

## ***Exploration Permit EP 426***

***FINAL***

***18 April 2006***

*The following ‘Independent Geologist’s Report’ was produced by Saitta Petroleum Consultants Pty Ltd, using information provided by the directors of Allied Oil & Gas Plc and third parties, for the inclusion in a prospectus for a capital raising in the United Kingdom. Saitta Petroleum Consultants Pty Ltd have used due care in the production of this assessment, but, since it is impossible to check all facts from first principle, cannot be held responsible for omissions or inaccuracies in this report.*

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18 April 2006

The Directors  
Allied Oil & Gas Plc  
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Channel Islands

Dear Gentlemen,

### **Independent Geologist's Report**

#### **SUMMARY**

This report has been prepared at the request of the Directors of Allied Oil & Gas Plc (Allied), a private company registered in the Channel Islands and based in the United Kingdom.

Allied has entered into an agreement with Empire Oil Company (WA) Limited a wholly owned subsidiary of Empire Oil and Gas NL, collectively referred to in this report as Empire. Empire Oil and Gas NL is an Australian company publicly listed on the Australian Stock Exchange Limited (ASX). Empire has 100% interest in exploration permit EP 426 located in the Northern Perth Basin and the agreement with Allied provides for Allied to acquire a 25% working interest in the Permit and to participate in the evaluation of the hydrocarbon potential of the Permit.

Saitta Petroleum Consultants Pty Ltd (SPCPL) was commissioned as the Independent Geological Consultant to review and assess the petroleum exploration interests to be acquired by Allied and to comment on the appropriateness of the proposed exploration programs.

SPCPL is a Perth based petroleum consultancy company, which has been established for fifteen years. The author considers that the tenement under discussion is prospective for the entrapment of hydrocarbons and presents simplified reasoning for this conclusion in this report.

The nature of petroleum exploration is such that it is a high-risk operation and as such, SPCPL does not intend to imply endorsement of the prospects contained within this report.

Yours sincerely,



**A.J. SAITTA**  
**Managing Director**

**ABBREVIATIONS AND GLOSSARY**

Aeolian	rock fragments transported by the wind. Also the rocks composed of these fragments.
Anticline	an upwardly convex fold with the oldest rocks in the core.
°API	degrees American Petroleum Institute- standard measure for the gravity of crude oil. The higher the number the lighter the crude.
Astrobleme	a structure formed by a meteorite impact
ASX	Australian Stock Exchange Limited
Basin	A section of the earth crust which is downwarped and within which sediments have accumulated
Basement	Non-prospective rock underlying a sedimentary basin.
bbl(s)	barrel(s) – 1 barrel is approximately 159 litres.
bopd	barrels of oil per day
Bcf	billion cubic feet – 1000 million cubic feet
Biogenic	gas generated by the decay of organic matter at relatively low sub-surface conditions of pressure and temperature. Biogenic gas is usually predominantly methane.
BMR	Bureau of Mineral Resources
°C	degrees centigrade
Cambrian	a period of geological history about 500-560 million years ago.
Carbonates	rocks composed of Calcium Carbonate usually precipitated in marine conditions.
Carboniferous	a period of geological history about 298-354 million years ago.
Clastics	sedimentary rocks composed of eroded pieces of other rocks cemented together.
Condensate	a hydrocarbon which is a gas within the reservoir, but condenses to a liquid on being brought to the surface.
Closure	the vertical height between the top of the structure and the closing contour.
Cratonic	a part of the earth's crust that has been stable for at least 1000 million years.
Cretaceous	a period of geological history about 65-135 million years ago.
CSG	Coal Seam Gas – gas that is adsorbed directly from a coal seam rather than reservoir in porous rock. Gas produced in this way is usually mostly methane.
Darcy	a unit of permeability – one Darcy represents very good permeability.
Dead Oil	immovable oil trapped in reservoir rocks.
Deltaic	sediments deposited in a delta formed at the mouth of a river.
Devonian	a period of geological history about 354-395 million years ago.
Dip	the angle which a sedimentary formation or the axis of an anticline makes to the horizontal.
Distal	rocks deposited distant from sediment source
DoIR	Department of Industry and Resources, Western Australia
DST	Drill Stem Test – A formation test on a well achieved by opening the drill stem to atmospheric pressure, allowing the formation fluids to flow into the drill pipe.
EP	Exploration Permit (WA) – a number in brackets after the EP number indicates a part permit.
Extension	Pulling apart of two or more stable rock masses.
°F	degrees Fahrenheit
Fault	a fracture or fracture zone in rocks along which there has been a displacement on one side relative to the other
Fluvial	produced by the action of a river.
Formation	a group of related strata which were formed in the same geological period
Frac (Fracking)	an artificial process of fracturing rock which increases the ability of the rock to produce hydrocarbons.
ft <sup>3</sup>	cubic feet
GCM	Gas Cut Mud
Inversion	an area of crust that was sinking and filling with sediment, that subsequently starts to rise causing the rocks to be uplifted and possibly eroded.
Jurassic	a period of geological history about 141-205 million years ago.
kick	an uncontrolled flow of gas, oil or water into a well bore.
km	kilometres
km <sup>2</sup>	square kilometres
kerogens	a precursor to oil formation in a source rock
Hydrocarbons	carbon and hydrogen compounds that include oil, gas and condensate.
Lacustrine	formed in or by a lake
Leads	an interesting area or structure in the rock which will require more work to mature it to a prospect which could be drilled to test for hydrocarbons.
Live Oil	oil in a reservoir that has not been degraded significantly and is free to move under pressure.
Methane	the lightest of the gaseous hydrocarbons.
Migration	the movement of hydrocarbons from a source rock along conduits to a reservoir rock.
Miocene	a period of geological history about 6-22 million years ago.
m	metres
mm	millimetres
m <sup>3</sup>	cubic metres
mD	milliDarcies

mKB	metres below kelly bushing – the kelly bushing is the section of rotary table on the drill floor from which measurements are taken while drilling a well. It is similar to but slightly different to rotary table, a more modern term.
ml	millilitres
MMbbls	million barrels
MMscf	million standard cubic feet
MMscfD	million standard cubic feet of gas per day
mSS	metres sub-sea – a measure of depth from sea level, which differs from mKB by the distance from the kelly bushing to mean sea level.
NFTS	No Flow to Surface
OGIP	Original gas-in-place which will be more than the recoverable gas by a factor known as the recovery factor.
OOIP	Original oil-in-place which will be more than the recoverable oil by a factor known as the recovery factor.
Ordovician	a period of geological history about 435-500 million years ago.
pay, pay zone	the sum thickness of intervals within a hydrocarbon column which could be considered as being productive.
Permeability	the capacity of a rock to transmit a fluid from one pore space to another.
Pinchout	the thinning of a formation to its edge
ppm	parts per million
Porosity	the percentage of the volume of a rock which is made up of voids or pore space. A measure of its ability to contain fluids.
Prospects mature leads	
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch gauge
Reserves	Recoverable volumes of oil or gas obtained by multiplying the OGIP or OOIP by an appropriate recovery factor.
Residual Oil	oil, usually heavy oil that has remained behind in a rock when other live oil has been flushed away.
Risk	the chance that a particular attribute will exist. If seal is high risk then the author thinks that there is only a small chance that this feature will exist and be able to trap the hydrocarbons if present. Risk in geological terms is subjective and difficult to quantify.
RL	Retention Lease – licence granted (usually 5 years) after a discovery to allow the commerciality to be established. The field must have the potential to be commercial within 15 years, but may be renewed every 5 years if it still meets the required criteria. When deemed to be commercial, an RL must be converted to a Production Licence (PL).
RTSTM	Rates to Small to Measure
Seal	an impervious layer over a reservoir which prevents the escape of fluids from the reservoir.
scf	standard cubic feet
Seismic Data	information obtained from the recording of sound waves reflecting from sedimentary layers to determine structure and depth.
Show	a show is an indication of live hydrocarbons usually in a well and usually from examination of cuttings. Residual oil fluorescence is not considered a show.
Silurian	a period of geological history about 395-435 million years ago.
Source Rock	a rock capable of generating hydrocarbons under the correct conditions of temperature pressure and time.
SPCPL	Saitta Petroleum Consultants Pty. Ltd.
Spill Point	position on a structure which defines the limit of closure (the closing contour on a structure map) and which could allow hydrocarbons to spill to a position outside the structure.
Stratigraphy	the study of composition, age subdivision and correlation of rocks.
Syncline	the opposite of an anticline – a U-shaped fold with the youngest rocks in the core.
Tcf	trillion cubic feet – 1000 billion cubic feet.
Terrestrial	formed on land without the aid of water.
TOC	total organic carbon
Trough	a linear depression that subsides as it receives sediments.
Triassic	a period of geological history about 205-251 million years ago.
TVDSS	true vertical depth sub-sea
TVDKB	true vertical depth below kelly bushing
Updip	a location on a structure where the target will be found at shallower depth as opposed to downdip.
Vr	Vitrinite Reflectance – a measure of the maturity of a source rock.
Wireline Log	a graphical representation of the rocks properties obtained by lowering instruments down a well.

## 1. INTRODUCTION

Allied intends to acquire an interest in a permit located in the Northern Perth Basin, currently held 100% by Empire Oil and Gas NL or its subsidiaries (Empire). This permit is listed in Table 1.1 and its location is shown on the map in Figure 1.1.

### PERMITS

AREA	PERMIT	EQUITY	NOTES
Northern Perth Basin	EP 426	25.00%	Agreement to acquire a 25% interest

Table 1.1

The Northern Perth Basin has been explored for more than 40 years, but has recently become fashionable following several discoveries both onshore and offshore. Most commercial hydrocarbons have been found on the north south trending ridge located on the western part of the onshore Basin (Figures 1.1 & 2.1), although many shows and minor recoveries have been made on the eastern side of the Basin. The primary reason for this is that the principal producing reservoirs are of PermoTriassic age and underlie a major seal of Triassic age. To the west this seal/reservoir combination lies at depths of 1000-4000m and reservoir quality at these depths is generally retained. To the east, subsidence continued after continental breakup making the PermoTriassic reservoirs too deep to retain good reservoir characteristics and indeed too deep to be easily penetrated by conventional drilling.

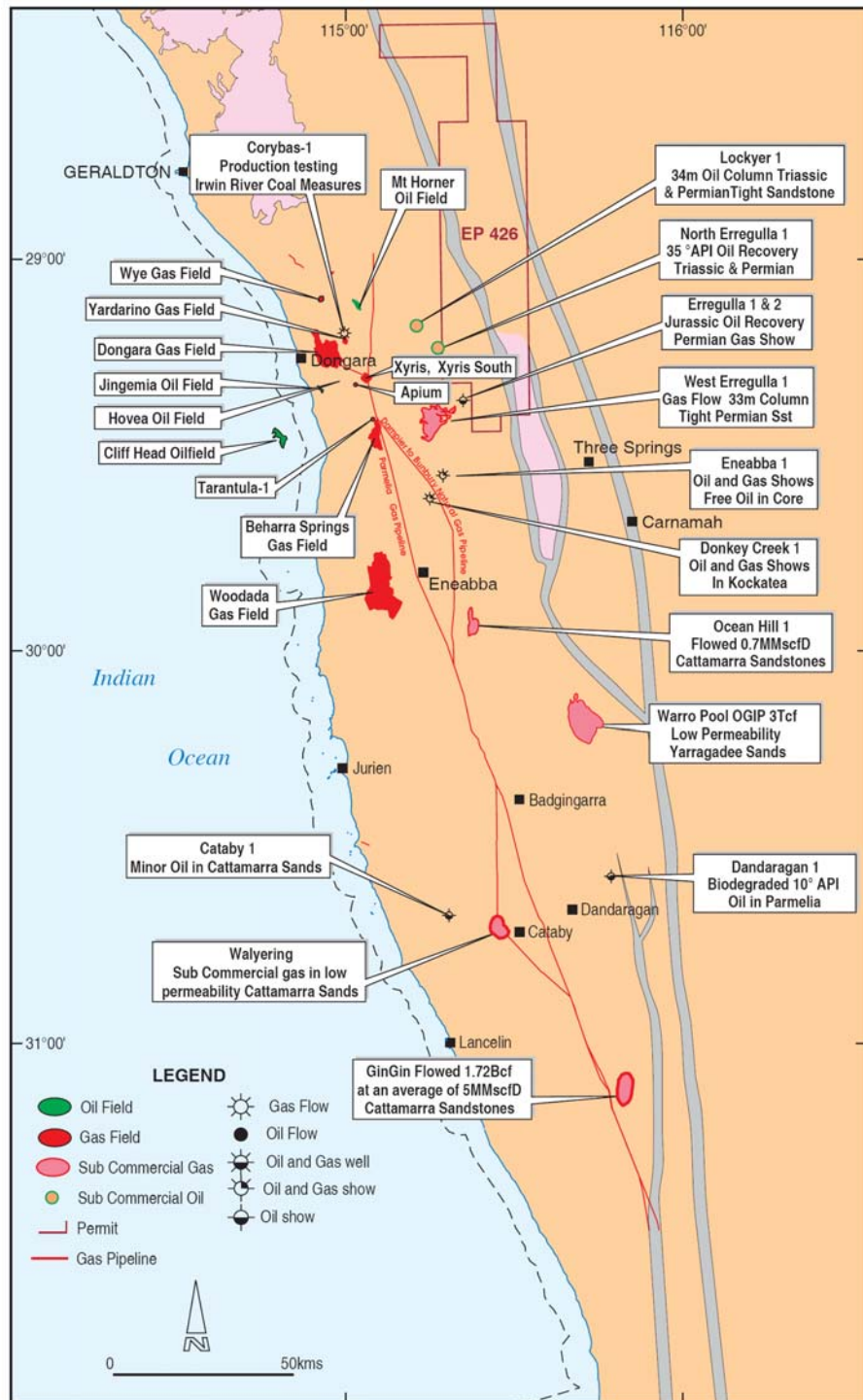
In recent times attention has returned to other seal/reservoir pairs located higher in the stratigraphic sequence. Principal amongst these are the fluvial, lacustrine and marginal marine sediments of the Jurassic section. The Early Jurassic Cattamarra Coal Measures consists of interbedded claystone, sandstone and coal and is therefore capable of providing seal, reservoir and where sufficiently buried, source. Both oil and gas have been recovered from rocks of this age, but commercial recoveries have generally been modest. The main reasons for this are thought to be related to the discontinuous nature of the stratigraphy due to the fluvial deposition; the fact that seals need to be relatively thick if not to be breached by faulting; and the highly compartmentalised nature of many of the structures tested to date. Added to this is the recent understanding that parts of the Jurassic section have been buried quite deeply and then exhumed to more reachable depths but with consequential reduction in reservoir quality.

Despite the difficulties of dealing with this play, some good points have come to light which make this play attractive. The principal seal often referred to as the K-unit, which although not homogeneous has been shown to be over 500 metres thick in the area near Cataby-1. This allows for the possibility of fault seals working and for anticlinal crestal faulting to seal. This same unit has also been shown to be a source to recovered oil allowing for relatively short range migration. Much of the area where the Jurassic play is likely to work is sparsely explored and covered by relatively poor quality seismic.

The Northern Perth Basin is an excellent location in which to explore for hydrocarbons having good links to Perth City and major industry including an oil refinery at Kwinana located about 200-300 kilometres to the south of the areas of interest; a road and rail network which make

transport easy and two gas pipelines running north south through the centre of the Basin. In addition the proximity to the ocean and shipping ports ensure that export of discovered hydrocarbons is possible at low cost and import of exploration materials is less expensive.

**Location of Interests and Hydrocarbon Discoveries**



**Figure 1.1**

## **2. REGIONAL GEOLOGY AND MAJOR TECTONIC ELEMENTS**

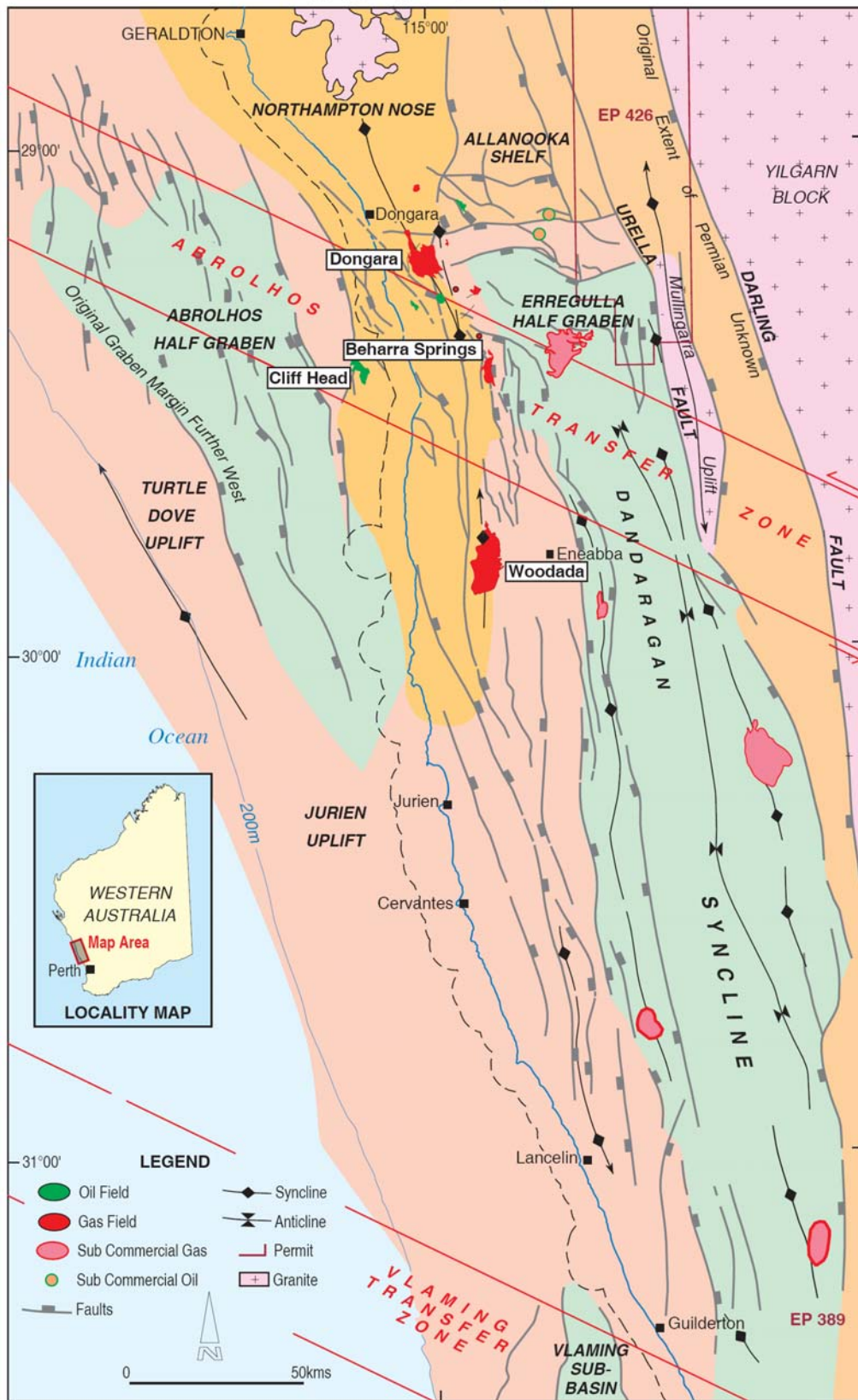
The structural history of the Perth Basin is dominated by two major phases of extension. Between these phases, a quiescent deep water system in the Triassic deposited the Kockatea Shale, a regional seal and source section in the Basin.

The Permian extensional phase caused half grabens to form on either side of the Northampton Nose (Figure 2.1). Permian erosion of the Yilgarn Craton and the Northampton Nose filled these half-grabens with clastic reservoir sediments. The second, more extensive phase of extension occurred in the Late Jurassic and Early Cretaceous associated with the processes leading to the break-up of Gondwana and resulted in extensive subsidence in part and inversion in part. To the south of the Northampton Nose several kilometres of Late Jurassic and Cretaceous section is inferred to have been eroded from the area of maximum uplift, just north of the Cataby 1 well. Conversely, over 10,000m of Jurassic and Cretaceous sediments were deposited in the Dandaragan Syncline, which formed to the east of the inversion. The sediment source for this depocentre is non-marine and provides sand/shale couplets with proven hydrocarbon potential. Mesozoic tectonics also produced much of the structuring in the area and trap development is dominated by faulting.

In terms of the permit areas under consideration, the southern part of EP 426 suffered minor subsidence associated with the Dandaragan Syncline and no inversion, so the area has probably not been buried any deeper than at present. The northern part of this permit is on the little explored terrace block bounded by the Urella and Darling Faults. This area is assumed to have remained high throughout this time, but is little explored.



**Northern Perth Basin Tectonic Elements**



**Figure 2.1**

## 2.1. Stratigraphy

The stratigraphy of the Northern Perth Basin is summarised on Figure 2.2.

For the purposes of this report only the stratigraphy of the Jurassic section is presented since it is unlikely that hydrocarbons discovered below this would be economic in most parts of the permit under consideration.

### 2.1.1. Yarragadee Formation

The Yarragadee Formation consists of a sequence of fluvial sandstones with minor claystones and coals. The sediment has been little transported and it is interpreted to be a low stand tract eroded from the Yilgarn Block to the east; the Northampton Nose to the north and the emerging inversion around Jurien. It is not noted as a reservoir due to lack of good seals and often shallow depth of burial, but shows have been noted in the formation where a good top seal is present (eg Warro-1 & 2 and Dandaragan-1)

### 2.1.2. Cadda Formation

The Cadda Formation is a marginal marine claystone with sandstones and a distinctive poor quality limestone band known as the Newmarracarra Limestone. Where present this is a significant seismic marker. To the north where the formation is more distinct it is known as the Champion Bay Group and consists of the Colalura Sandstone, Cadda Shale and Newmarracarra Limestone. Where the Cadda Formation was deposited in open marine environments, it can be dated as Middle Bajocian (Mid Jurassic) based on the ammonites. In the south the base of the Cadda Formation features the Coaly Unit, which is not present in Mt Horner to the north. The unit was deposited under quiet, swampy - lacustrine environments. Palynological age dating in Gingin-1 put this Coaly Unit in the upper *C. turbatus* zone of Lower Bajocian - Aalenian age. This coal is sometimes assigned to the Upper Cattamarra Coal Measures Formation.

### 2.1.3. Cattamarra Coal Measures

The Cattamarra Coal Measures disconformably underlies the Cadda Formation and consists of a thick section of interbedded sandstone and claystone which had good live oil shows in Eclipse-1, but was too thin to be commercial and was not tested. Palynological age dating in Bootine-1 put this sequence in the *D. harrisii* zone of Toarcian age. Towards the bottom of this section good gas shows were present in Gingin-1, Gingin-2 and Bootine-1 and DST's in Gingin-1 flowed 3.1, 2.6, 3.8 and 2.38MMscfD. Other tests were tight. DST's over the gas shows in Gingin-2 flowed at rates too small to measure, while a production test over the gas shows in Bootine-1 flowed 2.25MMscfD.

A distinctive coal measures unit is present over much of the Basin and is used as a seismic marker. This unit is dated as *C. torosus* zone of Pliensbachian age and is known as the Coaly Unit in Mt Horner to the north and Coaly Unit B by Empire who has carried out much of their work in the Gingin area. Beneath this coaly unit in all parts of the Basin the sediments are much more argillaceous with the K-unit ranging from about 40 metres thick at Mt Horner to over 500 metres thick in the Cataby region. In Gingin-1 and Bullsbrook-1 the unit was not fully penetrated and was not reached at Eclipse-1 at a total depth of 3660m. This section is also dated as *C. torosus* age, but microplankton in Gingin-1, suggests that this section may have been deposited under marginal marine conditions (Warris 2004).

This section is not completely homogenous and a number of sandstone units are present in wells that have penetrated the section. In the Gingin wells the uppermost sand flowed at a rate of 4.25MMscfD on DST 4 in Gingin-1, but tested water in Gingin-3. A deeper sand had good gas shows in Gingin-1, -3 and Bootine-1, but was tight in Gingin-1 and flowed water in Gingin-3. A work-over of a deeper sand in Bootine-1 recovered 0.25 barrels of 38.7 degree API oil, while oil was recovered from Cataby-1 in this zone. Oil was also produced from a sand in this zone in the Mt Horner Oil Field.

The lowermost sandy member of the Cattamarra Coal Measures (L sand at Mt Horner) has not been drilled in the area near Gingin 1, due to depth of burial, but was encountered in Cataby-1 at 1830m with porosities averaging about 15%, less than prognosed predominantly due to this area having been buried deeper in the past and the sands subjected to silicification. At Mt Horner this sand is encountered at about 1300m and averages porosities of about 24%.

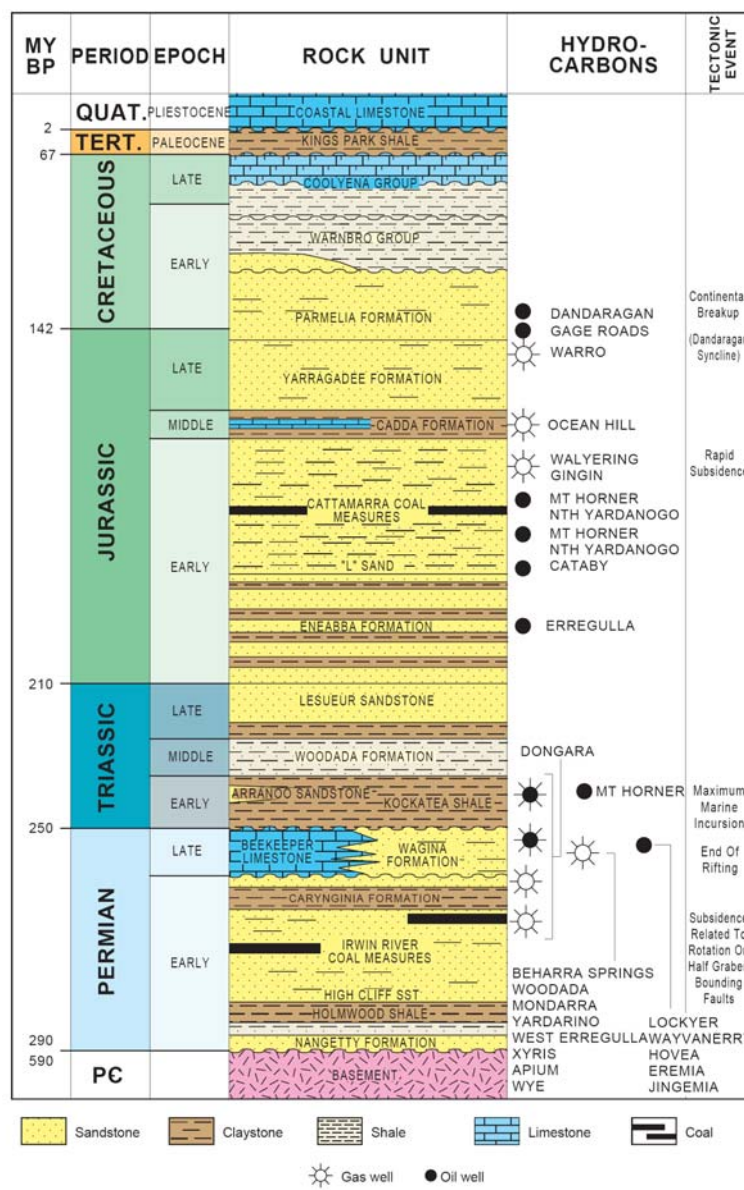
#### **2.1.4. Eneabba Formation**

The Early Jurassic Eneabba Formation was deposited under arid conditions with multi-coloured and oxidised shales and siltstones being present. The sandstone units have fining upward motifs typical of fluvial channels. Although not confirmed from cuttings analysis, the presence of evaporites within this section is inferred due to the very high salinities (>80,000ppm NaCl(Sodium Chloride) equivalent) which are present within the formation in areas protected from meteoric water invasion during the inversion.

In Cataby-1 the top section of the Eneabba Formation was sandy, but had relatively poor porosities averaging about 13%, though towards the total depth of the well (2200m+) porosities were of the order of 5%, primarily due to this area having been buried deeper in the past and the sands subjected to silicification.

Only one well has been drilled in EP 426 and this did not intersect Eneabba Formation, but Erregulla-1 drilled by West Australian Petroleum (WAPET) in 1966 to the south did have good quality Eneabba Formation with hydrocarbon shows. 36 barrels of 47° API oil were recovered by swabbing the Eneabba Formation. The follow-up well Erregulla-2 has core analysis in the lower Eneabba formation indicating an average porosity of about 18% at depths of 3200m. The proposed Moriary-1 well has Eneabba Formation at depths similar to the Mt Horner Field to the west. Here the Eneabba sandstones have porosities of around 21% except where highly silicified near faults.

**Northern Perth Basin Stratigraphic Column**



**Figure 2.2**

### 3. PREVIOUS EXPLORATION

The permit under consideration is under-explored, possibly due to early seismic and wells giving little encouragement and the excessive depth to the main Permian play in most parts of these areas.

#### 3.1. EP 426

No significant wells have been drilled in the Permit. Nearby wells, include Erregulla-1 and 2, and West Erregulla-1, all of which intersected gas in the Permian section, but at depths of circa 4000 metres were tight and produced at sub-commercial rates. Erregulla-2 also had sub-commercial oil recovery from the Jurassic Eneabba Formation (Figure 2.2). Immediately to the west of the Permit, the Eneabba-1 and Donkey Creek-1 wells penetrated a thick sequence of Jurassic and Triassic rocks, but were not drilled to the Permian section. Some fluorescence was noted in the Woodada and Kockatea Formations in these wells.

### 4. PROSPECTIVITY

In order to be successful a prospect has to have a source in which the hydrocarbons are generated; a reservoir which is porous to retain the hydrocarbons; an overlying impervious seal; a conduit through which hydrocarbons can migrate from the source to the reservoir and a trap to prevent the escape of hydrocarbons. Finally the timing of all of the factors has to be correct. It is no good having for example, migrating hydrocarbons millions of years before a trapping mechanism has formed to retain those hydrocarbons. The primary objectives in the Permit are sandstone reservoirs of the Early Jurassic Cattamarra Coal Measures and the underlying Eneabba Formation.

#### 4.1. Source, Migration and Timing

Most of the oil in the Perth Basin has been sourced from a section of the base Kockatea Shale with high TOC. This section is oil prone and has been buried to sufficient depths beneath the Dandaragan Syncline to enter the oil window. Oil at the Mt Horner Oil Field and Dongara Gas and Oil Field has been typed to this section, although at Dongara a significant portion of the oil has been displaced by gas sourced either from the same Kockatea Shale section buried deeper, or from the Permian sediments.

With the drilling of Cataby-1, two new source rocks were identified within the Cattamarra Coal Measures; the Coaly Unit and the K-unit. There is some evidence that these terrestrial sources have sourced the oil recovered from Dandaragan-1 to the east and are therefore proven sources. Since the Dandaragan Syncline has been subsiding gradually throughout the history of the Basin and numerous oil and gas discoveries have been made on the flanks of this trough, hydrocarbon source for the Permit must be considered low risk.

Migration is likely to have occurred from subsiding source rocks in the Dandaragan Syncline upwards and towards the flanks of the trough. Permit EP

426 is on the flanks of the trough and is ideally placed to receive migrating hydrocarbons. The risk of non-migration is low and proven for the southern part of EP 426, though there is some risk that the Jurassic structuring directed migrating hydrocarbons to the west away from the northern part of EP 426.

Much of the structuring on the flanks of the trough seems to have taken place during the Early Jurassic as India broke away from the Australian plate. At this time the Dandaragan Syncline seems to have been rapidly sinking and therefore generating large quantities of hydrocarbons. Timing of the structures is therefore likely to be coincident with migration though oil may be displaced by later migrating gas (eg Dongara Gas and Oil Field) as further subsidence occurred.

#### **4.2. Reservoir**

Reservoir quality is expected to be largely dependent on the maximum depth of burial to which the sediments have been subjected. SPCPL have carried out work based on shale dewatering over the Basin to estimate the maximum depth-of-burial of the various fault blocks. From this it seems likely that most of the Jurassic section is close to maximum depth-of-burial at the present time (ie little inversion) except in the area around Jurien which is known as the Jurien Uplift. This inversion affects the sediments at Cataby-1 making them considerably less porous than would be expected for their present depth.

Porosities in the range 20-25% can therefore be expected in EP 426

#### **4.3. Seal**

The nature of the thin discontinuous seals has been the main reason why the Jurassic sequence has been under-explored in the Perth Basin. Seals of only 30 or 40 metres make major fault traps unlikely to work and even anticlinal traps will often leak if crestal faulting is present. In some parts of the southern part of the Basin this belief is generally unfounded as the Jurassic section thickens considerably. In particular the K-unit towards the base of the Cattamarra Coal Measures thickens from around 40 metres in the north to over 500 metres in Cataby-1 (although not homogeneous containing thin sand stringers in parts) providing a seal that is likely to work even where the trapping mechanism requires relatively large fault throws. Therefore in the southern part of the Basin a good seal is present to the lowermost sand in the Cattamarra Coal Measures and the Eneabba Formation. Other thinner seals in the Cattamarra Coal Measures and Eneabba Formation are effective as top seals in 4-way-dip structures or small fault traps and the possibility of stacked reservoirs can increase volumes of hydrocarbons stored considerably.

In the area around EP 426 seals are more critical since the Jurassic section is generally thinner than in the south. At the top of the Cattamarra Coal Measures there is usually a relatively thin marine shale band known as the Cadda Shale. This may act as a semi-regional top seal to the Cattamarra Coal Measures.

Intraformational seals are also present in the Cattamarra Coal Measures and the Eneabba Formation, but are generally thin and relatively discontinuous making 4-way-dip structures a much better prospect than fault traps. These are relatively rare in the Basin, but the Mt Horner Field is an example of a small 4-way-dip rollover that has produced around 1.5 million barrels of oil so far. Reservoir development at Mt Horner is poor therefore it is likely that the Mt Horner trap also has an element of stratigraphic control. The Moriary structure as mapped by Empire also appears to be a 4-way-dip anticline.

#### **4.4. Prospects and Leads**

An audit of the structural validity of the various leads and prospects is outside the scope of this report. We have relied on the documentation provided by Allied and Empire for our evaluation. However it is the opinion of the author that large un-faulted anticlinal traps are rare in the Perth Basin and therefore the proposed exploration program will require a closely spaced seismic grid in order to define valid traps.

##### **4.4.1. EP 426**

The southern part of EP 426 covers the Dandaragan Syncline and beneath this, the Erregulla Half-graben and is prospective for hydrocarbons migrating out of these troughs both vertically in-situ and laterally from the south. To the north-west is the more stable Allanooka Shelf on which the Mt Horner Oilfield is situated, but which may have a risk of migration shadow in its eastern section. To the north-east the Irwin Terrace is a geologically high area which has been little explored.

The most significant prospect in the Permit is Moriary – a small 4-way-dip structure with low vertical relief, reasonably well controlled by the 1994 Mingenew seismic survey and older lines (Figures 4.3 & 4.4). Although the structure beneath the Cadda Formation is unfaulted, the Coaly Unit structure shows much faulting and with relatively thin seals in the Cattamarra and Eneabba Formation this faulting must be seen as a significant risk. The location of the Prospect from a regional perspective is good, being just south of Permian oil shows in North Erregulla-1 and north of Erregulla-2 that recovered oil from the Eneabba Formation.

Moriary is not a large structure but if the structure is as mapped by Empire it could reasonably be expected to contain oil reserves of 3MMbbls in the F sand and 2MMbbls in the J sand and L sand levels as calculated by Empire. These amounts of oil would be commercially viable in the Perth Basin. The main risk in Moriary is the existence of the structure. Additional seismic could confirm the existence of the structure and delineate crestal faults which may breach the structure.

Other small follow-up structures are available should Moriary-1 be successful.

As stated previously the Irwin Terrace is frontier acreage and a full exploration program would be needed to evaluate the potential of this area.



### Moriary Prospect Time Structure Map

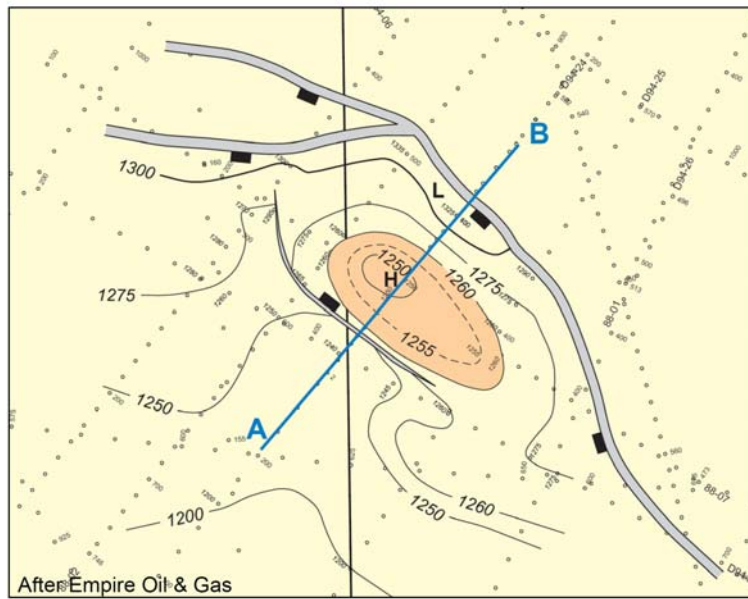


Figure 4.3

### Schematic Diagram showing the Moriary Play

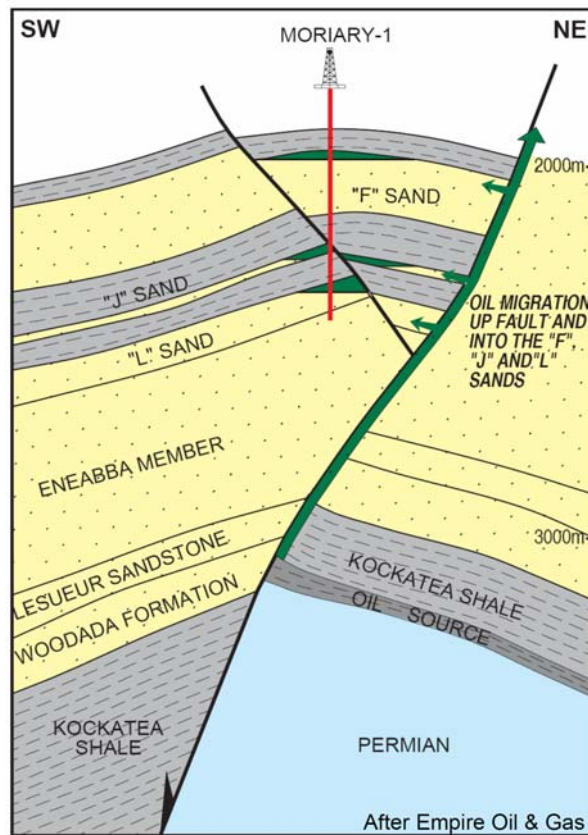


Figure 4.4

## 5. PERMIT COMMITMENTS

### 5.1. EP 426

The Permit work obligations are described in Table 5.1. The Permit is currently in Year 2 of a six-year term.

Allied has entered into a Farmin agreement with Empire whereby Allied will be assigned a 25% interest in the Permit by paying a sum of \$750,000 into the EP 426 Joint Venture Account. The Farmin agreement states that these moneys will be used to assist in the payment of costs towards the drilling of the Moriary 1 well on the Moriary Prospect to fulfil the Permit Year 2 work obligation.

We believe that additional seismic is required to confirm the low relief structure currently mapped by Empire.

Year of Permit	Year End Date	Commitment	Indicative Expenditure	Status
Year 1	15 July 2005	Geotechnical Studies 2D Seismic Reprocessing	\$100,000	Completed
Year 2	15 July 2006	Exploration Well	\$1,500,000	
Year 3	15 July 2007	Geotechnical Studies	\$100,000	
Year 4	15 July 2008	New 2D Seismic Survey	\$300,000	
Year 5	15 July 2009	Geotechnical Studies Seismic Interpretation	\$200,000	
Year 6	15 July 2010	Exploration Well	\$1,500,000	

Table 5.1

## 6. CONCLUSIONS

- The Northern Perth Basin is a proven producer of oil and gas most of which has been produced from reservoirs of PermoTriassic age. Nearly all prospective areas for this play are currently under licence. The deeper areas are however still very prospective by utilising the Jurassic play.
- The Jurassic play has produced oil at Mt Horner and gas at Walyering and Gingin and the existence of numerous other oil and gas shows bear testament to its hydrocarbon potential.
- Simple 4-way-dip structures are the best trapping mechanism in this play due to perceived thin seals. Few of these have been discovered in the Basin. Mt Horner is an example of a producing 4-way-dip closure, but the Cataby, Walyering and Gingin anticlines to the south are extensively faulted leading to breaching and compartmentalisation of the reservoir.
- Generally speaking source and migration is considered to be low risk, but timing of migration and integrity of mapped structures are key issues which need careful consideration. That is, structures may not have been present during migration, or may be subsequently breached by faulting or tilting following charging.

### 6.1. Positives and Risks

#### 6.1.1. EP 426

- Nearby oil in the Eneabba Formation and deeper suggest source and migration are low risk.
- The Jurassic section has not been buried deeply therefore reservoir quality is likely to be good.
- Seals are thin making crestal faulting or fault traps unlikely to work.
- The Moriary prospect is relatively small, but has an element of 4-way-dip increasing the chance of seal. However faulting at the Coaly unit may breach the lower reservoirs.
- Additional seismic is required to confirm the Moriary structure.
- Drilling costs to the Jurassic targets will be relatively low.
- The Irwin Terrace is virtually unexplored and would require an intensive exploration program to properly evaluate its prospectivity.

## 7. SOURCES OF INFORMATION

This report is based primarily on confidential data made available by Allied and Empire, open file data relating to previous exploration in each area and other data available in SPCPL's database.

## 8. DECLARATIONS

### 8.1. Qualifications

SPCPL is a Perth based Petroleum Consultancy Company, which has been established for fifteen years. The principle, Mr A. J. Saitta received a BSc from the University of Western Australia in 1969.

This report has been prepared for SPCPL by A. J Saitta. The qualifications and experience of these personnel are set out below.

A. J. Saitta- Managing Director SPCPL

B.Sc., FAusIMM

Mr Tony Saitta started off his career with Geophysical Services International in 1969 and joined WAPET in 1974.

Prior to establishing his own consultancy (Saitta Petroleum Consultants Pty Ltd) in 1990 he was Chief Geophysicist, Exploration Manager then Managing Director of the Australian Office of Canada Northwest, a medium sized international exploration and production company. His roles included the supervision of technical staff, acreage evaluation, farmin/farmout negotiations, preparation and review of JOA and farmout documents, corporate planning and reporting to the Board of Directors.

With his consultancy, he has worked extensively in the technical domain, particularly on seismic interpretation projects, regional studies and prospect assessment. In addition he has carried out economic evaluations and assisted companies with management matters.

### 8.2. Independence

A.J. Saitta of SPCPL, has no pecuniary or other interests which could reasonably be regarded as affecting his ability to report impartially on the petroleum exploration interests under consideration to be acquired by Allied.

SPCPL will be paid a fee for the preparation of this report, settlement of which is not dependent on the success of any capital raising.

### 8.3. Source of Data

SPCPL prepared this report using data supplied by Allied, Empire and Government agencies and other relevant reports by companies from whom the

assets were to be purchased, or from companies and individuals who had worked in the area. While reasonable care was taken to ensure the data was correct, SPCPL could not in the scope of this report research all data back to first principles.

**8.4. Purpose of the Report**

This report has been prepared solely for Allied for inclusion in a prospectus for a capital raising in the United Kingdom and should not be relied on for any other purpose.

**8.5. Conformity**

This report has been prepared in conformity with the requirements of the Australian Securities commission (specifically ASIC Practice Note 42 and ASIC Policy Statement 75) and the Valmin Code of the Australasian Institute of Mining & Metallurgy (Aus IMM) and the signatory is bound by the authority of the Ethics Committee of the Aus IMM.

**8.6. Consents**

SPCPL consents to the inclusion of this report in the form and context in which it appears.