



Helios Energy Ltd
23 May 2024

Presidio Oil & Gas Project

Highlights:

- Helios has undertaken a workover of the Presidio 52#1 well. Presidio 52#1 has restarted post workover with an initial instantaneous rate of 839 mcf/d of wet gas
- Helios has recently entered into an agreement with Macaw Energies LLC (Macaw). Macaw has developed a proprietary modular natural gas liquefaction facility (Macaw LNG Module) with the capability to process natural gas that otherwise would be flared or wasted.
- Macaw's initial testing of its Macaw LNG Module indicates that they can take production from 300 mcf/d to 1,200 mcf/d of wet gas.
- Helios is now moving forward towards further development of its discoveries in Presidio County, Texas, USA.

Helios Energy Ltd (ASX:HE8) (**Helios** or **Company**), an oil and gas explorer and producer in Presidio County, Texas, USA, is pleased to provide an update on its activities at its Presidio Oil & Gas Project.

The Presidio Oil & Gas Project is a 17,850 gross acre project with four wells drilled by Helios – namely, Presidio 141#2, Quinn Creek 141#1, Quinn Mesa 113, and Presidio 52#1.

Helios' primary focus at the Presidio Oil & Gas Project is on phased-in gas commercialization along with oil production sales. The Presidio Oil & Gas Project is comprised of a large wet gas resource and from the gas isotope analysis, it shows the wetness ratios are between 24-30% which corresponds to oil associated gas in the genetic gas classification.

Helios recently announced that it had entered into an agreement with Macaw Energies LLC (**Macaw**), which would see Macaw assist in the increased production of wet natural gas from the project – by eliminating the flaring and wasting of natural gas at present – and for Macaw to off-take otherwise to-be-flared natural gas from Presidio. This is being achieved through Macaw's proprietary modular natural gas liquefaction facility (**Macaw LNG Module**).

Helios is now moving forward towards further development of its discoveries in Presidio County, Texas, USA.

ASX Code: HE8

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Background to the Presidio 52#1 Well

The Presidio 52#1 well was successfully drilled to a total depth (**TD**) of 8,806 feet. During drilling, the Presidio 52#1 well encountered the lower bench of the Ojinaga Formation (primary target) and the Eagle Ford Shale Formation (secondary target) as well as two older (deeper) Cretaceous units, being the Buda and Georgetown Formations (both secondary targets).

The lower bench of the Ojinaga Formation was encountered at the depth of 6,632 feet and is 793 feet thick. Helios has successfully tested and produced oil from all 4 wells it has drilled which have penetrated the Ojinaga Formation.

The oil analysis shows that the oil in the Ojinaga Formation is sourced from the Eagle Ford Shale Formation. The Eagle Ford Shale was encountered at a depth of 7,425 feet and is 836 feet thick with the deepest 235 feet also referred to as the Boquillas Formation (which is equivalent to the lower Eagle Ford Formation in Karnes County, Texas, USA).

Very good to excellent oil and gas shows in the Presidio 52#1 Well

Very good to excellent oil and gas shows were observed throughout the drilling of the entire lower bench of the Ojinaga Formation and throughout the drilling of the entire Eagle Ford Formation (which includes the 235 feet of the Boquillas Formation).

Gas measurements were consistently high throughout the drilling through the entire lower bench of the Ojinaga Formation and throughout the drilling of the entire Eagle Ford Formation. From the gas isotope analysis, it shows the wetness ratios are between 24-30% which corresponds to oil associated gas in the genetic gas classification.

After perforating and fracture stimulating the vertical Presidio 52#1 well, it was subsequently put on production at an initial rate of 81 bopd and 700 mcf/d.

Workover of the Presidio 52#1 well

Helios has undertaken a workover of the Presidio 52#1 well with the aim of increasing the production performance of the well.

The recent workover was successfully completed, clearing any blockages in the lower section of the well between 7,000 to 8,100 feet. The workover was completed rapidly, without incident, and materially under budget.

The Presidio 52#1 well has restarted post workover with an initial instantaneous rate of 839 mcpd (839,000 cubic feet per day) of wet gas. Post workover the well is unloading water at a significantly increased rate. The Company is of the view that once this water flow subsides, oil and gas production should materially improve towards the flow rates earlier achieved.

Significantly, third party analysis performed on the current flow rates calculate a flowing bottom hole pressure (**FBHP**) of 1,181 pounds per square inch (**PSI**) which is an increase of almost 300% from the FBHP of 404 PSI prior to the workover.

With time, the stabilized gas rate should support the Macaw LNG Module.



Macaw LNG Module

Macaw is a 100% owned subsidiary of Norwegian multinational Golar LNG (Nasdaq: GLNG) which has a market cap of circa US\$2.8 billion. Macaw was created by Golar LNG to develop LNG solutions that could avoid natural gas flaring in oil and gas onshore production fields. Macaw has developed a proprietary modular natural gas liquefaction facility (**Macaw LNG Module**) with the capability to process natural gas that otherwise would be flared or wasted.

The Macaw LNG venture is significant to Helios as it looks to move towards the development of a pilot at its Presidio Oil & Gas Project. The Texas Railroad Commission has issued directives in Texas to all oil and gas operators to limit the flaring or wasting of gas. However, in the absence of sufficient scale to warrant the development of constructing a connecting gas pipeline, the Company needs another way to capture and monetise the wet gas being extracted. With Macaw's LNG Module in place, the Company can not only monetise this gas production but it will also limit gas wastage or flaring and further improve its liquids production rate. The gas produced at the Presidio Oil & Gas Project is rich in condensates and natural gas liquids (**NGL's**). Macaw's LNG Module strips these from the gas and these are sold separately as an addition to the oil production.

Macaw has finalised its testing of the Macaw LNG Module at their fabrication yard in Houston, Texas and will soon test it at a nearby well prior to mobilising to the Presidio 52#1 location. Macaw's testing indicates that the first Macaw LNG Module can take gas production from 300 mcf/d to 1,200 mcf/d. Helios and Macaw are targeting a deployment date at the Presidio Oil & Gas Project on or before 30 June 2024.

Helios and Macaw each hold the view that the utilization of Macaw's LNG Module at Helios' Presidio Oil and Gas Project will enable the elimination of flaring and facilitate increased oil production by Helios from the Presidio Oil and Gas Project.

Sale Agreement for Natural Gas as well as Natural Gas Liquids (NGL)

Helios and Macaw have executed a gas sales agreement and agreed to deploy the first Macaw LNG Module to off-take otherwise to-be-flared natural gas from Helios.

Under the Agreement (which has a term of 6 months), Macaw shall own, install, operate and maintain the Macaw LNG Module and be the buyer of the unprocessed natural gas delivered by Helios to the Macaw LNG Module. Macaw will own all LNG production generated from the Macaw LNG Module.

In addition, Macaw will own all of the natural gas liquids (**NGL**) separated by the Macaw LNG Module, sell the NGL on an arm's length basis to third party buyers and then split the profits with Helios.



2 Photos Above: Workover Activities at the Presidio 52#1 Well

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This ASX announcement has been authorized for release by the Board of Helios.



Competent Person's Statement

The information in this ASX announcement is based on information compiled or reviewed by Mr Neville Henry. Mr Henry is a qualified petroleum geologist with over 49 years of Australian, USA and other international technical, operational and executive petroleum experience in both onshore and offshore environments. He has extensive experience of petroleum exploration, appraisal, strategy development and reserve/resource estimation, as well as new oil and gas ventures identification and evaluation. Mr Henry has a BA (Honours) in geology from Macquarie University.

About Helios Energy Ltd (ASX:HE8)

Helios is primarily an onshore oil and gas exploration company with its flagship project, the Presidio Oil and Gas Project in Presidio County, Texas USA.

About the Presidio Oil & Gas Project

The Presidio Oil & Gas Project was generated in a remote area of Texas (Presidio County) by a team of geoscientists that were closely involved in the identification and development of the early Eagle Ford shale resource from 2005 to 2014.

Helios have since drilled four wells and have identified a large new oil and gas resource. The oil and gas discovery interval is some 2,000 feet thick and covers the Ojinaga Formation (Austin Chalk Equivalent), the Eagle Ford and the Boquillas (Lower organic rich Eagle Ford).

Helios has a 70% Working Interest (**WI**) over a total 17,850 gross acres (12,495 net acres) and a 70% WI in the four wells drilled by Helios in the Presidio Oil and Gas project.

At present, all 4 wells are producing oil and gas. The Presidio Oil and Gas Project production has a high Gas to Oil ratio. The Company has recently signed an agreement with Macaw Energies LLC for the implementation of Macaw's proprietary technology which will avoid the flaring or wastage of the gas and which will improve oil production rates and revenues.

The Presidio Oil and Gas 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 & Gas Project are sourced from Permian Region. Oil production in the Permian Region in May 2024 was over 6.169 million bopd.