



## Quarterly Activities Report

### Quarter Ending 31 December 2022

Helios Energy Ltd (ASX Code: HE8) (**Helios or Company**) is pleased to report its activities for the quarter ended 31 December 2022.

### Successful Frack Job of Presidio 52#1 Well

The frack of 4 stages across a 1,623 feet interval of the Presidio 52#1 well was successfully completed and flowback has commenced. The Presidio 52#1 well is currently flowing back and recovering frack fluid at the rate of approximately 1,600 barrels of fluid per day.

The distance between the commencement of the lower bench of the Ojinaga Formation at 6,632 feet and the cessation of casing at 8,255 feet is 1,623 feet. The 1,623 feet interval was fracked across 4 stages per a frack design created by John Ely of Ely and Associates. The four frack intervals have been co-mingled as a vertical completion for production purposes.

John Ely is the principal of Ely and Associates, a world-renowned consulting company for well completions, stimulation fluids, and reservoir analysis.

### 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 three wells it has drilled (namely, Presidio 141#2, Quinn Creek 141#1 and Quinn Mesa 113) which have penetrated the Ojinaga Formation.

ASX Code: HE8

### Directors

Hui Ye  
Non-Executive Chairman

Richard He  
Managing Director

Robert Bearden  
Non-Executive Director

Nicholas Ong  
Non-Executive Director

John Palermo  
Company Secretary

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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.

### **Testing of Boquillas Formation in the Presidio 52#1 Well During the Quarter**

During the quarter, a workover rig was used by Helios to conventionally test (without fracking) the lower Boquillas Formation in the Presidio 52#1 well (which is equivalent to the lower Eagle Ford Formation in Karnes County, Texas). When originally drilling the well, significant wet shows were recorded in the lower Boquillas section with gas measurements of up to 10,000 units and a gas composition of 25% C2 (ethane) to C4 (butane). Using the workover rig, Helios perforated a 20 feet section from 8,190 feet to 8,210 feet. Although the test results indicated low permeability, the well naturally flowed gas and oil at modest rates without being fracked. This is important as it establishes another potentially productive interval for lateral drilling in the future.

### **Testing of Quinn Creek 141#1 Well During the Quarter**

The discovery well in the Presidio Oil and Gas Project, Quinn Creek 141#1, was re-entered during the quarter utilizing a workover rig. During the re-entry, the bridge plug at 4,350 feet was unseated and the well flowed oil and gas naturally to the pits. The well initially flowed wet gas at an estimated rate exceeding 1,000 MCF per day. However, there was no oil and gas separator nor meter installed to measure the rate accurately. 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. The well continues to build up pressure while being shut in.

### **Background to Quinn Creek 141#1 Well**

In late June 2018, Helios successfully completed a one stage frack in the vertical Quinn Creek 141#1 well to test oil and gas shows and log indications between 4,744 and 4,880 feet (a 136 foot interval) in the lower bench of the Ojinaga Formation. The frack of the lower bench of the Ojinaga Formation in the Quinn Creek 141#1 well resulted in the successful injection of approximately 212,000 pounds of frack sand (approximately 1,500 pounds of frack sand per foot) and approximately 10,000 barrels of slick water (approximately 75 barrels of slick water per foot). On 19 July 2018, Helios reported that the well flowed 260 barrels of oil and 1,345 barrels of completion fluid in 168 hours (7 days). Gas was also produced at 456 mcf per day on a 34/64ths of one inch choke. The well was shut in in October 2018.



### **Presidio 141#2 Testing**

The Presidio 141#2 well required maintenance after mechanical issues downhole disrupted production efforts. After re-entering the well, the damaged artificial lift pump was removed and upon swabbing out 23 barrels of fluid, the well began unassisted flow at a gas rate of 626 MCF per day and 74 barrels of oil were recovered in the first 24 hours. Presidio 141#2 is currently shut in as various artificial lift applications are being investigated to optimize sustainable production. The well continues to build up pressure while being shut in.

### **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.

### **Commerciality and Monetization of Gas**

Helios is focused on phased in gas commercialization along with oil production sales. Helios' evaluation indicates a large wet gas resource that provides significant additional upside opportunity to the Presidio Oil and Gas Project which was initially considered primarily an oil province. Several technologies are being reviewed for a potential pilot project, including utilizing the gas for electricity generation for field use and for local commercial gas sales after stripping out the liquids for sale. Other options being evaluated include connecting the field to the Trans Pecos Gas pipeline located approximately 40 miles to the east, and the feasibility of utilizing modular small scale LNG plants in the field.

### **Presidio Oil Project – Infrastructure**

Access to the 4 wells that constitute the Presidio Oil 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 Project. Crude oil is sold there by truck delivery.

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 Project are sourced from Permian Region. Oil production in the Permian Region in January 2023 reached approximately 5,635,000 bopd.

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**Stratigraphy of the Presidio Oil Project located in Presidio County, Texas, USA**

Gulf Coast		Presidio Oil Project Subsurface
Series	Division or Group	
Gulf Cretaceous	Austin	San Carlos (Olmos)
		Austin Chalk age equivalent formation (called the Ojinaga)
	Eagle Ford	Upper Eagle Ford Shale
		Boquillas
Comanche Cretaceous	Washita	Buda
		Eagle Mt SS
		George Town
	Fredericksburg	Kiamichi
		Edwards
Trinity	Glen Rose	
		Hosston/Travis Peak

**Leases Acquired or Disposed of During the Quarter**

During the quarter, Helios choose to let expire 30,574 non-core acres the subject of its Presidio Oil and Gas Project. Helios now has a 70%WI in a total of 21,690 gross acres (15,183 net acres). All 21,690 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.

**First Oil Producer in Presidio County, Texas, USA**

With the wells drilled and tested, Helios became the first oil and gas exploration company who has commenced producing and commercializing crude oil in Presidio County, Texas, USA. The Company has recorded single well daily production from the Presidio 141#2 well since it was drilled in 2019.

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**Corporate**

Helios has no debt and cash at bank at the end of the quarter was \$11,887,000.

**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 further information, please contact:

**Richard He**  
**Managing Director**

***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 48 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.*

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## Appendix 5B

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

Name of entity

Helios Energy Ltd

ABN

61 143 932 110

Quarter ended ("current quarter")

31 December 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	32
1.2 Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(580)	(989)
(e) administration and corporate costs	(379)	(1,339)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	30	45
1.5 Interest and other costs of finance paid	(7)	(15)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(936)</b>	<b>(2,266)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	(2,769)	(7,454)
(e) investments	-	-
(f) other non-current assets	-	-

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 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)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(2,769)</b>	<b>(7,454)</b>
<b>3.</b>	<b>Cash flows from financing activities</b>		
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	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Lease payments	(99)	(117)
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>(99)</b>	<b>(117)</b>
<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	15,761	21,708
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(936)	(2,266)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(2,769)	(7,454)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(99)	(117)

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

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	70	16
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>11,887</b>	<b>11,887</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	11,887	15,761
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>11,887</b>	<b>15,761</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	115
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.*

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

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

8. <b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(936)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(2,769)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(3,705)
8.4 Cash and cash equivalents at quarter end (item 4.6)	11,887
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	11,887
8.7 <b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	3.21
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Not applicable	
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?	
Not applicable	

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

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?

Not applicable

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

- 1 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 January 2023

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.