



Commencement of Frack of Presidio 141#2

Frack of 1,400 Feet Horizontal Portion of Well Commences

Helios Energy Ltd (ASX Codes: HE8, HE8OA) (**Helios** or **Company**) is pleased to report the commencement of the frack of the 1,400 feet horizontal portion of the Presidio 141#2 well.

7 Stages Perf and Plug Hydraulic Frack

The 1,400 feet horizontal portion of the Presidio 141#2 well is being fracked across 7 stages. Each stage is approximately 200 feet in length. The frack will inject approximately 2,000 pounds of proppant per lateral foot. Flowback operations are expected to commence on Tuesday 13 August 2019.

Presidio 141#2 Well

The 1,400 feet horizontal portion of the Presidio 141#2 well was successfully drilled to the west towards the Quinn Creek 141 discovery well entirely within the zone of the best oil shows and highest natural fracturing that occurs within the 359 feet lower bench of the Ojinaga Formation present in the Presidio 141#2 well.

The 1,400 feet horizontal was drilled into rock which has uniform geological characteristics. The entire 1,400 feet is predominantly black shale with micro laminations of siltstone and fine carbonates and is highly naturally fractured. Continuous, good to excellent oil shows were observed throughout the entire 1,400 feet of horizontal drilling. Oil was present in fractures and micro-fractures and oil shows with fast fluorescence cut and bright bluish white residual ring were recorded throughout the entire 1,400 feet of horizontal drilling.

Vertical Portion of the Presidio 141#2 Well

The Presidio 141#2 well is located 2,300 feet to the east of the existing Quinn Creek 141 discovery well. The total measured depth of the well is 5,846 feet and this includes the 1,400 feet horizontal portion drilled into the primary target zone within the lower bench of the Ojinaga Formation. The well is located structurally updip of the existing Quinn Creek 141 discovery well.

ASX Code: HE8

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Ojinaga Formation

Wireline logs and drilling cuttings indicate that the Ojinaga Formation is approximately 1,941 feet thick. Wireline logs and drilling cuttings indicate that the lower bench of the Ojinaga Formation is 359 feet thick and is highly naturally fractured. Good to excellent, continuous oil shows were observed throughout the entire drilling of this 359 feet thick vertical interval. Excellent and continuous oil shows along with a high density of natural fractures were observed whilst drilling throughout a 220 feet subset of this 359 feet thick lower bench of the Ojinaga Formation. It is within this 220 feet subset that the 1,400 feet horizontal portion of the well was drilled.

Oil Discovery in the Ojinaga Shale Formation

Helios successfully completed a one stage frack in the vertical Quinn Creek 141 well to test oil shows and log indications between 4,744 and 4,880 feet in the lower Ojinaga Formation. The Company has previously reported to ASX that the Quinn Creek 141 well flowed 260 barrels of oil and 1,345 barrels of completion fluid in 168 hours (7 days).

The oil produced is good quality, mature, 39 degrees API gravity light oil similar in composition to Eagle Ford oils.

Gas was also produced at 456 mcf per day on a 34/64ths of one-inch choke. As the well cleaned up and the percentage of completion fluid recovery rose, a steadily increasing oil cut was observed. Total load recovery (until the lower interval was shut in) was approximately 35% (3,509 barrels of completion fluid out of 10,187 barrels of completion fluid injected).

Easily Mapped with 2D & 3D Seismic

The lower bench of the Ojinaga Formation shows well on both 2D & 3D seismic and is easily mapped.

Porosity and Permeability in Lower Bench of the Ojinaga Shale Formation

Based on previous petrophysical analysis, the lower bench of the Ojinaga Shale Formation has porosity predominately ranging between 4% to 12.5% and permeability up to 0.75 μ d (micro darcys). The porosity of sidewall cores taken from the Presidio 141#2 well is 4% to 10% therefore confirming the previous petrophysical analysis. The permeability of the sidewall cores taken from the Presidio 141#2 well is significantly higher than the previous petrophysical analysis, up to 0.06 md (60 μ d). Analysis of the Quinn Creek 141 well and the Presidio 141#2 well as well as surrounding historical wells clearly shows that these porosity and permeability characteristics in Presidio County in the Ojinaga Shale Formation exceed the characteristics present in the Eagle Ford Shale in the Karnes Trough which is the premier sweet spot of the Eagle Ford Shale play.

Presidio Oil Project – Infrastructure

Access to the 3 wells that constitute the Presidio Oil Project (Presidio 141#2, Quinn Creek 141 and Quinn Mesa 113) is provided by a 25 mile unsealed, formed road constructed by Helios that branches off the sealed US-90 highway which carries heavy truck and passenger vehicle traffic. The 3 oil wells have access to ample



supplies of fresh water provided by local water wells drilled into shallow water aquifers. The El Paso Oil Refinery located in El Paso, Texas has a processing capacity of 135,000 barrels of oil per day and is located 170 miles from the Presidio Oil Project. Crude oil is sold there by truck delivery. The Presidio Oil Project is located 250 miles (or 5 hours by truck) from Midland, Texas which is the epicenter of the Permian Basin oil industry. All rigs, supplies and services required for the Presidio Oil Project are sourced from Midland, Texas. Oil production in the Permian Basin is approximately 4,000,000 bopd.

For further information, please contact:

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Competent Person's Statement

The information in this ASX announcement is based on information compiled or reviewed by Eldar Hasanov. Mr Hasanov is a qualified petroleum geologist with over 21 years of experience in the USA, Russia, Azerbaijan, Kazakhstan, the Middle East, Turkey, Indonesia 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, as well as in identifying and evaluating new oil and gas ventures. Mr Hasanov has a Masters degree in Petroleum Geology. He is a member of the American Association of Petroleum Geologists.

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