# **Prion Seismic Survey** Project Summary





Project Summary | February 2020

#### PROJECT

Beach Energy is planning to undertake a three-dimensional (3D) marine seismic survey (the Prion Survey) to enable assessment of the natural gas reservoirs in Commonwealth offshore retention licenses T/RL2, T/RL3, T/RL4 and T/RL5. This project will operate under an Environment Plan (EP) that must be accepted by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

#### LOCATION

The proposed Prion Survey is in the offshore Bass Basin in Commonwealth waters, approximately 73 km east of King Island, 57 km north of Stanley in Tasmania and 105 km south of Wonthaggi in Victoria at their closest points.

#### TIMING

The survey will take around 50 days, subject to weather. It is expected to be completed between October 2020 and December 2021, with timing to be confirmed after consultation with stakeholders, receipt of regulatory approvals, and confirmation of vessel availability.

#### HOW

A seismic survey vessel, about 90 m long, will tow an acoustic source and hydrophone receivers on 12 streamers 8 km long. The acoustic source will transmit sound waves into the geological structures beneath the seabed, which reflect to the hydrophone receivers. Geophysicists will analyse the recorded data and create a 3D map of the subsea structures to identify potential natural gas reservoirs.

#### **About Beach**

Founded in 1961, Beach is headquartered in Adelaide Australia. With a proud track record for safety and environmental performance, Beach operates onshore and offshore hydrocarbon facilities across Australia and New Zealand.

Beach operates natural gas processing plants in Port Campbell and Lang Lang, supplying approximately 20% of Victoria's gas needs. Beach is the operating partner of the BassGas project which includes the Lang Lang gas plant, Yolla platform, pipelines and existing production permits. BassGas is a joint venture between Beach Energy, Mitsui and Prize Petroleum International Pte Ltd.

### Questions and Answers

#### What approvals are required?

Beach must submit an EP to NOPSEMA for acceptance under the Commonwealth Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009.

#### What's in an Environment Plan?

The EP must include a description of the existing environment and the proposed activity, an evaluation of the impacts and risks associated with the activities, environmental performance outcomes and standards, implementation strategy, and reporting requirements.

#### What about impacts on marine life?

The EP will include a detailed description of marine fauna present in the survey area at various times of the year. It will identify impact risks associated with the survey and avoidance, mitigation and management measures, such as the use of marine mammal observers during operations, along with shut-down procedures. An assessment of underwater sound levels will be undertaken by acoustic scientists. Impacts will be minimised by using the lowest acoustic source possible for the project requirements and avoiding areas at certain times, based on whether sound sensitive species may be present. For example, the size of the survey area has already been reduced to exclude scallop beds east of King Island.

#### How will you ensure that you operate safely?

Safety takes precedence in everything we do. Our values define us, guide our actions and our decisions. Beach has over 50 years' experience in the oil and gas industry and our marine exploration team have extensive local and international experience in conducting these types of surveys. We have stringent procedures for assessing, selecting and managing specialist contractors to carry out our marine activities to ensure they will keep our operations safe and operate in accordance with Australian Maritime Standards, regulated by the Australian Maritime Safety Authority (AMSA).

#### Will an exclusion zone be required?

Yes, a temporary exclusion zone will operate. A Notice to Mariners will be issued requesting that vessels do not approach closer than 5 km (2 nm) of the survey vessel and towed equipment. The survey vessel will be accompanied by a support vessel, which will communicate with other vessels.

#### Why are you surveying this area?

Natural gas from the Bass Basin has been supplying the east coast gas market for many years. Beach holds several permits in this area near its existing Yolla platform, which directs raw gas to the Lang Lang Gas Plant for processing and supply to Victorian homes and businesses. Beach is required to carry out exploration activities in the retention licenses in accordance with requirements set out by the National Offshore Petroleum Titles Administrator (NOPTA). The survey results will be assessed to plan for the next stage of development, which includes drilling gas wells to connect to the existing Yolla platform and pipeline.

#### Why do you do seismic surveys before drilling?

3D seismic data enables our geophysicists to develop a detailed map of the subsea geological structures that is used to identify correct drilling locations. The data is used to create high-resolution 3D images of the subsea geology, which is used by our drilling engineers to design the necessary drilling methodology that ensures safely drilling to target locations.

## Why is the survey area bigger than the permit areas?

Seismic surveys extend several kilometers outside the permit boundary in order to collect the data required to accurately create an image of the deep targets directly beneath Beach's permit zones. The survey operational area also incorporates the turning circles for the vessel, which are needed for the 8 km long towed streamers.

#### Why do we still need natural gas?

Natural gas has a wide variety of uses in our daily lives, including generating electricity with up to 50% lower emissions than coal, for residential heating, hot water and BBQs. Gas is a common ingredient in the production of fertilisers, plastics, pharmaceuticals and fabrics. In the industrial sector, gas is the primary heat source for the manufacturing of glass, steel, cement, bricks, ceramics, tiles, paper and food production. Gas is an important partner for renewable energy to ensure stability of affordable energy supply whilst our economy transitions to a greater percentage from renewables. For further information see: bright-r.com.au

#### Consultation

Beach values stakeholder consultation and feedback that enables us to understand how different stakeholders' functions, interests and activities may be affected by the proposed survey. We will consider all feedback, including any concerns and objections. Measures will be explored to reduce impacts and risks, and responses will be provided to stakeholders.

All records of consultation, copies of correspondence, including emails, will be considered alongside technical and environmental assessments as the EP is prepared for submission, and will be communicated to NOPSEMA as required by legislation.

#### **Contact us**

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#### Want to know more, visit:

beachenergy.com.au/bass-basin/

