



Armour Energy Limited

11 May 2018

Armour to Commence Kincora Project Well Program with Myall Creek 4A

Highlights:

- **New production well, Myall Creek 4A, planned to spud by the end of May 2018.**
- **Well design, stimulation and completion program designed to maximise production over life of the well.**
- **PPL63 pipeline repairs completed and pipeline capacity returned to 14 TJ/day.**
- **The Myall Creek 4A well is to be part funded by the Federal Government's Gas Acceleration Program.**

Brisbane based oil and gas explorer and producer Armour Energy Limited ("Armour", or "the Company", ASX: AJQ) is pleased to advise that the Company has entered into a contract for the drilling of Myall Creek 4A (permitted as well Myall Creek 2655 YNE) at the Kincora Gas Project on the Roma Shelf, south of Roma, Queensland (**Figure 1**). Drilling is expected to commence before the end of May 2018.

The 100% Armour-owned well is located within the Myall Creek Gas Field, which has produced 19.3 petajoules of gas historically and hosts a further 48.5 petajoules of 2P gas reserves in the Permian gas reservoirs of the field, as part of the overall 2P reserves for the Kincora Project of 56.8 PJs¹.

Historic total production from historic wells, drilled by Origin Energy, AGL and Mosaic, ranges from 0.84 PJs to 8.96 PJs from the Permian aged Upper Tinowon Sandstone. The historic success rate for Roma Shelf wild cat wells drilled at locations of seismic closure is 37%. The prognosed Armour success case for Myall Creek 4A is significantly higher owing to its status as a development well rather than a wildcat, its location within the field (surrounded by past producing wells), and the 300 metre gross hydrocarbon charged section that has been intersected in surrounding wells and verified through recently reprocessed 3D seismic and reservoir studies.

Previous production wells and completion strategies in the Myall Creek Gas Field have focussed on single stage production completions of either the Permian aged Upper and Lower Tinowon or the associated Rewan Formation. In all cases, where well design allowed, these various reservoirs have required a stimulation to enhance connectivity with the reservoir, to increase gas flow rates and to maximise hydrocarbon recovery.

Armour has designed the Myall Creek 4A wellbore for a multi-stage hydraulic stimulation of the prognosed 300 metre gross hydrocarbon charged section below the regional Triassic Snake Creek Shale seal. The design commingles all three historically stand-alone stimulated hydrocarbon reservoirs in one single wellbore to maximize production rates and to recover an estimated 4.4 PJ of gas and yield approximately 44,000 barrels condensate and 9,000 tonnes LPG¹ (**Figures 2 & 3**).

¹ Refer ASX release of 3 April 2017.

In a configuration similar to successful and current hydraulic stimulations in analogous reservoirs in the Bowen, Surat and Cooper Basins, but subject to petroleum and gas shows and log interpretation following the completion of the drilling and casing phase, a three stage hydraulic stimulation is currently planned to be deployed after drilling and casing of the Myall Creek 4A well has been completed in early June. Stimulations of Myall Creek wells, carried out some 15 years ago, involved 30,000-37,000 lbs (pounds) of fracture proppant in a single stage. After drilling and logging has been completed, Armour envisages carrying out up to 10 times larger stimulations using industry accepted high quality ceramic proppant over three stages. A fourth stage could be added for additional coverage of the thick and hydrocarbon saturated section below the Snake Creek Shale seal to ensure maximum hydrocarbon recovery and estimated ultimate recovery above 4.4 PJs of gas for the well. As part of the previously announced prospective resource, some 40 PJs of gas is attributed to the Rewan Formation in the Myall Creek field and this may be converted to reserves and resources upon successful completion and flow case from this hydrocarbon bearing zone¹.

Armour has extensively analysed previous drilling and completions strategies in the Permian and Triassic sections on the Roma Shelf and aims to optimise future production rates, minimise well bore and reservoir formation damage and deliver reduced decline rates by adopting the following strategies:

1. Casing and cementing off historically non-productive sections above the Triassic and Permian, and sealing off all aquifers from the well bore.
2. Placing production casing over the prognosed gas saturated, 300m thick Triassic and Permian section.
3. Comprehensive logging suites in combination with gas detection mud logs of the prospective sandstone bearing Permian Tinowon and Triassic Rewan Formations.
4. Perforations in the production casing will be designed over the best areas with a focus on the most suitable sandstones with the highest hydrocarbon response on the Mudlog.
5. Hydraulic stimulation of gas saturated zones in stages will be designed to maximise production rates, minimise well bore damage and minimise production decline rates. Armour envisages two stimulations (over 40 meters each) in the Permian section sandstones each approximately 90,000 lbs (pounds) of proppant, and a third stage (over 100 meters) in the Triassic sandstones of approximately 200,000 lbs (pounds) of proppant.
6. Following the multi-stage hydraulic stimulation, the well will be flow tested. Planned 2-3/8" production tubing capable of maximum 10 million cubic feet per day production with a choke installed to maximize production over the life of the well with little or no intervention.
7. In tandem with the planned completion of the Myall Creek 4A well, a 4" pipeline will be installed to gather production to the Myall Creek compressor station where a new manifold will be installed to take an additional five wells including the Myall Creek 4A.
8. Upon completion of the installation of production tubing and gathering pipelines, the well will be turned immediately to sales.

The well has been located and designed on the basis of proximity to existing productive wells and state of the art seismic interpretation, and stimulation and completion techniques.

Based on historic stimulated gas flows on test in the Myall Creek Gas Field by previous operators, the Company is targetting economic flow rates and slow decline rates. Any production will augment the current 9TJs per day production rates through the Kincora Gas Plant (100% Armour).

Armour aims to demonstrate a low cost-high volume repeatable blueprint for production well drilling and completion strategies across Armour's prospective Triassic and Permian reservoirs on the eastern Roma Shelf.

Table 1: Historic Stimulation Performance, Kincora Gas Project, Roma Shelf (Source: Various public well completion reports by various operators)

Well Name	Completed Zone	Tubing Size	Fracture Proppant	Pre-frac flow rate (perforation only)	Post-frac flow rate	Percentage increase
Myall Creek 2	Upper and Lower Tinowon	2 7/8 inch	30,000 lbs	0.47 MMScf/d	2.7 MMScf/d	580%
Myall Creek 3	Upper Tinowon	2 7/8 inch	30,000 lbs	0 MMScf/d	4.3 MMScf/d	infinite
Myall Creek 4	Upper Tinowon	2 3/8 inch	30,000 lbs	0.37 MMScf/d	1.9 MMScf/d	530%
Bloodwood 1	Rewan	2 7/8 inch	36,750 lbs	0.59 MMScf/d	2.5 MMScf/d	436%

The well is scheduled to take 21 days to drill and a further period of time for stimulation and completion. A successful production well would aim to be tied into production facilities as early as the end of August 2018.

Armour is currently producing 9 TJs per day and has 56.8 PJs of 2P reserves across the Kincora Project and a further 100 PJs of 3P reserves (refer **Table 2** below) with the opportunity for discovery and development of over 3.610 TCF of best estimate prospective resources gas in the Triassic and Permian sections within Armour's current tenement position.²

² Refer ASX release of 2 November 2015. Conventional, unrisks prospective resources (best estimate, unrisks).

Table 2: Independently Verified 2P Petroleum Reserves, Kincora Gas Project, Roma Shelf (3 April 2017)

Reserves ⁽¹⁾	1P	2P (1P+2P)	3P (1P+2P+3P)
Estimated Net Total Gas (BCF)	30.16	53.86	149.56
Estimated Net Total Gas (PJ)	31.82	56.82	157.79
LPG Yield (Tonne)	65,706	117,338	325,828
Condensate Yield (BBL)	316,215	564,700	1,568,075

Table 1 Notes:

- Petroleum reserves are classified according to SPE-PRMS.
- Petroleum reserves are stated on a risked net basis with historical production removed.
- Petroleum reserves are stated inclusive of previous reported estimates.
- Petroleum Reserves have no deduction applied for gas used to run the process plant estimated at 7%.
- BCF = billion cubic feet, LPG = liquefied petroleum gas, PJ = petajoules, kbbl = thousand barrels, kTonne = thousand tonnes; Conversion 1.055 PJ/BCF.
- 1P = Total Proved; 2P = Total Proved + Probable; 3P = Total Proved + Probable + Possible.
- LPG Yield 2065 tonnes/petajoules, Condensate Yield 9938 barrels/petajoules

PPL63 Repaired

In a further development, Armour advises that repairs to the PPL63 pipeline from the Myall Creek field to the Kincora Gas Plant have been effected and the pipeline has now been re-rated to the original operating pressure of 10.2 MPA with capacity of 14 TJs per day of gas. Currently, the pipeline is carrying approximately 3 TJs per day of gas from existing producing wells, and the repairs enable future production capacity of an additional 11 TJs per day in success cases for additional wells at Myall Creek Gas Field.

Gas production from Permian and Triassic sections is traditionally condensate rich and contains approximately 10 barrels of condensate (54^o API) and 2 tonnes of LPG per million cubic feet of gas. This has the effect of augmenting the value of Armour's gas revenues by up to 25%.

Gas Acceleration Program

The Myall Creek 4A well is expected to be part funded from a grant from the Federal Government Gas Acceleration Program (GAP). Armour was recently advised that it was a successful applicant for a \$6 million grant to assist with the drilling of 4 wells on the Roma Shelf in order to support with the provision of domestic gas supply for increasing demand in East Australian gas markets. Documentation of the funding agreement to give effect to the grant is currently being progressed.



On behalf of the Board
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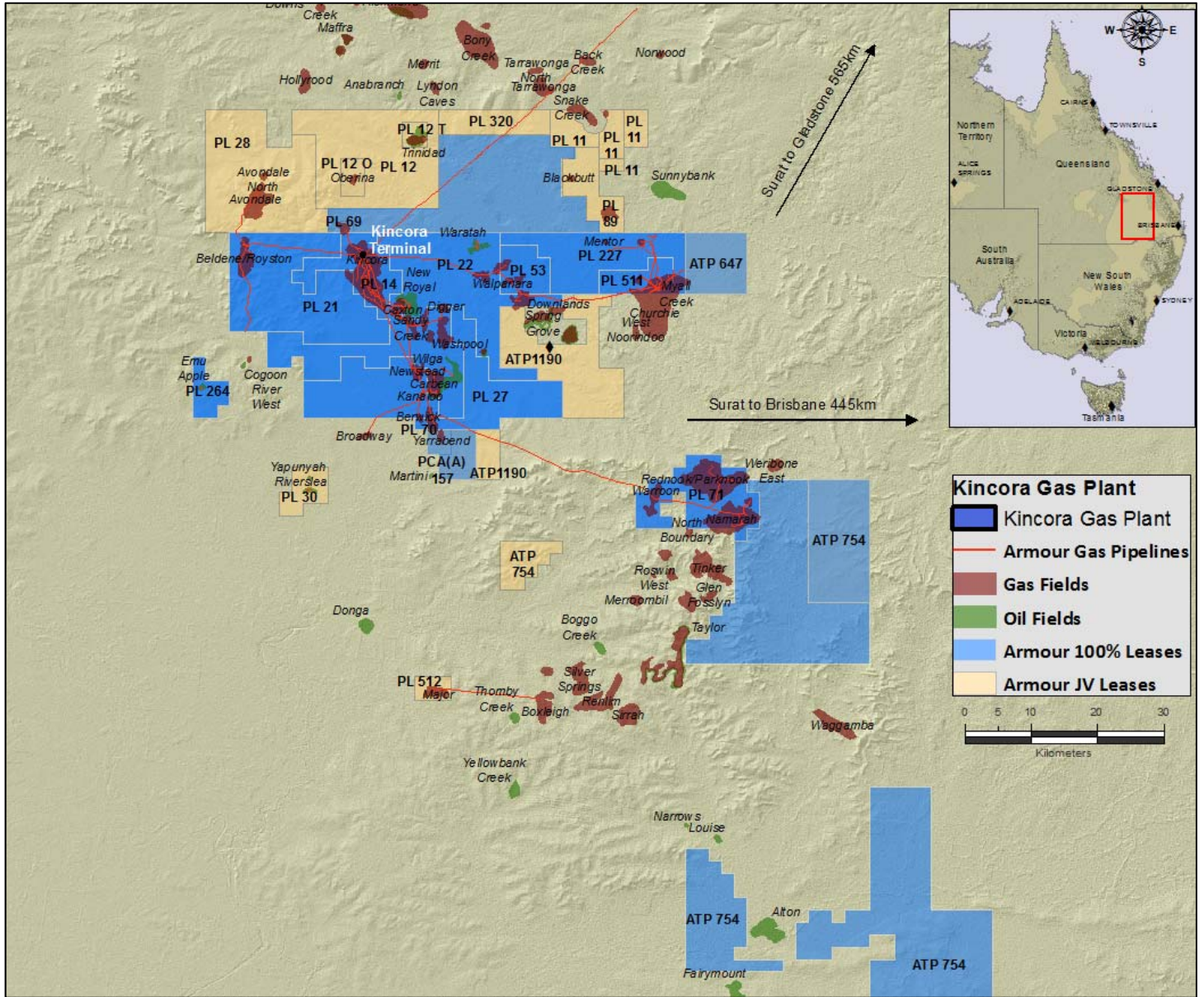
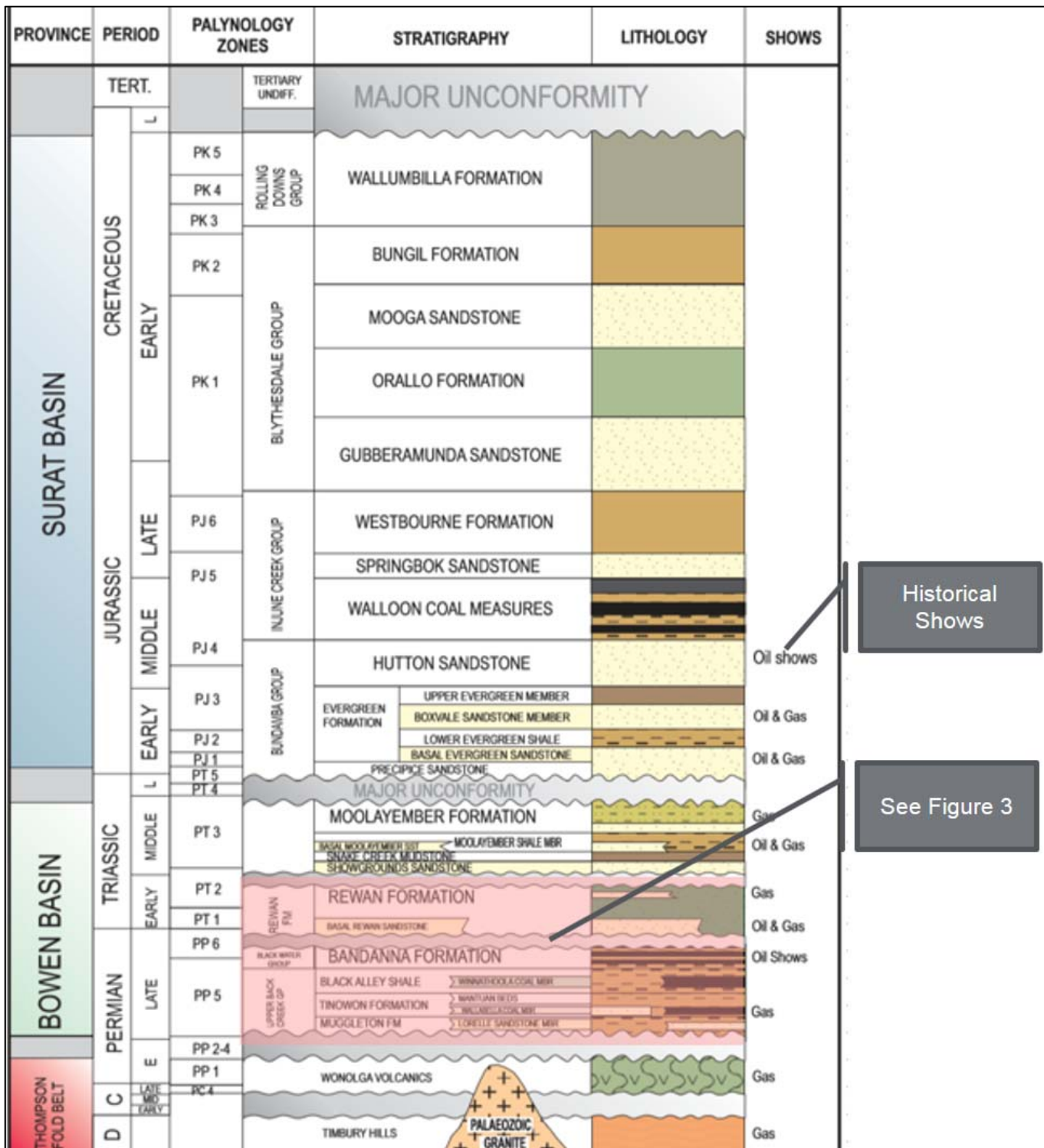


Figure 1 – Armour Energy Permits, Bowen-Surat Basins, Queensland.



Historical Shows

See Figure 3

Figure 2 – Roma Shelf Stratigraphic Column and Historical Shows (ref. Figure 3)

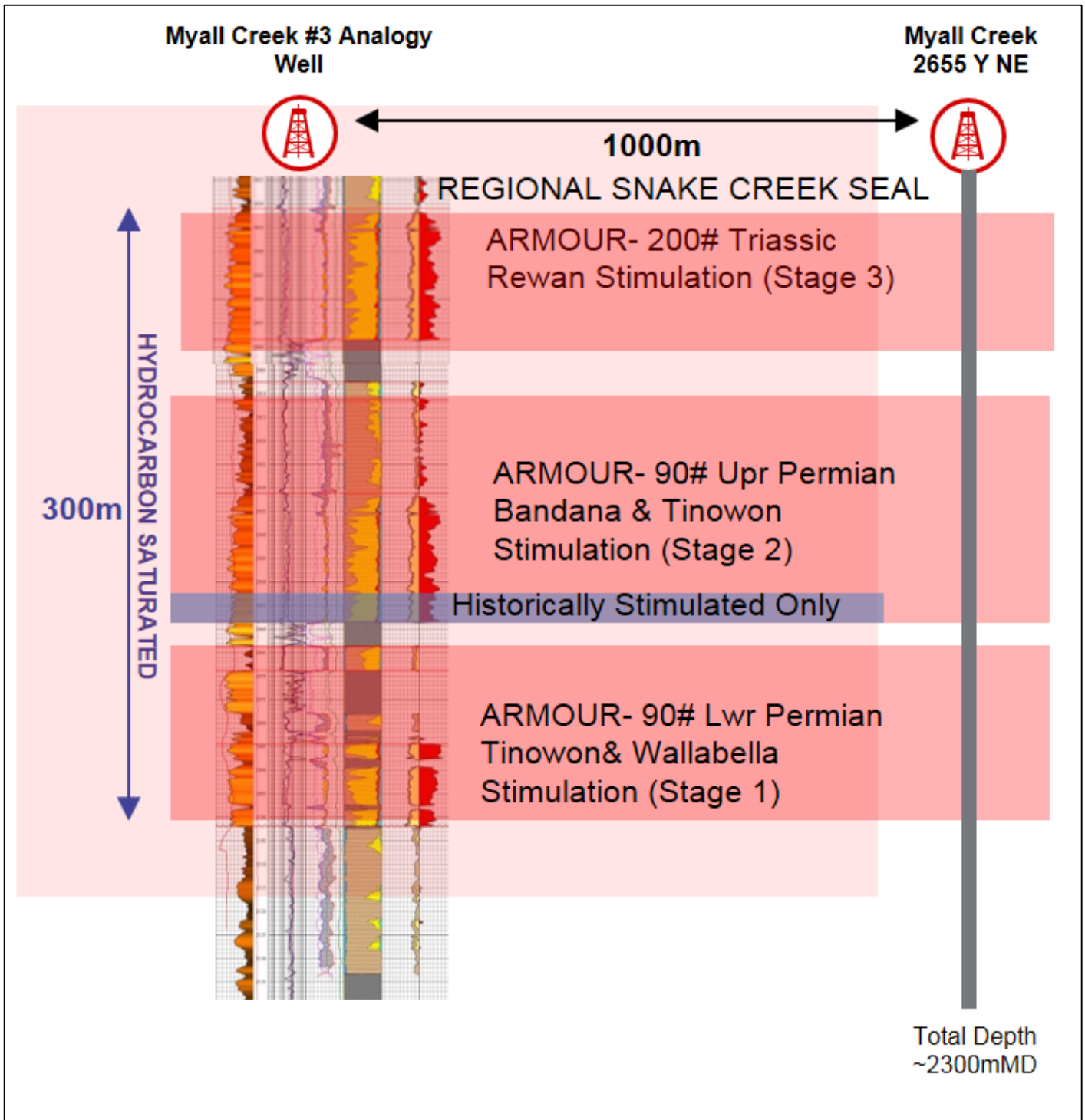


Figure 3 –Bowen-Surat Basin stratigraphy highlighting the Triassic & Permian section where Armour will be applying an industry standard multi-stage commingled hydraulic stimulation in the Myall Creek 4A well



Competent Persons Statement

Reported reserves and resources are in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines and 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 oil and gas exploration & production in the US and multiple international basins. Mr Titus meets the requirements of qualified petroleum reserve and resource evaluator as defined in the ASX Listing Rules and consents to the inclusion of this information in this release.

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.

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