and Indonesia. His Australian experience includes work in the Adavale, Surat, Bowen, Cooper, Eromanga, Galilee, Canning and Clarence/Moreton Basins.

In partnership with R. J. Paten, he co-authored the section on the Bowen Basin in the Australasian Institute of Mining and Metallurgy Monograph "Economic Geology of Australia and Papua New Guinea, 3, Petroleum". He has been a member of the American Association of Petroleum Geologists for over 30 years.

Fig 1: Location of Permit Areas



DISCLOSURE AND INDEPENDENCE

Neither G.P. and R. J. McDonagh nor any of its employees have any direct or indirect interest in the permits that are the subject of this report, nor in any adjacent or pending permit or in the securities of and of the public companies involved. G.P. and R. J. McDonagh will be paid a fee for the preparation of this report.

CONSENT

G. P. and R. J. McDonagh consent to the inclusion of this report in the Exoma Energy Ltd Prospectus either to be published or placed on the company web site in July 2009.

SUMMARY

Potential exists within Permian of the Galilee Basin and the Cretaceous of the Eromanga Basin for hydrocarbon accumulations.

A small volume of oil was recovered from the Permian of the Lake Galilee No1 well and also gas from the same unit in Carmichael No 1 located near the basin's eastern margin. Gas was also reported from Kiburra No 1 in the north. Minor shows of fluorescence were recorded from several wells.

The first oil recorded in Queensland was found in Eromanga Basin sediments by a well drilled for water in Longreach. A number of CSG wells have been drilled and partially tested to the east and north of the Application areas. Large volumes of water were retrieved with only small gas flows recorded to the present but it is thought that improvements in engineering techniques will overcome production problems. It is also thought that much of the water produced came from sands adjacent to the coal seams.

Gas shows are always recorded during drilling of the shallow Toolebuc Formation although the lack of known reservoirs has inhibited exploration of this unit.

The comparatively immature nature of the Eromanga Basin sediments has also detracted from interest in the unit although the occurrence of fluorescence and cut from drill cuttings indicates maturity for at least some of the organic matter in the Formation.

LOCATION

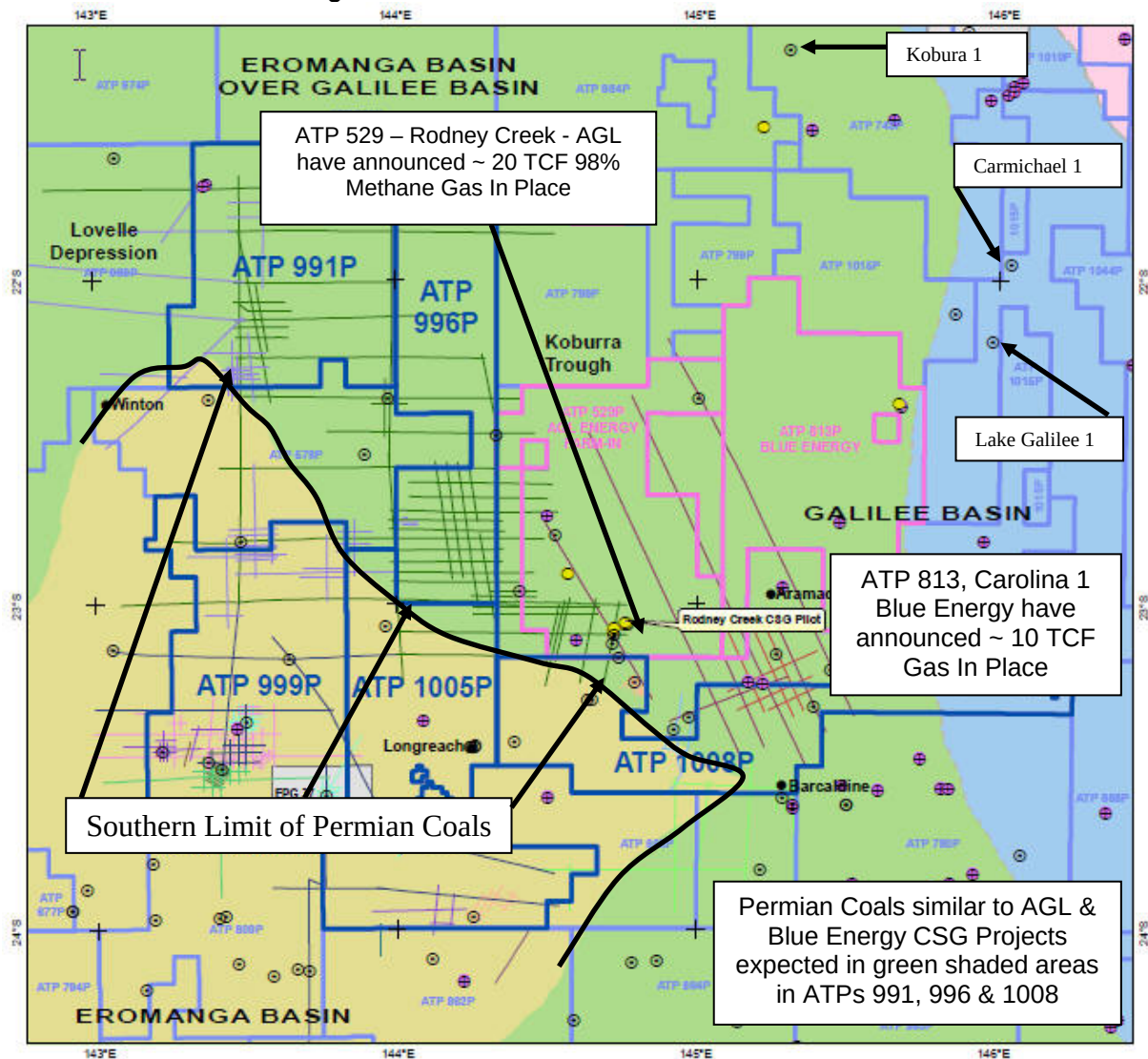
The Application areas are located in central western Queensland (see Figure 2).

The nearest regional centre is Longreach, on the Thompson River in ATP 1005P. Smaller centres include Barcaldine in ATP 1008P, and Winton to the southwest of ATP 991P. Longreach is connected to Brisbane by all-weather roads, rail and has a substantial aerodrome. Many stations in the region have their own airstrips.

The climate is hot in summer, cool in winter when occasional frosts occur, and generally dry. The “wet” season is normally in summer when transport movement off sealed roads can be restricted for up to weeks in a wet year. Occasional unseasonable rains mean that transport off sealed road cannot be definitively predicted. Up to three weeks can be lost due to rain even in the “dry” season.

The landscape is very gently rolling plains with occasional small hills dependant of the local geology. The main agricultural is grazing. The hills are generally composed of comparatively recent gravels related to the prehistoric drainage systems.

Fig 2: Permit Areas with Well & Seismic Data



PREVIOUS EXPLORATION

The initial seismic surveys within the basin were conducted in 1959 when Geoseismic ran a reflection survey for Artesian Basin Oil Company Pty Ltd in the Brookwood area. To the east, the Lake Buchanan–Lake Galilee Survey was run by Austral Geo-prospectors for Exoil N.L. in 1962. This included reflection and refraction work. It was followed by the Torrens Creek Survey. Data is not available for some of the very early seismic surveys. Adastra–Hunting Geophysics flew the Aramac–Mt Coolon Aeromagnetic Survey, also in 1962 (Makott & Peterson, 1962).

Only widely spaced seismic lines are present over much of the Galilee Basin and much of the area has no coverage.

More seismic programs between 1962 and 1970 defined anomalies which were tested by Lake Galilee No 1, (1964) (Pemberton, 1964), Towerhill No 1 (Witten & Pearson, 1967), Thunderbolt No 1 (Witten & Pearson, 1967), Muttaborra No 1, (Myers & Spenser, 1969) and Koburra No 1 (Pemberton & Le Gay Brereton, 1970).

Stratigraphic tests in the general area drilled by the Queensland Department of Mines include Aramac No 1 (1974), Muttaborra No 1 (1990) and Maneroo No 1 (1990).

The Bureau of Mineral Resources also drilled a number of stratigraphic wells in the area with much information collected by Hawkins and Green (1993).

A number of unpublished reports were examined (McDonagh, 1993).

TECTONIC SETTING

The Galilee Basin consists of a Late Carboniferous to Middle Triassic Basin located around the igneous Maneroo Platform (Hawkins and Green, 1993) (see Figure 3). This basin margin terminates against Palaeozoic and pre-Cambrian rocks of the Lolworth-Ravensworth Block in the north and northeast and overlies the Devonian to Carboniferous Drummond Basin in the east.

The contact with older rocks in the northwest and west is obscured by younger section. The Galilee Basin sediments generally thin towards the south. Most of the basin is covered by Jurassic and Cretaceous Eromanga Basin sediments.

The Koburra Trough in the northeast contains the greatest thickness of sediment and overlies the western portion of the Devonian to Middle Carboniferous Drummond Basin.

The Aramac Depression runs in a generally easterly direction from the Maneroo Platform into the Koburra Trough. The Lovelle Depression is the western arm of the basin but was not included within the study as it lies outside the permit area.

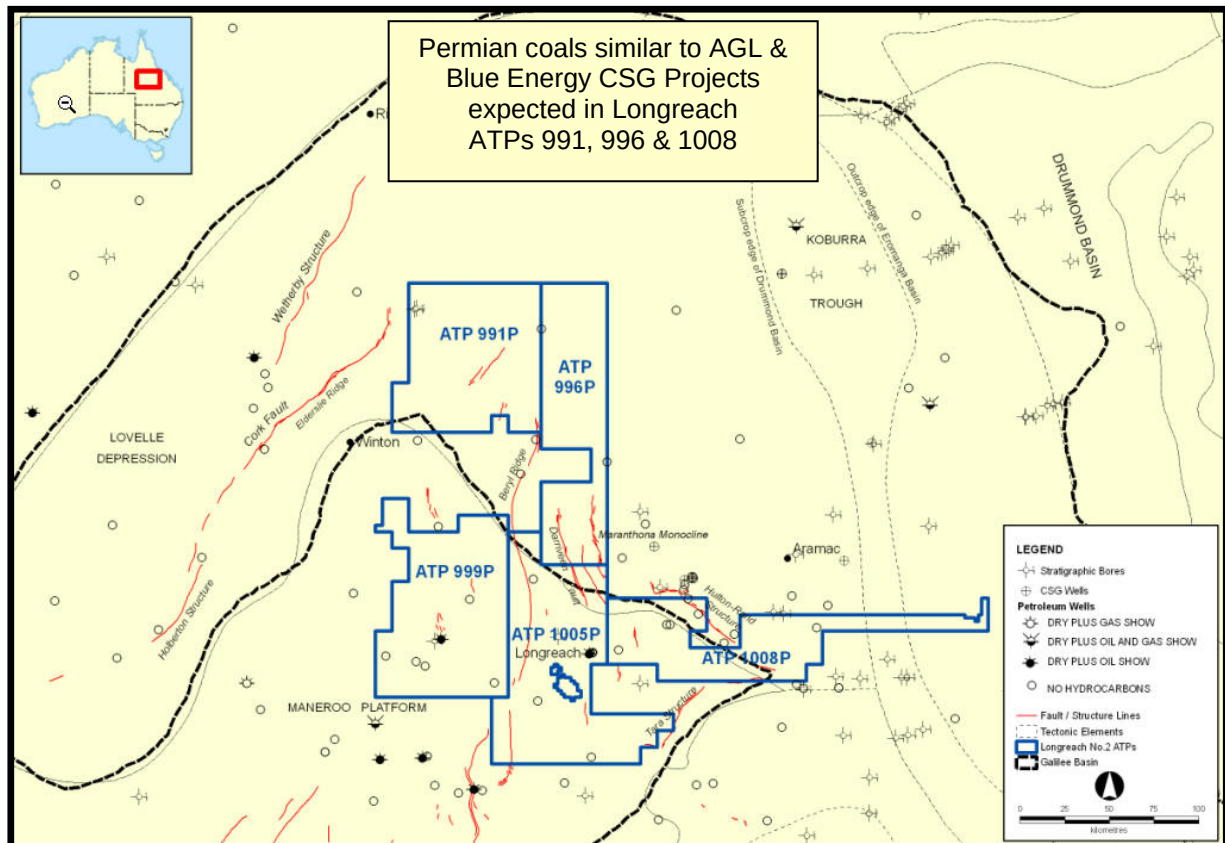
The Eromanga Basin contains fresh water to shallow marine sediments of basal Jurassic to Early Cretaceous age. Many of the stratigraphic units are extensive and are easily correlated across much of the basin.

Of particular interest to this report is the Lower Cretaceous Toolebuc Formation, which is present throughout much of the basin and is an exploration target in the Application area.

STRUCTURE

Major structures are mostly associated with the margins of the Maneroo Platform or radiate from it (see Figure 3).

Fig 3: Galilee Basin Structural Setting



Those of interest to this report are adjacent to or within the permit areas. These include the Hulton Rand Structure – a major fault system adjacent to the eastern margin of the Maneroo Platform and present in ATP 1008. Portions of the Darivan Fault and the Maranthona Monocline are present in ATP 1005. These structures appear to extend onto the Maneroo Platform.

Some extension of the Cork Fault System and Elderslie Ridge may be present in ATP 991. These structures, as well as the faulted margin of the Maneroo Platform are likely to be of interest in the exploration for CSG.

Anticlines mapped by seismic surveys and subsequently drilled in oil exploration can be targets for CSG exploration as such targets were not tested for that resource.

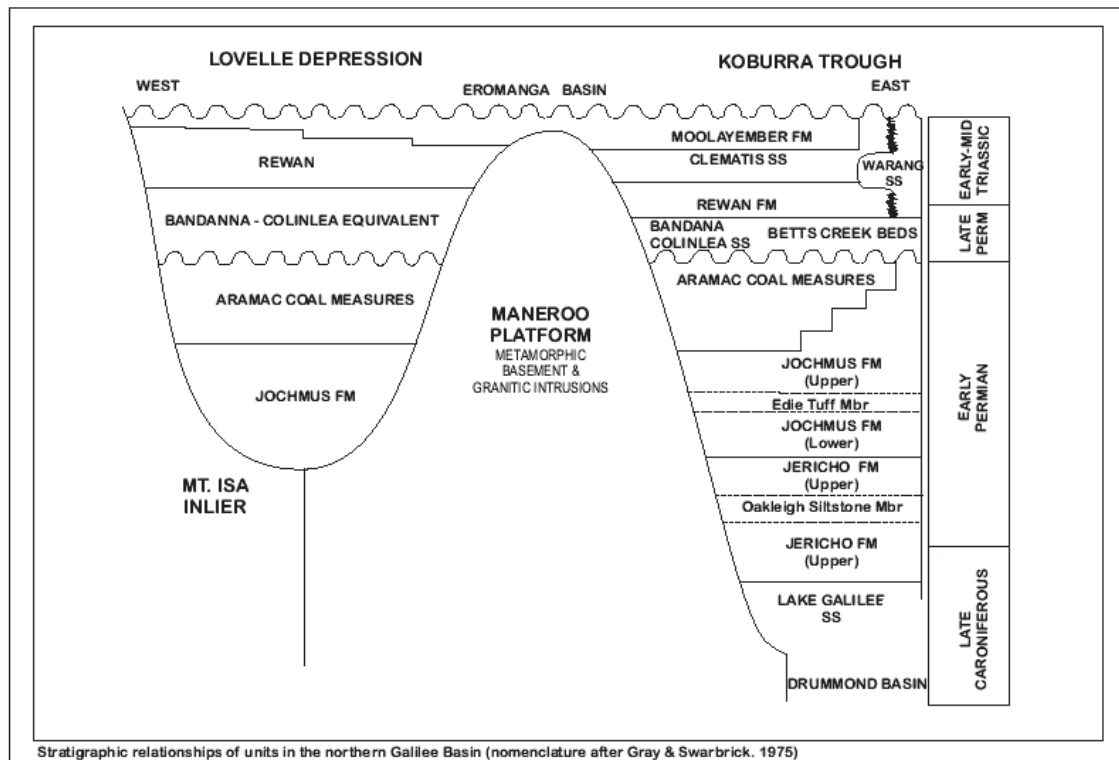
Smaller structures have been mapped within the Eromanga Basin section on the Maneroo Platform. These could provide the best targets for testing the prospects of the Toolebuc Formation as faulting and increased jointing might be present.

Structural lineation can be seen on appropriate aerial photographs and may indicate greater jointing patterns. The tendency to draw all lineations as straight lines has been a problem with this type of study previously and tends to obscure features likely to interest exploration for areas of increased jointing and faulting. The lineation study made for Enron in its permits is evidence of this.

GEOLOGICAL HISTORY

To the east of the Galilee Basin the Drummond Basin of Devonian to Carboniferous age is outcropping and extends for a distance beneath the Galilee Basin (see Figure 4).

Fig 4: Galilee Basin Stratigraphic Column



STRATIGRAPHY OF GALILEE BASIN

The earliest of these sediments are marine in origin and were deposited during the Middle Devonian. They were slightly metamorphosed towards the end of the Middle Devonian.

The Drummond Group sediments of Late Devonian to Middle Carboniferous age were deposited after a period of uplift, non-deposition, probable folding and erosion. These sediments are mainly fluvial in source, although some marine sediments are present within the group. Volcanic flows and tuffs are also common. The younger sediments appear to have a substantial portion of their make-up derived from volcanic rocks.

An unconformity or disconformity, depending on the geographical location, indicates that some tectonic movement was taking place before or during deposition of the earliest Galilee Basin sediments. This can be seen on regional seismic sections where the discordance between the two basins seems to decrease toward the west. It seems likely that the main deformation of the Drummond Basin commenced at about this time.

The Lake Galilee Sandstone, the fluvial sandstone of the basal Galilee Basin section, was deposited in the eastern part of the Koburra Trough and spread across the trough with time. It is assumed that the source of the sands was the uplifted area adjacent to the Drummond Basin, possibly in the region of the Pre-Cambrian Anakie Inlier to the east.

Presumably due to continued uplift and folding in the Drummond Basin, the depositional trough axis gradually moved westward and the Jericho and Jochmus formations were deposited, each overlapping the older formations.

A period of probable reduction in uplift to the east reduced sediment supply and the Oakleigh Siltstone Member of the Jericho Formation was deposited. Much of the sediment load of the two formations was derived from volcanic detritus. A period of volcanism is recorded by the presence of the Edie Tuff member of the Jochmus Formation.

The youngest of the Early Permian formations and the first of economic importance for CSG, the Aramac Coal Measures, was deposited over a greater area than its present distribution. It includes substantial coal seams with interbedded sandstones and shales.

The Coal Measures were deposited in the Aramac Trough to the east of the Maneroo Platform and also in the Lovelle Depression to the west of the platform. In places they were deposited around and over pre-existing highs and this led to drape structures in these and the younger section. It has not been possible to effectively correlate coal seams within the Aramac over any real distance. The assumption must be made that the seams are generally lenticular and formed in a fluvial plain with common changes of stream location.

An unknown area of the unit was removed by erosion, particularly in the east before deposition of the Late Permian sediments. There is no visible discordance between the Aramac Coal Measures and the overlying Colinlea Sandstone/Betts Creek Beds on the seismic sections nor can any erosion horizon be picked in cores recovered from drill holes.

There is a dichotomy of the stratigraphic nomenclature in the Late Permian. Where the section shows two recognisable units - a lower sandstone and an upper coal measures - the names Colinlea Sandstone and Bandanna Formation are used. These are formations extending from the Bowen Basin to the east.

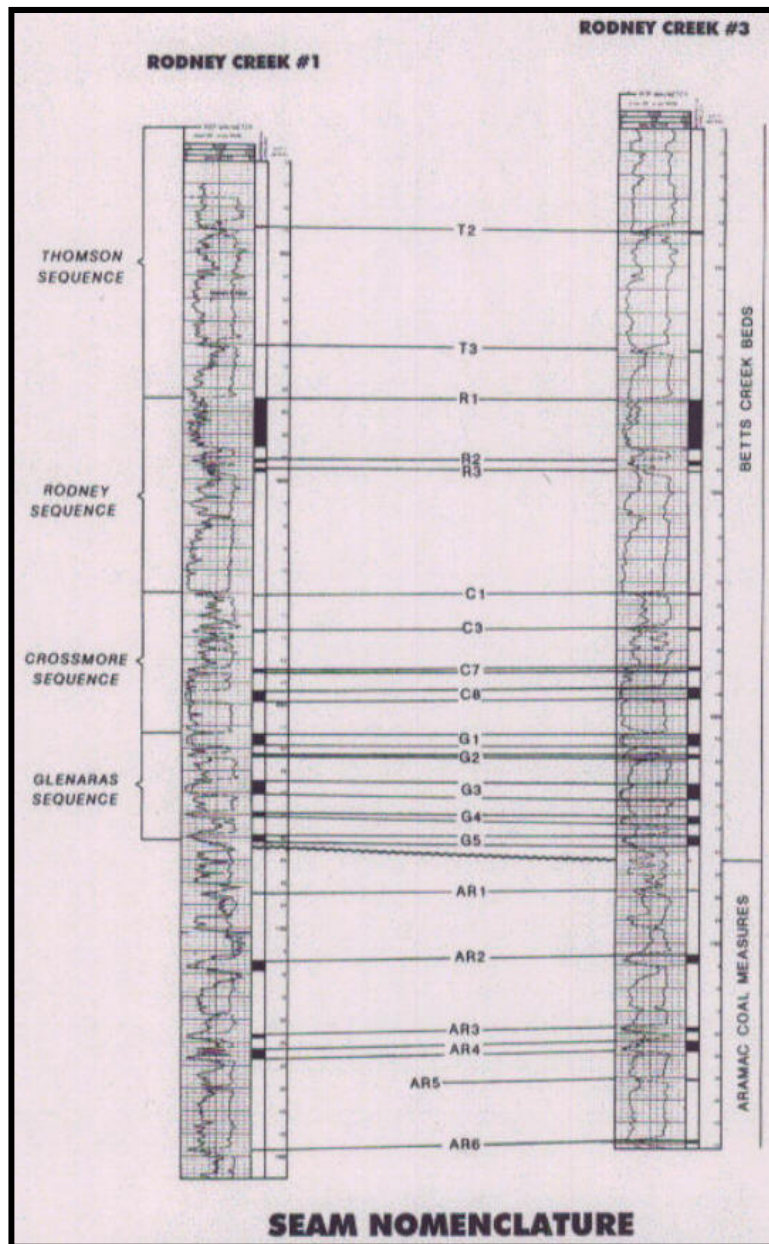
When the unit seems indivisible, consisting of interbedded sandstone, shale and coal then the name Betts Creek Beds is applied. The Late Permian coal seams can be correlated over greater distances than those of the early Permian (Report for Enron, unpublished) (see Figure 5).

Total coal thickness of the Permian units is generally over 20m. Ash contents range from about 7% to over 25%. The higher figures are generally in the thickest seam near the top of the Betts Creek Beds.

Recorded permeabilities within the coal seams vary up to 230m deep in Rodney Creek No 8, in ATP 529, the most recent well drilled for CSM in the general area (Galilee Energy Investor Presentation, May 2009).

The presence of porous sands interbedded with the coals make it difficult to be certain of some of the porosity and permeability results obtained by drill stem testing in the past.

Fig 5: Rodney Creek Coal Seam Nomenclature



Climatic changes at the end of Permian time, together with the Triassic red-bed Rewan Formation, the Clematis Sandstone and the Moolayember Formation were deposited over much of the area, probably in a semi-desert environment. Varying percentages have been removed by the post mid-Triassic erosion which followed continued uplift of the area.

Down-warping of the entire area commenced possibly in the latest Triassic, but definitely in the Early Jurassic, and the initial freshwater sediments of the Hutton Sandstone were deposited. In some areas a "Basal Jurassic" of sandstone, shale and occasional coal seams was deposited.

A reduction in the gradient between sediment supply and deposition occurred towards the top of the formation and the Birkhead Formation of less coarse sediments was deposited. A regional coarser unit, the Adori Sandstone, spread across the area.

This was followed by a generally siltstone unit, the Westbourne Formation, which was followed by a major coarse unit, the Hooray Sandstone. This coarse unit contains common siltstone, suggesting a slightly increased depositional gradient.

The Cadna Owie Formation seems indicative of two things. An increase in gradient took place and there are also indications of the presence of a shallow sea. This unit also crosses the Jurassic-Cretaceous boundary.

The early Cretaceous formations mark the beginning of a marine transgression. The Wallumbilla Formation is a generally siltstone unit with mudstone indicating little erosion on the hinterlands because of the lack of coarse sediments.

What is interpreted as a still-stand then took place and the extensive Toolebuc Formation was deposited. The Toolebuc Formation contains shale, marl and limestone with oil shale. Fossils are common including Inoceramus, foraminiferal tests and fish bones. Uranium and Vanadium are generally present associated with phosphatic nodules. The presence of the radioactive minerals means that the Toolebuc Formation is easily recognizable on the gamma ray logs and also means that the lithology of the unit cannot easily be determined from this log type.

Cuttings samples indicate the majority of the unit is generally organic rich shale. The thickness of the unit varies from as little as 4m in the east to over 30m in the west. The organic content of the unit has been recorded as up to 18% (LNG2).

An increase in sediment quantity allowed the deposition of the Allaru Mudstone followed by the Mackunda Formation of generally similar lithologies. In some areas the uppermost Early Cretaceous sedimentary unit is the Winton Formation, which includes sandstone and minor coal seams.

After a period of up-lift, tilting to the southwest and erosion, the Tertiary and Quaternary sediments were laid down in the pre-cursors of the present day drainage systems. Remnants of these deposits are seen as flat-topped hills.

DISCUSSION

It is understood that LNG2 plans to explore for methane, the gas commonly used in industry and in domestic reticulation, within the major Permian coal seams and the shales of the Cretaceous Toolebuc Formation. Although the CSG industry is comparatively recent, the controls for methane production are well proven.

During compaction of carbonaceous sediment and the conversion to coal, or dispersed organic material, methane is produced and a percentage is adsorbed onto available carbon atoms. This is a weak molecular link and is maintained by water pressure within the sediment, in most cases coal.

The formation pressure can be reduced by dewatering the formation which releases the methane. Although most gas produced this way is from coal seams, recent exploration in the United States has focussed on producing methane from shales with an organic content. This generally requires horizontal drilling and "fracking" and investigation into joint patterns and fracture directions.

Three stratigraphic units are of particular interest to this study. These are:

- the Early Permian Aramac Coal Measures,
- the Late Permian Betts Creek Beds and
- the Early Cretaceous Toolebuc Formation.

The most recent well data available is Rodney Creek 8, an outline of which has been provided to the author by LNG2. This data indicates 22m of net coal with permeabilities of up to 230mD with a weighted average for the 24.9m tested of 30mD. The calculated gas content given is 4-7.5 cubic metres per tonne of gas and gas in place (GIP) of some 20 TCF (Galilee Energy Investor Presentation, June 2008) of 98% methane and a target for a 2P reserves certification of up to 500 PJ (250 PJ net to Galilee) by 2010 (Galilee Energy Investor Presentation, May 2009).

The failure to produce economic volumes of methane from the Permian coals of the Galilee Basin is thought to be related to engineering constraints. While gas is present within the known coal deposit, the challenge of generating gas production from a generally dull coal sequence is yet to be met.

The exploration activity in the Galilee Basin of companies such as AGL Energy Limited seems to indicate that the engineering problems are being overcome. The Rodney Creek area is only 11km from the boundary of an LNG2 lease. Similar Permian coals tested in ATP 813 by Blue Energy's recent Carolina 1 well have been credited as containing potentially 10 TCF of GIP (Blue Energy Technical Presentation on ATP 813 at 8th Coal Seam Gas Conference in Brisbane, 2008).

The thickest seam, which is also the most extensive, is unfortunately the highest in ash content. However the lower ash content seams generally contain more bright coals and better cleating, a good sign for gas production. The best seams appear to be to be the lower seams of the Betts Creek Beds and the upper seams of the Aramac Coal Measures.

The presence of sandstones interbedded with the coals can provide a problem with the dewatering of the coal to produce the gas. This was one of the engineering problems of previous exploration programs. The sands are variably porous and permeable and care is needed to ensure that water from the sandstone is prevented from entering the coal seams. It is hoped that this engineering challenge can be solved in the near future, if not already achieved by the present explorers in the Galilee Basin.

It is understood that LNG2 also plans to test the possibility of “shale gas” production from the shales of the Toolebuc Formation, a widespread organic unit present across much of central Queensland. This unit underlies each of the Longreach permit areas, from outcrop in ATP 1008 to not more than 500m below sea level in ATP 999 (see Figures 6 & 7) and ranges in thickness from 7m to 35m.

Fig 6: Toolebuc Sub Sea Depth Map

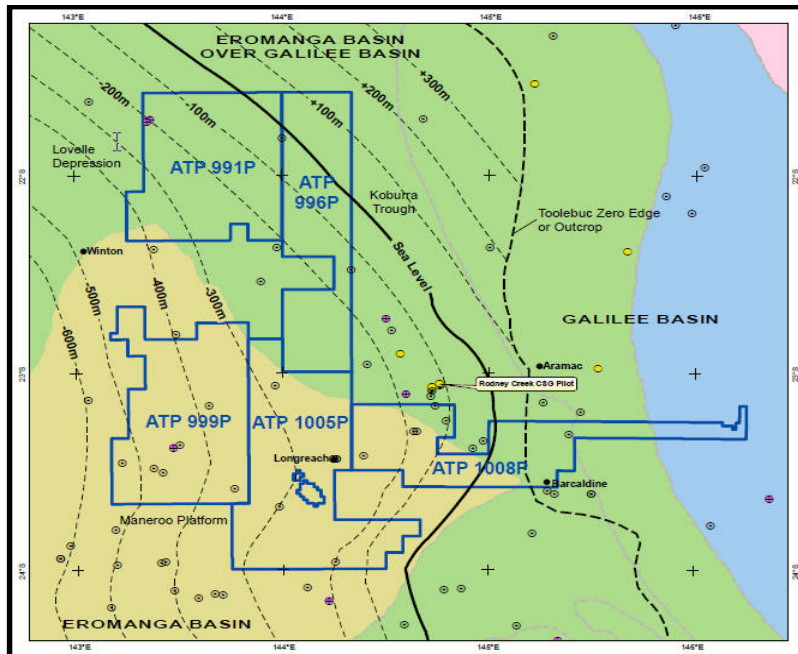
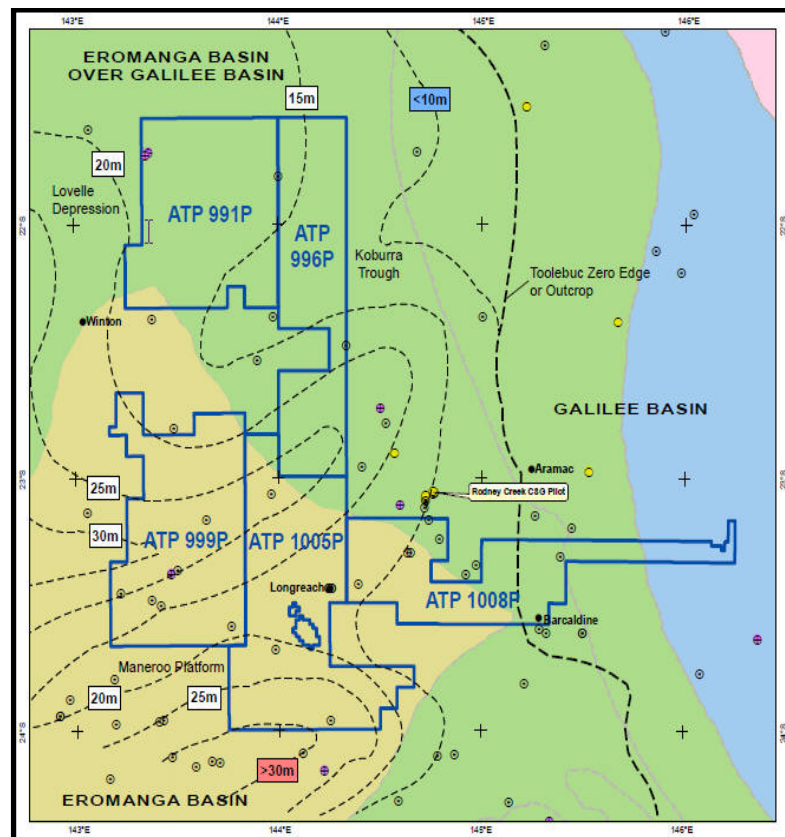


Fig 7: Toolebuc Thickness Map



This is an untested play but the Toolebuc shale unit should be investigated as it always produces a gas show when drilled and some hydrocarbons higher than methane are generally present. If this project is successful, it opens up the possibility of production from similar stratigraphic units in other areas of the world.

As far as the prospects for production from these shallow Toolebuc units is concerned, this is likely to be cutting edge engineering with the possibility of substantial rewards.

A recent analysis of shale from the Toolebuc Formation from one small sample of an old core from the Beryl No 1 well gave up to 30 cubic feet per ton of methane in place (~140 daf), (unpublished report by ERC Pty Ltd).

If horizontal drilling is successful in tapping into the gas adsorbed on the organic matter in the rock, then a substantial reserve (possibly as much as 25 TCF according to LNG2) must be present due to the large areal extent of the unit. There is also the possibility of underground combustion which could also release oil from the unit. This possibility must wait until the end of the Queensland Government's four year moratorium on underground gasification of coal.

SUMMARY

Three of the five contiguous permits which are the subject of this review are situated to the west and south of the Rodney Creek CSG project and, while there can be no guarantee that coals with similar or better CSG quality will be found, it is certain that the Permian Betts Creek and Aramac coals will occur through much of the permit area and at similar depths (from ~700m to ~1200m). The occurrence of similar quality coals to those at Rodney Creek in Blue Energy's ATP 813 (some 200km to the northeast) must also be taken as very encouraging.

All five of the permits have potential for the much shallower Toolebuc shale gas. While shale gas exploration has yet to be attempted in Australia, there can be no doubt that there is gas present in this organic rich shale throughout the general area. It may be possible that new drilling and production techniques that have been applied so successfully overseas, may provide the key to turning what is a very large hydrocarbon resource into potentially recoverable gas.

REFERENCES

- Cundill J., Myers, N. & Schultz, M. (1971), *Evaluation of ATP 76P, Lake Galilee Area, Queensland*, Unpublished.
- Enron Exploration Australia Pty Ltd. (1993) *Splitters Creek No 1 Well Completion Report*, Unpublished.
- Hawkins, P.J., and Green P.M. (1993) *Exploration Results, Hydrocarbon Potential and Future Strategies for the Northern Galilee Basin*.
- McDonagh, G.P. (1993) *Galilee Basin Prospects*, unpublished study for Enron.
- Makott, P.E. & Peterson, N.R. (1962) *Aramac – Mt Coolon airborne magnetometer survey, ATP 76P*, for Exoil N.L. by Adastra-Hunting Geophysics Pty Ltd.
- Myers, N.A. & Spencer, L.(1969) *Well Completion Report, Pursuit Oil N.L. Muttaborra No1*, Unpublished.
- Pemberton, R.L. (1964) *Well Completion Report Exoil N.L. Lake Galilee No 1*, Unpublished
- Pemberton, R.L. & Le Gay Brereton, J. (1970) *Well Completion Report, Flinders Petroleum N.L. Koburra No 1*, Unpublished.
- Queensland Department of Mines. (1974) *Aramac No1, Muttaborra No 1*.
- Witten, B.O. & Pearson, T.R. (1967) *Well Completion Report, Amerada Petroleum Company Towerhill No 1*, Unpublished,

GLOSSARY

Basal – At the base of - (usually the base of a stratigraphic unit).

Basin – A segment of the earth's crust which has down-warped and in which sediments have accumulated. It is in such basins that hydrocarbons may be found.

Carboniferous – A geological period between the Devonian and the Permian

Coal – an organic rock formed from vegetable matter

Coal measures- Strata containing coal beds.

Coal Seam Gas – Gas recovered from coal seams

Cooper Basin – A Palaeozoic Basin in west-southwest Queensland and northeast South Australia

Cretaceous –A geological period corresponding to approximately 140 to 60 million years before the present.

Deposition – Laying down of potential rock forming material i.e. sediments.

Fault – A fracture in the earth's crust along which the rocks on one side are displaced relative to those on the other.

Fluvial, Fluvatile – Pertaining to rivers.

Fold A bend in rock strata commonly a product of deformation. Convex folds or domes often provide traps for hydrocarbons.

Formation – A unit in stratigraphy defining a succession of rocks of the same type.

Galilee Basin – A sedimentary basin in Queensland

Geology – The science relating to the history and development of the Earth's crust.

High – A region either on the surface or subsurface that is elevated relative to surrounding areas.

Hydrocarbons – Compounds containing the elements hydrogen and carbon. They may exist as solids, liquids or gases.

Hydrocarbon shows – indications, such as fluorescence, observed during drilling of the possible penetration of hydrocarbon bearing rocks.

Jurassic – A geological period corresponding to the interval between 141 and 205 million years before the present.

km – Kilometres.

m - Metres

Marine – Deposited in the sea.

Marl – a rock composed of clay and limestone

Metamorphosed – deformed rock

Methane – The lightest naturally occurring hydrocarbon gas.

Mudstone – Similar to shale but lacks the lamination.

Non-marine – sediments deposited under fresh water conditions, i.e. a river or lake or alluvial processes.

Oil – A mixture of liquid hydrocarbons of different molecular weights.

Permeability – A measure of the capacity of rock or stratum to allow water or other fluids such as oil to pass through it. The unit is the Darcy.

Permian – A geological period corresponding to approximately 225 to 300 million years ago.

Porosity – The ratio of the pore space in a rock to its total volume, generally expressed as a percentage.

Recent – Youngest Geological era

Reservoir – Permeable and porous rocks (usually sandstones, limestone or dolomites) capable of containing significant quantities of hydrocarbons.

Risk – An expression of uncertainty (high risk) or certainty (no risk) relating to the presence of principal geological factors controlling oil accumulations.

Sandstone – A type of rock composed primarily of quartz grains.

Sediment – Solid rock material, both organic and inorganic, originally settled following transportation by water, wind or ice.

Sedimentary – Applies to rocks or depositional processes whereby material derived from pre-existing rock is deposited.

Shale – A laminated sediment in which the constituent particles are predominantly of the clay grade.

Siltstone – Rock intermediate in texture and grain size between sand and shale.

Source Rock – A rock containing sufficient organic matter to be capable of generating oil and/or gas under pre-requisite conditions of temperature, pressure and time.

Stratigraphic – Pertaining to the study of the subdivision, composition, age and correlation of sedimentary rocks.

Stratigraphy – The study of stratified rocks, especially their age, correlation and character.

Structure – A physical arrangement of rocks is such as to that may form a potential trap for migrating hydrocarbons.

Tertiary – The era of geological time which began approximately 60 million years ago and ended approximately one million years ago

Triassic – The geological period corresponding approximately to 205 to 250 million years.