

**Helios Energy Ltd** 

Date: 30 April 2018

# **Quarterly Activities Report**

### **Quarter Ending 31 March 2018**

Helios Energy Ltd (ASX Code: HE8) (**Helios** or **Company**) is pleased to report its activities for the quarter ended 31 March 2018.

### Quinn Mesa 113 Well

During the quarter, the Company tested the primary target zones of the Quinn Mesa 113 well.

The Quinn Mesa 113 well encountered oil and gas shows while drilling in an interval of over 100 feet in the San Carlos Sandstone Formation. Samples analysis at the location had oil shows, subsequent samples analyses in the laboratory post drilling had oil shows and analysis of the electric logs were interpreted to indicate hydrocarbon pay.

The main zone of oil and gas shows in the San Carlos Sandstone Formation was firstly perforated and then acidized and subsequently swabbed. Swabbing recovered low temperature and low salinity water which strongly suggested that the water had come from a different formation at shallower depth, highly likely via channels in the cement behind the casing. In order to solve this problem, the Company completed a 'squeeze job' using a water blocking polymer sealer in an attempt to isolate the primary target perforated zones in the San Carlos Sandstone Formation.

Post completion of the 'squeeze job' swabbing re-commenced and once again swabbing recovered low temperature and low salinity water. This strongly suggested that the water was continuing to come from a different formation at shallower depth. Therefore, the 'squeeze job' was not able to prevent the inflow of this water which prevented a valid swab test of the primary target zones within the San Carlos Sandstone interval of the Quinn Mesa 113 well from which high porosity oil and gas bearing samples and cuttings were obtained during drilling and whose oil reservoir properties were subsequently corroborated by a full suite of well logs.

Testing of the Quinn Mesa 113 well has been suspended until the completion of testing of the Quinn Creek 141 well and the drilling of the third well in the Presidio Oil Project. Helios' Board and senior management continue to believe the San Carlos Sandstone Formation has significant potential. The Company is now reviewing future well design, future mud programmes and future cementing programmes for the San Carlos Sandstone Formation.

**ASX Code: HE8** 

#### **Directors**

Hui Ye Non-Executive Chairman

Richard He Managing Director

Robert Bearden
Non-Executive Director

Nicholas Ong Non-Executive Director

Gary Steinepreis Non-Executive Director and Company Secretary

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Testing of the Quinn Mesa 113 well also included a test in the Austin Chalk equivalent formation. The Austin Chalk equivalent formation was a secondary target interval in the Quinn Mesa 113 well. A thin section of 10 feet of fractured shales and carbonates located in the Austin Chalk equivalent formation between 3,900 and 3,910 feet was perforated and tested by Helios. Testing resulted in oil and gas flowing to surface. This oil was analysed and is a very similar type of oil to the oil that was recovered from the mud pits in the Quinn Creek 141 well. The oil in the Austin Chalk equivalent formation in the Quinn Mesa 113 well is 33 degree API, an Eagle Ford type oil, mature and similar to the oil found in the Giddings Oil Field, an Austin Chalk field located in the onshore Gulf Coast. This positive test in the Austin Chalk equivalent formation in the Quinn Mesa 113 well resulted in the Company deciding to proceed with a more comprehensive test of the Austin Chalk equivalent formation in the Quinn Creek 141 well.

#### Quinn Mesa 141 Well

Subsequent to the end of the quarter, the Company commenced testing of the Quinn Creek 141 well.

Quinn Creek 141 was spud by Helios as Operator on 23 April 2017 and was designed to be drilled to a total depth (**TD**) of 6,000 feet. The well was first drilled to 5,000 feet and encountered live oil and gas shows from 3,000 feet to 5,000 feet through a thickened Austin Chalk age sequence of fractured shales and carbonates. Casing was then set to protect these oil and gas shows and the well was then deepened to 6,000 feet and by doing so penetrated the upper Eagle Ford Shale as well as the Lower Eagle Ford Boguillas organic rich limestone before entering the Buda Carbonate.

From the live oil shows between 3,000 feet and 5,000 feet oil was recovered from the mud pits and subsequent oil analysis indicated that the oil is a very good quality, mature, Eagle Ford type, 33 degrees API oil.

Multiple zones worthy of testing have been identified in the well from 2,300 feet to 6,000 feet. These comprise the Buda Carbonate, lower Eagle Ford (Boquillas Limestone), upper Eagle Ford Shale, as well several intervals in the Austin Chalk equivalent section and the San Carlos Sandstone.

Testing is on-going and is likely to take a further 3 weeks to complete.

### Presidio Oil Project – Extension of Time to Drill Third Well

Helios must drill 3 wells to earn a 70%WI in the initial 6,400 acres (4,480 net acres) which comprise the Presidio Oil Project. Helios to date has drilled 2 of those 3 wells with those 2 wells being the Quinn Creek 141 well and the Quinn Mesa 113 well. Helios was required to drill the third well by 30 April 2018 but has been granted an extension until 30 June 2018 to drill the third well.

### **Leasing Programme**

The Company has been actively leasing in the Presidio Oil Project area. Excluding the initial 6,400 acres (4,480 net acres) of the Presidio Oil Project in which Helios will earn a 70%WI upon completing the drilling of 3 wells by 30 June 2018, the Company has been actively leasing additional acres in close proximity to



these initial 6,400 acres and now has a 70%WI in a further 26,096 acres. In addition, Helios has a 70%WI in a further 34,280 acres which have been placed under call option to lease. In total therefore, Helios has under contract a 70%WI in a total of 66,776 acres (46,743 net acres).

### **Expanded Seismic Programme and Geological Surface Work**

Shooting of an additional 13 miles of 2D seismic programme was completed during the quarter. Processing of these new seismic data sets has also now been completed. After interpretation of this new 2D seismic the location of the third well will be determined and the drilling of the third well will commence.

Additional geological surface fieldwork was also completed during the quarter. This geological surface fieldwork has confirmed many aspects of the current seismic interpretation and confirmed that an extensive area of Eagle Ford and Austin Chalk equivalent formations are present throughout Helios' leases.

### **Share Placement**

On 27 December 2017, the Company advised that it had conducted a capital raising at a price of 6.4 cents per share (**Placement**). The Placement was made to sophisticated and professional investors under the provisions of section 708 of the Corporations Act 2001 (Cth).

On 5 January 2018, the Company completed Tranche 1 of the Placement by the issue of 36,018,672 shares at 6.4 cents per share to raise \$2,305,195 and on 27 February 2018 the placement to Mr Zhiqiang Shan of a further \$1,000,000 being 15,625,000 shares at 6.4 cents was completed.

On 5 April 2018, following shareholder approval on 29 March 2018, the Company completed the issue and allotment to Notable Pioneer Limited (a company associated with Helios' Chairman, Mr Ye) of 79,263,712 shares at 6.4 cents per share to raise \$5,072,877.

### Non-Executive Director – Robert Bearden

On 14 February 2018, Mr Robert Bearden was appointed as a non-executive director of the Company.

Mr Bearden has over 25 years of senior management experience in oil and gas exploration, development and production throughout the Gulf of Mexico, Kazakhstan, Indonesia, China, Iraq and West Africa.

He was previously the President and CEO of the ASX listed public company Sino Gas & Energy Holdings (ASX Code: SEH) which under his leadership reached a market capitalization of \$375m.

Prior to that role, he was the Operations Director for Addax (a Sinopec subsidiary) and the Production Excellence Manager for the Americas for Hess Corporation. He began his oil and gas career with Chevron where he worked for 27 years, and held positions including Managing Director Mid-Africa, Sr. Vice President EuroAsia, General Manager Tengizchevroil, and Operations Manager for the Gulf of Mexico.





Mr Bearden has a Bachelor of Engineering degree from Texas A&M and a Master of Petroleum Engineering degree from Tulane University. He also holds a MBA from Purdue University and an International Masters in Management from ESCAP-EAP, Paris. Mr Bearden lives in Texas, USA, and he is a petroleum engineer by profession.

For further information, please contact:

## Richard He Managing Director

### Competent Person's Statement

This information in this ASX announcement is based on information compiled or reviewed by Stephen Hermeston. Mr. Hermeston is a qualified petroleum geologist with over 35 years of experience in North America, South America, Africa, Middle East, Far East, Europe and other international areas involving technical, operational and executive aspects of petroleum exploration and production, in both onshore and offshore environments. He has extensive experience in petroleum exploration, appraisal and reserve and resource estimation and well as in identifying and evaluating new oil and gas ventures. Mr. Hermeston has a Bachelors degree in Geology and is a member of the American Association of Petroleum Geologists.