Environment Plan for Drilling of Exploration Wells in WA-371-P: Public Summary

This summary of the Environment Plan (EP) for Drilling of Exploration Wells in WA-371-P has been submitted to the Western Australia Department of Industry and Resources (DoIR) to comply with Regulations 11(7) and 11(8) of the Petroleum (Submerged Lands) (Management of Environment) Regulations 1999.

1. Introduction

Shell Development (Australia) Pty Ltd (Shell) is midway through exploratory drilling in Permit Area WA-371-P off northern Western Australia (WA). Eight wells have been completed by the Ocean Epoch MODU between November 2006 and February 2008, with another well Concerto planned for December 2008 under a Department of Industry and Resources (DOIR) approved WA-371-P Environment Plan (SDA 20060015, November 2006).

The current proposal is to continue the WA-371-P exploration drilling programme and additional wells with an alternative rig, the Songa Venus, which is expected to commence in early 2009.

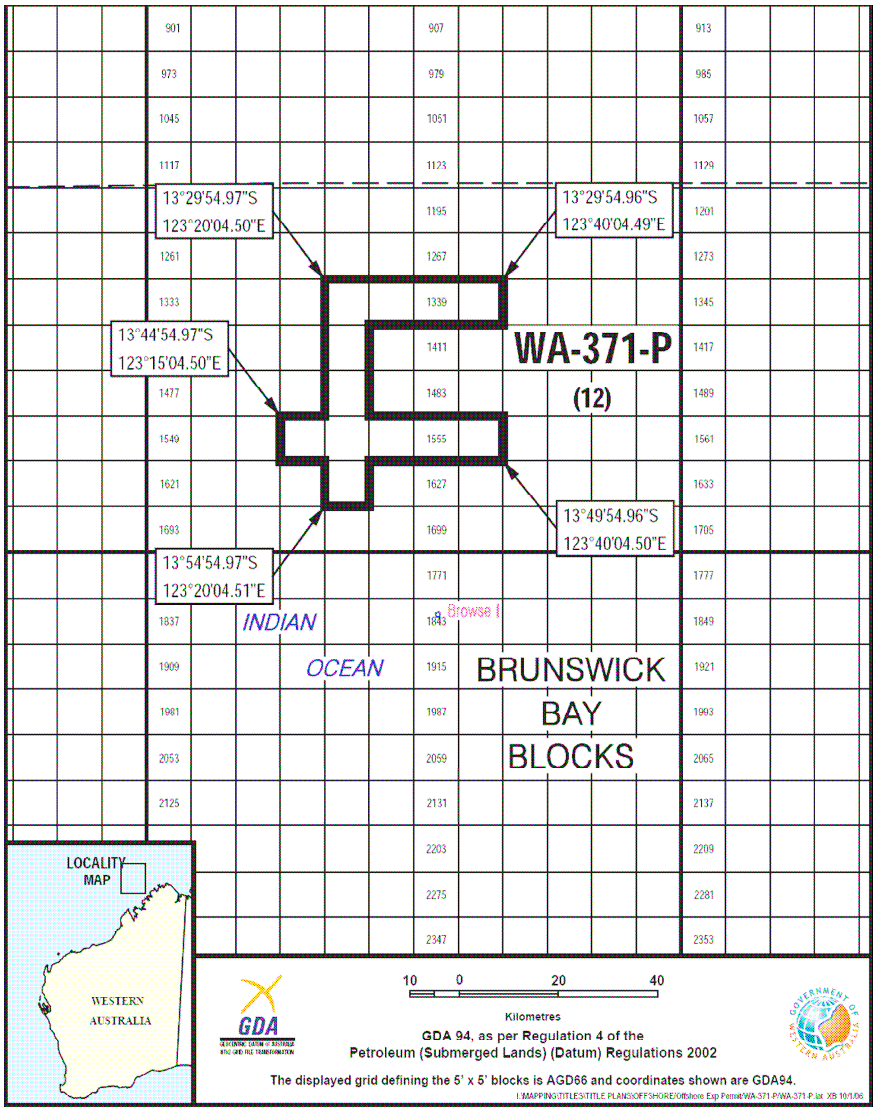
2. Coordinates of the Proposed Activity

The exploration drilling will take place in Commonwealth waters within Exploration Permit WA-371-P (Figure 2.1). The Permit area is bound by the coordinates listed in Table 2.1.

Table 2.1: Coordinates of the Permit Areas

Latitude	Longitude
13 29’ 54.97	123 20’ 04.50
13 44’ 54.97	123 15’ 04.50
13 54’ 54.97	123 20’ 04.51
13 29’ 54.96	123 40’ 04.49
13 49’ 54.96	123 40’ 04.50

Figure 2.1: Location of the WA-371-P Permit Area



3. Description of the Activity

The forthcoming works involve a series of drilling programmes within a known gas and condensate field in Permit Area WA-371-P (Figure 2.2). To date, 8 wells have been drilled by the Ocean Epoch. These include wells named Prelude (1 and 1A), Gigue, Bouree (1 and 1A), Rigaudon, Tocatta, Rondo, Trio and Fortissimo. The ninth well, Concerto, is planned for end December 2008.

Table 3.1 presents the proposed drilling well sequence for the drilling programme in WA-371-P permit area.

Table 3.1 Details of the Survey

Name of Well	Permit Area	Timing	Duration	Total Depth (m)
Ocean Epoch				
Concerto-1	WA-371-P	Q4 2008 – Q1 2009	50 days	4678
Songa Venus				
Staccato (Well 10)	WA-371-P	Q1 2009	22 days	2074
Intermezzo-1 (Well 11)	WA-371-P	Q1 2009	54 days	4580
Coda-1	WA-371-P	Q2 2009 – Q3 2009	86 days	4650
Well 12	WA-371-P	Q3 2009	53 days	4650

4. Description of the Receiving Environment

4.1. Physical Environment

The Permit Area is located on the Australian continental shelf 200 km offshore from the Australian mainland or 300 km from islands of the Indonesian archipelago. The water depth within the Permit Area is approximately 280 m.

4.2. Biological Environment

Six species of marine organisms listed as Threatened under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and are known to occur in offshore areas of northern Western Australia and may pass through the Permit Area. Of these 6 species, 1 is Endangered with the other 5 listed as Vulnerable (Table 4.1).

Table 4.1 Endangered and Vulnerable Marine Species Reported to Occur in WA-371-P permit area.

Common Name	Scientific Name	Status
Blue Whale	*Balaenoptera musculus*	Endangered
Whale Shark	*Rhincodon typus*	Vulnerable
Green Turtle	*Chelonia mydas*	Vulnerable
Leatherback Turtle	*Dermochelys coriacea*	Vulnerable
Humpback Whale	*Megaptera novaeangliae*	Vulnerable
Flatback Turtle	*Natator depressus*	Vulnerable

It is reasonable to consider that some of these organisms may pass through the Permit Area or utilise these waters for foraging. However, it is unlikely that species are dependent on the habitat and resources immediately adjacent to the proposed well sites at the time the wells are to be drilled.

4.2.1. Benthic Communities

The seafloor in WA-371-P is expected to comprise predominantly of sand-sized marine carbonate sediments. This bottom type is the primary habitat that will be affected by the proposed project.