



Eni Australia

2D SEISMIC SURVEY (WA-313-P) ENVIRONMENT PLAN SUMMARY

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2D Seismic Survey (WA-313-P) Environment Plan Summary					
Abstract:					
Eni Australia B.V. (Eni) plans to undertake a two-dimensional (2D) seismic survey in permit area WA-313-P in the Joseph Bonaparte Gulf. This document is the seismic survey Environment Plan Summary and has been prepared for submission to the Designated Authority, as required under the <i>Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009</i> .					
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ABBREVIATIONS

AMSA	Australian Maritime Safety Authority
APPEA	Australian Petroleum Production and Exploration Association
DA	Designated Authority
DAFF	Department of Agriculture, Forestry & Fisheries (Commonwealth)
DEWHA	Department of Environment, Water, Heritage and the Arts (Commonwealth)
DMP	Department of Mines and Petroleum (Western Australia)
DRPIFR	Department of Resources – Primary Industry, Fisheries and Resources (Northern Territory)
Eni	Eni Australia B.V.
EP	Environment Plan
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
HSE	Health, Safety and Environment
IMS	Integrated Management System
MARPOL 73/78	<i>International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto</i>
OPA	Offshore Petroleum Act
OPGA	Offshore Petroleum and Greenhouse Gas Storage Act 2006
OPGS P(E)R	<i>Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009</i>
OSCP	Oil Spill Contingency Plan
SOPEP	Shipboard Oil Pollution Emergency Plan

1. INTRODUCTION

Eni will be undertaking a two-dimensional (2D) Seismic Survey in Permit area WA-313-P (the Permit) in the Joseph Bonaparte Gulf (Figure 1.1). The survey will be undertaken in March 2010 by PGS Marine Geophysical using the Beaufort Explorer and will take approximately five to six days to complete.

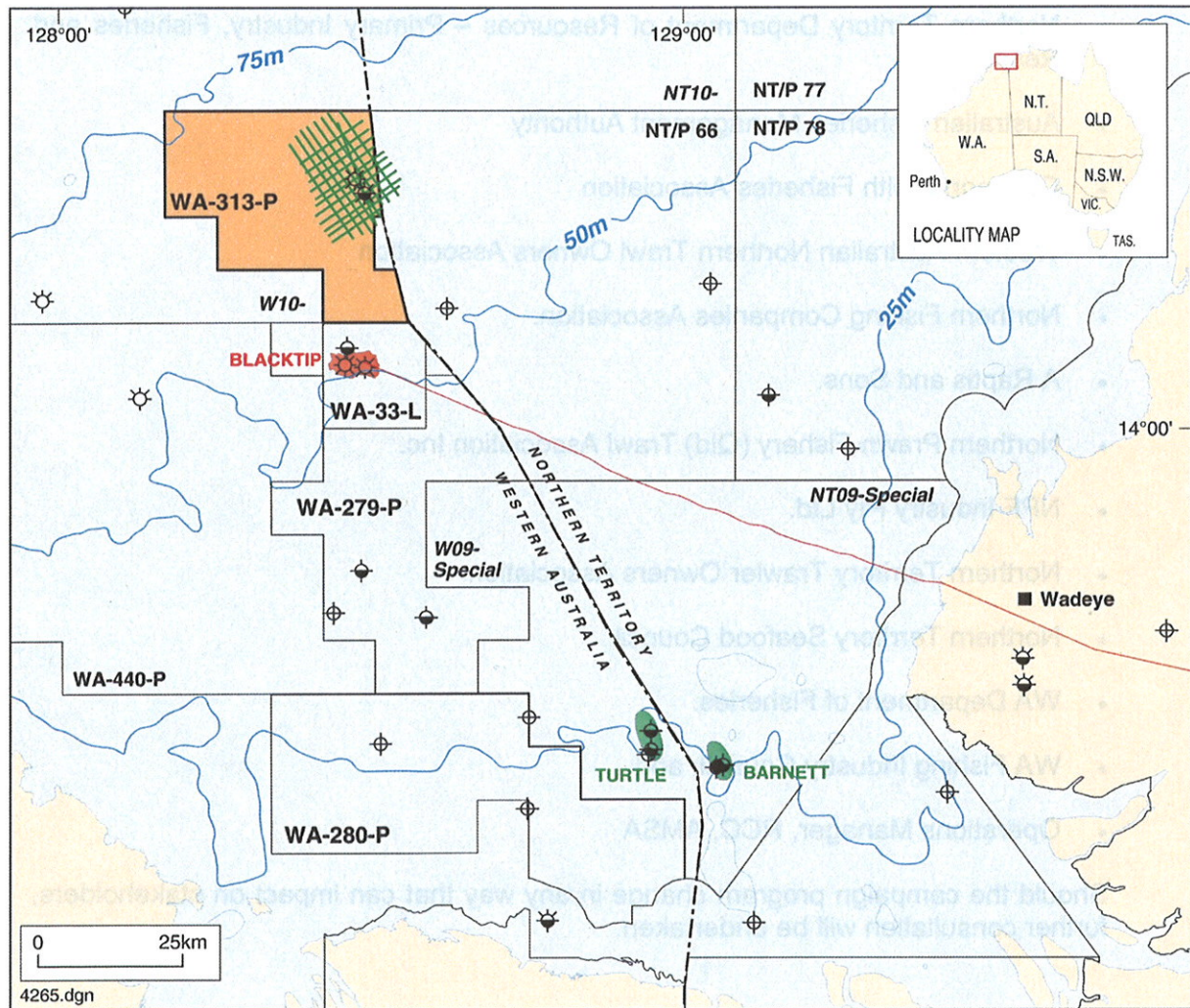


Figure 1.1: Permit and Survey Location

2. STAKEHOLDER COMMUNICATIONS

Stakeholders have been provided with details of the program. Relevant stakeholders include:

- Western Australian Department of Mines and Petroleum;
- Northern Territory Department of Resources – Primary Industry, Fisheries and Resources
- Australian Fisheries Management Authority
- Commonwealth Fisheries Association
- Western Australian Northern Trawl Owners Association
- Northern Fishing Companies Association.
- A Raptis and Sons.
- Northern Prawn Fishery (Qld) Trawl Association Inc.
- NPF Industry Pty Ltd.
- Northern Territory Trawler Owners Association.
- Northern Territory Seafood Council.
- WA Department of Fisheries.
- WA Fishing Industry Council; and
- Operations Manager, RCC, AMSA

Should the campaign program change in any way that can impact on stakeholders, further consultation will be undertaken.

3. DESCRIPTION OF THE ENVIRONMENT

Joseph Bonaparte Gulf is a large embayment on the northwestern continental margin of Australia (Figure 3.1). Several large rivers enter the gulf along its shoreline. Permit area WA-313-P is located in the upper (outer) reaches of the Joseph Bonaparte Gulf, in an area of relatively flat seabed (Woodside 2004). The seabed is flat and featureless and contains very soft, grey-green, gravelly sand clays.

The marine fauna of northern Australia is part of the Indo-West Pacific biogeographical province. The majority of species are widely distributed in this region, with the northern part of the Australian continent being a small part of the wider ranges of most species. A number of whale, dolphin and porpoise species have broad distributions, which include the Joseph Bonaparte Gulf. Some of these are very rare (blue whale), or usually restricted to deep waters (sperm whale), and are very unlikely to be encountered in this region. Humpback whales (*Megaptera novaeangliae*), which are seasonally the most abundant whale along the Western Australian coast, complete their northern migration in the Campden Sound area of the West Kimberley, well west of the permit area. A number of dolphins have wide distributions and are expected to occur within the Joseph Bonaparte Gulf including the Irrawaddy dolphin, the spotted bottlenose dolphin, Risso's dolphin, the Indo-Pacific humpback dolphin and the pantropical spotted dolphin.

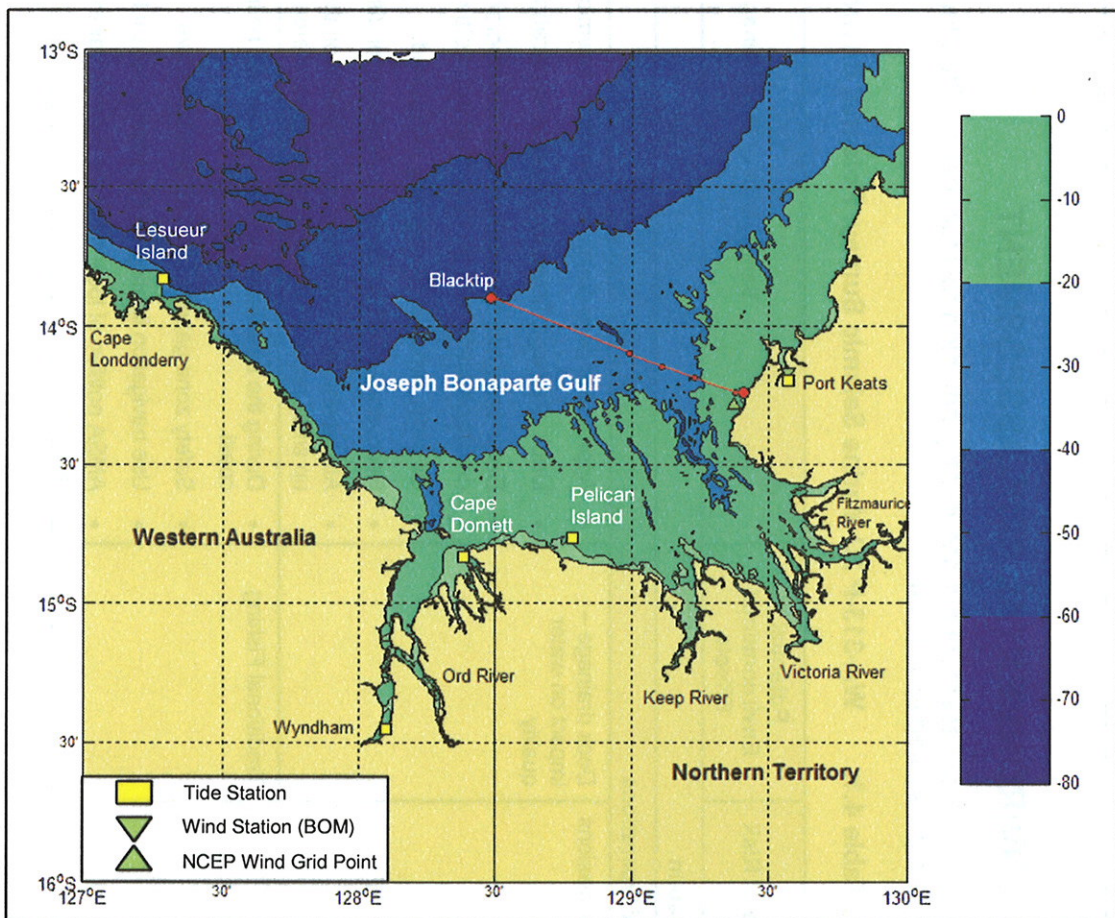


Figure 3.1: Joseph Bonaparte Gulf

4. ENVIRONMENTAL RISK ASSESSMENT

The risk assessment did not identify any high residual risks. The identified potential moderate environmental risks and their safeguards are presented in Table 4.1.

Table 4.1: WA-313-P 2D Marine Seismic Survey: Potential Environmental Risks and Their Safeguards

Source of Risk	Potential Environmental Effects	Safeguards or Risk Management Measures	Likelihood of Consequences Being Realised	Consequence	Risk
Mobilisation					
General Operations					
Waste/emissions	Deck drainage – impact on water quality	<ul style="list-style-type: none"> • Appropriate deck drains and bunds on seismic vessel • Deck drainage flows to oil/water separation device prior to discharge • Deck spills will be washed with bio-degradable detergents and polluted deck drainage water will be collected in a settling tank for later disposal on shore. • Oil water separator is regularly maintained. • Recovered oil is transferred to Australia for disposal • Absorbents and containers are available on the seismic and support vessels to clean up small accumulations of oil and grease around work areas and decks. 	Credible Occurrence (C)	Minor Impact (2)	Moderate
	Traditional Fishing	<ul style="list-style-type: none"> • During the seismic survey the vessels will be in the open ocean and away from the coast. • Safety zone gazetted around seismic vessel. • Use navigation lighting on the seismic vessel to ensure visibility at night. • AMSA notified of location of the seismic vessel and a Notice to Mariners will be issued. 	Unlikely Occurrence (B)	Significant Impact (3)	Moderate



Source of Risk	Potential Environmental Effects	Safeguards or Risk Management Measures	Likelihood of Consequences Being Realised	Consequence	Risk
Noise	Discharge of acoustic source - disturbance to marine mammals (whales, dolphins, etc.)	<ul style="list-style-type: none"> Follow EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales. <i>Observation zone</i> 3+km radius from acoustic source: whales monitored to determine if they are approaching the low power zone. <i>Low power zone</i> 2km to 500m radius from acoustic source: if whales enter this zone, the acoustic source should immediately power down to low setting. <i>Shutdown zone</i> <500m radius from acoustic source: if whales enter this zone, the acoustic source shuts down. Soft start procedures over 30 min period: a sequential build-up of warning pulses at the start of each acquisition line to warn and deter marine mammals from approaching. 	Credible Occurrence (C)	Minor Impact (2)	Moderate

5. IMPLEMENTATION STRATEGY

The project will be implemented under the umbrella of the Eni's HSE Policy, which the seismic survey contractor, must abide by. As the Operator, Eni will ensure that its personnel and contractors comply with all regulatory controls under the OPA, EPBC Act, this EP and other relevant legislation.

Key aspects of Eni's environmental management strategies include:

- Eni's Joseph Bonaparte Gulf OSCP (Eni 2008);
- Eni's Crisis Management Plan;
- Eni's HSE Integrated Management System (IMS), certified to *ISO 14001:2004 Environmental Management Systems*;
- use of personnel with area experience; and
- compliance with APPEA Codes of Environmental Practice (1996).

The seismic contractor has day-to-day control of the survey, and has formal, written management system, practices and procedures for HSE management of its activities. This system and its components have been reviewed by Eni and determined to be acceptable and consistent with Eni's HSE Integrated Management System and the commitments detailed in this EP. HSE documentation includes:

- Project HSE Plan for Eni's WA-313-P Seismic Survey;
- *Survey Vessel* Medical Evacuation (Medevac) Plan for Eni's WA-313-P Seismic Survey;
- *Survey Vessel* Crew HSE Plan, detailing specific procedures of the seismic vessel including waste management and refuelling; and
- Survey Vessel SOPEP.

An Eni representatives will be onboard the seismic vessel for the duration of the survey. All seismic vessel crew will receive an environmental induction at the commencement of the seismic survey. This induction will address the issues and actions identified within this EP.

6. CONTACT DETAILS

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