

PETREL SURVEYS

Frequently Asked Questions

Q. Who is conducting the Petrel surveys and why?

A. Eni is an international energy company with a history of operating in Australia for over 20 years and, through its subsidiary Eni Energy Bonaparte Pty Ltd, is the titleholder of the Petrel Gas Field (Petrel) in the Bonaparte Basin in North Western Australia.

Eni are proposing to undertake surveys within the Petrel field in the Bonaparte Basin to support the Petrel Development and exploration activities within the Petrel Field.

Q. What are the surveys for?

A. The objective of the surveys is to acquire geophysical, geotechnical and environmental baseline data to better understand the existing environment and seabed characteristics of the Petrel Development area.

This information will contribute to understanding the locations of development infrastructure and may support the planning of any future exploration activities within the Petrel field.

Q. What survey campaigns are being undertaken?

A. Eni is proposing to undertake the following initial survey campaigns in Q3 and Q4 2026:

- Geotechnical survey, to help the design of the subsea structures.
- Geophysical survey, to get a handle on what the seabed looks like, what’s underneath, and any hazards. This helps Eni to plan activities such as drilling, installing subsea equipment, and building wells.
- Environmental surveys, to understand the environmental conditions of the Petrel field

Survey Type/Campaign	Development			Exploration		
	Location	Duration	Expected Timing	Location	Duration	Expected Timing
Geophysical Survey	Whole OA	40 days	Q3/Q4 2026	Retention leases only	20 days	Q3/Q4 2026
Environmental baseline	Whole OA	20 days	Q3/Q4 2026	Retention leases only	10 days	Q3/Q4 2026
Geotechnical	Whole OA	40 days	Q3/Q4 2026	Retention lease only	10 days	Q3/Q4 2026

Q. Are the surveys similar to a seismic acquisition activity?

A. No. The survey activities are different and the potential noise impacts of the proposed geophysical and geotechnical surveys are much lower.

The proposed geophysical survey at Petrel and along the gas export pipeline aims to image the seafloor and 60m of sediment below the seabed floor. This geophysical survey work can be carried out using a small vessel (i.e. 35m catamaran) with the geophysical equipment installed on the back deck. The survey uses a small airgun (approx. 120 cubic inch) that emits underwater noise to image the seabed floor. Geophones (acoustic sensors) are towed behind the vessel on a short cable (approx. 400m long).

As the operational area is such a small part of the overall fishery, and given the short duration, it is unlikely that the extent of underwater noise emitted from the geophysical survey airguns will have any regional scale effects.

In contrast to this, for conventional seismic survey work (NOT the activity Eni is conducting), a large (70m-100m) specialised seismic vessel would be required. A conventional seismic survey is designed to image deep geological subsurface formations, which can be as deep as 8000m (8km) below the seabed floor. To achieve this imaging, multiple very large air guns (approx. 4000 cubic inch) and multiple long streamers (5km to 10km long) towed behind the vessel are utilised.

The extent of underwater noise emitted from the air guns used in these conventional seismic surveys has the potential to affect fish and crustaceans up to distances of several hundreds of meters, and so conventional seismic surveys generally require a greater level of environmental management to ensure potential ecological effects are mitigated.

Q. What does the Geophysical Survey involve?

- A. This survey collects high-resolution information about the seabed and very shallow subsurface. The focus is on seabed characterisation, hazard identification, and engineering support. Equipment that is used includes:
- a Side Scan Sonar (SSS) – for photographic-like images of the seabed;
 - a Sub-Bottom Profiler (SBP) – that provides images of shallow sediments below the seabed;
 - a Multibeam Echo Sounder (MBES) – which maps seabed depth and shape; and
 - a Magnetometer (MAG) – to detect ferrous (metallic) objects.

Parts of the survey involves low output sound sources to generate images of the seabed and shallow layers of ground (~60m) just below the seafloor. It involves a low-impact imaging technique that provides information on potential changes in the strength of the near-surface sediments.

Q. What does Environmental Baselineing involve?

- A. This helps us understand the environmental conditions of the Petrel field. Baseline physical, biological, and oceanographic data is collected to see the existing environmental conditions before activities occur. Seabed habitat characterisation is also considered alongside targeted benthic biological sampling, water column measurements and oceanographic and marine fauna observations.

Q. What does the Geotechnical Survey involve?

- A. Direct measurements and samples are taken of the seabed and shallow subsurface soils to support safe well design, infrastructure placement, and engineering assessments. This includes:
- measuring soil strength and the layering of soils beneath the seabed; and
 - collecting some physical samples of seabed sediments and limited core hole sampling to inform engineering designs.

Q. When will these activities take place?

- A. Timing of the initial survey campaigns is aimed at Q3 and Q4 2026. Confirmed activity dates will be dependent on a number of factors including access approvals, vessel availability and weather conditions. Subsequent surveys could be undertaken between 2027 and 2030.

Q. How big is the operational area and where is it?

- A. The operational area (OA) is a defined area within which all petroleum activities associated within the EP occur, and which allows impact assessment of those activities. It includes the extent of all planned activities within the EP, and is defined to cover the spatial extent of:
- Retention leases (WA-6-R and NT/RL1);
 - 10km wide corridor along the proposed GEP route; from the boundary of the retention lease to the Blacktip GEP tie-in point; and
 - 5km radius around the Blacktip GEP tie-in point.

A map of the area can be found at the project landing page petreleni.com.

Q. How can you access areas outside the retention leases for the activities?

- A. Eni will submit an Access Authority Application to the offshore titles administrator in Q1 2026, for access to the 10km wide survey corridor along the proposed gas export pipeline. This approval will be in place prior to the proposed survey activities.

Q. How far is the activity from shore?

- A. The Petrel field is located approximately 250 km WSW of Darwin. The tie-in point for the proposed Petrel Gas Export Pipeline and the southernmost point of the surveys operational area is approximately 113km from Wadeye, approximately 184km from Wyndham and approximately 199km from Kalumburu.

Q. Have potential impacts on the environment by the survey activities been assessed?

- A. Eni will conduct an Environmental Impact Identification workshop to confirm and assess impacts, risks and management measures for the activity. A table of risks and assessments generated based on existing knowledge and experience, is available on the landing page at petreleni.com.au. A detailed list of the identified risks, assessment and mitigations can be found in the published Environment Plan (EP), which will become available upon acceptance by the regulator.

Q. What vessels are required for the surveys?

A.

Survey	Expected Vessel Type
Geophysical and environmental surveys	Multi-purpose catamaran vessel 35m in length
	Single hull vessel 44m in length
Geotechnical	76m length vessel for downhole drilling
	65.8m vessel for all other geotechnical survey activities

Q. How do you assess and monitor the impact to the environment in which the activities will be conducted?

- A. The assessment of the environmental impact covers three areas:
1. the Operational Area – a defined area within which all petroleum activities associated within the EP occur, and which allows impact assessment of those activities. It includes the extent of all planned activities within the EP.
 2. The Zone of Potential Impact (ZPI) – the moderate exposure zone representative of an area of biological impact from hydrocarbons
 3. the Environment that May Be Affected (EMBA) – the area within which the operations activities could have an environmental impact. The outermost boundary of the EMBA (for this activity) is based on an accidental release of marine diesel oil (MDO) to the environment in the unlikely event of a vessel collision damaging a fuel tank.

The results of this analysis can be found on the map shown on the surveys project landing page petreleni.com and activity flyer along with an explanation of the three areas of assessment.

Q. What would be the worst-case hydrocarbon spill?

- A. In the unlikely event of a vessel failure or collision, a maximum of 130m³ marine diesel (the size of the largest vessel's single fuel tank) may be spilled. The assessment of a spill of this nature has confirmed the rapid evaporation of spilled fuel within the bounds of the EMBA. There is no likelihood of near shore contamination from such an event in the activity area.

Q. What are the emergency response arrangements to contain a hydrocarbon spill?

- A. Eni will activate their Oil Pollution Emergency Plan (OPEP), which is an operational document and contains all the information necessary for Eni to carry out a response to an accidental oil spill. The OPEP covers actions to stop, assess, report, monitor and combat an accidental oil spill, to ensure the effective and timely management and response to such an unlikely incident.

Q. Will the activity affect any marine life?

- A. All care is taken in protecting marine life and megafauna. This includes an induction for personnel on the activity vessels outlining the sighting requirements for marine life, assessment of migration and breeding grounds, fisheries and an in-place Oil Pollution Emergency Plan (OPEP) in the unlikely event of a spill from a vessel.

Q. What if I have concerns about this activity?

- A. Eni is conducting engagement activities with relevant persons from 27 January to 17 March 2026. If you believe you are a relevant person, please contact us by phone, email, or through our landing page at petreleni.com. Information on the definition of a relevant person can also be found on the landing page.

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