# Regulatory Story

#### Go to market news section







Empyrean Energy PLC - EME Dempsey Gas Well to Flow Test Multiple Zones Released 07:45 18-Sep-2017



RNS Number: 9963Q Empyrean Energy PLC 18 September 2017

## This announcement contains inside information

# Empyrean Energy PLC / Index: AIM / Epic: EME / Sector: Oil & Gas 18 September 2017

Empyrean Energy PLC ("Empyrean" or the "Company")

## **Dempsey Gas Well to Flow Test Multiple Zones**

- Wireline logs confirm numerous zones for production testing
- Wireline log data supports the presence of gas saturated sands consistent with previously reported significant gas shows
- 5 ½" liner run and cemented to protect zones for testing
- Drill rig being replaced by workover rig to carry out completion and testing
- Testing expected to commence in 2 to 3 weeks based on logistics of rig moves
- Tests to be conducted sequentially from lowest up (not in priority of interpreted significance ) and will cease once sufficient commercial flow is established for production
- Dempsey has successfully drilled the largest mapped structural closure in the northeastern Sacramento Basin

Empyrean Energy (EME: AIM), the oil and gas development company with interests in China, Indonesia and the United States, is pleased to announce that it has been informed by Sacgasco Limited (ASX: SGC) ("Sacgasco"), the operator of the Dempsey 1-15 well in the Sacramento Basin, onshore California, that the Dempsey 1-15 well has completed the drilling phase, and a 5 ½" liner has been run and cemented to protect all potential reservoirs beneath the existing 9 5/8" casing.

Since the last update two wireline logging runs have been completed. The wireline log data supports the presence of gas-saturated porous sands consistent with the zones of significant gas shows reported earlier.

These strata have been underexplored and under-evaluated in the Sacramento Basin. Therefore, in the absence of nearby analogue producing reservoirs, flow testing in the next stage of operations will determine whether the gas sands have a combination of porosity, permeability and access to volumes of reservoir rocks of sufficient quality to flow gas at commercial rates for an extended period.

The production potential of these zones of interest will become more apparent when the zones are flow tested through perforations in the liner.

Flow testing of the potential gas producing reservoirs will commence in 2 to 3 weeks when the current drilling rig has been demobilized and a more cost effective workover rig has been moved to the Dempsey well location. For practical reasons the flow testing process will be carried out in a sequential way from the lowest zone of gas upwards. At such time that a zone is capable of flowing pipeline quality gas at commercial rates, testing will be suspended and the well placed into production for earliest cash flow.

The previously reported gas filled sands at the existing field reservoir levels, that are also safely protected behind casing, will be the last sands to be perforated and tested.

A more complete understanding of the potential gas available for future production will likely require some months of flow testing and production, combined with integration of data from the Dempsey 1-15 well with the 3D seismic data.

Updates will be provided on meaningful results from the flow testing of the target sandstone reservoirs.

The Dempsey 1-15 well has successfully drilled the largest mapped structural closure in the northeastern part of the prolific Sacramento Gas Basin and is interpreted to have trapped gas in multiple potential reservoir zones.

Tom Kelly, Empyrean CEO, commented "With multiple interpreted potential production zones now safely behind cemented casing, we now embark on an exciting flow testing program. A completion rig is being used for the flow testing operation and rig changeover is underway. This is a positive achievement for the JV in what we all hope will be a well that provides early cash flow from the project from what is potentially high impact frontier exploration. We look forward to providing updates as testing progresses."

# **Dempsey Prospect and Dempsey 1-15 Well**

Dempsey is a large structure mapped with 3D seismic and interpreted by Sacgasco to have the potential to hold a prospective resource of over 1 Tcf of gas in up to seven stacked target reservoirs. Individual, unrisked Deterministic Prospective Resources for the primary targets range from 116 Bcf to 352 Bcf of recoverable gas. Should all the stacked reservoirs be full of gas, the cumulative unrisked recoverable Prospective Resources within the Dempsey prospect could exceed 1 Tcf.

The primary targets are interpreted in a series of Cretaceous sandstone reservoirs that exhibit structurally consistent amplitude anomalies similar to those that are observed on seismic data elsewhere in the basin where conventional sandstone reservoirs have trapped natural gas in mapped structural closures, for example the Tulainyo / James and Alvares wells.

Sacgasco intersected gas shows in a number of zones in the Dempsey 1-15 well and these will be assessed based on the information available, but quantitative results will need to await conventional logging and flow testing to be definitive.

The Dempsey 1-15 well was drilled in three discrete sections to depths of approximately 600m, 2,000m and 3,200m associated with decreasing planned casing sizes. The well has been designed conservatively to provide flexibility to respond to well bore conditions and progressive results.

Empyrean has also been informed that since the Dempsey 1-15 well has explored for a new gas pool, Sacgasco has requested that the regulator keep the records confidential for two years as allowed by Section 3234 of the Public Resources Code of California. The regulator has approved the "Confidential Status" for Dempsey 1-15 in order to protect longer-term shareholder value.

Aside from compelling technical merit, the Dempsey 1-15 well location sits next to existing gas metering and surface infrastructure that is owned by the joint venture. This allows for any gas discovery to be tested and connected into the local pipeline at relatively low cost and in an accelerated timeframe.

This announcement has been reviewed by Empyrean's Technical Director, Mr Frank Brophy BSc (Hons), who has over 40 years experience as a petroleum geologist.

## \*\*ENDS\*\*

For further information:

### **Empyrean Energy plc**

Tom Kelly Tel: +61 8 9380 9920

#### **Cenkos Securities plc**

 Neil McDonald
 Tel: +44 (0) 131 220 9771

 Beth McKiernan
 Tel: +44 (0) 131 220 9778

 Nick Tulloch
 Tel: +44 (0) 131 220 9772

# St Brides Partners Ltd

Lottie Brocklehurst Tel: +44 (0) 20 7236 1177
Olivia Vita Tel: +44 (0) 20 7236 1177

### **Notes to Editors**

# **About Empyrean Energy Plc (LON: EME)**

Empyrean is a London AIM listed oil and gas explorer with three potentially high impact new projects. Empyrean has a 1800km<sup>2</sup> offshore oil permit located in the Pearl River Mouth Basin,

China where it has completed a 3D seismic survey over two large oil prospects, Jade and Topaz. Processing and interpretation is underway and preliminary internal interpretation of the raw seismic data has confirmed the structural validity of the Jade and Topaz prospects and also identified a third significant target named Pearl, which is located north of Topaz. The permit is directly South East of the billion barrel+ Liuhua Oil Field operated by CNOOC and two recent discoveries to the permits West and South further enhance the merit of Jade and Topaz. Empyrean is operator and holds 100% of the exploration rights through to commercial discovery where CNOOC have a back-in right to 51%.

Empyrean also has a 10% interest in West Natuna Exploration Limited that holds 100% of the Duyung PSC in offshore Indonesia and is targeting the Mako Shallow Gas Discovery that has an independently verified 2C and 3C gas resource of between 430-650 Bcf recoverable gas. Successful testing operations were recently completed at the Mako South-1 Well with 10.9 million cubic feet of gas flow and better than expected reservoir quality and multi Darcy permeability. The operator is currently analysing data with a view to providing a development plan.

Empyrean also has a joint venture with ASX listed Sacgasco Limited on a suite of projects in the Sacramento Basin, onshore California, USA. The package includes two mature, multi-Tcf gas prospects, 'Dempsey' and 'Alvares', and an Area of Mutual Interest (the "Dempsey Trend AMI") that includes at least three already identified, large Dempsey-style follow up prospects. Dempsey is a large structure mapped with 3D seismic and interpreted by Sacgasco to have the potential to hold a prospective resource of over 1 Tcf of gas in up to seven stacked target reservoirs. The Company has recently completed drilling a 3,200 metre (~10,500 feet) combined appraisal and exploration well, Dempsey-1, to evaluate this prospect.

Aside from compelling technical merit, the Dempsey-1 well location sits next to existing gas metering and surface infrastructure that is owned by the joint venture. This will allow for any gas discovery to be tested and connected into the local pipeline at relatively low cost and in an accelerated timeframe. This early potential for short-term cash flow in the event of a commercial discovery would be significant for the joint venture and for the state of California where gas demand is high and approximately 90% of consumption is imported from other states. Gas produced in the Sacramento Basin currently prices at a 10-15% premium to Henry Hub Gas Prices.

Alvares is a large structure mapped with 2D seismic and interpreted by Sacgasco to hold prospective resources of over 2 Tcf estimated potential recoverable gas. A well drilled by American Hunter Exploration Limited in 1982 for deeper oil intersected 5,000ft of gas shows. No valid flow test was conducted due to equipment limitations and the deeper oil target failing. However minor gas flows to surface were recorded even with these limitations. The possibility of using the existing well bore to sidetrack and get a valid flow test, thus reducing costs will be examined.

The Dempsey Trend AMI is an Area of Mutual Interest extending to approximately 250,000 acres and containing the Dempsey prospect (described above) as well as at least three other, Dempsey-style prospects which have been identified on existing seismic.

www.empyreanenergy.com

### About Sacgasco Limited (ASX. SGC)

Sacgasco Limited (ASX: SGC) is an Australian-based energy company focused on conventional gas exploration in the Sacramento Basin, onshore California. SGC has an extensive portfolio of gas prospects at both exploration and appraisal stages, including multi-Tcf opportunities. The Company is targeting gas supply to the local Californian gas market and burgeoning LNG market in North America. SGC is of the view that the size of the prospects in California have the potential to supply both the domestic Californian gas market and export LNG markets.

www.sacgasco.com

This information is provided by RNS
The company news service from the London Stock Exchange

**END** 

### **UPDSFSSMAFWSELU**

CLOSE

# **Sponsored Financial Content**

dianomi

- Hold any of the Big Banks in your portfolio?
   This is a must read!
   Clime Asset Management
- Capturing Megatrends: Digitalization STOXX PULSE ONLINE
- Telstra right time to buy more? What telcos to buy now
   Fat Prophets
- How to Manage Your Own Super Fund and Benefit From a Pension ESUPERFUND

London Stock Exchange plc is not responsible for and does not check content on this Website. Website users are responsible for checking content. Any news item (including any prospectus) which is addressed solely to the persons and countries specified therein should not be relied upon other than by such persons and/or outside the specified countries. Terms and conditions, including restrictions on use and distribution apply.

©2014 London Stock Exchange plc. All rights reserved

Gas Well to Flow Test Multiple Zones -  $\ensuremath{\mathsf{RNS}}$