

#### **Helios Energy Ltd**

31 October 2024

## **Quarterly Activities Report**

#### **Quarter Ending 30 September 2024**

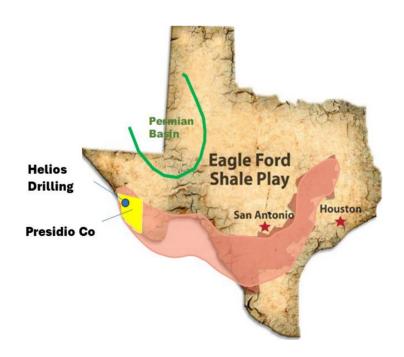
This is the quarterly report of Helios Energy Ltd (ASX Code: HE8) (**Helios** or **Company**) for its activities for the 3 month period ending on 30 September 2024.

#### Helios - Presidio Oil & Gas Project

The Company is an onshore oil and gas exploration company whose principal activity is the Presidio Oil and Gas Project located in Presidio County, Texas, USA.

#### 4 Wells Drilled into the Presidio Oil & Gas Project by Helios

Helios has a 70%WI in the Presidio Oil & Gas Project located in Presidio County, Texas, USA. This 70%WI is comprised of a 70%WI in a total of 8,390 gross acres (5,873 net acres) and a 70%WI in the 4 wells drilled by Helios in the Presidio Oil & Gas Project, namely, Presidio 52#1, Presidio 141#2, Quinn Creek 141#1 and Quinn Mesa 113.



Map above shows the location of Presidio County in Texas, USA, the general trend of the Eagle Ford Shale Formation in Texas and the location of Helios' drilling in the Presidio Oil & Gas Project.

**ASX Code: HE8** 

#### **Directors**

Mark Lochtenberg Non-Executive Director

John Kenny Non-Executive Director

Henko Vos Non-Executive Director and Company Secretary

#### **Contact Details**

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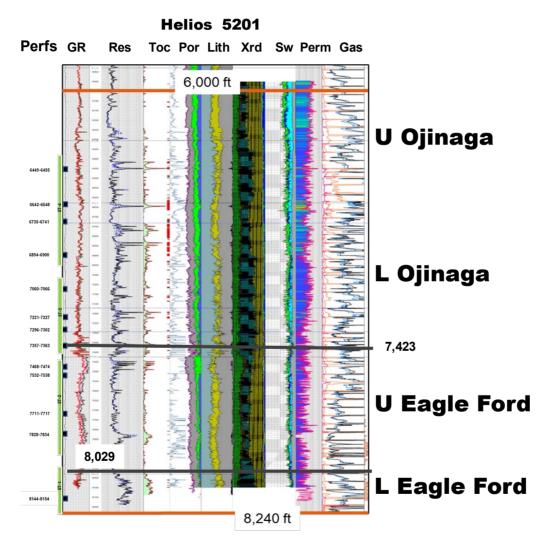
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#### Proven Oil & Gas Column which is More Than 2,000 Feet Thick

The drilling of 4 wells into the Presidio Oil and Gas Project by Helios has proven an oil and gas column of more than 2,000 feet across 5 unconventional benches, namely, the Upper Ojinaga Formation (which is age equivalent to the Austin Chalk); the Middle Ojinaga Formation; the Lower Ojinaga Formation; the Upper Eagle Ford Shale and the Lower Eagle Ford Shale.



Above is a log of the Presidio 52#1 well. The oil and gas column in the Presidio 52#1 well from the commencement of the Ojinaga Formation (which is the Austin Chalk age equivalent formation overlying the Eagle Ford Shale) to the bottom (deepest) part of the Eagle Ford Shale Formation is 2,240 feet in thickness.



#### Very Good Porosity in the Lower Bench of the Ojinaga Shale Formation

Petrophysical analysis shows that the lower bench of the Ojinaga Shale Formation has very good porosity, predominately ranging between 4% and 12.5%. Sidewall cores extracted show porosity ranging from 4% to 10%. The average porosity is 7.6%.

#### Excellent Permeability in the Lower Bench of the Ojinaga Shale Formation

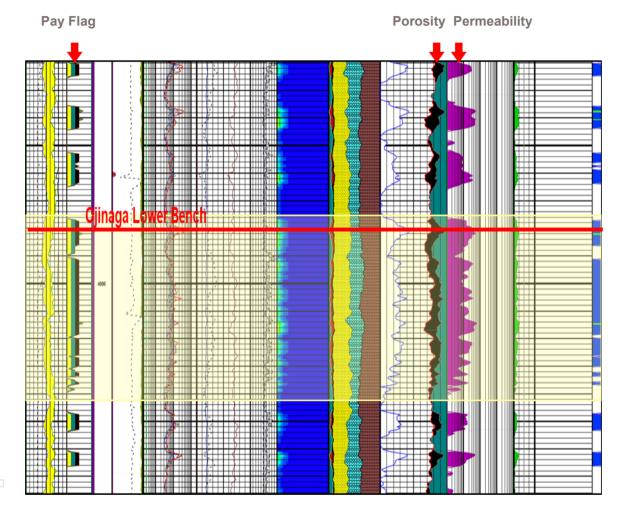
Petrophysical analysis shows excellent permeability up to  $0.75 \, \mu d$  (micro darcys) and sidewall cores showing permeability up to up to  $0.06 \, md$  (millidarcys) which is  $60 \, \mu d$  (microdarcys).



Photo showing the locations of 3 wells drilled by Helios in the Presidio Oil and Gas Project, namely, the discovery well Quinn Creek 141#1, Presidio 141#2 and Quinn Mesa 113.



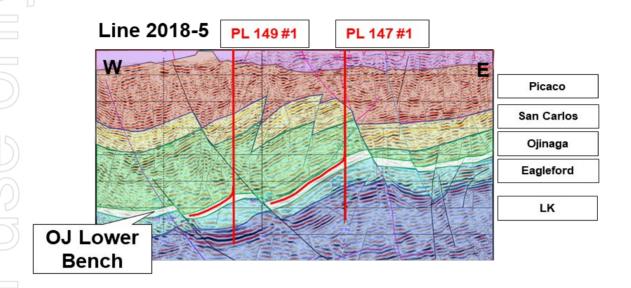
XRD results of sidewall cores show that the lower bench of the Ojinaga Formation has a high percentage of non-clay content. This increases rock brittleness and makes the rock more easily frackable.

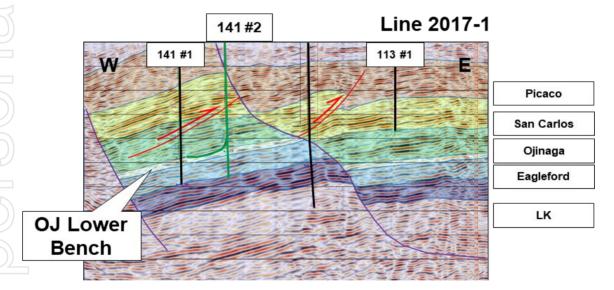


Seismic - 2D and 3D

The Ojinaga Formation (Upper, Middle and Lower) and the Eagle Ford Shale Formation (Upper and Lower) show up clearly on both 2D and 3D seismic and are easily mapped.

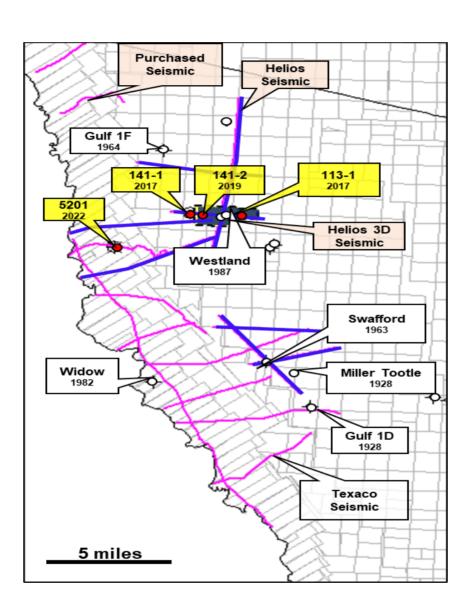






Helios has shot 42 miles of 2D seismic itself (see purple lines below) and in addition licensed a further 70 miles of 2D seismic (see pink lines below) from Texaco (which is now part of Chevron). In addition, Helios has shot 2 square miles of 3D seismic over the locations of 3 wells: Presidio 141#2, Quinn Creek 141#1 and Quinn Mesa 113.





Shown in purple are the 42 miles of 2D seismic shot be Helios itself. The pink lines represent the 70 miles of 2D seismic licensed from Texaco (now part of Chevron).

#### Total Play Area - Greater Than 100,000 Acres

Both the Ojinaga Formation and the Eagle Ford Shale Formation blanket the Presidio Oil & Gas Project. The total play area of the Ojinaga Formation and the Eagle Ford Shale Formation is greater than 100,000 acres in the vicinity of the Presidio Oil & Gas Project.





Above is a photograph of the Presidio 52#1 well

#### Oil Type, Quality and Geochemistry

The geochemistry and shale analysis indicate that the Presidio Oil & Gas Project is currently in the volatile oil generation stage with Vitrinite Reflectance (Ro) of 1.0 - 1.2.

The oil produced has similar biomarkers to those from the Giddings Field in South Texas.

Geochemical analysis of the oil being produced from the Presidio Oil & Gas Project show that the oil is high quality, mature, 39 degrees API gravity light crude oil from the Eagle Ford Shale.

#### **Gravity and Magnetic Data**

Helios has acquired gravity and magnetic data over the entire Presidio Oil and Gas Project. Interpretation of that data was then compared with the entire seismic programme, along with data from the 4 new wells and the existing old well data. The data sets, when compared, evidence a high degree of 'matching' or 'fit'.

The presence therefore of the Ojinaga Formation and the Eagle Ford Shale Formation across the entire play area of greater than 100,000 acres can be easily mapped.



Stratigraphy of the Presid	dio Oil & Gas Project located in Presidio	o County, Texas, USA
	Gulf Coast	Presidio Oil Project Subsurface
Series	Division or Group	
75		San Carlos
		(Olmos)
Gulf	Austin	Austin Chalk age equivalent formation (called the Ojinaga)
		Upper Eagle Ford Shale
ō	Eagle Ford	Boquillas
		Buda
		Eagle Mt SS
0	Washita	George Town
ns sn		Kiamichi
Comanche	Fredericksburg	Edwards
		Glen Rose
	Trinity	Hosston/Travis Peak

#### Commercialization of the Presidio Oil & Gas Project

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

#### Farmout of the Presidio Oil & Gas Project

Commercialization options being assessed by Helios for the Presidio Oil and Gas Project also include bringing in a farmin joint venture partner to participate in the Presidio Oil and Gas Project. During the quarter, Helios continued its campaign to procure a joint venture farmin partner for the Presidio Oil & Gas Project.



#### Presidio Oil & Gas Project - Infrastructure

Access to the 4 wells that constitute the Presidio Oil & Gas Project (Presidio 52#1, Presidio 141#2, Quinn Creek 141#1 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 4 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 & Gas Project. Crude oil is sold there by truck delivery.

The Presidio Oil & 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 August 2024 was approximately 6,100,000 bopd.

#### **Production Facilities Installed**

Permanent production facilities have been installed at the well site location of the Presidio 141#2 well consisting of a 3-phase separator, two 500 barrel oil tanks, two 500 barrel water tanks, and a flare stack. The Quinn Creek 141#1 well has also been piped into and connected to flow to the shared field production facilities located at the Presidio 141#2 location.

#### Background to the Presidio 52#1 Well

The Presidio 52#1 well has been 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.



## Leases Acquired or Disposed of During the Quarter

Helios has a 70%WI in a total of 8,390 gross acres (5,873 net acres). A total of 280 gross acres of leases were allowed to expire during the last quarter. All 8,390 gross acres, the subject of the Presidio Oil and Gas Project, are located in the south-west portion of Presidio County, Texas and are the subject of oil and gas lease agreements entered into with private oil and gas mineral rights owners.

#### Presidio 52#1 Well

Wet gas production continued through the quarter.

#### Quinn Creek 141#1 Well

Quinn Creek 141#1 is now shut in with production tubing run in the well. Various artificial lift applications are being investigated to optimize sustainable production.

#### **Presidio 141#2 Testing During the Quarter**

Presidio 141#2 is currently shut in as various artificial lift applications are being investigated to optimize sustainable production.

#### Corporate

On 8 August 2024, Mr Henko Vos was appointed as a Non-Executive Director of Helios. Helios' cash at bank at the end of the quarter was \$247,000.

## Related Party Payments - Item 6 of Appendix 5B

Payments to related parties listed in Item 6 of the Appendix 5B are to Executive and Non-Executive Directors for personal exertion salary and directors fees.

For more information, contact Helios at:

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





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.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Helios Energy Ltd

ABN Quarter ended ("current quarter")

61 143 932 110 30 September 2024

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	30	30
1.2	Payments for		
	(a) exploration & evaluation	(38)	(38)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs		
	(e) administration and corporate costs	(104)	(104)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(6)	(6)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(118)	(118)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(31)	(31)
	(e) investments	-	-
	(f) other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
81	Net cash from / (used in) investing activities	(31)	(31)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	(29)	(29)
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Lease payments	(27)	(27)
3.10	Net cash from / (used in) financing activities	(56)	(56)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	464	464
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(118)	(118)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(31)	(31)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(56)	(56)

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(12)	(12)
4.6	Cash and cash equivalents at end of period	247	247

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	247	464
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	247	464

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	-
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	Financing facilities  Note: the term "facility" includes all forms of financing arrangements available to the entity.  Add notes as necessary for an understanding of the	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
	sources of finance available to the entity.	ΨΑ 000	
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	500	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at qu	arter end	500
<b>7</b> 0			

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after guarter end, include a note providing details of those facilities as well.

Gleneagle Securities has extended a credit facility to Helios in the amount of \$500,000 (all fully undrawn). The facility is unsecured and bears interest at an interest rate of 12% per annum.

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(118)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(31)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(149)
8.4	Cash and cash equivalents at quarter end (item 4.6)	247
8.5	Unused finance facilities available at quarter end (item 7.5)	500
8.6	Total available funding (item 8.4 + item 8.5)	747
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	5.01
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item of Otherwise, a figure for the estimated quarters of funding available must be included in	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the follo	wing questions:
	8.8.1 Does the entity expect that it will continue to have the current cash flows for the time being and, if not, why not?	level of net operating

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **Compliance statement**

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 October 2024

Authorised by: Board of Directors

(Name of body or officer authorising release - see note 4)

#### Notes

- 1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- 2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
- 4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
- 5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.