

22 November 2021

OPERATIONAL UPDATE & COMMENCEMENT OF PHASE II SUBSURFACE WORK PROGRAMME

Highlights:

- **Adoption of a new field and prospect naming convention chosen to celebrate exceptional British and Irish women in science, technology, engineering and medicine**
- **Commencement of the Phase II subsurface work programme covering the Hodgkin (formerly Audrey) and Lovelace (formerly Tethys) field developments targeting completion in Q2 2022**
- **Receipt of pre-stack depth processed 3D seismic dataset covering Hodgkin and Lovelace fields from the previous Operator, Spirit Energy, achieves time and cost savings, associated with the development of the Phase II assets**
- **Phase II workstreams will generate revised in place gas volumes, recoverable 2C contingent resources and production profiles for the Hodgkin and Lovelace fields**
- **On completion of the Phase II workstreams, revised 2C Contingent Resources on Hodgkin and Lovelace will be independently audited as part of an updated Competent Persons Report (CPR) covering the Phase I and Phase II assets.**

Hartshead Resources NL (**Hartshead, HHR** or the **Company**) is pleased to announce the commencement of the Phase II subsurface work programme covering the Hodgkin (block 48/15c) and Lovelace (block 49/6c, 49/11c) field developments as part of the multi-phased development of Seaward Production License P2607 in the UK Southern Gas Basin.

The Company recently received the pre-stack depth processed Annabel, Audrey and Audrey Extension 3D seismic datasets from the previous Operator of the Audrey Field, Spirit Energy. This data was reprocessed between 2011 and 2013, incorporating six separate 3D seismic surveys and covers both the Hodgkin and Lovelace Fields.

This new data enables the Company to finalise a new work programme & budget for the Phase II subsurface workstreams, targeting completion in Q2 2022. The Phase II workstreams will encompass the construction of a new geological and geophysical database, detailed interpretation of the new 3D seismic data, petrophysical analysis and reservoir engineering to deliver revised in place gas volumes,

recoverable 2C contingent resources and production profiles for both the Hodgkin and Lovelace gas fields.

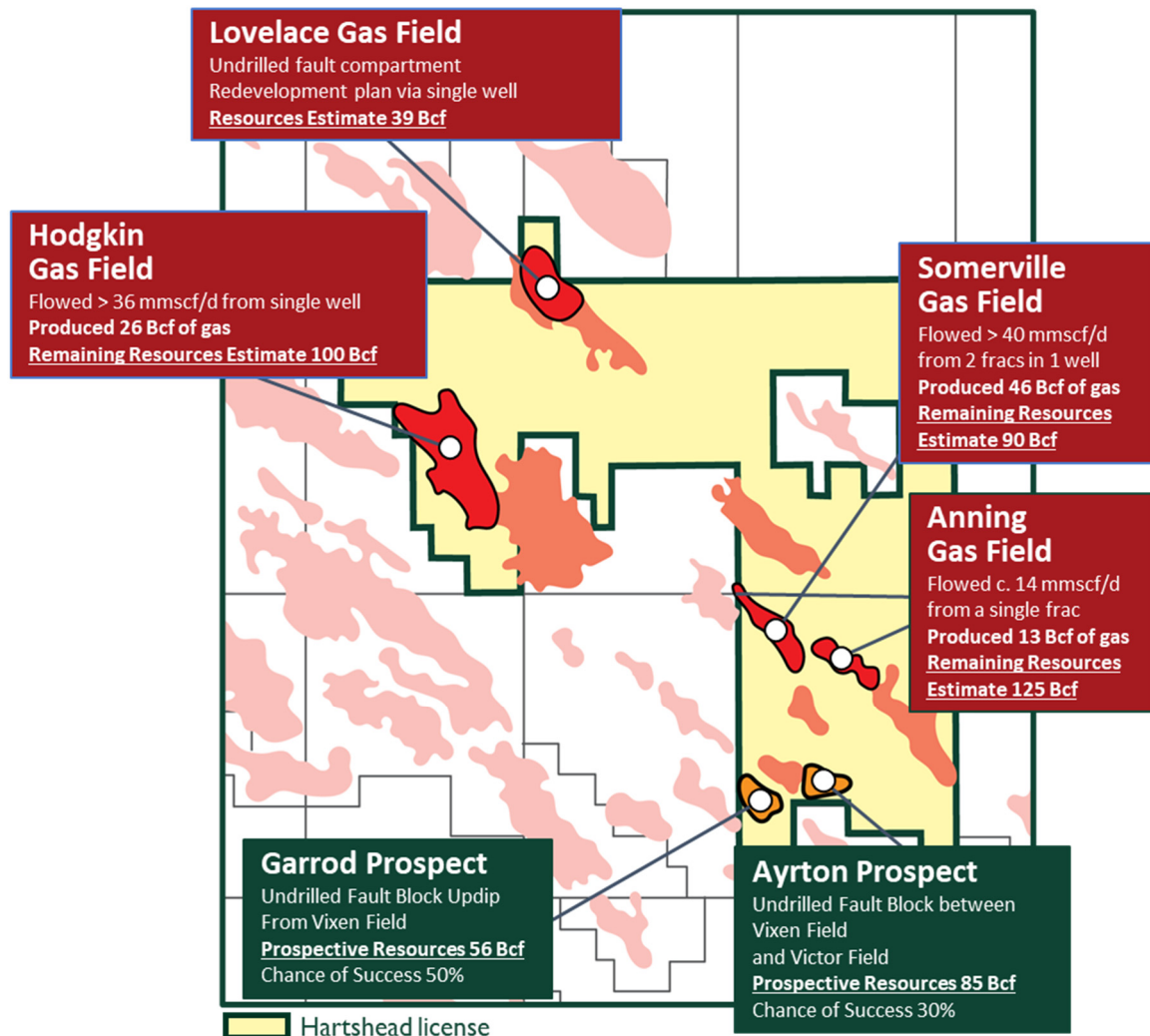


Figure 1. Hartshead P2607 License includes new field and prospect naming.

The Hodgkin and Lovelace fields are located in the north-west part of License P2607 and are currently estimated to contain a combined **139¹ Bcf** of 2C Contingent Resources as detailed below. Following completion the Phase II work programme contingent resources at Hodgkin and Lovelace will be independently audited and the results compiled and announced as part of an updated Competent Persons Report (CPR) covering both the Phase I and Phase II assets.

¹ Hartshead management estimates.

CONTINGENT RESOURCES (BCF) ¹			1C	2C	3C	GCoS
PHASE II	49/6c,	Lovelace	14	39	79	100%
	49/11c					
	48/15c	Hodgkin	35	100	387	100%

Once revised production forecasts for Hodgkin and Lovelace are available a decision will be made to proceed with field development planning for the two fields. This will present the opportunity to utilise the Phase I infrastructure to monetise the Phase II gas production.

Transmission of the Phase II gas flow stream through the Phase I pipeline may lead to a potentially enhanced economic performance of the Hodgkin and Lovelace fields given the upfront investment in Phase I infrastructure.

HODGKIN FIELD

The Hodgkin field has historically produced 26 Bcf of gas from a single well, is currently estimated to contain **100 Bcf¹** of 2C Contingent Resources and is an extension of the Audrey field. This estimate of in place and recoverable gas volumes and productivity of Hodgkin is already proven by previous drilling and production.

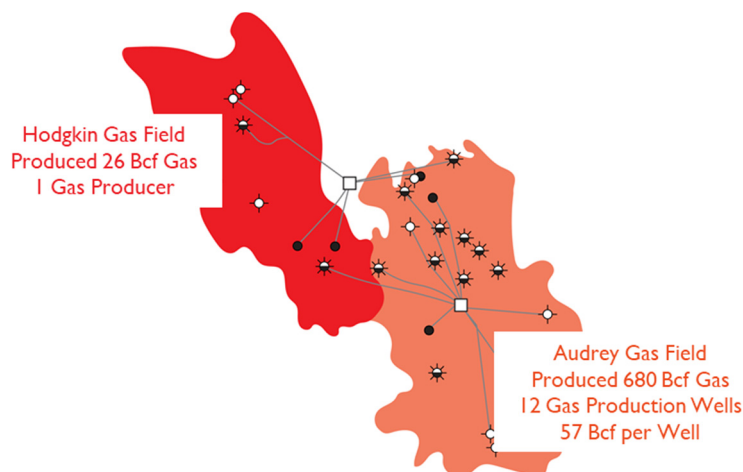


Figure 2. Audrey and Hodgkin gas fields with historical well locations and production history.

Seismic imaging of the reservoir at Hodgkin is challenging in places due to a complex overburden containing the Audrey Salt Wall. The recently received pre-stacked depth migrated (PSDM) seismic data significantly improves the seismic image, removing many of the effects of the overburden, and will improve the mapping of the Hodgkin gas field to generate a new structural map. This will assist with improved gas-in-place estimates and development well positioning.

Petrophysical analysis of Hodgkin and Audrey wells plus analysis of production and pressure data from the historic field production will greatly improve confidence in production forecasts and contingent resource estimates for the field.

LOVELACE FIELD

The Lovelace field is an undrilled extension of the Tethys gas field and is currently estimated to contain **39 Bcf¹** of 2C contingent resources which is planned to be development via a single production well. This field is also covered by the PSDM seismic data and revised production forecasts and contingent resources will be part of the Phase II workscope.

FIELD AND PROSPECT RENAMING CONVENTION

The Company is also pleased to announce the adoption of a new naming convention for its gas fields and prospects within License P2607. The new field names have been chosen to celebrate exceptional British and Irish women in science, technology, engineering and medicine. The new names are listed below (along with the previous names) and summary information on those celebrated here can be seen in Appendix I to this announcement.

NEW FIELD NAME	ORIGINAL FIELD NAME
ANNING	Victoria
SOMERVILLE	Viking Wx
HODGKIN	Audrey NW
LOVELACE	Tethys N
NEW PROSPECT NAME	ORIGINAL PROSPECT NAME
GARROD	Vixen SW
AYRTON	Vixen SE

Chris Lewis, CEO, commented “I am delighted with the names of our Phase I and Phase II gas fields and how this reflects our commitment to diversity and inclusion as an organisation and support of women in science, technology, engineering and medicine. Also, I would like to thank Spirit Energy for their assistance in providing a large volume of 3D seismic data to Hartshead. This has, undoubtedly,

saved time, money and effort in the development of our Phase II assets. I look forward to the results of the Phase II work and being able to provide an update in due course”.

-Ends-

CONTACTS

The Board of Directors of Hartshead Resources NL authorised this announcement to be given to ASX.

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APPENDIX I

Biographies of famous British female scientists used in the new field and prospect naming convention:

- **Mary Anning**: Early British fossil collector and palaeontologist – finding the skeleton of the first ichthyosaur to be recognised and the first two plesiosaur skeletons ever found, the first pterosaur skeleton found outside of Germany, and some important fossil fish. (1799-1847);
 - **Mary Somerville**: Author of “The Mechanism of the Heavens “. First woman to join Royal Astronomical Society in 1835. She and Caroline Herschel were elected to the Royal Astronomical Society in 1835, the first women to receive such an honour. (1780-1872);
 - **Dorothy Hodgkin**: Nominated more than once for the Nobel Prize, she won in 1964 for her work on penicillin and vitamin B12. The following year she was made a member of the Order of Merit, in recognition of her contribution to science. (1910-1994);
 - **Ada Lovelace**: Considered the first computer programmer, Ada Lovelace was a Victorian visionary. (1815-1852);
 - **Dorothy Garrod**: English archaeologist who specialised in the Palaeolithic period. She held the position of Disney Professor of Archaeology at the University of Cambridge from 1939 to 1952, and was the first woman to hold a chair at either Oxford or Cambridge (1892-1968);
 - **Hertha Ayrton**: . Ayrton was elected the first female member of the Institution of Electrical Engineers in 1899, published her widely acclaimed work The Electric Arc in 1902, the same year that she became the first woman nominated a Fellow of the Royal Society of London,. In 1904 Ayrton became the first woman to read her own paper before the Royal Society on ‘The origin and growth of ripple-mark’. She received the Royal Society’s Hughes Medal for her investigations in 1906. (1854-1923).
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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.

UK Southern North Sea Production Seaward License P2607 – 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
ANNING	49/17b	84	125	177
SOMERVILLE	49/17b	62	90	124
COMBINED ²	49/17b	161	217	285

CONTINGENT RESOURCES (BCF)			1C	2C	3C	GCoS
PHASE II	49/6c, 49/11c	Lovelace	14	39	70	100%
	48/15c	Hodgkin	35	100	387	100%
PROSPECTIVE RESOURCES ³			P90	P50	P10	GCoS
PHASE III	49/17b	Garrod	29	56	94	50%
EXPLORATION	49/17b	Ayrton	43	85	142	30%

² Volumes combined stochastically to give portfolio volume

³ 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.

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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 Anning and Somerville 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 Hodgkin and Lovelace fields and the Prospective Resource information in relation to the Garrod and Ayrton 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.