

## 11 February 2020

Australis Oil & Gas ABN: 34 609 262 937

#### ASX: ATS

Australis is an upstream oil and gas company seeking to provide shareholders value and growth through the strategic development of its quality onshore oil and gas assets in the United States of America and Portugal.

The Company's acreage within the core of the oil producing TMS provides significant upside potential for ATS with 62 million bbls of 2P reserves including 3.5 million bbls producing reserves providing free cash flow as well as 130 million bbls of 2C contingent resource.

The Company was formed by the founders and key executives of Aurora Oil & Gas Limited, a team with a demonstrated track record of creating and realising shareholder value.

#### Address

Level 29, Allendale Square 77 St. Georges Tce Perth WA 6000 Australia

Suite 3750 3 Allen Center 333 Clay Street Houston, Texas U.S.A 77002

Contact Telephone: +61 8 9220 8700

Facsimile: +61 8 9220 8799

Email: contact@australisoil.com

Web: www.australisoil.com

# Reserve and Resource Update Year end 2019

# Australis grows proved reserve 53% within the Tuscaloosa Marine Shale ("TMS")

Australis Oil and Gas Limited ("Australis" or "Company") is pleased to announce a substantial increase in its reserve and resource position in the TMS.

The Company holds approximately 115,000 net acres in the TMS Core, which has been independently assessed by Ryder Scott Company L.P. ("Ryder Scott") with an effective date of 31 December 2019<sup>1</sup> to generate the following:

- Net oil reserve estimates: (variance vs YE18<sup>3</sup>) based on the limited development area assessed for reserves (~31% of the Company's acreage in the TMS Core):
  - 1P 48.6 MMbbls (+53%)
  - 2P 62.1 MMbbls (+25%)
  - 3P 93.8 MMbbls (+5%)
- Net contingent oil resource estimates: (variance vs YE18<sup>3</sup>) based on the remaining undeveloped acreage in the TMS Core:
  - 1C 6.3 MMbbls (-10%)
  - 2C 129.5 MMbbls (+20%)
  - 3C 234.8 MMbbls (+20%)

The reserves development area assessed by Ryder Scott was unchanged from 2018<sup>3</sup> and both the reserves and resources have increased substantially driven by the following factors:

- the wells drilled by Australis during 2018/2019 as part of the Initial Drilling Program ("IDP") continued the de-risking of the reserves development area, allowing future well locations to be transitioned as at 31 December 2019 from the possible and probable categories to the lower risk proved (1P) category;
- evaluation of the production data, including the addition of new 2019 wells, led Ryder Scott to increase their expectation of performance of future wells in each reserve category;
- an increase in the Company's working interest in the acreage within the assessed reserves development area; and
- the focused leasing program in 2019 increased the overall acreage position by 5,000 acres and its bias to the high graded areas in the overall net acreage, which has led to increased contingent resources estimates.



## **TMS Resource and Reserve evolution**

The chart below shows an update to the chronological evolution in our total reserve and most likely (2C) contingent resource base since our IPO, and it reflects the continued implementation of our strategy.

The substantial increase in the proved reserves estimate in 2019 is attributed to a number of probable and possible locations from the YE18 estimate transitioning to the lower risk/higher probability proved category following the IDP. These new wells have continued the delineation of the TMS Core and their productivity has allowed Ryder Scott to increase their expectations for performance at each proved future location, which further added to the proved reserve estimate. As can be seen below, the consistent and methodical implementation of the Australis business strategy has continued to increase the overall recoverable estimates and the field reserve base.



## Figure 1: Evolution of TMS Reserves and Resources (MMbbl) (see notes 1 - 6)

## **Tuscaloosa Marine Shale Reserve and Resource estimates**

Australis holds a substantial net leasehold position of 115,000 acres within the core of the TMS in Mississippi and Louisiana. Through an active leasing and permitting program, the Company has been continuously high grading its acreage and the IDP of six new wells (four of which commenced production in 2019) has further delineated the core area.

Australis operates 38 wells and has interests in a further 17 wells operated by others in the play (for a total of 37.4 net wells), most of which have been on production for at least four years. The PDP reserve allocation detailed in this report estimates the remaining economically recoverable hydrocarbons from these wells, which includes the six wells from the IDP.



The year end 2019 reserve report considers a development program operated and managed by Australis over the next five years which conforms to the maximum evaluation timeframe prescribed by the SPE Petroleum Reporting Management System – 2018 (the "SPE – PRMS"). The development program, designed to be appropriate for an entity with the Company's current capital and operating capacities, builds to a maximum of four drilling rigs to drill a total of 180 wells within this period and considers the same size of reserves development area as used for the year end 2018 report<sup>3</sup>. As such, the development program assesses a reserve development area that includes approximately 31% of the overall Australis net acreage position in the TMS Core. The remaining acreage that would not be developed in this period under the development plan is considered a resource under the SPE - PRMS and is deemed contingent, subject to a permissible development plan.

Ryder Scott assessed all future locations they evaluated for development to be commercial and they allocated the following oil reserves and resources to the Australis TMS position.

|                                   | Australis Reserves <sup>1</sup> |                    | Net Oil<br>YE19 <sup>1</sup> |
|-----------------------------------|---------------------------------|--------------------|------------------------------|
| Reserve Category                  | Gross Oil<br>(Mbbls)            | Net Oil<br>(Mbbls) | vs<br>YE18 <sup>3</sup>      |
| Proved Developed Producing (PDP)  | 5,374                           | 3,547              |                              |
| Proved Undeveloped (PUD)          | 58,733                          | 45,053             |                              |
| Proved (1P)                       | 64,107                          | 48,600             | 52.5%                        |
| Probable Developed Producing      | 985                             | 655                |                              |
| Probable Undeveloped              | 16,953                          | 12,851             |                              |
| Probable Total                    | 17,938                          | 13,507             |                              |
| Proved + Probable (2P)            | 82,045                          | 62,107             | 24.9%                        |
| Possible Developed Producing      | 1,040                           | 698                |                              |
| Possible Undeveloped              | 51,595                          | 30,950             |                              |
| Possible Total                    | 52,663                          | 31,648             |                              |
| Proved + Probable + Possible (3P) | 134,680                         | 93,755             | 5.1%                         |

| Contingent Resource<br>Category | Oil<br>(Mbbls) <sup>1</sup> | Oil<br>YE19 <sup>1</sup> vs<br>YE18 <sup>3</sup> |
|---------------------------------|-----------------------------|--|
| Low Estimate (1C)               | 6,252                       | -10%   |
| Best Estimate (2C)              | 129,539                     | 20.2%  |
| High Estimate (3C)              | 234,800                     | 20.2%  |

The year end 2019 PDP reserve estimate<sup>1</sup> of 3.55 MMbbls is reconciled to the year end 2018 report<sup>3</sup> below and has an NPV(10) of US\$62.8 million. The 24% decrease in the NPV(10) value from 2018 is predominantly due to the lower oil price assumptions used for 2019, as described in the "Assumptions" section below.



## Assumptions

Key assumptions used by Ryder Scott to generate these estimates are as follows:

- Reserves and contingent resources estimates are based on the deterministic estimation method.
- The oil price used for all reserves analysis is a flat realised price of US\$60.27/bbl, which is based on the average Louisiana Light Sweet oil price on the first trading day of each calendar month during 2019 adjusted for transportation costs and is US\$8.98/bbl less (13%) than the realised price assumed in year end 2018 estimates.
- Operating costs for developed producing wells are based on actuals incurred between January and August 2019 and represent a modest increase on the assumptions used for the year end 2018 estimates. Operating costs for future wells are based on management's conservative estimates of likely costs going forward.
- The existing PDP estimates are based on production from 38 operated and 17 non-operated wells (37.4 net wells).
- Proposed future well locations are allocated a reserve category based on proximity to existing wells and production. The additional PDP wells added during 2019 have allowed a number of probable and possible locations to transition to the proved category.
- The five-year development plan used for this reserve report assumes a four rig program, with additional rigs being added to the initial one rig program in October 2020, May 2021 and May 2022, drilling a total of 180 gross well locations and all were deemed commercial. The development plan assumed eight wells per standard development unit and approximately 250 acre spacing.
- Anticipated D, C & T well costs range from US\$10.8 to US\$12.9 million depending on well length and timing. The estimated long-term cost of a 7,500 ft drilled lateral is on average US\$10.8 million.
- The development plan assumes an initial estimate of 45 days to drill new wells, which then reduces to 29 days over time.
- Type curves were derived based on historical production data. Proved, probable and possible type curves were generated by Ryder Scott and used for future undeveloped wells. The following table provides the type curve EUR's for each reserve class, which have all increased compared with 2018.

|                  | Type Curve EUR               |                              |  |
|------------------|------------------------------|------------------------------|--|
| Reserve category | YE18 <sup>3</sup><br>(Mbbls) | YE19 <sup>1</sup><br>(Mbbls) |  |
| Proved           | 472                          | 527                          |  |
| Probable         | 576                          | 611                          |  |
| Possible         | 704                          | 709                          |  |

- Type curves were normalised to planned future well horizontal length.
- Average royalty payable on future well locations allocated a reserve in this report is 18.9%.
- Contingent resources are only estimated for areas not included in the reserve development area. The 1C contingent resources are limited to any unit that contains existing TMS wells which



would have been considered as reserves had the development plan included such locations within the five-year development window. The 2C and 3C considered all the remaining undeveloped net acreage within the core area but used different estimates of in-place volumes and recovery factors.

• No gas sales are assumed as all gas is consumed on the lease, therefore neither gas nor gas liquids have been included in the reserves estimates.

## **PDP** reconciliation

The following table provides a reconciliation of net PDP reserves between 31 December 2018 and 31 December 2019

| Description                         | Net Oil<br>(Mbbl) |
|-------------------------------------|-------------------|
| PDP Reserve (31/12/18) <sup>3</sup> | 3,927             |
| 2019 Net Production                 | (691)             |
| Four New IDP wells                  | 837               |
| Technical Adjustment                | 43                |
| Lower oil price                     | (239)             |
| Higher operating cost               | (321)             |
| Changes to ownership                | (11)              |
| PDP Reserve (31/12/19) <sup>1</sup> | 3,547             |

Contributors to the downward adjustments shown in the above table are discussed below.

- The lower realised oil price used in generating the estimates resulted in an economic cut-off that reduced reserves by 239 Mbbls.
- The higher operating cost for existing wells is largely driven by operating and workover costs of the jet pump wells and water disposal costs. Future wells will no longer use the Jet pump artificial lift and development costs include an allowance for dedicated water disposal wells, which leads to lower anticipated costs.

#### TMS Contingent Resource reconciliation

The following table summarises the change in contingent resource estimated on 31 December 2019 and 31 December 2018.

| Description                          | Contingent<br>Resource<br>31 Dec 2018 <sup>3</sup><br>(MMbbl) | Contingent<br>Resource<br>31 Dec 2019 <sup>1,2</sup><br>(MMbbl) |
|--------------------------------------|---|---|
| Low Contingent Resource (1C)         | 6.9   | 6.3   |
| Most Likely Contingent Resource (2C) | 107.8   | 129.5   |
| High Contingent Resource (3C)        | 195.4   | 234.8   |



The following key factors contributed to the changes in contingent resource.

- Between the two dates Australis increased its net acreage position in the TMS core from 110,000 net acres to 115,000 net acres.
- Australis has concentrated its acreage position in areas deemed to be high graded, with higher 'in place' estimates yielding higher contingent resource estimates.

## Portugal

On 25 January 2017 Australis provided an updated Contingent and Prospective Resource estimate to the market completed by NSAI<sup>7,8</sup>. Whilst Australis has carried out a number of technical workscopes in the intervening period, the Company is not aware of any information that would influence these estimates and therefore they were not updated at year end. For ease of reference the Aljubarrota gas discovery Contingent Resource estimates are shown below:

|  | Low      | Best     | High     |
|--|----------|----------|----------|
|  | Estimate | Estimate | Estimate |
|  | 1C (Bcf) | 2C (Bcf) | 3C (Bcf) |
| Net Contingent Resource <sup>7,8</sup> | 217.4    | 458.5    | 817.7    |

#### -ends-

#### This ASX announcement was authorised for release by the Australis Disclosure Committee.

Further Information:

Ian Lusted Managing Director Australis Oil & Gas +61 8 9220 8700 Graham Dowland Finance Director Australis Oil & Gas +61 8 9220 8700 Shaun Duffy FTI Consulting +61 8 9485 8888



## GLOSSARY

| Unit | Measure            | Unit | Measure                                     |
|------|--------------------|------|---|
| В    | Prefix – Billions  | bbl  | Barrel of oil                               |
| MM   | Prefix – Millions  | boe  | Barrel of Oil equivalent<br>(1bbl = 6 mscf) |
| М    | Prefix – Thousands | scf  | Standard cubic foot of gas                  |
| /d   | Suffix – per day   | Bcf  | Billion cubic feet of gas                   |

| Unit        | Measure   |
|-------------|---|
| Gross or WI | Company beneficial interest before royalties or burdens   |
| Net or NRI  | Company beneficial interest after royalties or burdens  |
| С           | Contingent Resources (1C/2C/3C equivalent to low/most likely/high)  |
| NPV(10)     | Net Present Value (@ discount rate)   |
| EUR         | Estimated Ultimate Recovery of a well   |
| WTI         | West Texas Intermediate oil benchmark price   |
| LLS         | Louisiana Light Sweet oil benchmark price   |
| D, C & T    | Drill, Complete, Tie – in and artificial lift   |
| 2D/3D       | 2 and 3 dimensional seismic surveys   |
| Opex        | Operating Expenditure   |
| HBP         | Held by production – within a formed unit a producing well meets all lease obligations within that unit. Primary term remains valid whilst well is on production. |
| LOE         | Lease Operating Expense   |
| TMS Core    | The Australis designated productive core area of the TMS delineated by production<br>history  |

#### Notes

- Estimates from the independent Ryder Scott report, effective 31 December 2019. The report was
  prepared in accordance with the definitions and disclosure guidelines contained in the Society of
  Petroleum Engineers (SPE), World Petroleum Council (WPC), American Association of Petroleum
  Geologists (AAPG), and Society of Petroleum Evaluation Engineers (SPEE) Petroleum Resources
  Management (SPE-PRMS) as revised in June 2018. Ryder Scott generated their independent reserve
  and contingent resource estimates using deterministic methods.
- Previous Australis reserve and resource estimates were prepared using the 2007 SPE-PRMS definitions and guidelines other than the 2018 estimates which also used the SPE-PRMS as revised in June 2018.
- 3. Contingent Resources and Reserves estimated with an effective date 31 December 2018 are taken from the independent Ryder Scott report dated 31 January 2019 and announced on 6 February 2019 and titled 'Reserve and Resource Update Year End 2018'.
- 4. Contingent Resources and Reserves estimated with an effective date 31 December 2017 are taken from the independent Ryder Scott report dated 26 January 2018 and announced on 30 January 2018 and titled 'Reserve and Resource Update Year End 2017'.
- 5. Contingent Resources estimated with an effective date 31 December 2016 are taken from the independent Ryder Scott report dated 23 January 2017 and announced on 25 January 2017 and titled



'2016 Year End Resource Update'.

- Contingent Resources estimated with an effective date 1 May 2016 are taken from Section 8 (Technical Experts Reports) of the Company's prospectus dated 29 June 2016 and is available on the company website.
- 7. All estimates have been taken from the independent Netherland, Sewell & Associates report, effective 31 December 2016 and announced on 25 January 2017 titled '2016 Year End Resource Update'. The report was prepared in accordance with the definitions and disclosure guidelines contained in the Society of Petroleum Engineers (SPE), World Petroleum Council (WPC), American Association of Petroleum Geologists (AAPG), and Society of Petroleum Evaluation Engineers (SPEE) Petroleum Resources Management (SPE-PRMS). The Company is not aware of any new information or data that materially affects the information included in the referenced market announcement and that all material assumptions and technical parameters underpinning the estimates in the referenced market announcement continue to apply and have not materially changed.
- 8. Australis holds a 100% working interest in the Batalha and Pombal Concessions, however this interest is subject to a 3% working interest option granted to a contractor and the Net estimates provided by NSAI are prepared with the assumption that this option has been exercised. The Net estimates provided by NSAI also make an allowance for royalties payable to the Portuguese government. The actual royalties payable by Australis are detailed in Article 51 of Decree Law nr 109/94 of the 26<sup>th</sup> April,1994 and Article 19.2 of each concession contract. For oil there is a staged royalty of between 0 and 9% based on produced volumes and for gas there is a similar staged royalty of between 3 and 8% again based on produced volumes. As there is not a development plan and an associated production profile for either the contingent or prospective resource estimates, the royalty rate has been assumed to be 8 and 9% respectively.

#### **Competent Persons Statement**

The reserves and contingent resource estimates provided in this announcement pertaining to the Tuscaloosa Marine Shale is based on, and fairly represents, information and supporting documentation, prepared by, or under the supervision of, Raymond Yee, P.E., who is an employee of Ryder Scott Company, L.P. an independent professional petroleum engineering firm. Mr Yee is a Professional Engineer in the State of Texas (Registration No. 81182). The reserve and resource information pertaining to the Tuscaloosa Marine Shale in this announcement has been issued with the prior written consent of Mr Yee in the form and context in which it appears.

#### **Forward Looking Statements**

This document may include forward looking statements. Forward looking statements include, but are not necessarily limited to, statements concerning Australis' planned development program and other statements that are not historic facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward looking statements. Although Australis believes its expectations reflected in these statements are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.