

Armour Energy Limited

19 June 2012

Cow Lagoon 1 Well Completed

Highlights:

- **Cow Lagoon 1 has been cased, cemented and suspended at 1804m total depth**
- **Significant flares and gas shows at several levels from 295m to 1560m depth**

The Directors of Armour Energy Ltd (**ASX: AJQ**) are pleased to report that the drilling of the Cow Lagoon 1 well (Batten Trough, McArthur Basin NT EP176) has been completed at a total depth of 1804 metres. Approval has also been obtained from the Northern Territory Government to suspend the well. The well has now been cased and cemented. The current well head configuration will allow Armour Energy to perform future cased hole testing, lateral drilling and stimulation as required.

Cow Lagoon 1 was drilled to 1804m and discovered gas in the Lynott and Reward Formations with further gas shows in the Barney Creek and deeper formations on the Cow Lagoon West Anticline (Figure 1) during underbalanced, air-mist drilling operations. This proved the presence of a valid hydrocarbon trap at the Cow Lagoon 1 location where surface geological mapping had indicated four-way dip closure. Gas influxes and flares were observed and continued from these formations up to 15 days after they were drilled.

Table 1 below set out the summary of the gas shows and flares produced.

Drilling Depth (m)	Description of Show	Projected Formation at Time of Show
394	Downtime Gas 1.2%; 2m Flare Observed	Lynott Fm
499	Connection Gas 6.3%; No Flare Observed	Lynott Fm
546	Downtime Gas 2.1%, 3m and 5m Flare Observed	Lynott Fm
698	Connection Gas 1.1%; No Flare Observed	Lynott Fm
1049	Downtime Gas <1.0%; 2m Flare Observed	Reward Dolomite
1069	Downtime Gas <1.0%; <1m Flare Observed	Reward Dolomite
1081	Connection Gas <1.0%; 2 Quick Flares Observed	Reward Dolomite
1428	Downtime Gas 5.1%; No Flare Observed	Teena/Coxco Dolomite
1569	Downtime Gas 7.84%; Trace to 0.05% C ₂ , C ₃ and C _{4+n} – C ₄ ; No Flare Observed	Mitchell Yard Dolomite
1598	Downtime Gas 6.6%; No Flare Observed	Mitchell Yard Dolomite

Gas charged sediments were confirmed by flares, mudlog shows, chromatograph readings, and preliminary desorption readings from core and cutting samples from the Lynott, Reward and Barney Creek Formations. A full suite of logs was acquired and detailed cuttings collection was obtained for further mineralogy, maturity, and brittleness studies. Image logs indicated porosity responses in conjunction with natural fracturing within these formations. The presence of this thick gas charged, naturally fractured sequence indicates the potential for the application of lateral wells and stimulation techniques in these sequences across EP176.

The Barney Creek Formation, an unconventional shale gas and shale oil target, was encountered in Cow Lagoon 1 at a depth of 1245m which was deeper than the original depth prognosis. A prospective 65m shale section was penetrated within the Barney Creek Formation.

Further appraisal of the Lynott, Reward and Barney Creek Formations at greater depth can now be considered at down dip locations in synclinal areas of the Batten Trough where the formations may thicken and display further increases in gas charge and pressure. Additional targets have been identified 10-15km south west of Cow Lagoon.

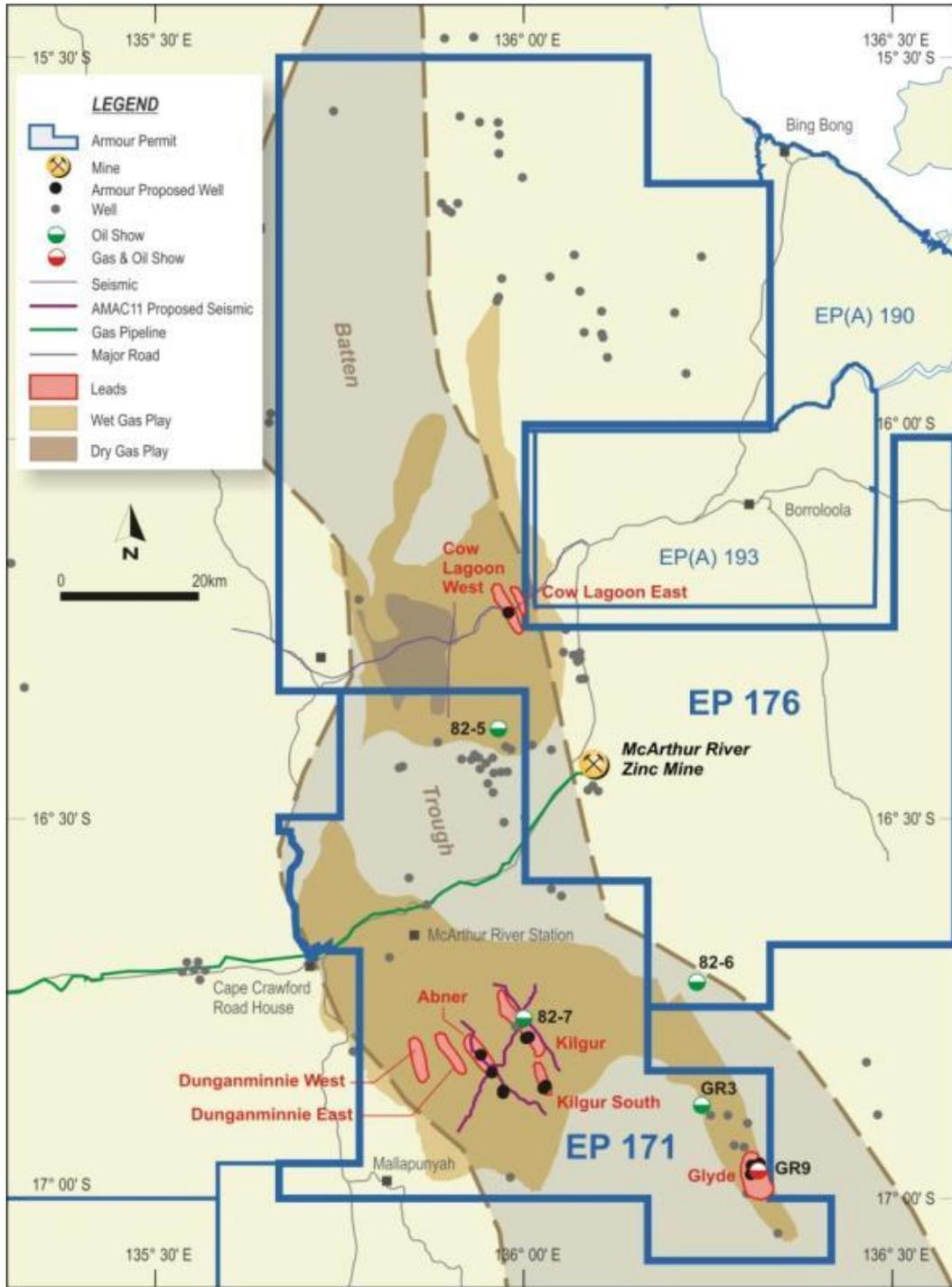
Armour Energy is currently using the Vertical Seismic Profile data acquired at Cow Lagoon 1 to reprocess and reinterpret the regional seismic line 02GA-BT1 that was originally surveyed in 2002 and extends across EP 176. This will assist in identifying further Barney Creek Formation targets.

During the course of drilling the Cow Lagoon 1 well, significant improvements in drilling rates were achieved. These improvements will be refined and applied to the Kilgour North 1 well which will be drilled next in the current campaign. The Kilgour North 1 well is expected to be spudded on Friday 22nd June.



On behalf of the board
Karl Schlobohm
Company Secretary

Figure 1: Cow Lagoon Location in EP 176





About Armour Energy

Armour Energy is focused on the discovery and development of world class gas and associated liquids resources in an extensive and recently recognised hydrocarbon province in northern Australia. This region has only recently had its shale potential identified by Armour Energy. The domestic and global demand for gas, combined with the new shale extractive technologies and experienced personnel, provides Armour with an extraordinary opportunity to define and ultimately develop a new liquids rich gas province.

Armour Energy's permit areas are characterised by low population densities, cooperative stakeholders and aspects of the natural environment suited to the exploration and development of a future gas and liquids province. Armour places considerable importance on close liaison with traditional owners and all stakeholders and this approach has led to speedy grant of its key tenements in the Northern Territory. The Company intends to continue to invest this effort.

Armour Energy is focusing on the exploration of the McArthur, South Nicholson and Georgina Basins in the Northern Territory and Queensland, and in the onshore Gippsland Basin in Victoria in joint venture with Lakes Oil, for gas and associated petroleum liquids.

The Board of the Company includes four past Directors of Arrow Energy, and the same expansive approach to exploration and development that drove Arrow's evolution is planned for Armour Energy. The CEO Mr Philip McNamara has been involved in the development of large coal projects, including most recently as managing Director of Waratah Coal, where he was instrumental in securing \$5.5 billion of financing for the proposed development of the Galilee Basin coal projects. The Company's technical team includes a range of industry experts and seasoned professionals who have been selected to support the Board and the CEO in our goal to build Armour Energy into a significant gas exploration and development company.

Further information regarding Armour Energy Limited, its projects, management team and a copy of its Prospectus are available on the Company's website at www.armourenergy.com.au

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