

Quarterly Report

For the period ended 30 September 2021

SEAWARD PRODUCTION LICENSE P2607, OFFSHORE UNITED KINGDOM
(HARTSHEAD RESOURCES 100% AND OPERATOR)

Hartshead Resources NL (**Hartshead**, **HHR** or the **Company**) Seaward Production License P2607, formally awarded in January 2021 with an effective date of 1 December 2020, as part of the UK 32nd Offshore Licensing Round, covers five contiguous blocks (48/15c, 49/6c, 49/11c, 49/12d and 49/17b) located in the Southern North Sea (Figure 1) with four existing discoveries totalling **354 Bcf¹** of 2C Contingent Resources.

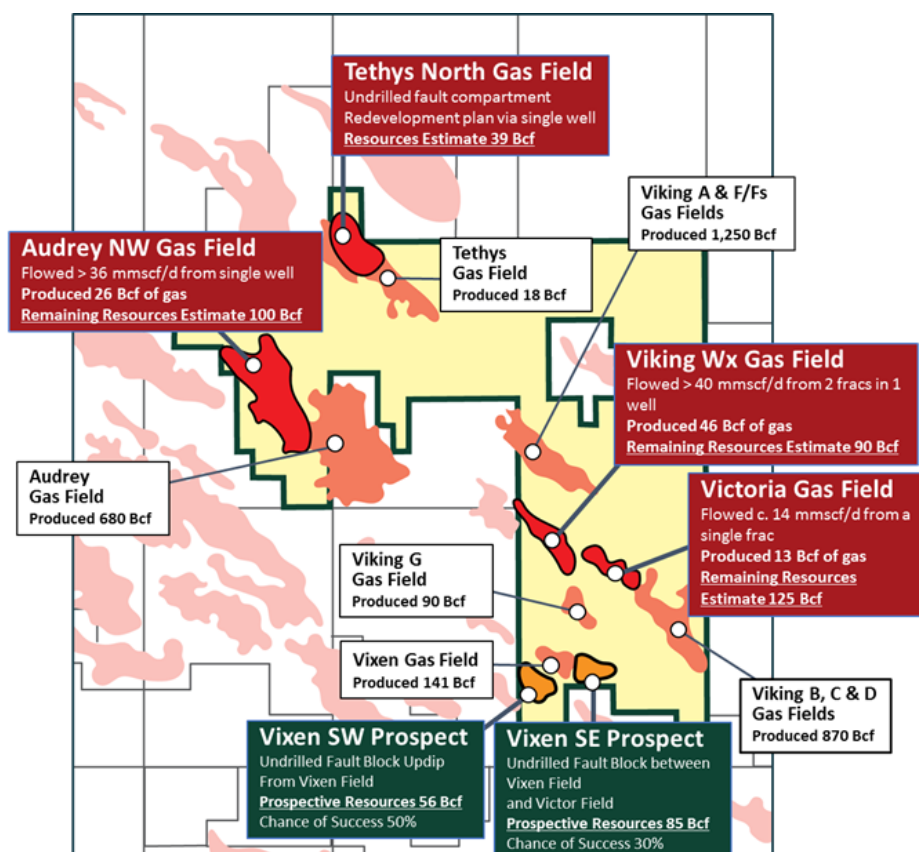


Figure 1 . Hartshead Resources Seaward License P2607 holds multiple gas fields and prospects

During the quarterly period Hartshead made material progress with respect to the Phase I Concept Select work program covering the development planning of the Victoria and Viking Wx gas fields which contain audited 2C contingent resources of **217² Bcf**. Importantly the subsurface interpretation and modelling work resulted in an increase in the Viking Wx field gas-initially-in-place GIIP volumetrics to 368 Bcf.

¹ Hartshead Resources management estimates.

² Volumetric estimates are from Oilfield Production Consultants (OPC) Ltd, Independent Competent Persons Report (CPR) entitled "Contingent Resources Review and Audit (Victoria and Viking Wx)" dated October 2020. See Qualified Persons Statement for contingent resource reporting notes.

The following key development planning tasks performed during Q3 2021 are summarised below:

1. Subsurface Interpretation & Modelling

- Completion of Viking Wx geo-cellular static reservoir model with gas-initially-in-place (GIIP) volumetrics
- Viking Wx GIIP of 368 Bcf which is a 112 Bcf increase (43%) on estimates made previously by Hartshhead and within the CPR (dated October 2020)
- Additional undrilled extension to Viking Wx gas field identified which has added 40 Bcf to total field in-place volumes
- Prospective undrilled fault compartment identified adjacent to Viking Wx (not included in the increase in calculated GIIP)
- Reservoir simulation and history matching for Viking Wx commenced
- Victoria field geo-cellular static reservoir model construction underway.

2. Frac Modelling & Design

- Analysis of three historically fraced production wells completed.

3. Development Well Planning

- Review of potential development well trajectories complete
- Initial development well costs received for subsea, single platform and dual platform development options.

4. Production Facilities Planning

- CAPEX, OPEX & ABEX cost estimates complete for multiple greenfield development scenarios
- Net Present Cost and Net Present Revenue for all options compared to rank and screen concepts
- Greenfield Concept Select Report received from Petrofac.

5. Commercial Gas Transportation

- Workshops with third party infrastructure owners held with further workshops scheduled
- Short-listing of export routes underway.

6. QHSE

- Safety and environmental workshops held with Petrofac
- Introductory meeting held with the EMT (Environmental Management Team) within the UK Government BEIS (Department for Business, Energy & Industrial Strategy).

Subsurface Interpretation & Modelling

Construction of the Viking Wx geo-cellular static field model has been completed by Xodus Group (**Xodus**) providing a calculated GIIP volume of 368 Bcf. The model is based on new analysis and interpretation of seismic and well data performed by Xodus. The GIIP is comparable to the calculation made by Hartshead and independently as part of the recent CPR:

SOURCE	Gas-Initially-In-Place (Bcf)
Xodus (deterministic – best technical case)	368
CPR (deterministic – mid case) ²	259
CPR (stochastic – P50) ²	262
Hartshead (stochastic – P50) ¹	256

As well as confirmation of existing GIIP estimates, an extension to the gas field has been identified as a fault block in the south-east part of the field. This fault block contains 40 Bcf of additional gas in place (included in the new total field estimate) and will be evaluated as an additional target location for development drilling, which is expected to add recoverable resources to the Phase I development. Adjacent and to the northeast of the field, an undrilled structure has also been identified that will be evaluated as a potential, near field, exploration prospect that could also add further gas volumes to the Phase I development. This undrilled prospective structure is not currently included in the total field GIIP estimate.

The Viking Wx static field model will now be used to construct a full field dynamic reservoir simulation model to match against historic gas production from the field. Once history matched this model will be used to generate production profiles and updated resource outputs for the Concept Select, third party infrastructure hosts and engineers for the optimisation of production well frac design.

The building of the geo-cellular static reservoir model for the Victoria field is progressing and completion is expected shortly and similarly will be used to develop a dynamic reservoir simulation model of the Victoria field.

Frac Modelling & Design

Fenix Consulting Delft (**Fenix**) completed an analysis of three historically fraced production wells in the Victoria and Viking Wx fields. The analysis provided information on the fracture characteristics, such as near wellbore permeabilities, fracture dimensions and proppant concentrations achieved during the previous operations. The results from this review will be used to assist in the design and optimisation of new fracs in planned future development wells on the Phase I fields.

Development Well Planning

Fraser Well Management (**FWM**) completed drilling and completion cost estimates for production wells (platform & sub-sea) for various Phase I greenfield development concepts, following a review of the potential well trajectories from single and dual drill centre options.

These costs have been incorporated with greenfield platform & pipelines costs to evaluate the various development options and used, with other workstreams, to generate the Greenfield Concept Select Report.

Production Facilities Planning

Cost estimates (CAPEX, OPEX, ABEX) were completed for the various greenfield development options for Phase I, including a single platform for both fields, one platform for each field, a mix of platform and sub-sea infrastructure and fully sub-sea development.

Petrofac has issued the Greenfield Concept Select Report identifying the preferred greenfield development concept, which is based on these costs, the drilling cost estimates and the gas production revenue projections.

The preferred Greenfield Development Concept is via two wireline capable production platforms, one at Viking Wx and one at Victoria. This development concept provides slightly superior economic performance and a reduction in drilling risk when compared to a single platform development. In addition, it is envisaged that production from Viking Wx will tie in subsea to the Victoria export pipeline, thus allowing both platforms to operate independently and mitigates outages on one platform stopping production from the other.

Commercial Gas Transportation

Discussions have progressed with several owners of gas transportation and processing infrastructure local to the Phase I development area. A number of workshops have been held with the operators of potential host platforms and pipelines to identify the optimum gas transportation route for gas produced as part of the Phase I development. Further workshops are planned with a view to commencing engineering feasibility studies for the tie-in of Hartshead's facilities and gas offtake. The feasibility studies will commence once Hartshead Terms of Reference (TOR) for the tie-ins have been established and will be evaluated prior to entering an indicative commercial agreement.

QHSE

Petrofac have commenced the safety and environmental workstreams and three workshops were held during July and August 2021.

An introductory meeting has been held with the UK Government's Environmental Management Team (EMT), part of the Department for Business, Energy & Industrial Strategy (BEIS) and an EMT Manager has been appointed by BEIS to liaise with Hartshead on all environmental matters. The UK Government BEIS department work closely with the UK OGA on many aspects of UK North Sea License regulation and stewardship and have a key stakeholder role to play in the UK Government's 2050 net zero target.

Gas Markets

Structural supply-side constraints in global LNG, reduced piped gas capacity from Norway and Russia and low gas storage inventories have dominated European gas markets during the quarterly period. This has been reflected in the recent UK NBP front-month contract reaching in excess of 240 pence per therm³ (**p/therm**) during the quarterly period and a near-term NBP futures (Jan 2022 contract) of circa 280 p/therm compared to 47.5 p/therm at the time of the acquisition of HRL in February 2021. The UK gas futures curve currently points to a winter 2024/25 price in excess of 60p/therm. Hartshead's internal economic evaluation of the Phase I development is based on a gas price assumption of 46p/therm highlighting the potential for economic upside should market conditions persist.

CORPORATE & FINANCIAL

On 1 September 2021 the Company announced that an agreement had been reached with the vendors of Hartshead Resources Ltd (UK) (**Vendor**) for the extension of their voluntary escrow period for a further 12 months, being from 3 February 2022 through to a new date of 3 February 2023.

The extended escrow period applying following expiry of the current escrow period (3 February 2022) is the earlier of 3 February 2023 or until such time as one of the events listed below occurs:

- there is a transaction involving a joint venture, farm-out or sale of the Company's 2P Reserves contained within the Phase I and/or Phase II assets for at least US\$3 per boe; or
- the Company achieves a listing on the AIM or London Stock Exchange (LSE) with an associated debt instrument, equity raising and/or vendor/off-taker financing of a least A\$10 million.

The Company also facilitated an off-market sale for un-related parties, with a shareholding of 20,864,790 shares (representing 2.08% of the Vendor consideration shares and 1.1% of the entire issued share capital) by lifting the current voluntary escrow arrangements and then reapplying post transfer. The purchasers of these shares, none of whom are related parties, included the Hartshead Operations Manager, Commercial Manager, Company Secretary, and existing Vendors. All have agreed to a voluntary escrow to 3 February 2023 on the same terms as the other Vendors.

Hartshead's closing cash and cash equivalents at the end of the quarter was A\$5.68 million.

Payments to related parties and their associates during the quarter as outlined in Section 6 of the accompanying Appendix 5B to this quarterly activities report were A\$319K. These payments are related to salaries, superannuation and directors' fees paid to directors and related entities during the September 2021 quarter.

PETROLEUM TENEMENTS HELD AS AT 30 SEPTEMBER 2021

	% Interest	Tenement	Location
Held at end of the quarter	100%	Seaward Production License P2607	Offshore United Kingdom

³ Source: Intercontinental Exchange (ICE)

100%⁴

Nkembe Block

Offshore Gabon

100%⁵

Ambilobe Block

Offshore Madagascar

CORPORATE DIRECTORY

Directors

Bevan Tarratt	Non-Executive Chairman
Christopher Lewis	Chief Executive Officer
Andrew Matharu	Chief Financial Officer
Nathan Lude	Executive Director

Company Secretary

Matthew Foy

Registered Office and Principal Place of Business

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PERTH WA 6000
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Facsimile: +61 8 9226 2099
Web: www.hartshead-resources.com.au
Email: info@hartshead-resources.com

Share Registry

Computershare
Level 11, 172 St Georges Terrace
PERTH, WA 6000
Telephone: 1300 850 505 (within Australia)
+61 3 9415 4000 (outside Australia)

The Board of Directors of Hartshead Resources NL authorised this announcement dated 29 October 2021 to be given to ASX.

PETROLEUM REPORTING STATEMENTS

SOUTHERN NORTH SEA LICENSE P2607 (UNITED KINGDOM) – CONTINGENT AND PROSPECTIVE RESOURCES

Please refer to the qualified person's statement relating to the reporting of contingent and prospective resources on Hartshead Resources Southern North Sea License P2607 in Hartshead's ASX Announcement dated 14 December 2020 (see Schedule 3). The Company is not aware of any new information or data that materially affects the information about the contingent resource and prospective resource estimates included in this announcement and all the material assumptions and technical parameters underpinning those estimates in this announcement continue to apply and have not materially changed.

Contingent resources reported herein have been estimated and prepared using the probabilistic method.

CONTINGENT RESOURCES (BCF)				
PHASE I PROJECTS		1C	2C	3C
VICTORIA	49/17b	84	125	177
VIKING WX	49/17b	62	90	124

⁴ Hartshead's interest is subject to the right of the State of Gabon to participate in any development for up to a 20% interest under the Nkembe PSC

⁵ Subject to relinquishment as per the terms of the Ambilobe PSC

COMBINED ⁶		49/17b	161	217	285	
CONTINGENT RESOURCES (BCF)			1C	2C	3C	GCoS
PHASE II	49/6c, 49/11c	Tethys North	14	39	70	100%
	48/15c	Audrey NW	35	100	387	100%
PROSPECTIVE RESOURCES ⁷			P90	P50	P10	GCoS
PHASE III	49/17b	Vixen SW	29	56	94	50%
EXPLORATION	49/17b	Vixen SE	43	85	142	30%

Qualified Person's Statement

Hartshead has prepared the Contingent Resource and Prospective Resource information in this announcement in accordance with the ASX Listing Rules and the 2007 Petroleum Resources Management System published by the Society of Petroleum Engineers (SPE-PRMS). The Contingent Resource estimates and Prospective Resource estimates presented in this report were originally disclosed to the market in an announcement released 14 December 2020. Hartshead confirms that it is not aware of any new information or data that materially affects the information included in the aforesaid market announcement and that all the material assumptions and technical parameters underpinning the estimates in the aforesaid market announcement continue to apply and have not materially changed. The information in this announcement that relates to Contingent Resource information in relation to the Phase I Victoria and Viking-Wx fields is based on information compiled by technical employees of independent consultants, Oilfield Production Consultants Ltd, which information was subsequently reviewed by Mr Christopher Lewis. The information in this announcement that relates to Contingent Resource information in relation to the Phase II Audrey NW and Tethys North fields and the Prospective Resource information in relation to the Vixen SW and Vixen SE prospects is based on information compiled by Mr Christopher Lewis and information compiled by technical consultants contracted to Hartshead which has been subsequently reviewed by Mr Christopher Lewis. Mr Lewis has consented to the inclusion of such information in this announcement in the form and context in which it appears and the resources information in this report is based on, and fairly represents, information and supporting documentation reviewed by, or prepared under the supervision of, Mr Christopher Lewis. Mr Lewis is a Director of Hartshead and has a BSc from the Imperial College, University of London and is a member of The American Association of Petroleum Geologists (AAPG) and the European Association of Geoscientists and Engineers (EAGE). Mr Lewis is qualified in accordance with the requirements in ASX Listing Rule 5.41.

⁶ Volumes combined stochastically to give portfolio volume

⁷ Prospective resources are estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) and relate to undiscovered accumulations. These prospective resources estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Forward Looking Statements

This document has been prepared by Hartshead Resources NL (HHR). This document contains certain statements which may constitute "forward-looking statements". It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including, but not limited to: price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve and resource estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delays or advancements, approvals and cost estimates.

HHR's operations and activities are subject to regulatory and other approvals and their timing and order may also be affected by weather, availability of equipment and materials and land access arrangements. Although HHR believes that the expectations raised in this document are reasonable there can be no certainty that the events or operations described in this document will occur in the timeframe or order presented or at all.

No representation or warranty, expressed or implied, is made by HHR or any other person that the material contained in this document will be achieved or prove to be correct. Except for statutory liability which cannot be excluded, each of HHR, its officers, employees and advisers expressly disclaims any responsibility for the accuracy or completeness of the material contained in this document and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this document or any error or omission there from. Neither HHR nor any other person accepts any responsibility to update any person regarding any inaccuracy, omission or change in information in this document or any other information made available to a person nor any obligation to furnish the person with any further information.

Notes to Editors:

Hartshead Resources NL

ASX-listed Hartshead Resources NL and is focussed on building a financially, technically and environmentally responsible European Energy business.

Hartshead's goal is to secure and invest in projects where resources can be extracted and delivered to meet Europe's growing energy demand while supporting the transition to a low carbon future.

In progressing this strategy Hartshead is focused on its 100% owned Production Seaward License P2607 comprising of five blocks which contain four existing gas fields in the UK Southern Gas Basin.

Hartshead brings together a highly experienced oil and gas team with specialised knowledge covering subsurface, engineering, commercial, QHSE and capital markets with the required skillsets needed to successfully and safely deliver oil and gas upstream projects.

Appendix 5B

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

Name of entity

HARTSHEAD RESOURCES NL

ABN

11 150 624 169

Quarter ended ("current quarter")

30 SEPTEMBER 2021

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	-	-
1.2	Payments for		
	(a) exploration & evaluation	(13)	(13)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(319)	(319)
	(e) administration and corporate costs	(392)	(392)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
1.5	Interest and other costs of finance paid	-	-
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	(723)	(723)
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(5)	(5)
	(d) exploration & evaluation *	(498)	(498)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated 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	Cash acquired on acquisition	-	-
2.6	Net cash from / (used in) investing activities	(503)	(503)

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	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	6,899	6,899
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(723)	(723)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(503)	(503)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated 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	5	5
4.6	Cash and cash equivalents at end of period	5,678	5,678

* Prior quarter amounts have been re-positioned for consistency with current quarter disclosures.

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	5,638	6,859
5.2	Call deposits	40	40
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)	5,678	6,899

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	319
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		
Payments of Directors fees and salaries		

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

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		-
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.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(723)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(498)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,221)
8.4	Cash and cash equivalents at quarter end (item 4.6)	5,678
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	5,678
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.7
	<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?	
	Answer: N/A	
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?	
	Answer: N/A	

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?

Answer: N/A

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: 29 October 2021

Authorised by: The Board
(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.