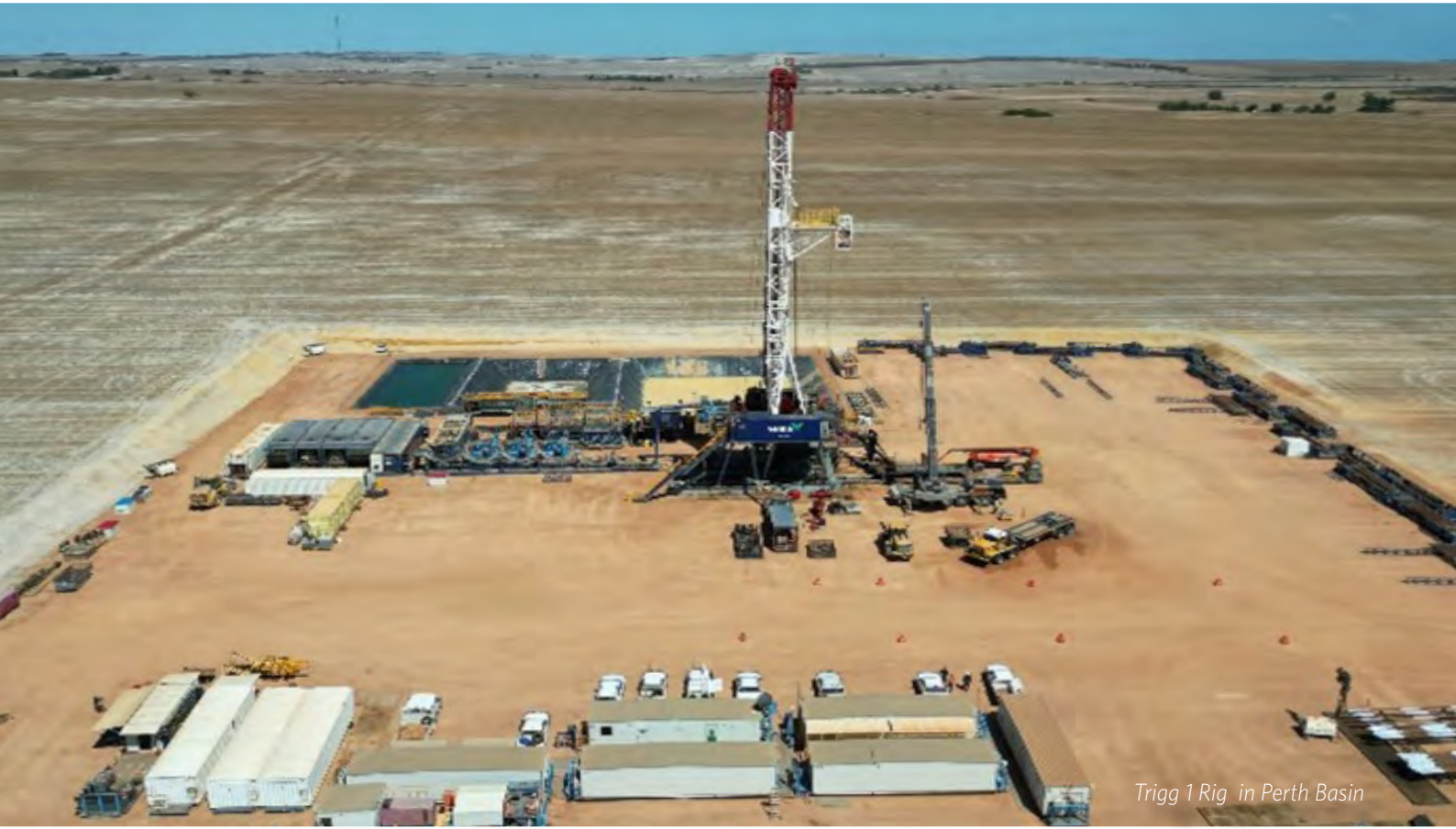


Perth Basin

Exploration and Drilling



Trigg 1 Rig in Perth Basin

Project update | April 2023

Project overview

Beach Energy is planning on undertaking seismic surveys in the North Perth Basin, around 40 kilometres southeast of Dongara, over the next few years.

The aim of these surveys is to identify natural conventional gas reserves within our existing exploration permits and production licenses.

Following previous seismic surveys in 2020 we now have approval or are seeking approval to drill wells in areas identified as new viable gas resources.

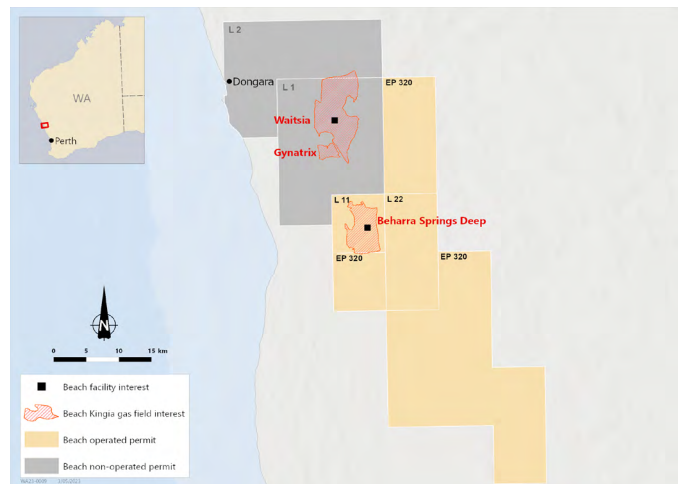
About Beach Energy

Beach Energy is an ASX-listed oil and gas exploration and production company based in South Australia and has offices and operations in Western Australia.

Beach's purpose to 'sustainability deliver energy for communities' which means it operates

while maintaining the highest health, safety and environmental standards.

For over 60 years Beach has been working to discover and develop gas in the Perth Basin and provides a secure and clean source of affordable energy for Australia and globally.



Key Facts

- Safety and environmental sustainability are priorities for Beach, and only proven technologies are used in our operations.
- Beach has not undertaken any fracture stimulation (fracking) activities in the Perth Basin.
- Exploration in the Perth Basin commenced over 60 years ago.
- Low impact advanced seismic surveying techniques will be used for Donkey Creek 3D survey, and
- We operate under stringent regulatory conditions and approvals.

Background

The Perth Basin is a large basin of approximately 174,000 square kilometres that encompasses both onshore and offshore parts of south-western Western Australia. The basin extends about 1300 km from south of Perth to its northern tip offshore from Carnarvon.

Working with its joint venture partner Mitsui E&P Australia, Beach is the part-owner of gas production licences and exploration permits (EP), located within the North Perth Basin. Together we are progressing the Waitsia Stage Two Gas Project, with first gas expected in 2023.

Beach's Perth Basin operations consist of the Waitsia Stage 1 and Beharra Springs operations. The Beharra Springs Gas Processing Facility is a 25 TJ per day plant, processing gas from nearby wells and transporting it through the Parmelia pipeline to domestic customers in Western Australia.

Exploration in the Perth Basin commenced over 60 years ago and more than 200 wells have been drilled onshore during that time by numerous oil and gas companies including Beach.

Previous Perth Basin projects include:

- **Beharra Springs Deep 1** – exploration well drilled, and
- **Trieste 3D Survey** – seismic survey that concluded in 2020 which identified new potential wells for further exploration.

From Exploration to Development

When assessing exploration activities, projects go through three major phases: Exploration, Appraisal/Development and Production. The typical timeframe from seismic survey acquisition to gas production is approximately 5 years, and production from the resulting wells may last up to 20 years.

Beach Energy, along with its Joint Venture Partners, will also be permanently decommissioning 3 existing wells in the Perth Basin during 2023-24.

1	2	3
Exploration Phase	Appraisal and Development Phase	Production Phase
Identify and drill exploration prospects <ul style="list-style-type: none"> • Seismic surveys • Interpretation of the seismic data • Detailed planning for drilling • Drill Exploration wells: <ul style="list-style-type: none"> ○ if viable, progress to Appraisal and Development phase ○ if not viable, discontinue wells and rehabilitate land. 	Determine discovered field size and field development plan <ul style="list-style-type: none"> • Assess the resource size of a discovery • Determine and gain approval for full field development plans • Undertake field development including drilling infill development wells, and building/upgrading production processing plants and pipelines using existing infrastructure where possible <ul style="list-style-type: none"> ○ if viable, progress to Production Phase ○ if not viable, discontinue wells and rehabilitate land. 	Production Phase <ul style="list-style-type: none"> • Production wells and facilities may have a life of up to 20 years • Operations ongoing to optimize production and ensure safe and reliable operations throughout the field life all the way to field discontinue and rehabilitate.
Discontinue wells and rehabilitate land		

Table 1 - Project phases

Our Current Perth Basin Activities

To explore for gas, investigation methods such as seismic surveys and exploration drilling are required. Under our permits with the WA Government, we plan to look for conventional natural gas using seismic techniques. 2D/3D seismic surveys help us safely and accurately plan future drilling activities.

Our current exploration permits are located in the Shires of Irwin, Three Springs, Mingenew, and Carnamah.

Seismic Surveys

Beach uses a safe and sustainable exploration method called 'seismic surveying' to determine the size and location of subsurface natural gas reserves in the area.

Seismic surveys are an important exploration method used to produce detailed images of the geology beneath us. The technology measures reflected acoustic energy waves from underground layers, enabling geologists and geophysicists to determine the location and size of possible hydrocarbon reservoirs. Seismic surveys help ensure that drilling can occur in the right place ultimately reducing the number of exploration wells within a permit.

In order to undertake a seismic survey, regulatory approvals which are specific to the type of activity and the location of the activity must be obtained. These approvals set the high standards for environmental care and risk mitigation by which Beach must comply with.

Beach was recently announced the industry award winner for the innovative approach for seismic surveys, by reducing the need for clearing native vegetation, better protecting local wildlife habitats and minimising impact to landholders.

Upcoming seismic projects are:

- **Donkey Creek 3D Seismic Survey** – approvals being sought to commence seismic survey from January 2024, and
- **Skipper 3D Seismic Survey** – approvals being sought to commence in January 2025.

Additional Surveys linked to Seismic Surveys

Beach undertakes flora and fauna surveys as part of its approval process for seismic surveys in the Perth Basin.

One of these recent surveys gave Beach the opportunity to use latest technology to assist in new fauna detection of different rare species and their habitat.

Mallee Fowls and Carnaby's Black Cockatoos

In a Beach first, new aerial imagery using Light Detection and Ranging (LiDAR) technology was used to assist in identifying potential nesting mounds of the vulnerable

Mallee fowl bird. This was part of environmental surveys undertaken which covers 480km² and sits over the Beharra Springs Facility in EP320, L22 and L11.

The LiDAR survey and a patented data processing engine assessed the data and identified 12 potential mounds by the fauna team. Five of the mounds were confirmed as active and being maintained by a male Mallee fowl for nesting.

As a result of this survey, these locations will be avoided and removed from the survey area by the seismic team to prevent potential impacts. Ecologists also assessed the suitability of tree hollows for the endangered Carnaby's Black Cockatoo.

This was the largest flora and fauna survey Beach has ever conducted and was completed in late November. These surveys will be vital in achieving environmental approvals as well as ensuring we can minimise our environmental impact.

Drilling

Recent seismic surveys over the past few years have identified new potential gas discoveries and approvals have been obtained or are being sought to investigate further through drilling programs.

Our current drill programs will determine if Beach progresses to further development of these assets.

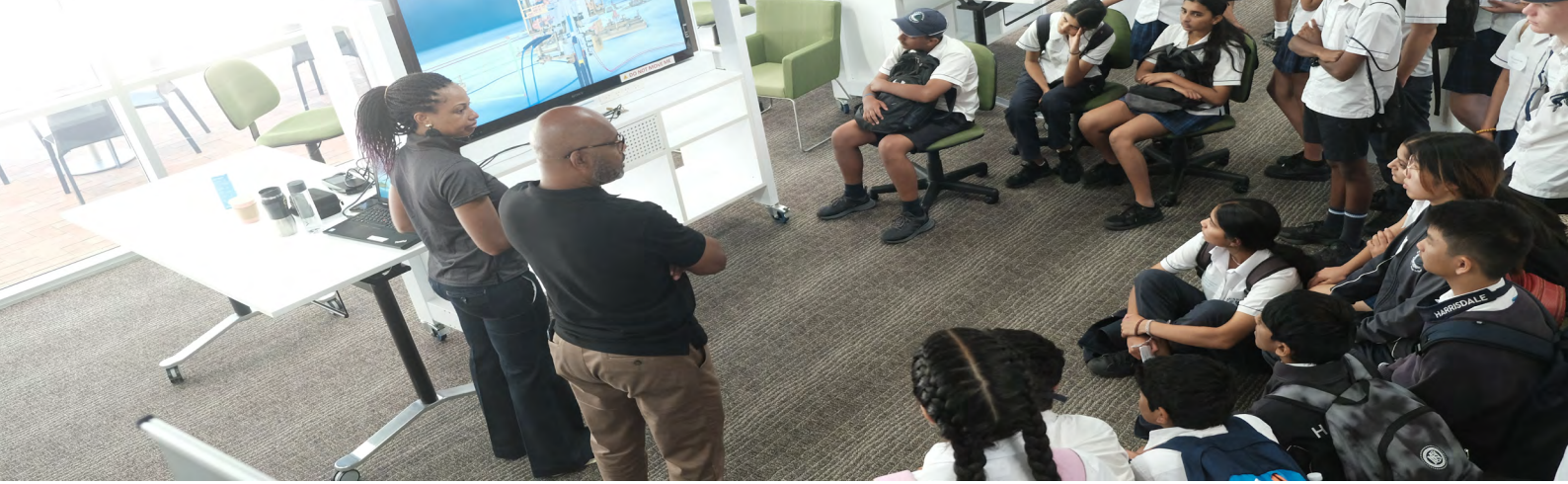
Current projects are:

- **Arrowsmith East** – drilling approvals have been obtained for one location (Trigg 1) and another approval pending (Trigg NW-1). Drilling commenced at Trigg 1 in April 2023.

Traditional custodians and cultural heritage

Beach respectfully acknowledges the Southern Yamatji people, the traditional custodians of the land on which Beach's Perth Basin operations are located. Beach respects their historical and ongoing connection to country through cultural and spiritual sites, language and ceremony, and pays respect to their Elders past, present and emerging.

Beach works closely with the Southern Yamatji people to ensure operational activities do not impact cultural heritage sites and areas of significance. This is conducted through ongoing engagement and communication on projects, and as applicable, on the ground cultural heritage field surveys.



Community Partnerships in the Region

Beach is committed to supporting the communities in which we operate and where our people live too. We focus on partnerships and programs that build sustainable and resilient communities.

Over the last year, Beach has supported the following programs in Western Australia:

- Next Generation Schools Program.
- Entrance sign to Dongara.
- New scoreboard for Dongara Football Club.
- Virtual reality equipment for Dongara District High School, and
- St John Ambulance to support their operational capacities.

Climate Change

As an oil and natural gas explorer and producer across Australia and New Zealand, Beach is committed to sustainably delivering energy for communities. Beach recognises that climate change is one of the global challenges of this century and understands the role we must play in managing our carbon emissions. Beach has an aspiration to reach net zero Scope 1 and 2 emissions by 2050 and a target to reduce emissions intensity by 35% from its entire portfolio by 2030. See further information in Beach's [Sustainability Report](#).

Safety and the Environment

For Beach Energy, the safety of our people, the community and the local environment is our highest priority in any activity we undertake.

Beach operates within a highly regulated industry and must meet stringent environmental and safety standards to obtain approval to undertake any seismic activity in the permit area.

A comprehensive Environment Plan must be accepted by the regulator – Department of Mines, Industry Regulation and Safety (DMIRS) before the activities

can proceed. Other submissions include referrals under the State and Federal environmental legislation, rehabilitation plans, native vegetation offset plans, and numerous State government permit applications.

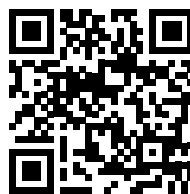
Community Consultation

Beach respects the rights and requirements of all landholders in the Mid-West. Beach will engage with the landholders in the areas where we operate regarding our activities and to identify opportunities to minimise potential impacts.

Beach is committed to working with the local community, ensuring people are informed of proposed operations and can ask questions or raise issues about its projects if required.

Stakeholder consultation is an important part of preparing Environment Plans for our activities as it helps identify local issues and concerns and ensures our planning includes an approach to managing potential impacts.

For more information on Beach's operations in the Perth Basin visit www.beachenergy.com.au/perth-basin/



Contact Us

If you have any questions, concerns or would like more information, please contact the Community Relations team.

P 1800 797 011

E community@beachenergy.com.au

