

## Armour Energy Limited

12 June 2020

### 22% Increase in 2P Gas Reserves at Kincora Project

The Directors of Armour Energy Ltd (ASX: AJQ, the Company) are pleased to provide an update on the Company's gas growth and development plans for the Kincora Gas Project.

#### Highlights:

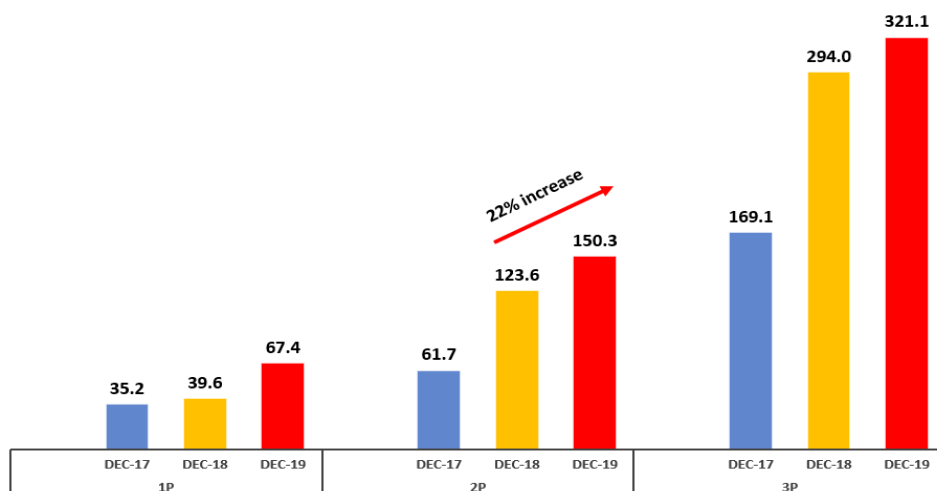
- **2P gas reserves increased by 22% to 150.3 PJ.**
- **Material long term potential demonstrated across the wider Kincora Project.**
- **Reserves independently verified.**

Armour Energy is pleased to provide a reserve update on its Kincora project (**see Map 1**). The following numbers in Table 1 and Figure 1 have been evaluated in accordance with the Society of Petroleum Engineers – Petroleum Resources Management System (SPE-PRMS) and independently certified and documented in Armour Energy's Hydrocarbon Reserves (as at 31 December 2019) report.

Kincora Gas Project	1P	2P	3P
Gas (Bscf)	59.3	132.2	282.4
Sales Gas (PJ)	67.4	150.3	321.1
LPG (T)	139,000	310,000	663,000
Condensate (Bbl)	670,000	1,493,000	3,191,000

**Table 1. Combined Armour Energy Gas Reserves**

#### Armour Gas Reserves (PJ)



**Figure 1. Armour Energy Reserves growth as per 31<sup>st</sup> December 2019**

Notes:

- Petroleum reserves are classified according to SPE-PRMS.
- Petroleum reserves are stated on risked net basis with historical production removed
- Petroleum Reserves have no deduction applied for gas used to run the process plant estimated at 7%
- Petroleum Reserves can be sold on behalf of any minority interest holder
- Petroleum Reserves are stated inclusive of previous reported estimates
- BSCF = billion cubic feet, PJ = petajoules, bbls = barrels, gas conversion 1.137 PJ/BCF
- 1P = Total Proved; 2P = Total Proved + Probable; 3P = Total Proved + Probable + Possible.
- LPG Yield 2065 tonnes/petajoules, Condensate Yield 9938 barrels/petajoules

Armour's successful hydraulic stimulation of Myall Creek 5A, the drilling of the Horseshoe 4 gas well and ongoing geological and reservoir studies across the greater Kincora Project have contributed to the upgrade in reserves.

### **Strategically Growing a Diversified Portfolio**

Armour has re-evaluated existing discovery wells and identified significant tight gas from the Myall Creek area and south along the western flank of the Roma Shelf in its operated authority-to-prospect, potential-commercial-areas and petroleum licences. Multiple hydrocarbon saturated tight liquid rich gas reservoirs are present in cased/suspended wells and offer further opportunities to accelerate production. Armour is currently progressing plans to hydraulically stimulate existing well stock in 2020 and in 2021. These efforts are expected to contribute to gas production and further characterize the fields for future drilling and ultimately contribute to the reserve's maturation strategy.

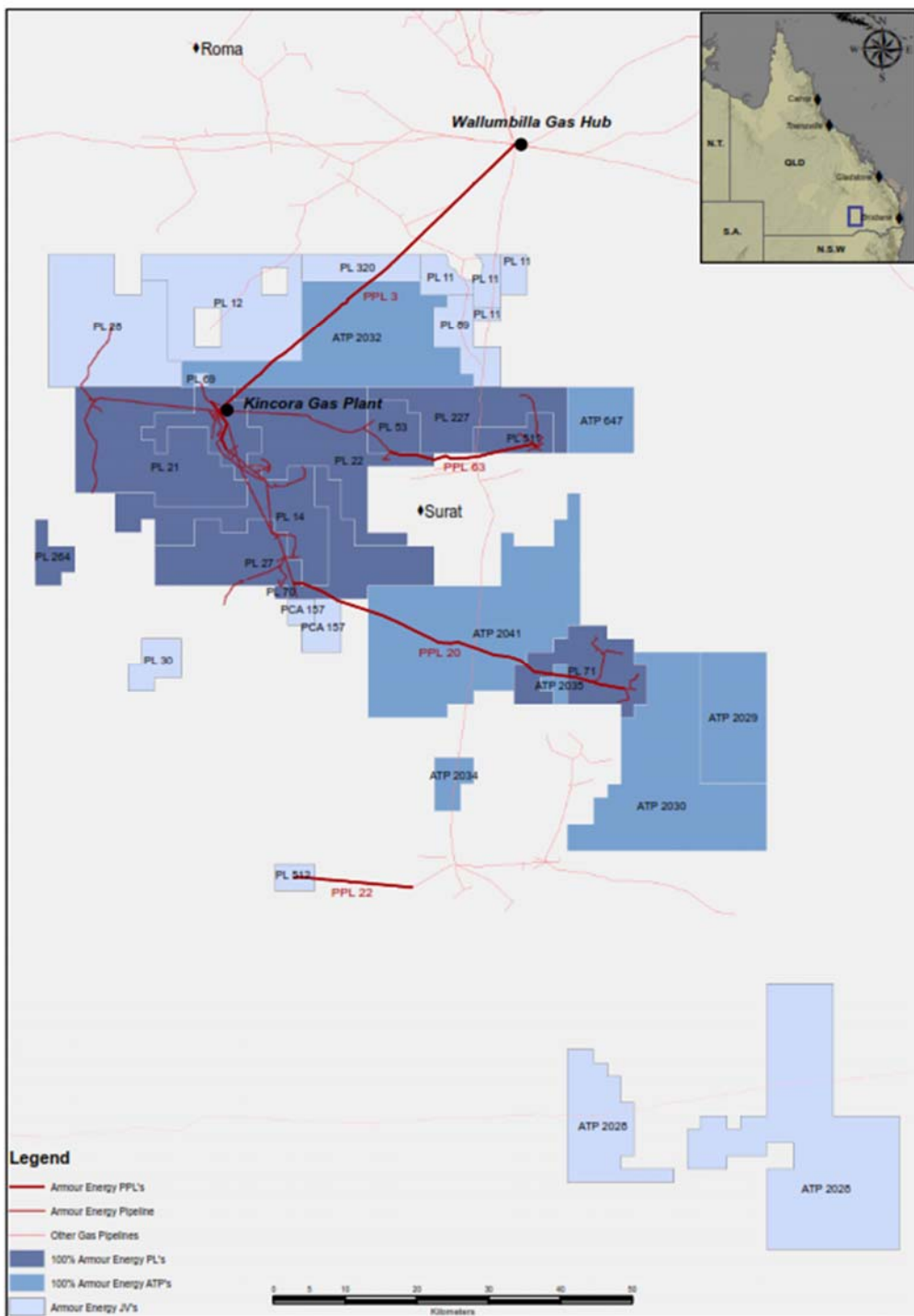
*This Announcement is Authorised by the Board of Directors*

On behalf of the Board  
Karl Schlobohm  
Company Secretary

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**Map 1. Kincora Project Tenements, June 2020**

## Technical Statement – Hydrocarbon Reserves

The report 'Armour Energy Hydrocarbon Reserves, 01 January 2020', to which this announcement refers, documents the Reserves Update based upon Armour's successful drilling and sales production from the Myall Creek 4A, Myall 5A and Horseshoe 4 wells in PL 511 & PL 227 (**see Map 1**). The estimated aggregated quantities of petroleum reserves to be recovered from existing wells and through future capital are listed in **Table 1** above and exclude 5% production processing fuel and provisional flaring.

The independently verified 'Armour Energy Hydrocarbon Reserves, 01 January 2020' report details a high degree of confidence in the commercial producibility of Permian aged reservoirs previously discovered and produced in operated granted petroleum licenses 511 & 227 using, recent Armour drilled and hydraulically stimulated wells, 2D-3D seismic, historic and modern well data, reservoir pressure data, electric logs and rock properties from chip & core samples, gas composition analysis, hydraulic stimulation results, analysis of historical well production, decline curve analysis, offset field production data and prior production data from wells before the Kincora Gas Plant was shut-in by the previous operator, Origin Energy. The reported Reserves are used in connection with estimates of commercially recoverable quantities of petroleum only and in the most specific category that reflects an objective degree of uncertainty in the estimated quantities of recoverable petroleum. The petroleum reserves are reported net of fuel and net to Armour to the APA Group metered sales connection to the Roma to Brisbane Pipeline (Run 2) at Wallumbilla and the report discloses the portion of petroleum Reserves that will be consumed as fuel in production and lease plant operations. Armour will be using calibrated metering and gas chromatographs at the Kincora Gas Plant as a reference point for the purpose of measuring and assessing the estimated petroleum Reserves from the produced gas.

The economic assumptions used to calculate the estimates of petroleum Reserves are commercially sensitive to the Armour operated Kincora Project. The methodology used to determine the economic assumptions are based upon strategic objectives that include, but not limited to, new drills, hydraulic stimulation, workovers, recompletes and surface facility modifications to ramp up to and maintain a 30 TJ/day production profile for 15 years. The sanctioned development model includes a starting and ending monthly schedule of working/net interest capital expenditure to develop and maintain the petroleum Reserves, operational expenditure to develop and produce the petroleum Reserves, fixed petroleum Reserve prices under-contract and escalated petroleum Reserve futures based upon Wallumbilla Hub prices, tax/royalty sensitivities, revenue from gross and net petroleum production yields and cash flow from petroleum production yields and summation of discounted cash flows.

The petroleum Reserves are located on granted petroleum licences with approved environmental authorities and financial assurances. Armour has a social licence to operate and relevant surface access agreements are in-place. Armour is the owner and operator of the Kincora Project and PPL3 sales gas pipeline which connects the Kincora Gas Plant to the Wallumbilla gas hub via the connection agreement with APA. Armour holds granted Petroleum Licenses over the reported estimates of petroleum Reserves, associated gathering and field compressors. The basis for confirming the commercial producibility and booking of the estimated petroleum Reserves is supported by actual historic production & sales and/or formation tests. The analytical procedures used to estimate the petroleum reserves were decline-curve analysis to 50 thousand cubic-feet-day, historic production data and relevant subsurface data including, formation tests, 2D-3D seismic surveys, well logs and core analysis that indicate significant extractable petroleum.

The proposed extraction method of the estimated petroleum Reserves will be through approved conventional drilling and, where applicable, hydraulic stimulation techniques to accelerate production, commingle the productive zones and extract volumes from tight gas zones. Wellbores will be cased and cemented with a high-pressure wellhead completion. Petroleum will be recovered through 2-3/8" production tubing and gathered to field compression sites for delivery to the Kincora Gas Plant.

Wellbores will be designed to protect aquifers and deviated drilling may be used to lessen the overall impact to surface owners, environmental receptors, strategic cropping and to consolidate surface infrastructure. Processing at the Kincora Gas Plant will be required to separate the extracted hydrocarbons into dry gas, liquid petroleum gas, oil and condensate and to remove any impurities prior to sales.

#### ***Competent Persons Statement - Consents***

The reserves information in this ASX release is based on, and fairly represents, data and supporting documentation prepared by, or under the supervision, of Mr Teof Rodrigues. Mr Rodrigues' primary discipline is Reservoir Engineering and during his 40-year period in the Industry has had the opportunity to work in multidisciplinary teams to appreciate the importance of understanding the process involved in moving the hydrocarbons from the reservoir to the reference sales point. As the Chief Reservoir Engineer for 6 years he had the Corporate Reserves Team reporting to him. In addition, he had the responsibility of endorsing all the Major Projects and the key Reserves and Resource estimates of the Company. He is a Director of TR&A and an experienced petroleum Reserves and resources estimator with 40 years relevant experience. He has adhered to the ASX Listing Rules Guidance Note 32. His qualifications and experience meet the requirements to act as a Competent Person to report petroleum reserves under PRMS (2018). The Resources information in this ASX announcement was issued with the prior written consent of Mr Rodrigues in the form and context in which it appears.

The reserves review was carried out in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines under the supervision of Mr. Luke Titus, Chief Geologist, Armour Energy Limited. Mr. Titus' qualifications include a Bachelor of Science from Fort Lewis College, Durango, Colorado, USA and he is an active member of AAPG and SPE. He has over 20 years of relevant experience in both conventional and unconventional hydrocarbon exploration & production in the US and multiple international basins. Mr. Titus meets the requirements of qualified petroleum reserve and resource evaluator as defined in Chapter 19 of the ASX Listing Rules and consents to the inclusion of this information in this release.

#### ***SPE-PRMS***

Society of Petroleum Engineer's Petroleum Resource Management System - Petroleum resources are the estimated quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resource assessments estimate total quantities in known and yet-to-be discovered accumulations, resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating development projects, and presenting results within a comprehensive classification framework. PRMS provides guidelines for the evaluation and reporting of petroleum reserves and resources (June 2018).

***Under PRMS***

“Reserves” are those quantities of petroleum which are anticipated to be commercially recovered from known accumulations from a given date forward. All reserve estimates involve some degree of uncertainty. The uncertainty depends chiefly on the amount of reliable geologic and engineering data available at the time of the estimate and the interpretation of these data. The relative degree of uncertainty may be conveyed by placing reserves into one of two principal classifications, either proved or unproved. Unproved reserves are less certain to be recovered than proved reserves and may be further sub-classified as probable and possible reserves to denote progressively increasing uncertainty in their recoverability.

“Contingent Resources” are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

***Forward Looking Statement***

This announcement may contain certain statements and projections provided by or on behalf of Armour Energy Limited (Armour) with respect to the anticipated future undertakings. These forward-looking statements reflect various assumptions by or on behalf of Armour. Accordingly, these statements are subject to significant business, economic and competitive uncertainties and contingencies associated with exploration and/or production which may be beyond the control of Armour which could cause actual results or trends to differ materially, including but not limited to price fluctuations, exploration results, resource estimation, environmental risks, physical risks, legislative and regulatory changes, political risks, project delay or advancement, ability to meet funding requirements, factors relating to property title, native title and aboriginal heritage issues, dependence on key personnel, share price volatility, approvals and cost estimates. Accordingly, there can be no assurance that such statements and projections will be realised.

Armour makes no representations as to the accuracy or completeness of any such statement of projections or that any forecasts will be achieved.

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