

TO: Manager, Company Announcements ASX Limited 09.05.29
CONTACT: John Heugh +61 8 9474 1444

GAS POTENTIAL OF NORTHERN SECTION OF AMADEUS BASIN “SIGNIFICANTLY UNDER-ESTIMATED” – CENTRAL PETROLEUM

A new technical report released today has pointed to a significant under-estimation of the amount of gas likely to be trapped in the northern section of the Amadeus Basin, a producing oil and gas province near Alice Springs in the Northern Territory.

Assembled by Central Petroleum Limited (ASX: “CTP”), the report says newly described Neoproterozoic plays may host a total of over 12 trillion cubic feet of Undiscovered Gas Initially In Place (UGIIP) at “high” or P10 estimate levels, just in the northeastern section alone of the Amadeus Basin.

“The only known hydrocarbon production from the Neoproterozoic structures in Australia comes from the Amadeus Basin’s Mereenie and Palm Valley fields,” Central Petroleum’s Managing Director, Mr John Heugh, said today.

“Other geologically and structurally comparable Neoproterozoic/Cambrian basins in the world include the prolifically producing basins of Oman, the Eastern Siberian Platform and the Sichuan Basin,” Mr Heugh said.

“However, precedence in the Amadeus Basin has been given in the past mainly to exploration of the Ordovician sequence which hosts the Mereenie and Palm Valley fields.

“This has tended to sideline the Basin’s other gas formations in the northern section including the Marinoan Pioneer Sandstone (Ooraminna discovery) and the Julie Formation/lower Arumbera Sandstone (Orange and Dingo fields).

“Our research of this potential suggests the prospectivity of the Neoproterozoic in this area has been significantly under-estimated as the Pioneer Sandstone for example, has only been penetrated in one well, Ooraminna 1 drilled in 1963, and it flowed gas to surface.”

“Significantly, new test work shows that although these formations may flow from primary porosity or naturally occurring fracture systems, the formations are probably all candidates for modern-day fracture stimulation and new analysis suggests some of the gross gas columns are up to 100 metres or more. A fracking programme at the Dingo gas field produced approximately double the previous gas flow.”

Central Petroleum will undertake new seismic mapping and study newly reprocessed data for the area, and plans to include at least the Pioneer Sandstone and the Areyonga Formation gas plays at the Ooraminna Prospect, in its drilling schedule planning later this year.



central
PETROLEUM
LIMITED

ABN 72 083 254 308

Suite 3, Level 4
Southshore Centre
85 The Esplanade
South Perth
Western Australia
6151

Postal: PO Box 197
South Perth
Western Australia
6951

Phone:
+61 8 9474 1444

Fax:
+61 8 9474 1555

info@centralpetroleum.com.au
www.centralpetroleum.com.au

Wholly owned
subsidiaries:

merlin
ENERGY
PTY LTD
ABN 95 081 592 734

ordiv
PETROLEUM
PTY LTD
ABN 29 111 102 697

frontier
OIL & GAS
PTY LTD
ABN 91 103 194 136

helium
AUSTRALIA
PTY LTD
ABN 11 078 104 006

merlin
WEST
PTY LTD
ABN 59 114 346 968

The Company's expanding hunt for hydrocarbons in the Red Centre now encompasses exploration programs in coal seam gas, two active petroleum systems in the Pedrika Basin, about 340 kilometres southeast of Alice Springs and very large gas, condensate, oil and helium prospects in the Amadeus Basin.

With 270,000 km² of tenements, Central Petroleum is also the largest holder of prospective oil and gas acreage in onshore Australia, with a portfolio that includes the majority of the Pedirka and Amadeus Basins on the SA-NT border, all of the known Lander Trough north of Alice Springs and 15,000 km² of the Southern Georgina Basin in far west Queensland.

MEDIA CONTACT:

John Heugh
Central Petroleum Limited
(08) 9474 1444
0427 107 690

Kevin Skinner
Field Public Relations
(08) 8234 9555
0414 822 631

Hydrocarbon Potential of New Neoproterozoic Reservoir Plays, Northern Amadeus Basin

(CTP Technical Note 290509)

Executive Summary

- The Amadeus Basin, with analogous geology to the prolifically producing basins of Oman, the Eastern Siberian Platform and the Sichuan Basin, is the only basin in Australia to record gas flows to surface from the Neoproterozoic sequence.
- Newly described Neoproterozoic plays may host a total of up to over 12 TCF UGIIP in the northeastern Amadeus Basin alone at “high” or P10 estimate level.
- Sub-commercial gas flows have been recorded from the Pioneer Sandstone, Arumbera Sandstone and the Julie Formation. All are candidates for fracture stimulation with successful results coming from Dingo-2.
- The Dingo field is underfilled at the level of the Arumbera Sandstone but a water leg has not been established for the Julie Formation in this area. There is a possibility for basin-centred gas at this level and also up dip spillage to the bald Finke-Highway Trend.
- At the Orange field (within Central’s current acreage portfolio) Central believes the Arumbera/Julie Formation forms one gross gas column of ~ 100 m with no indication of a water leg. Seismic mapping of newly reprocessed data in this area will assess the possibility of basin –centred gas and other structural plays. There is potential for the application of hydraulic fraccing in the Orange field to produce commercial flow rates. Further seismic mapping and analysis is required to test this theory.
- The Julie Formation and Arumbera Sandstone present onlap Halo plays on the Finke-Highway Trend with total UGIIP (fractures and matrix) of 3.0 TCF and 2.1 TCF respectively.
- The Pioneer Sandstone has only been intersected once in the northern Amadeus Basin. ie in Ooraminna-1 where this unit flowed 12 mcf/d despite some formation damage. An attractive Pioneer Sandstone onlap Halo play extends from the Finke-Highway Trend to the Gardiner High to the west. Both high trends are bald of Pioneer Sandstone. This extensive play could address up to 7.2 TCF UGIIP (fractures and primary?-seems low for a 200km strike play) and it is planned that this trend and the Missionary Plains Trough will attract incremental seismic in 2010.
- “UGIIP” : Undiscovered Gas Initially In Place (SPE definition)

Greg Ambrose
Manager-Geology
Central Petroleum Limited

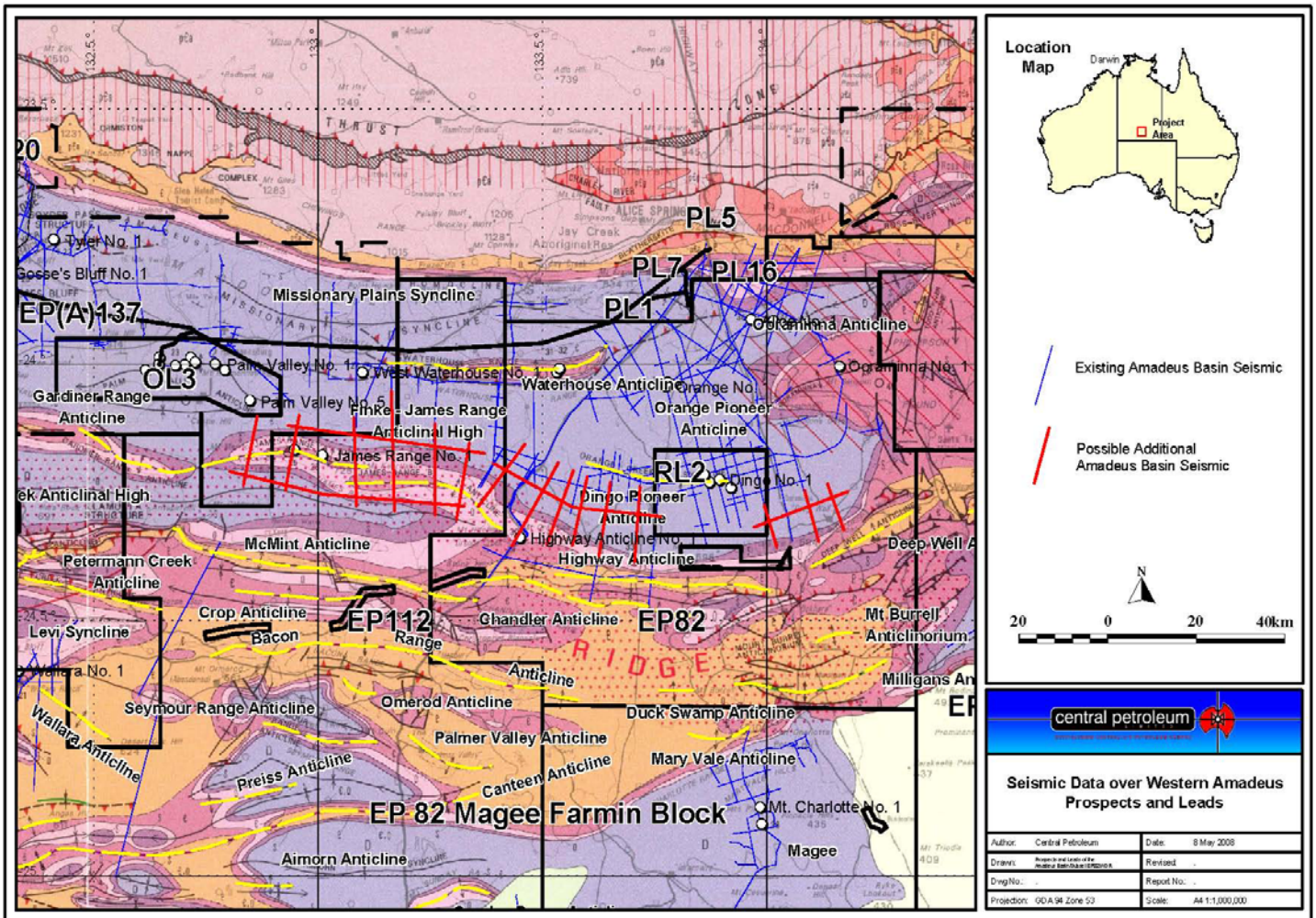
John Heugh
Managing Director
Central Petroleum Limited

Introduction

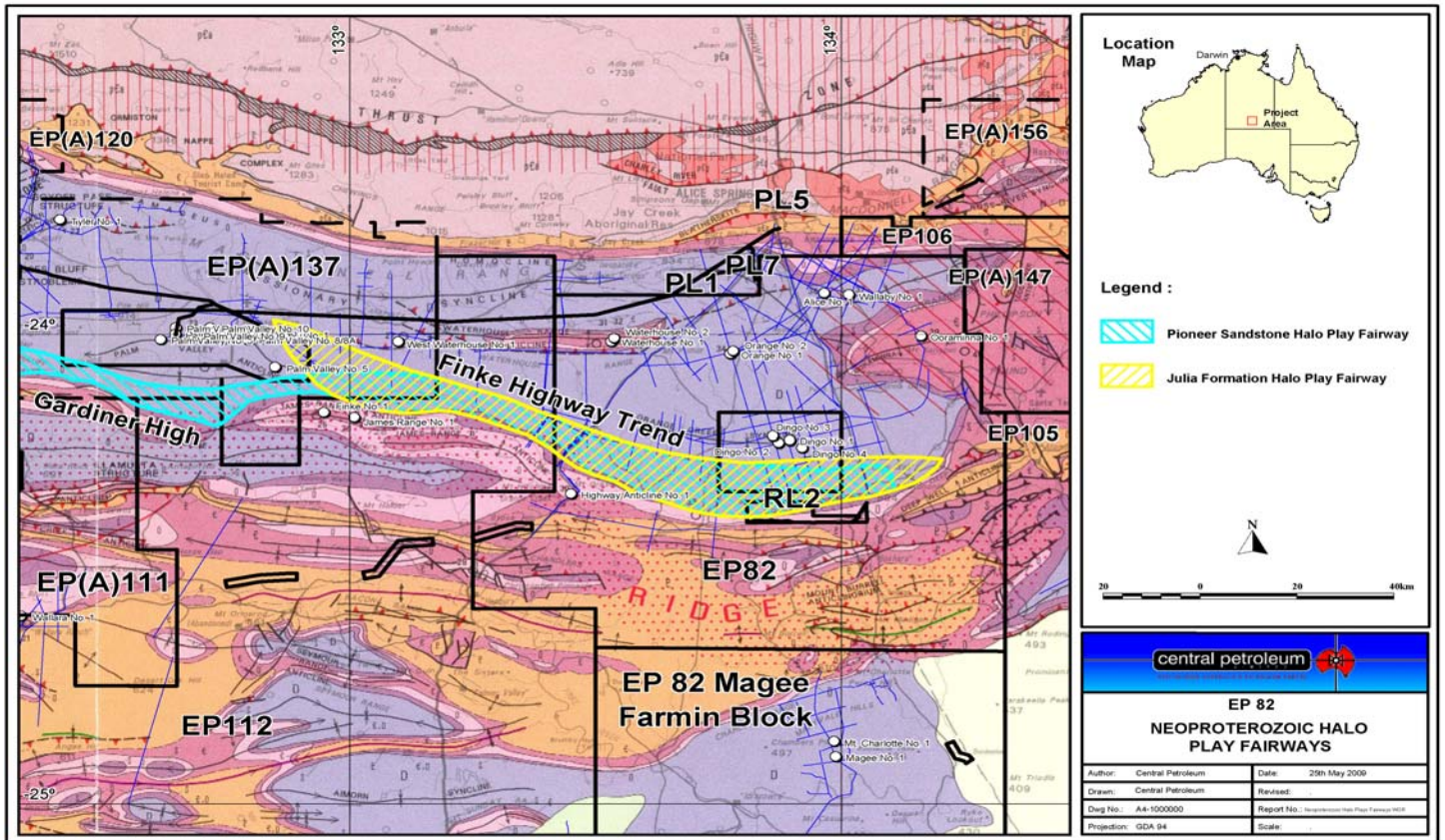
- The only known hydrocarbon production from the Neoproterozoic in Australia comes from the Amadeus Basin. Other Neoproterozoic/Cambrian basins in the world include the prolifically producing gas and/or oil basins of Oman, the Eastern Siberian Platform and the Sichuan Basin. Gas flows in the Amadeus Basin have been recorded from the Marinoan Pioneer Sandstone (Ooraminna discovery) and the Julie Formation/lower Arumbera Sandstone (Orange and Dingo fields) which span the Marinoan/Ediacran boundary. The prospectivity of the Neoproterozoic in the Amadeus Basin has been underestimated with precedence being given in the past to exploration of the Ordovician sequence which hosts the Mereenie and Palm Valley fields. This report reviews the potential of the Julie Formation/Arumbera sequence and the Pioneer Sandstone in the Northern Amadeus Basin.
- Significantly the Pioneer Sandstone has only been penetrated in **one well** north of the Central Ridge i.e. Ooraminna-1. This unit is prospective over a wide area and given the gas reservoir discovered at this level in Ooraminna-1, Central believes its potential has been vastly underestimated.
- The Pioneer Sandstone and the Areyonga Formation gas plays at Ooraminna Prospect are planned to be drilled by Central in its forthcoming exploration campaign commencing in 2009. The original discovery well, Ooraminna -1, suffered formation damage but despite this the well was still able to flow gas to surface from the Pioneer Sandstone at 12 mcf/d with no indication of a water leg. A second appraisal well Ooraminna-2, will further address reservoir productivity in the Ooraminna Anticline which has UGIIP of up to 2.15 TCF UGIIP at "high" or P10 estimate.

Arumbera /Julie Formation Potential

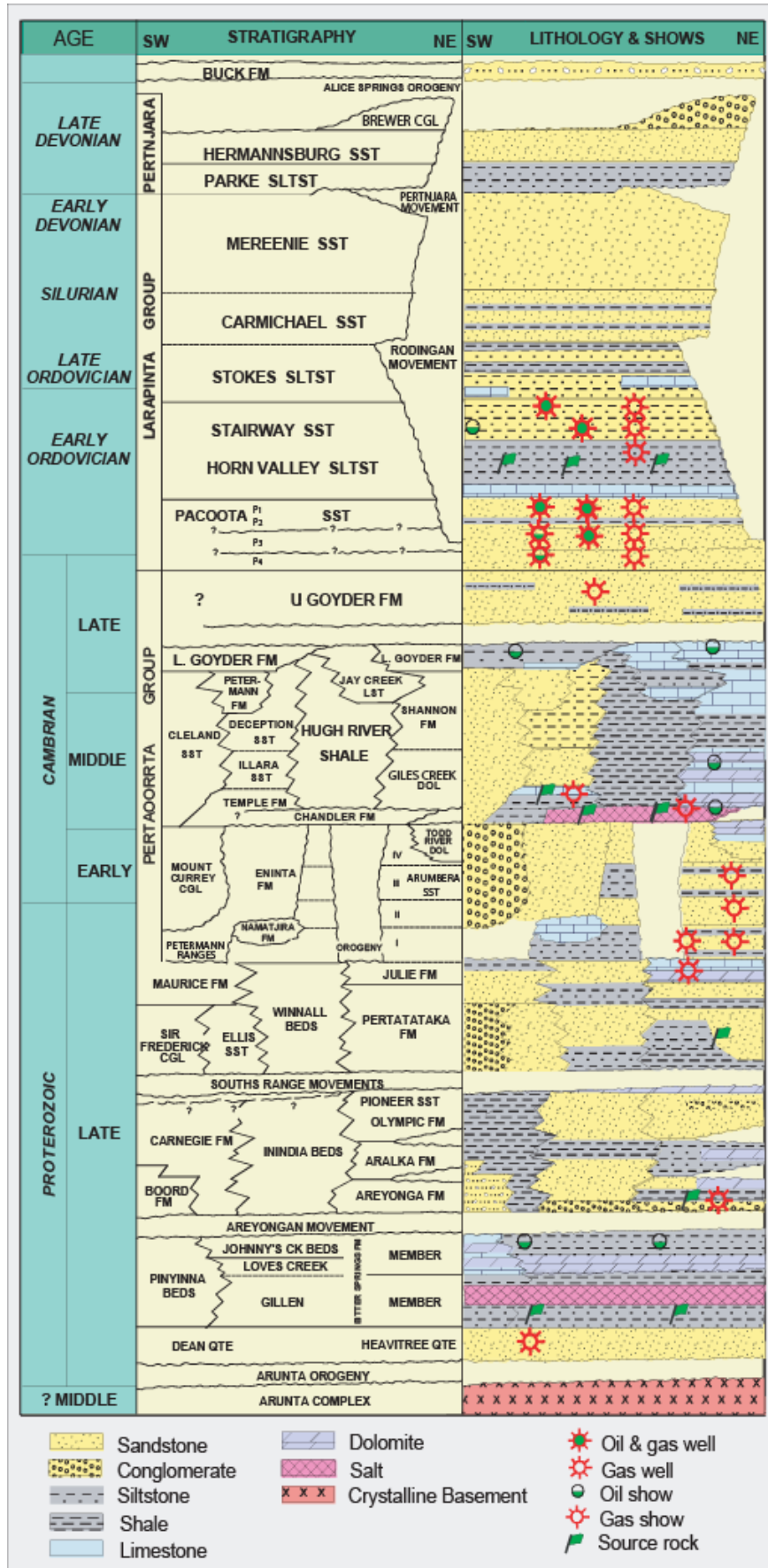
- Key reservoir data for the Arumbera and Julie Formation reservoirs comes from the Dingo and Orange fields, the latter occurring in Centrals EP 115. Both reservoirs flowed gas to surface at low rates (<2 mmcf/d) but these reservoirs are candidates for hydraulic fracturing given the encouraging results of a hydraulic fracc in Dingo-2 which effectively doubled gas production rates to 4.8 mmcf/d.
- At the Dingo field the Arumbera Sandstone has a clearly defined gas column and water leg, but deliverability is relatively low. The Arumbera structure appears to be underfilled. The Julie Formation unconformably underlies the Arumbera Sandstone and does not appear to be in reservoir communication with the latter. The absence of a defined water leg in the Julie Formation leaves open the possibility of updip gas spillage to the Finkle-Highway Trend which is bald of Julie Formation, and also the possibility of basin-centred gas in the Pioneer Syncline.
- The Finkle-Highway anticlinal high is bald of Julie Formation and Pioneer Sandstone setting up the required geological conditions for onlap (Halo) plays. The Pioneer play could extend up to 200km E-W along the high; estimated UGIIP stands at 7.2 TCFG. More drill hole data, however, is available to assess the Julie play which has assessed UGIIP at "high" or P10 estimate of 3.0 TCF. The Julie Fm water leg remains unassessed at Dingo and Julie fields where there is the possibility of gas spillage below structural closure.
- The Arumbera Sandstone is probably absent along the central portion of the Finkle-Highway high; Arumbera Sandstone Unit 1 has been newly recognised in crestal well James Range1 but is absent to the east in Highway-1. A really significant onlap Halo traps could exist at this stratigraphic horizon and importantly, the Arumbera halo play as mapped downdip of Highway -1 has undiscovered UGIIP of 2.1 TCF.



Regional Seismic Program Outline – Northeastern Amadeus Basin

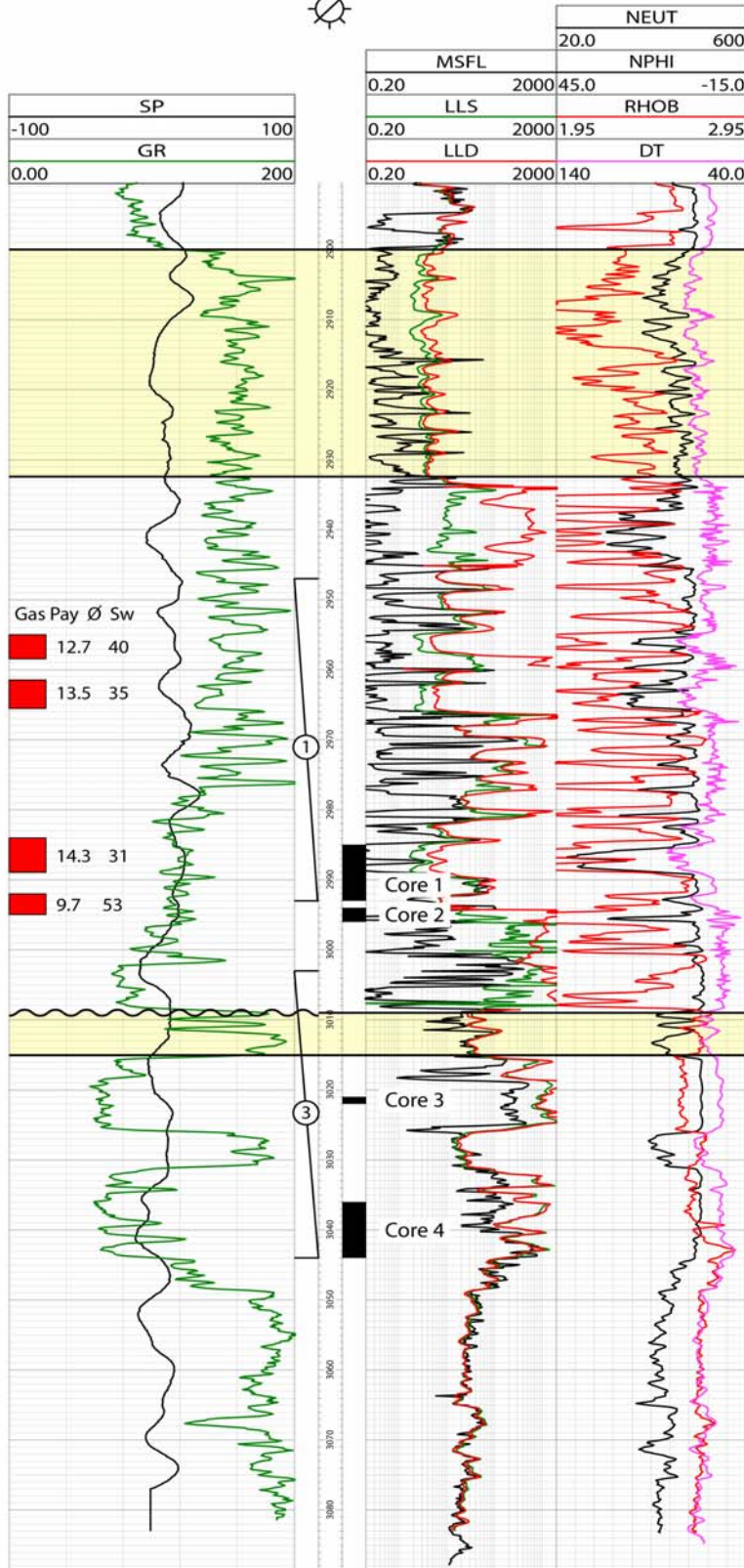


Schematic of Pioneer-Julie onlap play: Finke-Highway Trend



Stratigraphic Column – Amadeus Basin

DINGO 2



**Top Arumbera Sst. (Unit 1)
(2900m)**

Seal

Air Drilled to 2952m.
There after mud system.

DST # 1
Q = 138mcf.
Rec. 140bbls muddy water
369m of water cushion.

Core 1
Ave. Ø 3.0 - 14.8%
AvK = 0.14 - 12md

**Julie Formation (3009m)
Seal**

DST # 3
Tool plugged but flowed GTS.
Q = 144mcf.
Rec. 520m MGCW
(no chlorides measured)

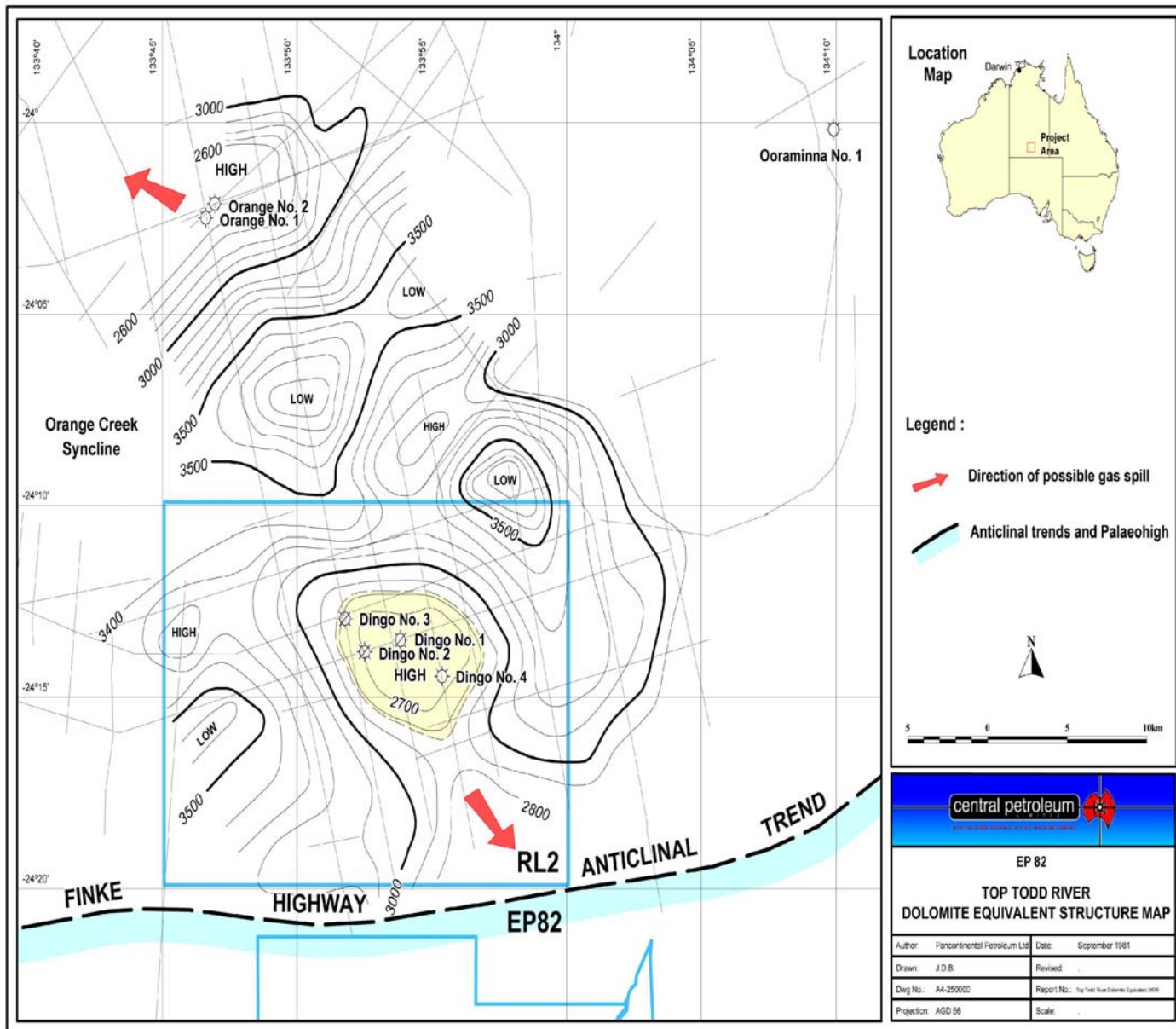
Core 4
Ave. Ø 4%
AvK = 2.2 - 0.02md

Gas Zone fraced 1984
Retested 1988 : Q = 3.0mmcf.
Retested 1991 : Q = 4.8mmcf.

Total Depth 3085.19m

Author: G.Ambrose Drawn: Central Petroleum Date: 12th May 2009

Dingo-2 Composite Log – Arumbera Unit 1 and Julie Formation

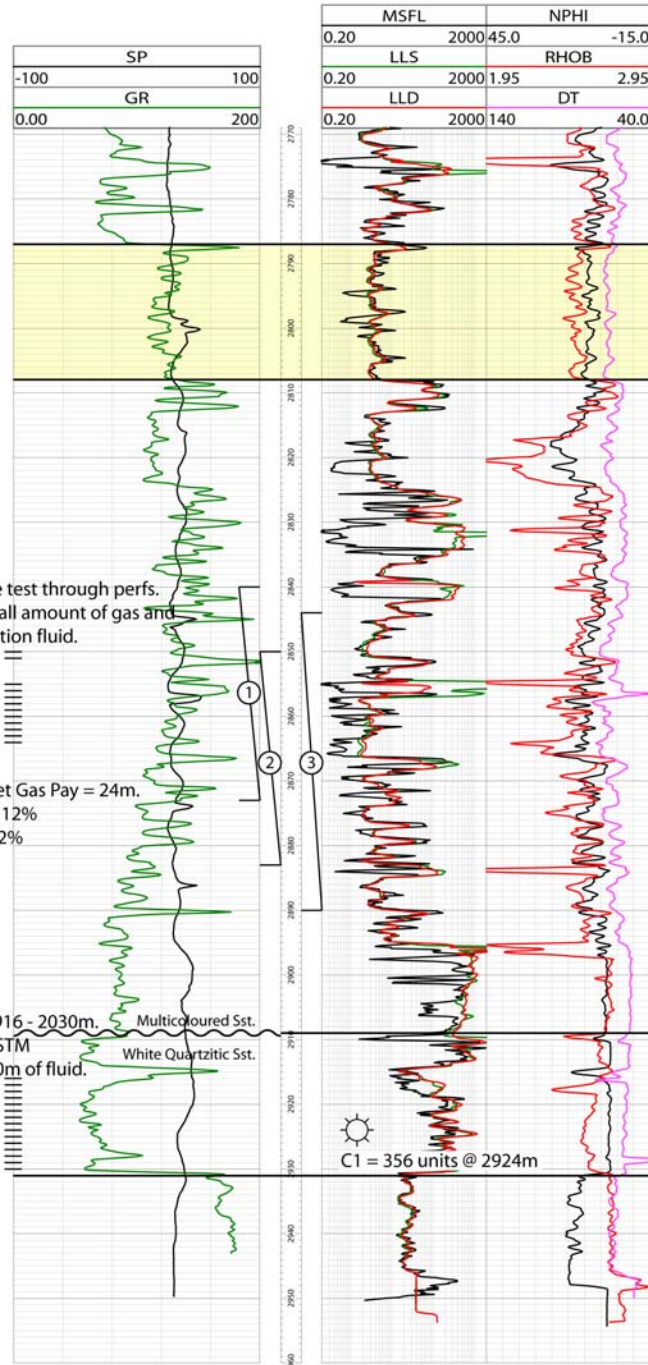


Location Map Dingo and Orange fields

The Orange field

- In the Orange field there appears to be a continuous gas reservoir from the Arumbera Sandstone into the Julie Formation sequence. The evidence for a water leg is equivocal and a more reasonable interpretation indicates one relatively thick gas column which could spill outside of mapped closure, however a revamp of seismic mapping using newly reprocessed lines is required in this area.
- The gas column at Orange 2 could, on the basis of Central's new interpretation, exceed 100 m in gross thickness. In addition, although testing indicated relatively low deliverability, hydraulic fracturing should improve this considerably, especially considering the well was drilled with mud and hence the reservoir was more prone to formation damage.

ORANGE 2



Summary :
100m gas column.
GWC unlikely.

Top Arumbera Sst. (Unit 1) (2787m) Seal

DST # 1
Misrun (packer seat failed)
Strong Blow - lost packer seat.
GTS @ 22psi
Rec. 672m of water cushion.

DST # 2
Q = 0.4mmcf.
Rec. Gas cut water cushion.

DST # 3
GTS RTSTM
Rec. 183m of gas cut water cushion.

Questionable GWC in this zone.
No confirmed evidence of water.

CH hole test through perms.
Rec. small amount of gas and completion fluid.

Total Net Gas Pay = 24m.
Ave. Ø 12%
AvSw 52%

Perfs 2916 - 2930m.
GTS RTSTM
Rec. 800m of fluid.

Multicoloured Sst.
White Quartzitic Sst.

Julie Formation (2909m)



C1 = 356 units @ 2924m

Pertatataka Formation (2931m)

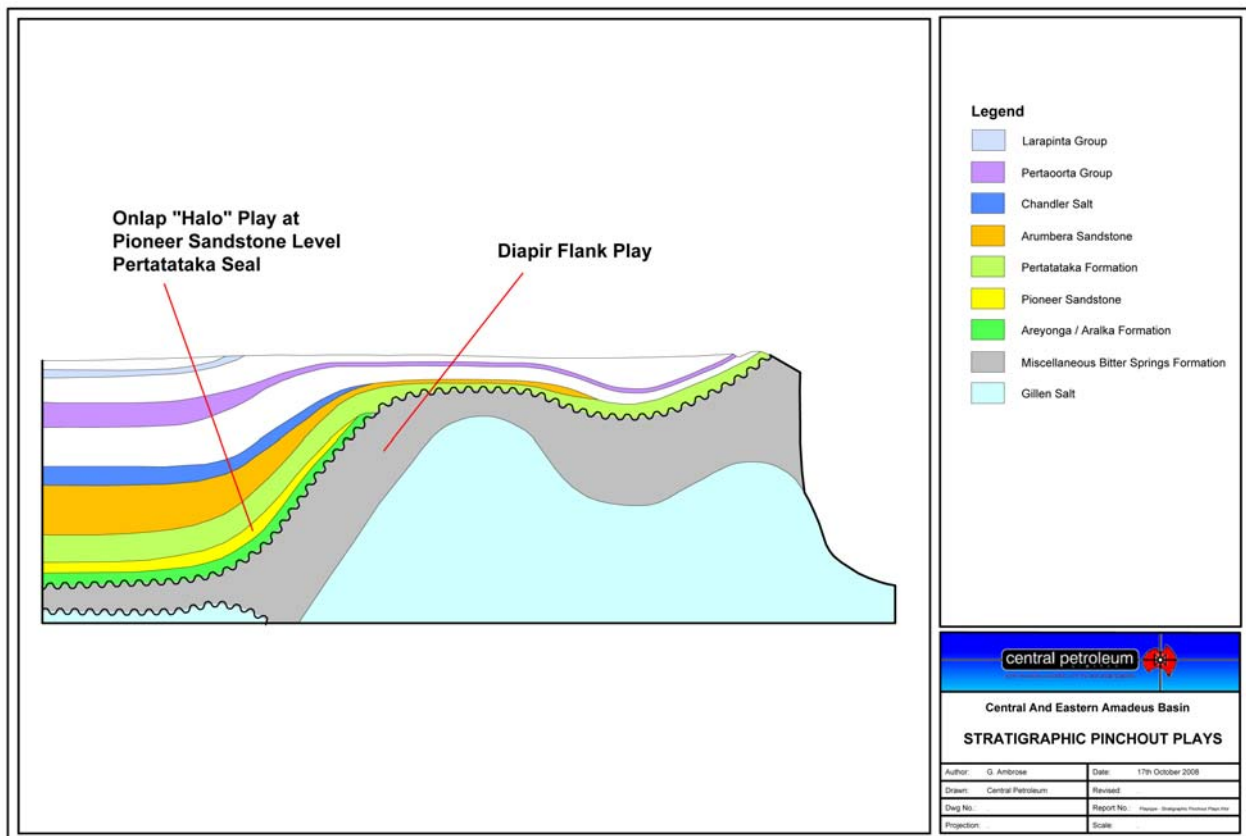
Total Depth 2950m

Author: G.Ambrose Drawn: Central Petroleum Date: 12th May 2009

Orange-2 Composite log- Arumbera Sandstone Unit 1 and Julie Formation

Pioneer Sandstone

- The Pioneer Sandstone has produced gas to surface at Ooraminna 1 but significantly, this is the only well to penetrate this unit north of the Central Ridge. The sandstone is absent along antecedent highs such as the Finke- Highway Trend and the Gairdener High but geological modelling suggests its presence downdip of these regional highs. This concept underwrites many onlap Halo plays in the basin, the most important occurring off the northern margin of the Finke-Highway - Gardner Trend.
- The Pioneer Sandstone is absent along this high over a strike length of 200 km from the Deepwell Anticline to the Gardner High providing an extensive onlap edge. Detailed seismic to be acquired in 2010 will provide drill locations to evaluate individual prospects but a broad estimate of potential hydrocarbon volumetrics indicates UGIIP OF 2.8 TCF. The Pioneer play could have potential for both oil and gas given potential source rocks in the Pertatataka Formation and the Aralka Formation have potential for both commodities.



Schematic Pioneer Onlap Play

Neoproterozoic Sandstones – Gross Play Volumetrics

Pioneer Sandstone Halo Play (Finke-Highway-Gardiner Trend)

Area	520,000 acres
Column	30 m
Net/gross	0.80
Geometric Factor	1.00
Gas Saturation	0.60
Fracture Porosity	0.015
Matrix Porosity	0.03
Bg	150
Conversion Factor	43560

Undiscovered Original Gas Initially In Place: 1.6 TCF OGIIIP (In Fractures)

Undiscovered Original Gas Initially In Place: 3.2 OGIIIP (In Matrix)

Total Undiscovered Original Gas Initially In Place: 7.2 TCF UGIIIP (In Matrix and Fractures)

Julie Formation Halo Play (Finke-Highway Trend)

Area	265,000 acres
Column	25 m
Net/gross	0.80
Geometric Factor	1.00
Gas Saturation	0.60
Fracture Porosity	0.015
Matrix Porosity	0.03
Bg	150
Conversion Factor	43560

Undiscovered Original Gas Initially In Place: 1.0 TCF OGIIIP (In Fractures)

Undiscovered Original Gas Initially In Place: 2.0 TCF OGIIIP (In Matrix)

Total Undiscovered Original Gas Initially In Place: 3.0 TCF UGIIIP (In Matrix and Fractures)

Arumbera Halo Play (Finke-Highway Trend)

Area	94,500 acres
Column	60 m
Net/gross	0.70
Geometric Factor	0.95
Gas Saturation	0.60
Fracture Porosity	0.015
Matrix Porosity	0.03
Bg	150
Conversion Factor	43560

Undiscovered Original Gas Initially In Place: 0.7 TCF OGIIIP (Fractures)

Undiscovered Original Gas Initially In Place: 1.4 TCF OGIIIP (Matrix)

Total Undiscovered Original Gas Initially In Place: 2.1 TCF UGIIIP (In Matrix and Fractures)

References

Kennard, J.M. and Lindsay, J.F., 1991. Sequence stratigraphy of the latest Proterozoic-Cambrian Pertaoorta Group, northern Amadeus Basin, Central Australia. In: Korsch, R.J., Kennard, J.M. Eds Geological and Geophysical studies in the Amadeus Basin central Australia. pp 171-194.

Lindsay, J.F. and Gorter, J.D., 1993. Clastic petroleum reservoirs of the late Proterozoic and early Palaeozoic Amadeus Basin, Central Australia. : In Rhodes E.G., Moslow, T.F. (Eds). Marine clastic reservoirs:examples and analogues.

Warris, B.W., 1996. The Geology of the Dingo Gas field; RL 2. Amadeus Basin, Northern Territory. Energy Equity Corporation Ltd . Unpublished Company Report: PR96-47. Northern Territory Govt Rpt. DRDPIFR, Darwin. NT