



#### 21 July 2015

# Palm Valley and Dingo await NEGI – Reserves Confirmed

Central Petroleum Limited (**ASX:CTP**) ("**Company**" or "**Central**") today announced that, as of 30 June 2015, internationally recognised petroleum consultants Netherland, Sewell & Associates, Inc. (NSAI) estimated petroleum reserves and contingent resources for the 100% owned Palm Valley Field and Dingo Field as follows:

Combined Palm Valley Field & Dingo Field (Central net share - 100%)	PJ
1P (Proved)	28.0
2P (Proved + Probable)	56.8
2C (Contingent)	52.4

Central expects the 2C contingent resources of 52.4PJ (being contingent on markets) will be able to be converted into 2P reserves once the NT Gas Interconnect ("**NEGI**") becomes certain, adding to the amount of gas available to underwrite that pipeline. Palm Valley and Dingo Gas Fields are accordingly forecast to have around a combined 109.2PJ of 2P reserves when NEGI is certain.

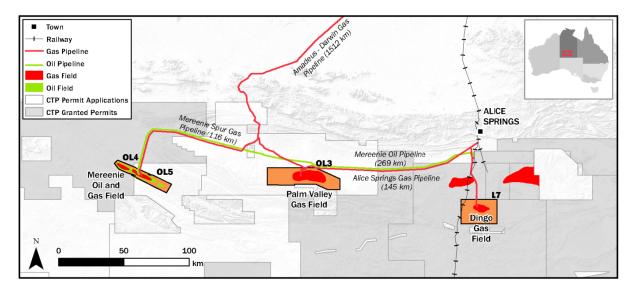


Figure 1. Location of Palm Valley and Dingo Gas Fields

### PALM VALLEY GAS FIELD

Gas was discovered by the Palm Valley-1 well, drilled in 1965. Development of the gas field commenced after the grant of the Petroleum Lease on 9 November 1981. Gas was first delivered to Alice Springs in 1983 through the 145 kilometre Palm Valley-Alice Springs gas pipeline and subsequently to Darwin in 1987 through the 1,512 kilometre Amadeus Basin-Darwin gas pipeline.

The Palm Valley structure is an elongate WSW to ENE trending anticline defined by 2D seismic lines. The reservoirs are sandstone enhanced by natural fractures. Gas deliverability is provided by a complex interconnected network of fractures which has resulted in extremely high open hole test flow rates (137 MMcf/D from Palm Valley - 6B) and good connectivity along the crest of the field.

A total of 11 wells have been drilled on the field, of which Palm Valley 1, 2, 6, and 7 are currently producing. Gas production rates at the Palm Valley gas field have continued to decline naturally, primarily as a consequence of the reduction in reservoir pressure and the influx of formation water in the productive fractures. The rate of pressure decline has reduced in recent years due to recharge from a large volume of tight gas connected to the fracture network. Reservoir pressures also increased following shut-in after the 2012 contract ceased.

Palm Valley Field is subject to a Gas Sales and Purchase Agreement with Santos for up to 25.65PJ over 17 years (from commencement in 2012).

As at 30 June 2015, estimated Palm Valley Field net sales gas reserves and contingent resources in Petajoules (PJ) are summarised as follows:

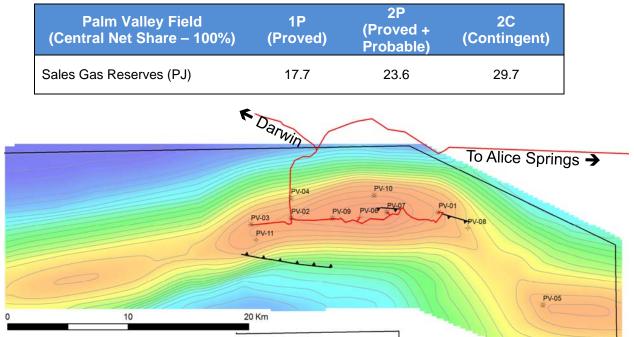


Figure 2. Palm Valley Gas Field, Pacoota Sandstone depth structure map

## **Existing Reservoir Depletion Plan**

Palm Valley is a well-established mature field. The field will continue to be produced from existing wells, primarily by depletion drive. Once on surface, gas is compressed and dehydrated to pipeline specification without further treatment required. The gas is sold into the domestic market via the NT Gas Pipeline Infrastructure.

### DINGO GAS FIELD

The Dingo Gas Field is located in the northeast Amadeus Basin, Northern Territory, Australia, approximately 60 km south of Alice Springs.

The gas field was discovered in 1981 when the Dingo-1 exploration well tested 1.45 MMscf/d gas from the Late Proterozoic Arumbera Sandstone Unit 1. The field has been appraised by three additional wells:

- Dingo-2 was drilled in 1984 and flowed gas at a rate of 1.38 MMscf/d. A subsequent workover and hydraulic fracture stimulation improved the flow rate to 3.21 MMscf/d.
- Dingo-3 was air-drilled in 1990 and flowed gas at a rate of 2.86 MMscf/d.
- Dingo-4, drilled in 1991, encountered saline water in the reservoir and was plugged and abandoned.

The only production from the field has been during well testing operations. Total gas production during testing operations carried out from 1981 to 1991 has been estimated at 200 MMcf. This production resulted in a pressure decrease of 51 psi from an original reservoir pressure of 4,600 psi. Limited testing was carried out prior to Central's acquisition of the field and exceeded expectations as a result the wells are expected to deliver current contract volumes.

The Dingo structure is mapped as a slightly elongate west-northwest trending, simple unfaulted anticline. Areal closure to the lowest closing contour at the Arumbera Sandstone (A1 reservoir) level is approximately 61.5 km2 and the closure height on the structure is approximately 256 m. Maximum closure is defined by a narrow saddle at the south-eastern end of the structure, Figure 3.

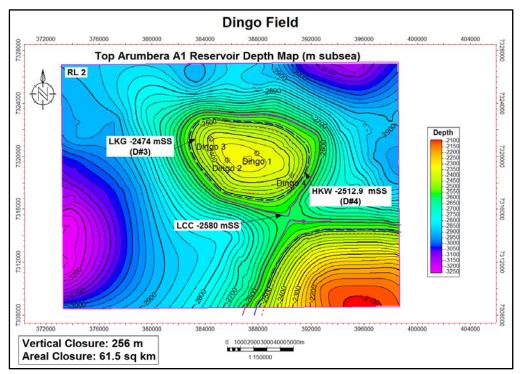


Figure 3. Near top Arumbera A1 Sandstone, subsea depth structure map

The primary reservoir at Dingo is the Arumbera Unit 1, which is the lowest (oldest) unit of the Late Proterozoic-Lower Cambrian Arumbera Sandstone. The Arumbera Sandstone reservoirs consist of sandstone with minor siltstone deposited in a shallow marine to delta plain environment. The sandstones are classified as mature subarkoses consisting predominantly of quartz (70%-80%) and feldspar (10%-20%), and with subordinate amounts of mica, clays and rock fragments.

Deliverability is proven with gas flows on test in Dingo-1, 2 and 3 and the field limit established by water recovery in Dingo-4. Reservoir quality is moderate and it is possible that natural fractures contribute to reservoir deliverability. In Dingo-2 in the Arumbera Sandstone Unit 1 core porosity averages 8.3% (ranging from 2% to 14.8%) and core permeability averages 1.6 mD (ranging from 0.1mD to 11.9mD).

In 2013 a Gas Supply and Purchase Agreement was negotiated with Power and Water Corporation to supply Dingo gas for up to 16PJ of gas over a 10-year supply period (from commencement in 2015) for use in the Owen Springs Power Station located at the Brewer Industrial Estate approximately 20 km south of Alice Springs. There is a possibility for the GSPA to continue with gas sales for up to a further 10 years subject to economically deliverable reserves determined by a reserves report, as further described in the Gas Supply and Purchase Agreement.

As at 30 June 2015, estimated Dingo Field net sales gas reserves and contingent resources in Petajoules (PJ) are summarised as follows:

Dingo Field (Central Net Share – 100%)	1P (Proved)	2P (Proved + Probable)	2C (Contingent)
Sales Gas Reserves (PJ)	10.3	33.2	22.7

# **QUALIFIED PETROLEUM RESERVES AND RESOURCE EVALUATOR REQUIREMENTS**

The petroleum reserves and contingent resources information in this ASX release is based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of, Mr Michael Herrington. Mr Herrington is an employee of Central Petroleum Limited and has a BE (Eng) degree from the University of Utah and is a member of the Society of Petroleum Engineers (SPE) and a Registered Professional Engineer in the United States. The petroleum reserves and contingent resources information in this ASX release was issued with the prior written consent of Mr Herrington in the form and context in which it appears.

## NOTES

- 1. The estimates of petroleum reserves and contingent resources contained in this reserves statement are as at 30 June 2015.
- 2. The petroleum reserves and contingent resources estimates have been prepared in accordance with the 2007 Petroleum Resources Management System (2007 PRMS) approved by the Society of Petroleum Engineers (SPE).
- 3. Unless otherwise stated, all references to petroleum reserves and contingent resources quantities in this reserves statement are Central's net share.
- 4. Central engaged independent expert Netherland, Sewell & Associates, Inc. ("**NSAI**") to estimate the petroleum reserves and contingent resources, as of 30 June 2015, to the Central's interest in certain gas properties located in Palm Valley Field and Dingo Field located in the northeastern portion of the Amadeus Basin in Northern Territory, Australia.
- 5. The data used in NSAI's estimates of petroleum reserves and contingent resources were obtained from Central, public data sources, and the non-confidential files of NSAI and were accepted as accurate. NSAI's estimates used technical and economic data including, but not

limited to, well logs, geologic maps, seismic data, well test data, production data, historical price and cost information, and property ownership interests. NSAI used standard engineering and geoscience methods, or a combination of methods, including performance analysis, volumetric analysis, analogy, and reservoir modelling, that NSAI considered to be appropriate and necessary to classify, categorise, and estimate volumes in accordance with the 2007 PRMS definitions and guidelines. A portion of the contingent resources shown in this report are for undeveloped locations; such volumes are based on estimates of reservoir volumes and recovery efficiencies along with analogy to properties with similar geologic and reservoir characteristics. As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, conclusions necessarily represent only informed professional judgment. NSAI's report was prepared using gas price and cost parameters specified by Central. Gas contracts for Palm Valley Field and Dingo Field are in existence. Palm Valley Field is subject to a Gas Sales and Purchase Agreement with Santos for up to 25.65PJ over 17 years (from commencement in 2012). Dingo Field is subject to a Gas Sales and Purchase Agreement with Northern Territory Power and Water Corporation for up to 16PJ of gas over a 10-year supply period (from commencement in 2015). There is a possibility for the GSPA to continue with gas sales for up to a further 10 years subject to economically deliverable reserves determined by a reserves report, as further described in the Gas Supply and Purchase Agreement. Gas prices under these GSPAs remain confidential. Thus, in the aggregate, the total volumes summarised in the tables included in this reserves statement represent a reasonable estimate of Central's Palm Valley Field and Dingo Field petroleum reserves and contingent resources position as at 30 June 2015.

- 6. The contingent resources shown are contingent upon establishing contractual commitments for gas sales and demonstration of the economic viability of an approved development plan. If these are satisfied, it is estimated that a gross (100 percent) best estimate (2C) contingent gas resources of approximately 29.7 and 22.7 additional Petajoules of gas could be categorised as 2P petroleum reserves for Palm Valley Field and Dingo Field, respectively, with Central's net share being 100 percent. If the contingencies are successfully addressed, it is estimated that these volumes, in excess of those currently included in the 2P reserves, could be classified as 2P reserves. This 2C estimate has not been risked to account for the possibility that the contingencies are not successfully addressed nor has an economic analysis on these resources been performed; as such, the economic status of these contingent resources is undetermined. Excess facility and pipeline capacities currently exist, but additional wellbores would be required if additional contractual commitments are negotiated.
- 7. The petroleum reserves and contingent resources in this report have been estimated using deterministic methods. The estimates of reserves and contingent resources herein have not been adjusted for risk.
- 8. The reserves and contingent resources shown in this report are estimates only and should not be construed as exact quantities. Estimates may increase or decrease as a result of market conditions, future operations, changes in regulations, or actual reservoir performance. Estimates are based on certain assumptions including, but not limited to, that the properties will be developed consistent with current development plans, that the properties will be operated in a prudent manner, that no governmental regulations or controls will be put in place that would impact the ability of Central to recover the volumes, and that our projections of future production will prove consistent with actual performance. Because of governmental policies and uncertainties of supply and demand, the sales rates, prices received, and costs incurred may vary from assumptions made.
- 9. The reference point for the Palm Valley Field is the inlet flange to the Amadeus Gas Pipeline and for the Dingo Field it is the outlet flange of Central's pipeline, and quantities of produced product are measured under defined conditions prior to custody transfer. Fuel, flare and

shrinkage to the reference points are excluded from the petroleum reserves stated in the tables above.

- 10. The method of aggregation is by arithmetic sum by category. As a result each of the 1P and 1C may be a very conservative estimate and each of the aggregated 3P and 3C may be a very optimistic estimate due to the effects of arithmetic summation.
- 11. Information on petroleum reserves and contingent resources quoted in this reserves statement is rounded to the nearest whole number. Some totals in the tables may not add due to rounding.

## **GENERAL DISCLAIMER AND EXPLANATION OF CERTAIN TERMS**

This document may contain forward-looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which may be outside the control of the Company and could cause actual results to differ materially from these statements. These risks, uncertainties and assumptions include (but are not limited to) funding, exploration, commodity prices, currency fluctuations, economic and financial market conditions in various countries and regions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay or advancement, approvals, cost estimates and other risk factors described from time to time in the Company's reports filed with the ASX. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, readers are cautioned not to place reliance on forward looking statements. Any forward looking statement in this document is valid only at the date of issue of this document. Subject to any continuing obligations under applicable law and the ASX Listing Rules, or any other Listing Rules or Financial Regulators' rules, the Company, its agents, directors, officers, employees, advisors and consultants do not undertake any obligation to publicly update or revise any information or any of the forward looking statements in this document if events, conditions or circumstances change or that unexpected occurrences happen to affect such a statement. Sentences and phrases are forward looking statements when they include any tense from present to future or similar inflection words, such as (but not limited to) "believe". "understand". "estimate", "anticipate", "plan", "target", "forecast", "predict", "may", "hope", "can", "will", "should", "expect", "intend", "projects", "is designed to", "with the intent", "potential", the negative of these words or such other variations thereon or comparable terminology or similar expressions or future may indicate a forward looking statement or conditional verbs such as "will," "should," "would," "may" and "could" are generally forward-looking in nature and not historical facts.