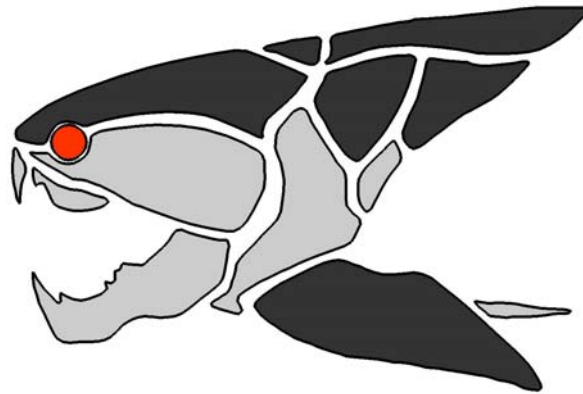


# **INPEX**

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## **INPEX BROWSE, LTD.**



# **Ichthys Field Development**

## **Commonwealth**

### ***Environment Protection &***

### ***Biodiversity Conservation Act 1999***

## **Referral Document**

**Doc No. DEV-EXT-RP-0001**  
**Revision: 0**

**Environment Protection and Biodiversity Conservation Act 1999****Referral****Important Note:**

Please read the [Referral Guide](#) and associated Fact Sheets (available at <http://www.deh.gov.au/epbc>) carefully. The guide and Fact Sheets will help you to complete the form correctly and ensure that your referral is in a form that can be processed. The completed form, together with the required maps and any other information you may wish to submit, should be sent to the EPBC Act Referrals Section, Approvals and Wildlife Division, Department of the Environment and Heritage, GPO Box 787, Canberra, ACT, 2601 and/or by email to [epbc.referrals@deh.gov.au](mailto:epbc.referrals@deh.gov.au) (see Referral Guide for allowable electronic formats).

**1. Contacts and proponent****1.1 Person making the referral** *(the person that has the responsibility to prepare this document)*  
**(Note: The term “person” can refer to an individual or a corporation)****INPEX BROWSE LTD.**

Level 35, Exchange Plaza, 2 The Esplanade  
Perth, Australia 6000  
Telephone: +61 8 9223 8433  
Fax : +61 8 9223 8455

Contact: Mr. Sean Kildare  
Position: External Affairs Manager  
Email: [skildare@inpex.com.au](mailto:skildare@inpex.com.au)

**1.2 Person(s) proposing to take the action** *(the person accountable for meeting any conditions attached to an approval for the action to be undertaken)***INPEX BROWSE LTD.**

Level 35, Exchange Plaza, 2 The Esplanade  
Perth, Australia 6000  
Telephone: +61 8 9223 8433  
Fax : +61 8 9223 8455

Contact: Mr. Shinsuke Ban  
Position: General Manager  
Email: [sban@inpex.co.jp](mailto:sban@inpex.co.jp)

**1.3 Person(s) who will be the proponent for the action** *(the proponent is responsible for the preparation of all assessment documentation. Generally the proponent is the same as the person taking the action because the assessment documentation will contain commitments from the person taking the action ie. The individual or organisation that will be held accountable for meeting those commits.)*

As per 1.2 above.

## 2. Description of the proposal

### 2.1 Provide a *summary description of the action (two or three sentences)*

INPEX Browse is proposing to develop the Ichthys gas-condensate field using offshore facilities and a gas-condensate processing and LNG production and export facility that would be built on the Maret Islands (North and South), in the Bonaparte Archipelago off the Kimberley Coast. Champagne Island to the south of the Maret Islands, is an alternative location under consideration. Marets and the Champagne Islands are within the Shire of Wyndham East Kimberley. However, during the course of further studies a third location may have to be considered. The operating life of the project is expected to extend beyond 30 years. Potential expansion of the facility may extend the life of the project beyond this period.

### 2.2 Details of the *location of the project area*

The Ichthys Field Development involves the offshore permit area WA-285-P R1 located in the Browse Basin on the North West Shelf of Western Australia approximately 440 km north of Broome and 800 km south-west of Darwin (Figure 1). The permit encompasses an area of approximately 3041 km<sup>2</sup> with water depth ranging from 90 to 340 m. The permit is held and operated solely by INPEX.

The proposed offshore semi-submersible Central Processing Facilities (CPF) and associated infrastructure are likely to be located within the Ichthys Field. The proposed location of the CPF within the Ichthys Field is at 526825E, 8465666N (GDA 94). The field measures approximately 40 km by 20 km. Water depth in this region is between 230 m (LAT) to 280 m (LAT).

The exact route of the subsea export pipeline is yet to be determined, but will approximate a direct route from the offshore facility to South Maret Island accounting for any subsea obstructions that may be found during the route survey. The length of the subsea export pipeline to the shore crossing will be approximately 200 km.

The Maret Islands (preferred development site) and Champagne Island (alternative development site) are the two sites currently under consideration for land based development. South Maret Island is located at 713932E, 8402528N (GDA 94) whilst Champagne Island is located at 634962E, 8308686N (GDA 94).

Depending on the results of detailed site selection studies, INPEX may consider a third location if the Maret or the Champagne Islands prove unsuitable



Figure 1: Location of Permit Area WA-285-P R1

**Attach** an A4/A3 size map/plan(s) showing the location and approximate boundaries of the area in which the project is to occur (this map, or a second attached map, should also show features mentioned in responses to questions in Part 3 of this referral, for example, conservation reserves, areas of remnant native vegetation, streams and roads).

**2.3 Provide the *timeframe* in which the action is proposed to occur. Include start and finish dates where applicable.**

<b>Development Stage</b>	<b>Start</b>	<b>End</b>
<b>Concept Selection</b>	<b>2Q 2006</b>	<b>3Q 2006</b>
<b>Concept Definition</b>	<b>4Q 2006</b>	<b>4Q 2007</b>
<b>FEED</b>	<b>4Q 2007</b>	<b>4Q 2008</b>
<b>FID</b>	<b>4Q 2008</b>	
<b>Initial Development Drilling</b>	<b>3Q 2011</b>	<b>2Q 2012</b>
<b>Construction and Commission</b>	<b>1Q 2009</b>	<b>Mid 2012</b>
<b>Production</b>	<b>Mid 2012</b>	<b>TBA</b>

**2.4 Provide a *description* of the action, including *all activities* proposed to be carried out as part of the proposed action.**

Exploration programs have indicated the presence of significant natural gas and condensate volumes in the permit area. The Ichthys Field consists of two reservoirs, Brewster Member and Plover Formation. Estimates of the recoverable hydrocarbon resource indicate over 269 000 Mm<sup>3</sup> (9.5 Tcf) of gas, and 49.6 GL (312 MMbbls<sup>1</sup>) condensate. The estimated CO<sub>2</sub> content averages 8.5 % in the Brewster Member and 17% in the Plover Formation.

The Project proposal includes the transport of two phase gas from the Ichthys field via a subsea pipeline to the proposed onshore processing facilities located on South Maret Island. The proposed subsea pipeline route from the field to South Maret Island is illustrated in Figure 2.

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<sup>1</sup> MMbbls ('million barrels') is the standard oil field unit, and Mm<sup>3</sup> (million metres cubed) is the Standard International (SI) unit for hydrocarbon liquids.



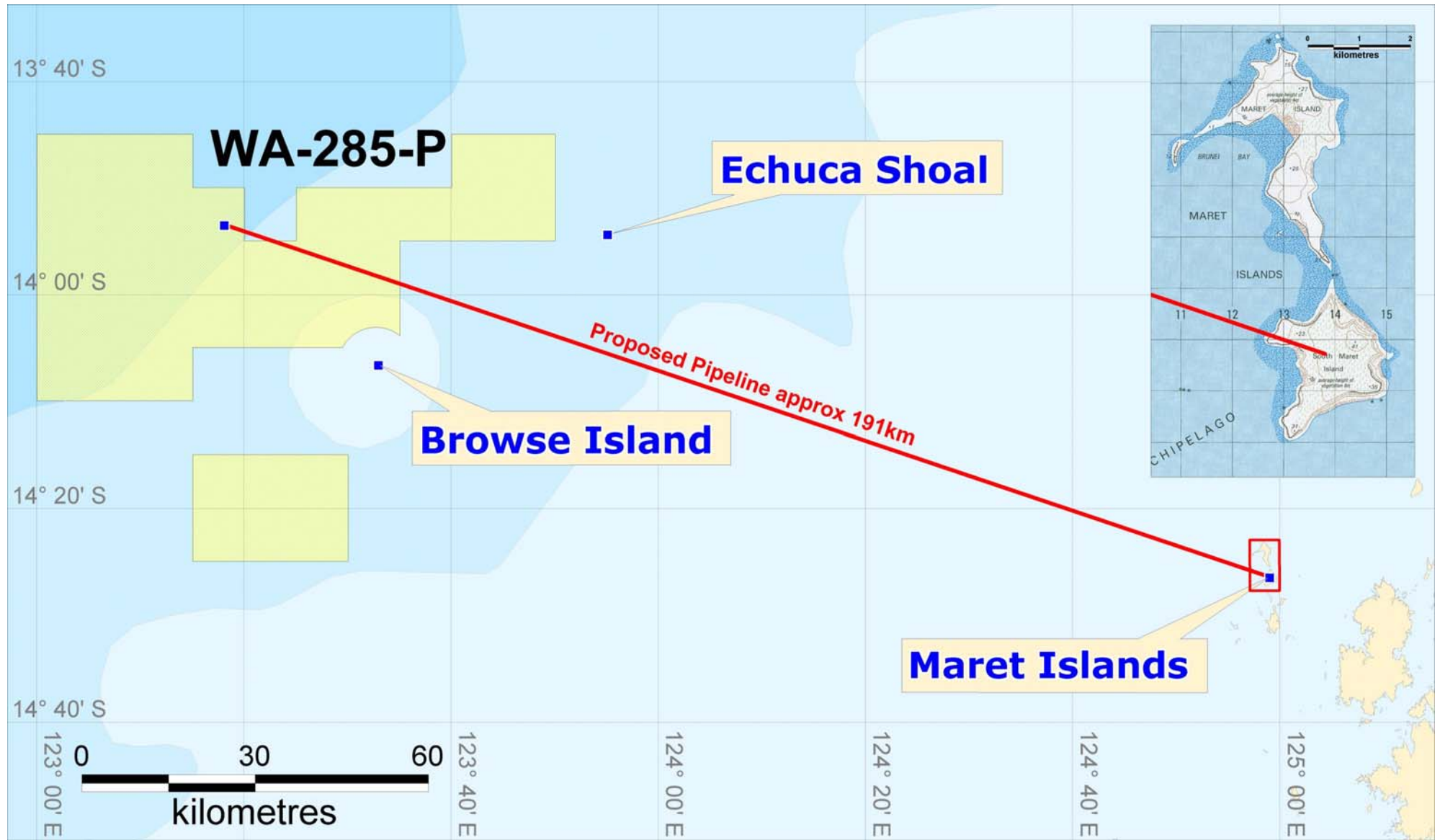
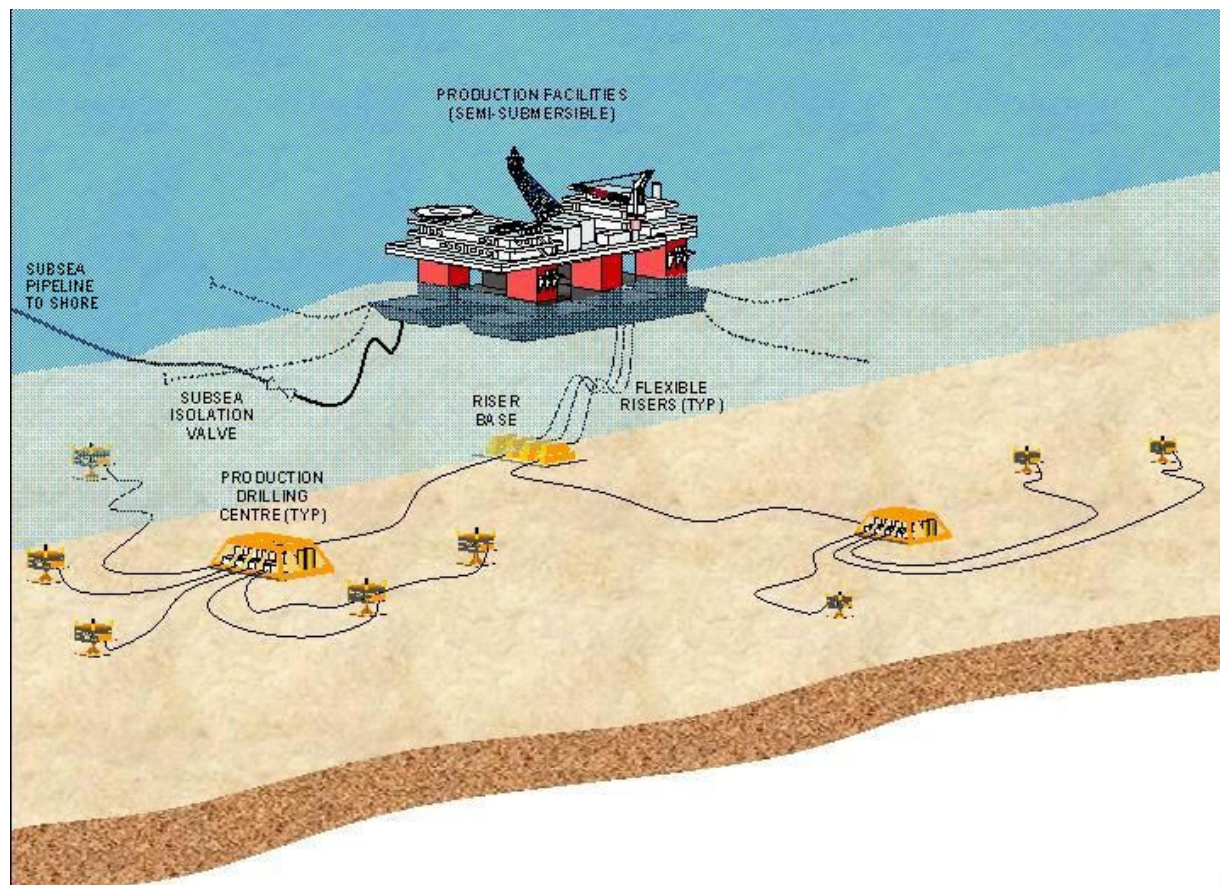


Figure 2: Proposed Development Area with Pipeline Route, Onshore Area and Key Locations. (Inset: Maret Islands)

The offshore development concept consists of a number of drilling centres (subsea wells and manifolds), with infield flowlines/flexible risers for submarine transfer of the reservoir fluid to the CPF. Dehydrated two phase gas will be exported to the Maret Islands via a subsea pipeline. Figure 3 illustrates the offshore development concept.



**Figure 3: Indicative Schematic of the Offshore Facilities**

An alternative CPF concept involves the installation of a fixed structure (TLP, Jacket, etc.) in the permit area, or the installation of a fixed platform in shallow water (100 – 120 m) approximately 35 km to 50 km from the field. This would be located in Commonwealth waters adjacent to the subsea pipeline route to either South Maret Island or Champagne Island. Additional CPF's and looping of the subsea pipeline may be required for the full development of the field.

The proposed onshore processing facilities consists of the slug catcher, gas treatment plant (condensate and LPG extraction, CO<sub>2</sub> removal) and LNG plant, with the slug catcher and gas treatment plant being integrated upstream of the LNG plant. The maximum capacity of the LNG Plant will extend up to 12 Mtpa comprising two 6 Mtpa trains.

The Project will come under Commonwealth jurisdiction for offshore facilities and the offshore component of the subsea gas export pipeline, and Western Australian jurisdiction for near-shore (i.e. within 3 nautical miles of the coast) and onshore facilities.

The main components of the Ichthys Field Development include:

- Subsea wells and manifolds tied back to the CPF
- Subsea gas export pipeline to shore
- Onshore gas pipeline
- Onshore processing facilities
  - Phase 1 – 1 x 6 Mtpa
  - Phase 2 – 1 x 6 Mtpa (at some time in the future)

- Onshore storage for condensate, LPG and LNG
- Materials Offloading Facility (MOF)
- Product offloading jetty(s)
- Airport
- Accommodation and associated infrastructure
- Causeway between South and North Maret Islands.

These components are described in detail below.

### **Satellite Subsea Wells and Manifolds Tied Back to Central Processing Facilities**

- Production Rates: the production rates of the facilities will vary between approximately 34 Msm<sup>3</sup>/d (1200 MMscfd) in Phase 1 and a total of 68 Msm<sup>3</sup>/d (2400 MMscfd) when the 2nd LNG train starts up in Phase 2
- Drilling centres will be installed to support approximately 35 to 40 wells phased over the field life. The exact number, location and timing of the drilling centres and wells can only be determined after gaining some production performance data from the field
- Exact (or nearest to) location: the proposed CPF location is at the coordinates indicated in Section 1.3
- Water depth: 230 m (LAT) to 280 m (LAT)
- Use of additives etc: MEG/Methanol will be required for hydrate inhibition of subsea flowlines; corrosion inhibitors and wax inhibitors may also be required
- Discharges: the main discharges to air will be the combustion gases from the power generation and gas compression turbines.
- Gas compression: timing and amount of compression required will depend on production rates selected and the performance of the field over time.
- Flaring: will be minimised as far as practical other than where required for safety reasons
- Manning requirements: 50-100 personnel depending on operating and maintenance philosophy adopted
- Service requirements (boats, aircraft) etc: main mode of personnel transport to these offshore facilities will be by helicopter. Supply boats will deliver materials/goods on a regular basis to support operation and maintenance activities.

### **Subsea Gas Export Pipeline to Shore**

- Length: approximately 200 km
- Location: as shown in Figure 2
- Size: 863.6mm (34") to 1016mm (40") nominal bore
- Materials: carbon steel
- Construction features: secondary stabilisation of the pipeline will be required and will involve trenching and/or rock dumping
- A second pipeline may be required in parallel with the first pipeline for the expansion of LNG production.

### **Onshore Gas Pipeline**

- Length: approximately 1 km
- Location: South Maret Island
- Materials: carbon steel
- Below ground at shore crossing to plant
- Tracks and racks within plant.

### **Onshore Processing Facilities**

- South Maret Island
- Phase 1 – 1 x 6 Mtpa train
- Phase 2 – an additional 1 x 6 Mtpa train



- Emissions: green house gases will be a major emission from the plant. INPEX is currently studying various alternatives to manage this issue.
- Flaring: will be minimised as far as practical other than where required for safety reasons
- Discharges: cooling water.

### **Onshore Product Storage**

- Location: South Maret Island
- Product stored: LNG, propane, butane and stabilised condensate
- Stored volumes: For Phase 1 LNG 280 000 m<sup>3</sup>, propane 80 000 m<sup>3</sup>, butane 50 000 m<sup>3</sup>, condensate 120 000 m<sup>3</sup>. For Phase 2 additional storage will be required or alternatively more frequent offloading of product

### **Materials Offloading Facility (MOF)**

- Location: South Maret Island
- Land-backed structure with a face wall comprising tied-back tubular interlocking piles.
- This will also service the offshore and onshore producing operations after the start of production during the life of the field.
- A breakwater will be required.

### **Product Offloading Jetty(s)**

- Location: South Maret Island
- One or two offloading jetties may be required depending on production rates and frequency of product offloading
- Construction: precast concrete and/or steel
- Length: 400 m (possible breakwater required).

### **Airport**

- Location: North Maret Island
- Runway dimensions: minimum 2000 m long
- Type of fixed wing aircraft: BAe146 or comparable
- Helipad to support of the offshore operations.
- Refuelling facilities.

### **Accommodation and Associated Infrastructure**

- Accommodation camp – location and capacity: North Maret Island. During construction accommodation will be provided for a peak workforce of approximately 2000 to 3000 personnel. During producing operations accommodation will be provided for approximately 300 - 400 personnel depending upon final plant operation and maintenance philosophy
- Personnel will rotate on a ‘fly-in/fly-out’ basis because of the remote location
- Access roads: based on laterite backfill with bitumen coating to seal
- Power generation: gas-turbine driven power generators, diesel-fired blackstart generators on standby
- Water supply: potable and plant use by desalination of sea water by reverse osmosis
- Waste water: including sewage treatment plant will be provided.
- All buildings and infrastructure will be designed and constructed to withstand the regions cyclonic conditions using industry accepted standards and criteria.

### **Workforce**

- During construction accommodation will be provided for a peak workforce of approximately 2000 to 3000 personnel
- During producing operations accommodation will be provided for approximately 300 - 400 personnel depending upon final plant operation and maintenance philosophy
- Personnel will rotate on a ‘fly-in/fly-out’ basis because of the remote location

**Causeway between North and South Maret Islands**

- Dimensions: approximately 500 m in length
- Construction materials: reinforced concrete base with culverts covered with core of laterite which in turn is covered with twin layer of rock armour.

**2.5 Provide an explanation of the context in which the action is proposed to take place, including any relevant planning framework (for example, relevant management plans or State or Local Government approvals). Indicate whether, and in what way, the action is related to other actions or proposals that may have already occurred, are occurring, or are likely to occur, at a future date. You should also provide the name(s) of the Local Council and/or Local Government Area the action will take place in, if relevant.**

INPEX is a Japanese oil and gas company headquartered in Tokyo, with substantial interests in oil and gas projects in Australia and internationally. As the sole permittee, INPEX intends to develop the Ichthys Field to produce condensate, LPGs and LNG for export. Initial production will be sold into Japan and other export markets in the Asia-Pacific region.

**Commonwealth Legislation**

The *Environment Protection and Biodiversity Conservation Act 1999* is the primary piece of legislation for the protection of environmental matters of national significance. This proposal will be referred to the Commonwealth Department for the Environment and Heritage in accordance with requirements of the *EPBC Act 1999*.

Other relevant Commonwealth legislation and regulations include, but are not limited to:

- Australian Ballast Water Management Requirements and Australian Quarantine Regulations
- *Australian Heritage Commission Act (No 1) 2003*
- *Australian Heritage Commission Act 1975*
- *Australian Maritime Safety Authority Act 1990*
- Environment Protection and Biodiversity Conservation Regulations 2000
- *Environmental Protection (Sea Dumping) Act 1981*
- *Fuel Quality Standards Act 2000*
- *Hazardous Waste (Regulations of Export and Imports) Act 1989*
- *Historic Shipwrecks Act 1976*
- *Native Title Act 1993*
- *Navigation Act 1912*
- *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*
- Petroleum (Submerged Lands) (Management of Environment) Regulations 1999
- *Petroleum (Submerged Lands) Act 1967*
- *Protection of the Sea (Prevention of Pollution from Ships) Act 1983*
- *Quarantine Act 1908*
- *Sea Installations Act 1987*.

**Western Australian Legislation**

The *Environmental Protection Act 1986* represents the primary statute for the protection of the environment in the State of Western Australia. This proposal will be referred to the Western Australian Environmental Protection Authority (EPA) in accordance with the requirements of the *Environmental Protection Act 1986*.

Other relevant Western Australian legislation and regulations that are likely to apply to this proposal include:

- *Aboriginal Heritage Act 1972*
- *Agriculture and Related Resources Protection Act 1976*

- Clean Air Regulations 1967
- *Conservation and Land Management Act 1984*
- *Dangerous Goods (Transport) Act 1998*
- Environmental Protection (Clearing of Native Vegetation) Regulations 2004
- Environmental Protection (Controlled Waste) Regulations 2004
- Environmental Protection (Liquid) Waste Regulations 1996
- Environmental Protection (NEPM-NPI) Regulations 1998
- Environmental Protection (Noise) Regulations 1997
- *Explosives and Dangerous Goods Act 1961*
- *Jetties Act 1926*
- *Land Administration Act 1997*
- *Local Government Act 1995*
- *Marine and Harbours Act 1981*
- *Maritime Archaeology Act 1973*
- *Pearling Act 1990*
- *Petroleum (Submerged Lands) Act 1982*
- *Petroleum Act 1967*
- *Petroleum Pipelines Act 1969*
- *Pollution of Waters by Oil and Noxious Substances Act 1987*
- *Port Authorities Act 1999*
- *Shipping and Pilotage Act 1967*
- *Soil and Land Conservation Act 1941*
- *Western Australian Marine Act 1982*
- *Wildlife Conservation Act 1950.*

#### **International Covenants and Agreements**

- Chinese Australia Migratory Birds Agreement (CAMBA)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Convention on the Conservation of Migratory Species (CMS)
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)
- International Convention for the Prevention of Pollution from Ships 1978 (MARPOL)
- International Convention on Oil Pollution Preparedness, Response and Co-operation 1990
- Japan Australia Migratory Birds Agreement (JAMBA)
- Protocol to International Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter 1972 (London (Dumping) Convention 1972)
- Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer
- World Bank EIA Standard/Guideline.

#### **Ancillary Approvals, Permits and Licences**

In addition to Ministerial Approval and any conditions attached to such approval, a number of ancillary approvals, permits and licences will be required to enable construction and operation to proceed. Such permits and licences include, but are not limited to:

- Dredging Permit
- Sea Dumping Permit
- Dangerous Goods Transport Licences
- Vegetation Clearing Permit
- Works Approval Permit
- Licence to Operate/Emit
- Pipeline and infrastructure licences
- Sea Installations, Drilling and Works Approvals
- Consent to Construct

- Production Licence.

Numerous Environment Plans or Environmental Management Plans under relevant Commonwealth or State legislation will also be required for drilling and well installation, pipe lay, operations and ultimate decommissioning of facilities.

#### Local Government Jurisdictions

- Onshore facilities: Maret Islands, Shire of Wyndham – East Kimberley.
- Construction and supply base: Broome, Shire of Broome.

**2.6 If you are considering making a referral of a stage or component of a larger action, you must provide information about the larger action and details of any interdependency between the stages/components and the larger action. If appropriate, you may also provide justification as to why you believe it is reasonable for the proposed action, that is the subject of this referral, to be considered separately from the larger proposal (see the [Referral Guide](#)).**

**Section 74A of the EPBC Act provides that the Environment Minister may not accept a referred action that is a component of a larger action. If the Environment Minister does not accept the referral, he or she is not permitted to make a decision on whether the action is a controlled action. The Environment Minister may request the person proposing to take the action to refer the larger action for consideration under the EPBC Act (see also [Fact Sheet](#)).**

Development of the Ichthys Field is not related to any other proposals.



### 3. Description of the project area and the affected area

**Note:** You must include a *map(s)/plan(s)* clearly showing the location of the action, and any relevant features referred to in 3.1. (A general location map (eg, 1:250 000 scale) and a more detailed map/*plan* showing the elements of the proposal may be appropriate. If available, an aerial photograph or other photograph of the site can be included.)

**3.1 Describe the affected area referring, as appropriate, to attached maps, plans and aerial photos. In particular, indicate on the map the location of any of the following features: World Heritage properties, National Heritage places, Ramsar wetlands, listed threatened species or communities and/or known habitat for these species or communities, listed migratory species and/or known habitat for these species, Commonwealth marine areas and Commonwealth land, listed Commonwealth Heritage places, conservation reserves/parks, and areas of remnant native vegetation.**

#### **Kimberley Coast**

The Kimberley coast is characterised by a broad continental shelf dotted with reefs, banks, shoals and near-shore islands, often fringed with coral reefs (Burbidge, McKenzie and Kenneally 1991). The coastline is remote and mostly inaccessible with little supporting infrastructure. Population density is sparse, with the exception of Broome in the south, and remote coastal communities such as Derby and Kalumburu.

Over 2000 islands extend throughout the Buccaneer and Bonaparte Archipelagos. Tidal ranges in this area are extreme (up to 10 m), which produce turbid waters that may extend seaward for several kilometres.

The regional climate is typically tropical with distinct wet and dry seasons. Rainfall is highly seasonal and is characterised by a heavy tropical signature with monsoonal and infrequent cyclonic rains during summer. Annual average rainfall is highly variable, with a median average rainfall of 600 mm at Broome and 622 mm at Derby, with most rainfall occurring during the summer months (Bureau of Meteorology 2006).

The EPBC Act Protected Matters Search Tool was accessed on 04/04/06 and a report generated for the development area including Champagny and North and South Maret Islands, infield facilities and pipeline routes. The search area is described in Appendix 1.

A summary of search outputs is provided in Table 1 and confirms there are no World Heritage Properties, National Heritage Place, Wetlands of International Significance or Threatened Ecological Communities in the proposed development area. 15 threatened species, 30 migratory species, 72 listed marine species, and 24 cetacean species may occur in the development area. The listed species includes various species of pipefishes, seahorses, sea snakes, turtles and crocodiles. Further details of the threatened and migratory species are provided in Table 2 and Table 3 respectively. An historic shipwreck located at Browse Island also appears on the National Register of Estate.

**Table 1: Protected Matters Report Summary for Maret Islands and Surrounding Waters**

<b>Matter</b>	<b>Status</b>
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Significance	None
Commonwealth Marine Reserves	Relevant
Threatened Ecological Communities	None
Threatened Species	15
Migratory Species	30
Commonwealth Lands	None
Commonwealth Heritage Places	None
Place on Register of National Estate	1
Listed Marine Species	72
Whales and Other Cetaceans	24
Critical Habitats	None
Commonwealth Reserves	None

Table 2: Threatened Species

Threatened Species	Status	Presence Type
<b>Birds</b>		
<u><i>Erythrotriorchis radiatus</i></u> Red goshawk	Vulnerable	Species or species habitat likely to occur within area
<u><i>Erythrura gouldiae</i></u> Gouldian finch	Endangered	Species or species habitat may occur within area
<u><i>Geophaps smithii blaaui</i></u> Partridge pigeon (western)	Vulnerable	Species or species habitat likely to occur within area
<u><i>Malurus coronatus coronatus</i></u> Purple-crowned fairy-wren (western)	Vulnerable	Species or species habitat likely to occur within area
<u><i>Tyto novaehollandiae kimberli</i></u> Masked owl (northern)	Vulnerable	Species or species habitat may occur within area
<b>Mammals</b>		
<u><i>Balaenoptera musculus</i></u> Blue whale	Endangered	Species or species habitat may occur within area
<u><i>Dasyurus hallucatus</i></u> Northern quoll	Endangered	Species or species habitat may occur within area
<u><i>Megaptera novaeangliae</i></u> Humpback whale	Vulnerable	Breeding known to occur within area
<u><i>Mesembriomys macrurus</i></u> Golden-backed tree-rat	Vulnerable	Species or species habitat may occur within area
<b>Reptiles</b>		
<u><i>Caretta caretta</i></u> Loggerhead turtle	Endangered	Species or species habitat may occur within area
<u><i>Chelonia mydas</i></u> Green turtle	Vulnerable	Breeding known to occur within area
<u><i>Dermochelys coriacea</i></u> Leathery turtle, leatherback turtle, luth	Vulnerable	Species or species habitat may occur within area
<u><i>Eretmochelys imbricata</i></u> Hawksbill turtle	Vulnerable	Species or species habitat may occur within area
<u><i>Natator depressus</i></u> Flatback turtle	Vulnerable	Species or species habitat may occur within area
<b>Sharks</b>		
<u><i>Rhincodon typus</i></u> Whale shark	Vulnerable	Species or species habitat may occur within area

Table 3: Migratory Species

Species	Status	Presence Type
<b>Migratory Terrestrial Species</b>		
<b>Birds</b>		
<i>Coracina tenuirostris melvillensis</i> Melville cicadabird	Migratory	Species or species habitat may occur within area
<i>Erythrura gouldiae</i> Gouldian finch	Migratory	Species or species habitat may occur within area
<i>Haliaeetus leucogaster</i> White-bellied sea-eagle	Migratory	Species or species habitat likely to occur within area
<i>Hirundo rustica</i> Barn swallow	Migratory	Species or species habitat may occur within area
<i>Petrophassa smithii blaauwi</i> Western partridge pigeon	Migratory	Species or species habitat likely to occur within area
<i>Poecilodryas superciliosa cerviniventris</i> Derby white-browed robin	Migratory	Species or species habitat likely to occur within area
<i>Rhipidura rufifrons</i> Rufous fantail	Migratory	Species or species habitat may occur within area
<b>Migratory Wetland Species</b>		
<b>Birds</b>		
<i>Charadrius veredus</i> Oriental plover, oriental dotterel	Migratory	Species or species habitat may occur within area
<i>Glareola maldivarum</i> Oriental pratincole	Migratory	Species or species habitat may occur within area
<i>Numenius minutus</i> Little curlew, little whimbrel	Migratory	Species or species habitat may occur within area
<b>Migratory Marine Birds</b>		
<i>Puffinus leucomelas</i> Streaked shearwater	Migratory	Species or species habitat may occur within area
<i>Sterna anaethetus</i> Bridled tern	Migratory	Breeding known to occur within area
<i>Sula leucogaster</i> Brown booby	Migratory	Breeding known to occur within area
<b>Migratory Marine Species</b>		
<b>Mammals</b>		
<i>Balaenoptera bonaerensis</i> Antarctic minke whale, dark-shoulder minke whale	Migratory	Species or species habitat may occur within area
<i>Balaenoptera edeni</i> Bryde's whale	Migratory	Species or species habitat may occur within area
<i>Balaenoptera musculus</i> Blue whale	Migratory	Species or species habitat may occur within area
<i>Dugong dugon</i> Dugong	Migratory	Species or species habitat likely to occur within area
<i>Megaptera novaeangliae</i> Humpback whale	Migratory	Breeding known to occur within area
<i>Orcaella brevirostris</i> Irrawaddy dolphin	Migratory	Species or species habitat may occur within area



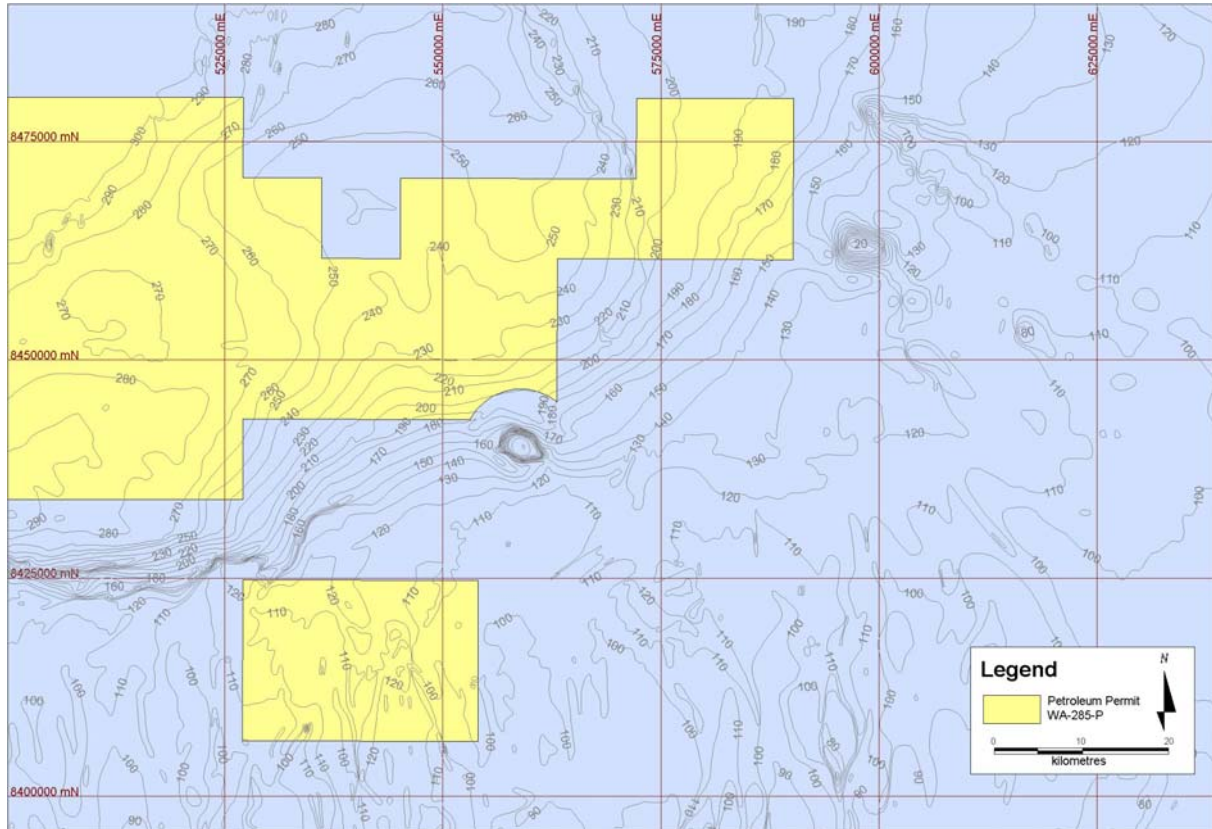
Species	Status	Presence Type
<u><i>Orcinus orca</i></u> Killer whale, orca	Migratory	Species or species habitat may occur within area
<u><i>Physeter macrocephalus</i></u> Sperm whale	Migratory	Species or species habitat may occur within area
<u><i>Sousa chinensis</i></u> Indo-pacific humpback dolphin	Migratory	Species or species habitat may occur within area
<u><i>Tursiops aduncus</i></u> <u>(Arafura/Timor Sea populations)</u> Spotted Bottlenose Dolphin (Arafura/Timor Sea populations)	Migratory	Species or species habitat likely to occur within area
<b>Reptiles</b>		
<u><i>Caretta caretta</i></u> Loggerhead turtle	Migratory	Species or species habitat may occur within area
<u><i>Chelonia mydas</i></u> Green turtle	Migratory	Breeding known to occur within area
<u><i>Crocodylus porosus</i></u> Estuarine crocodile, salt-water crocodile	Migratory	Species or species habitat likely to occur within area
<u><i>Dermochelys coriacea</i></u> Leathery turtle, leatherback turtle, luth	Migratory	Species or species habitat may occur within area
<u><i>Eretmochelys imbricata</i></u> Hawksbill turtle	Migratory	Species or species habitat may occur within area
<u><i>Natator depressus</i></u> Flatback turtle	Migratory	Species or species habitat may occur within area
<b>Sharks</b>		
<u><i>Rhincodon typus</i></u> Whale shark	Migratory	Species or species habitat may occur within area

### Marine Areas

The Ichthys Field lies on the continental shelf in Commonwealth waters within Permit WA-285-P with water depths ranging from 230 m to 280 m (refer to Figure 4). No ecological surveys relevant to the development area have been published. Preliminary field surveys carried out by the proponent in the vicinity of the Ichthys Field (September 2005) suggest the dominance of a barren sand seabed prone to strong currents and mobile sediments. Benthic communities are sparsely distributed in shallower waters, depending upon seabed substrates which range from muds, rippled sands, low semi-exposed pavements and upstanding reefal features. Soft substrates appear to support a low diversity and sparse array of epi-benthic organisms, primarily small gorgonians, sponges, and tube worms. Hard substrates support diverse assemblages which include small sea whips, sponges, gorgonians, crinoids, and black corals. Infauna surveys identified 117 nominal species across ten phyla of varying abundance. Infauna assemblages are characterised by polychaete worms (Annelida) and crustaceans (Arthropoda).

Regional features in the development area include Echuca Shoal and Browse Island. Echuca Shoal is located approximately 70 km east of the proposed location of the CPF and is characterised by a diverse assemblage of corals including *Porites*, *Faviids*, and *Acroporids*. Soft corals include small sea whips (*Junceella*) and members of the genera *Dendronephthya*, *Sacropton* and *Sinuloaria*. All taxa are common in tropical Western Australian reefal habitats. Browse Island (refer to Figure 2) is classified a Class C Nature is located approximately 35 km from the proposed central processing facilities. Browse Island is a sand and limestone cay situated on a limestone reef and coral reef and

covers an area of 13 ha. The remnants of historical phosphate mining on the island have left a significantly disturbed surface. The island represents an important turtle nesting site, particularly for the green turtle (*Chelonia mydas*). Browse Island is the nearest land to the Ichthys Field (approximately 35 km). Through environmental studies, INPEX will demonstrate Browse Island's environmental values are not a risk from the development.



**Figure 4: Bathymetric Map of WA-285-P Permit and Surrounding Area**

There is little information available in regard to the near-shore marine environment of the Maret Islands. Preliminary site investigations by INPEX (June 2004) show that near shore sea bed conditions are characterised by scattered outcroppings of coral reefs with near surface conditions dominated by sand. A number of rocky outcrops and near-surface reefs are located around the islands. Extensive reef structures exist to the north and south west of the islands.

Table 2 and Table 3 provide a detailed list of threatened and migratory marine species that occur in the region of the Maret Islands. While various marine mammals are known to occur broadly within the region, the annual migration of the humpback whale is possibly the most significant. Figure 5 shows the limited extent of information in regards to humpback whale activity in the development area. This data gap will be addressed through cetacean surveys throughout the development region (refer to Figure 6).

The inshore waters and sandy beaches of the Kimberley Islands are considered important habitat for five species of turtle listed in Table 2. The green turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricate*), flatback turtle (*Natator depressus*) and loggerhead turtle (*Caretta caretta*) are known to nest on beaches throughout the region. Preliminary investigations by INPEX (September 2005) indicate the key turtle species present at the islands of interest is the hawksbill turtle.

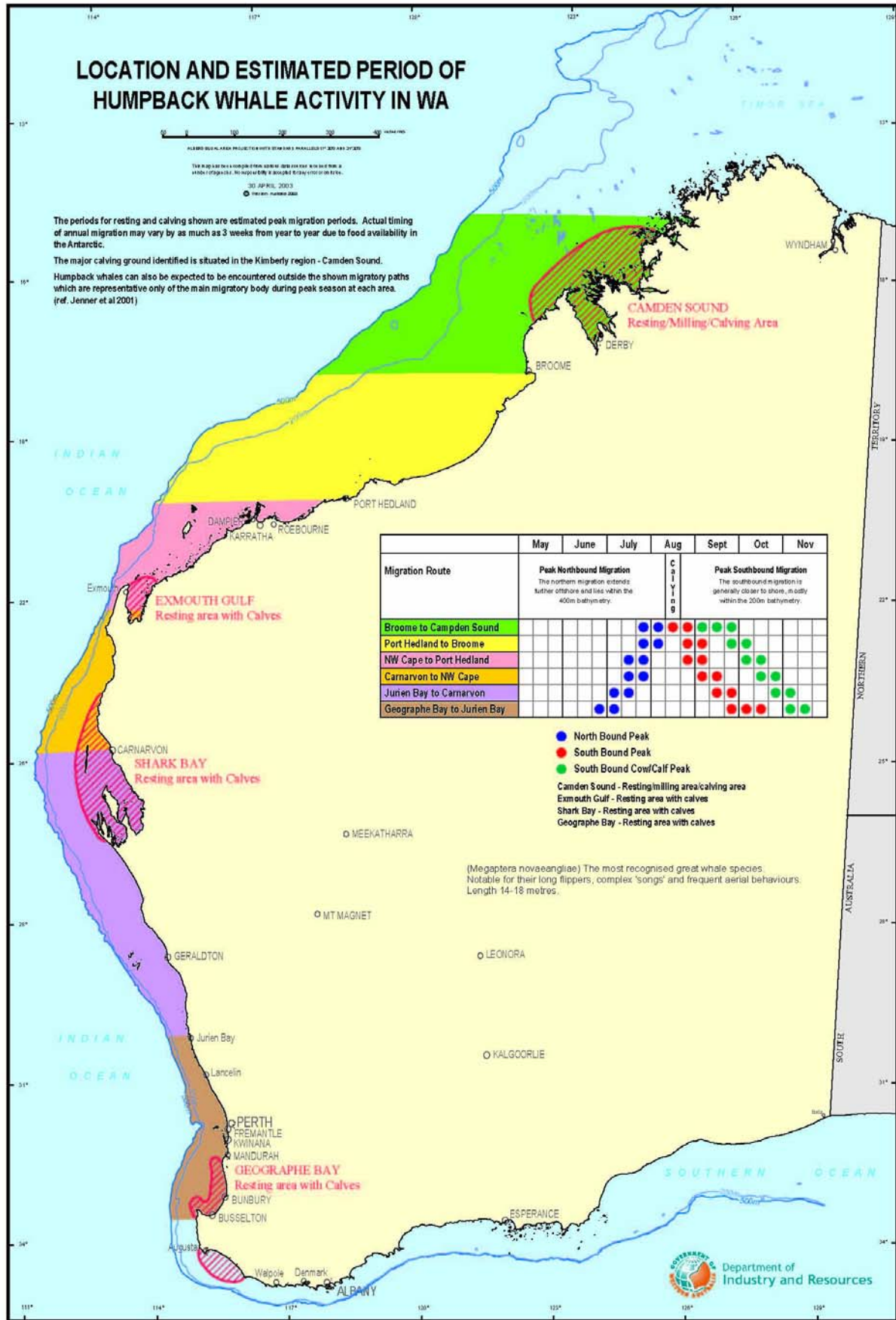


Figure 5: Location and Estimated Period of Humpback Whale Activity in WA (Source: DoIR 2003)



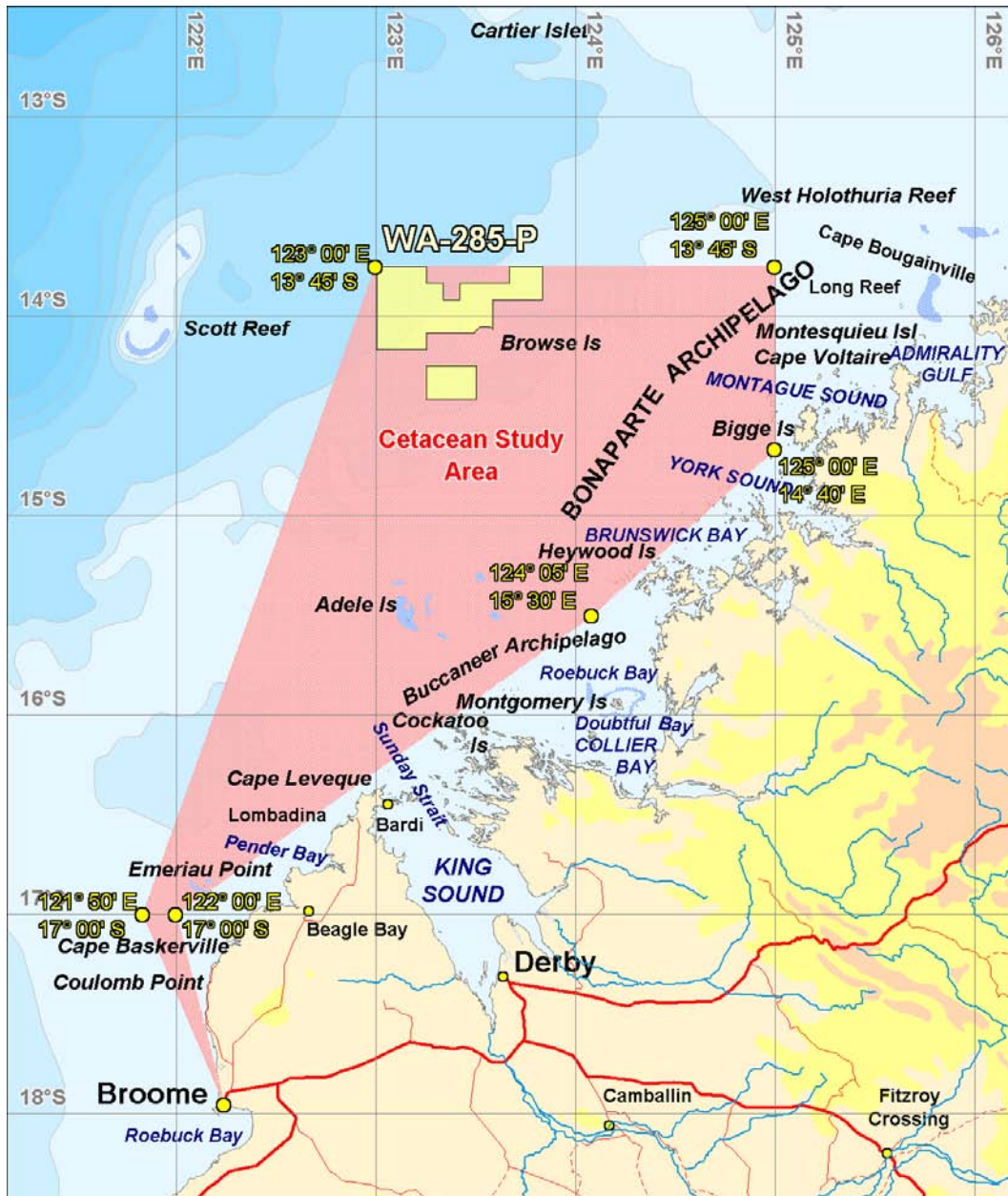


Figure 6: Cetacean Study Area

3.2 Provide a description of important features of the project area and the affected area and show these on the attached map, including (if relevant to the project area or affected area) information about:

**Terrestrial Environment**

- (a) soil and vegetation characteristics;

**Preferred Development Site – Maret Islands**

The geology of the Maret Islands is characterised by a lateritic cap averaging 15 m to 20 m thickness over a basalt base. The laterite is undifferentiated with the upper 10 m weathered and hardened, and the lower 5 to 10 m typically softer as evidenced by the eroding cliff faces. The basalt layer is a part of the Kimberley Carson Volcanics and is grey green to black in an angular blocky formation.



There is virtually no soil on North Maret Island and very little on South Maret Island. The surface of both islands is very rocky with broken laterite exposed at ground level. Interspersed between broken laterite is massive unbroken laterite at the surface.

North Maret has large open spaces of spinifex hummock grassland with some pockets of woodland in the centre (and wider) part of the island.

Observed flora species included the long fruited bloodwood (*Corymbia polycarpa* [previously *Eucalyptus polycarpa*]). This tree is the dominant woodland species on the plateau and occurs in extensive stands along the central western side of the island.

Other species include: *Grevillea pyramidalis*, wattles (*Acacia* sp. [*retinervis*?]), *Commelina ensifolia*, spinifex (*Triodia* sp.), *Distichostemon hispidulus*, tropical lily (*Crinum flaccidum*) naked lady (*Sarcostemma viminalis* ssp. *australe*), *Diospyros neritima*, *Gomphrena* sp., *Pandanus* sp. (*spiralis*?) and spear grass (*Heteropogon contortus*). Cliff and beach vegetation are particularly abundant on the western side of the island, with extensive development of sand dunes. Species observed include: lawyer vine (*Flagellaria indica*), *Gomphrena* sp., *Pittosporum* sp. (*moluccanum*?), coastal spinifex (*Spinifex longifolius*), beach morning glory (*Ipomea pes-caprae* ssp. *braziliensis*), *Scaevola* sp., *Pouteria sericea* and *Ptilotus spicatus* ssp. *spicatus*.

The plateau vegetation on South Maret Island appears significantly different to North Maret Island only in terms of density and abundance. The vegetation features some small, isolated areas of open hummock grassland, however the majority of the island is covered with thick woodland that in some areas (e.g. the north and west sides) could be regarded as closed forest. The canopy in these areas is approximately 5 to 7 m high and the undergrowth extremely dense with vine thickets.

All the flora species listed above for North Maret were found on South Maret, in addition the following were observed: *Eucalyptus* sp. (*bella* or *miniata*?) and *Asparagus racemosus*.

All species observed are widely abundant and commonly found throughout the Kimberley islands and mainland.

### **Alternative Development Site — Champagne Island**

Champagne Island is an alternative development site located approximately 190 km from the Ichthys Field, 30 km from the nearest mainland location and 365 km from Broome. The island covers an area of 1 388 ha and lies in the Augustus Group of islands.

Champagne Island is characterised by hardened quartzitic Warton sandstone estimated to be approximately 300m thick (Gellatly and Sofoulis 1973). There is a prominent joint pattern in the Warton Sandstone that has led to some gullying at the surface which has eroded into blocky angular features.

Substantial gullies and creek lines run parallel to each other across the island, generally in a north-south direction. The north-eastern side of the island has significantly elevated topography relative to the remainder of the island, with peaks reaching greater than 50 m.

There are substantial beaches on the eastern and south-eastern sides of the island and steep cliff faces along the northern side of the island falling into the sea.

Preliminary aerial observations indicate the island is covered mainly with open scrub though a number of dense stands of Eucalyptus (*E. perfoliata*) and Acacia (*A. plectocarpa* and *A. tumida*). The understorey is dominated primarily by spear grass (*Heteropogon contortus*) and spinifex (*Triodia* sp. and *Spinifex longifolius*). Mangrove species (*Avicennia* sp.?) exist in the sheltered silty creeks along the southern side of the island.

(b) water flows, including rivers, creeks and impoundments;

There is no record of permanent water on the Maret Islands. Aerial photography suggests the presence of a small number of minor ephemeral water drainage lines. The presence of groundwater is highly unlikely given the volcanic/metamorphic characteristics of regional and island geology.

(c) the presence of outstanding natural features, including caves;

The Maret Islands have been allocated to a Landscape Protection area under the Shire of Wyndham – East Kimberley Local Planning Strategy. Both islands are characterised by a number of beach areas, with the remaining coast featuring steep cliff faces. The majority of the cliff faces have undercut as a result of erosion. Coastal cliffs up to 10 metres high occur in parts of the Maret Islands. There is no record of caves, or development of subterranean cave structures, which would be unlikely given the islands basaltic–lateritic geology.

(d) gradient;

North and South Maret Islands are characterised by slight relief. North Maret Island is relatively flat in contrast to South Maret Island which provides more relief with a peak elevation of 45 m.

(e) any buildings or other infrastructure;

None.

(f) any marine areas;

Refer to 3.1 for description of marine area.

(g) kinds of fauna in the area;

**Preferred Development Site – North and South Maret Islands**

The Project will require the removal of between 35% and 45% of the Maret Islands native vegetation that would otherwise provide potential habitat for terrestrial fauna. It is anticipated that there is no subterranean fauna present on the islands due to the volcanic–metamorphic characteristics of regional and island geology.

There are no known native mammals or marsupials observed on the Maret Islands and literature research of publicly available information has not revealed records of them being present. Anecdotal information (e.g. from Western Australian Museum and CALM) support this finding.

The reptile fauna on the Maret islands is abundant and provides much of the food source for the larger raptors and each other. Smaller lizards include species from the Gekkonidae (geckos), Agamidae (dragon lizards) and likely Scincidae (skinks) families. Unidentified species of sea snakes have been observed around the reefs of North Maret Island. Of particular note was the abundant presence of hawksbill turtle nests (*Eretmochelys imbricata*) on all the beaches of both islands.

**Alternative Development Site – Champagne Island**

The Project will require the removal of between 19% and 25% of Champagne Island's native vegetation that would otherwise potentially provide habitat for terrestrial fauna. It is anticipated that there is no subterranean fauna present on the islands due to the volcanic–metamorphic characteristics of regional and island geology.

There are many birds recorded around the Augustus group of islands, all of which are anticipated to be found at Champagne Island. Burbidge and McKenzie (1978) report that the mammal *Zygomys*

*woodwardii* (large rock rat) may have been sighted on Champagne Island, though the evidence was not conclusive enough to positively identify the species. The large rock rat is common throughout the northern Kimberley and Northern Territory in similarly rocky environments (Watts & Aslin 1981). There is evidence in the literature that bats and a broad range of reptiles may also occur on Champagne Island (Burbidge & McKenzie 1978).

Refer to 3.1 for description of marine fauna.

- (h) the current state of the environment in the area, including information about the extent of erosion, whether the area is infested with weeds or feral animals and whether the area is covered by native vegetation or crops;

The rugged and remote environment of the Maret Islands combined with very limited non-aboriginal human contact suggests the environment is largely undisturbed from its natural state. INPEX believes that no evidence exists indicating the presence of non-native species of plants or animals on Maret Islands.

- (i) known Indigenous heritage values;

#### Preferred Development Site – North and South Maret Islands

There is only one known Aboriginal Heritage site listed on the Department of Indigenous Affairs register for South Maret Island. Details of this listed site are provided in Table 4.

**Table 4: Maret Islands Registered Aboriginal Sites**

Site Number	K00132
Name	South Maret Island
Site Type	Man made structure
Reliability	Reliable
Location	South Maret Island E714136 – N8402311
Restriction	Not Restricted

#### Alternative Development Site – Champagne Island

There are two known Aboriginal Heritage sites listed on the Department of Indigenous Affairs register for Champagne Island. Details of these listed sites are provided in Table 5.

**Table 5: Champagny Island Registered Aboriginal Sites**

<b>Site Number</b>	<b>K00179</b>
Name	Champagny Islands
Site Type	Painting, man made structure
Reliability	Unreliable
Location	E635137 – N8305161
Restriction	Not Restricted
<b>Site Number</b>	<b>K00180</b>
Name	Champagny Island
Site Type	Man made structure
Reliability	Unreliable
Location	E636637 – N8308661
Restriction	Not Restricted

Aboriginal heritage surveys will be conducted on both Champagny and the Maret Islands to ensure compliance with the Western Australian *Aboriginal Heritage Act 1972* and respect the wishes of the relevant Traditional Owners.

- (j) any other characteristics or important features of the receiving environment if the action is by a Commonwealth agency or may affect Commonwealth land.

None that are known nor foreseen.

### 3.3 What is the *tenure* of the project area (for example is it freehold, leasehold or some other tenure)? If practicable, show on the attached map.

#### **Preferred Development Site – Maret Islands**

The Maret Islands are classified as vacant crown land and are subject to a Native Title Claim WC99/35 and Federal Court file number W6033/99. The proposal would require negotiation of Native Title agreement with the Uunguu claimants. The Department for Planning and Infrastructure will be approached for a licence under Section 91 of the *Land Administration Act 1997* to gain access to the Maret Islands for site investigations and studies

#### **Alternative Development Site – Champagny Island**

Champagny Island is classified Aboriginal Reserve land and is part of the Kunmunya Aboriginal Reserve administered by the Western Australian Aboriginal Affairs Planning Authority. The island is included in the Dambimangari native title claim. The claim was lodged with the National Native Title Tribunal (NNTT) in 1995 and was formally registered in 1999. The Federal Court has referred the Dambimangari claim to the NNTT for mediation, although only limited mediation has occurred to date. Access to Champagny Island for site investigations and studies will be coordinated through the Kimberley Land Council.

Depending on the results of detailed site selection studies, INPEX may consider a third location if the Champagny or the Maret Islands prove unsuitable.

#### **Ichthys Field**



The exploration permit WA 285-P lies solely within Commonwealth waters. INPEX is the operator and 100% equity holder of this permit. At the appropriate time in the development schedule, a portion of WA 285-P will be subject to acquisition of a production licence and will convert to a production area.

### 3.4 What are the current and/or proposed *land uses* for the project area?

#### **Marine Areas**

The Ichthys Field and surrounding waters are utilised by the Royal Australian Navy, Australian and Indonesian fishing operations, commercial shipping operations and other petroleum development enterprises.

#### **Preferred Development Site**

Both North and South Maret Islands are currently uninhabited with no commercial, industrial or residential developments ever having been constructed upon them.

#### **Alternative Development Site**

Champagny Island is an Aboriginal Reserve.

## 4. Nature and extent of the likely impacts of the action

### 4.1 Describe, as relevant to your project, the nature and extent of likely impacts on the following matters of national environmental significance protected by the EPBC Act:

- (a) the world heritage values of a declared World Heritage property; or
- (b) the heritage values of a listed National Heritage place; or
- (c) the ecological character of a declared Ramsar wetland; or
- (d) the members of a listed threatened species (except a conservation-dependent species) or any threatened ecological community, or their habitat, or
- (e) the members of a listed migratory species or their habitat; or
- (f) the environment in part of the Commonwealth marine area.

On the basis of information sourced from the Protected Matters Search Tool (Table 1) the proposal will have no impact on the following Matters of National Environmental Significance:

- World Heritage Properties
- National Heritage Places
- Wetlands of International Significance
- Threatened Ecological Communities

None of the matters listed above exist within the development area or within proximity to the area that could be affected by the proposed development.

Disturbance to native vegetation on the development site will be minimised as far as practicable. The total area required to be cleared for onshore development is estimated at between 260 ha and 340 ha, or 35% and 45% of the total area of the Maret Islands. If the Project were to occur on Champagne Island, it is estimated that the clearing of 260 ha to 340 ha, or 19% to 25% of the total area of Champagne Island would be required.

Fifteen (15) threatened species and thirty (30) migratory species may occur in the development area (refer to Table 2 and Table 3 respectively). Surveys for the presence of cetaceans, particularly humpback whales, will be designed and executed in accordance with *Australian National Guidelines for Whale and Dolphin Watching* (DEH 2005) to determine presence and activity, if any, in the development area. In the event cetaceans are detected in the area, strategies will be implemented to mitigate any potential impact. The location of the pipeline shore crossing is yet to be determined, but will be located and constructed in a manner that will have minimal impact on turtle nesting habitat and activities. This will be achieved through scheduling activities to avoid the nesting season, and to minimise light spill to nesting beaches. Construction of marine infrastructure including the jetty, tanker channel, and materials offloading facility will also be carried out in a manner designed to minimise impacts to turtle nesting areas and marine habitat. Operational impacts on whales and turtles are expected to be negligible and approved Environmental Management Plans will be in place prior to any development activities commencing.

The proposed action will be undertaken in part in a Commonwealth marine area. Activities within this area will be typical of offshore petroleum production operations, including:

- Drilling and operation of numerous subsea wells, manifolds and risers tied back to an offshore facility
- Installation and operation of an offshore facility
- Construction and operation of a subsea pipeline of approximately 200 km in length.

Drill cuttings and discharges can have adverse impacts on local water quality, pelagic and benthic communities. The proponent will manage all drill cuttings and discharges, in accordance with the guidelines for *Drilling Fluids Management* (DoIR 1998).

Construction of the subsea export pipeline will be conducted in accordance with an approved Pipeline Management Plan which will include minimising disturbance to cetaceans and migratory species and unnecessary disturbance to marine habitat.

Commissioning and operational impacts will be managed through a risk-based approach in accordance with legislated regulations and industry standards. Discharges, including hydrotest water and produced formation water will be managed through an Environmental Plan in accordance with relevant legislation.

Decommissioning will require an assessment of the best available option at the time facilities are decommissioned. This will take into account relevant safety, environmental and economic issues in order to produce a practical outcome that makes the best use of technology available at that time. A decommissioning concept will be developed during the environmental studies.

**4.2 Describe, as relevant to your project, the nature and extent of likely impacts on the environment for the following category of proposed actions (in addition to the specific matters addressed above in 4.1):**

(a) a nuclear action; or

The proposed action is not a nuclear action.

(b) an action by the Commonwealth or by a Commonwealth agency; or

The proposed action will not be undertaken by the Commonwealth or by a Commonwealth agency.

(c) an action that will be taken on Commonwealth land or that may affect Commonwealth land; or

The proposed action will not be undertaken on Commonwealth land or that may affect Commonwealth land.

(d) an action taken by the Commonwealth or by a Commonwealth agency that may affect a listed Commonwealth Heritage place or a place listed on the Register of the National Estate.

The proposed action will not affect a listed Commonwealth Heritage place or a place listed on the Register of the National Estate.

## 5. Measures aimed at avoiding or reducing significant impacts on matters protected under the EPBC Act

**5.1 Describe any specific measures proposed as part of the action to avoid or lessen significant impacts on matters protected under the EPBC Act. Include a timeframe or workplan for implementation of any relevant measures.**

Examples of relevant measures may include the timing of works to avoid critical periods for listed species, avoidance of habitat important for listed species from direct and indirect impacts, application of specific design measures to avoid or reduce impacts, or adoption of specific work practices to reduce or avoid impacts (see Referral Guide, Fact Sheet and 'Particular Manner' Guideline at <http://www.deh.gov.au/epbc>).

Described above in Sections 3 and 4.1 respectively.

**5.2 Describe any consultations undertaken with Indigenous stakeholders regarding the action, if relevant. Identify relevant stakeholders and the status of consultations at the time of referral.**

Consultations with the Kimberley Land Council (representing the Dambimangari and Unguu native title claimants) have taken place in regard to gaining access to various offshore islands in the Kimberley region. Ongoing consultation will be undertaken with the Kimberley Land Council and Traditional Owners during the assessment phase of this proposal and over the life of the project.

## 6. Information sources

**6.1 List relevant references**

You should also attach a copy of any relevant reports or documents that support the arguments and conclusions made in this referral. For example, any flora and fauna surveys or desktop investigations should be provided.

**6.2 For information given in sections 3 and 4 of this referral, please indicate:**

- (a) the source of the information; and
- (b) how recent the information is; and
- (c) how the reliability of the information was tested; and
- (d) any uncertainties in the information.

Burbidge, A., N., McKenzie, and K. Kenneally 1991. *Nature Conservation Reserves in the Kimberley Western Australia*. Department of Conservation and Land Management, Western Australia.

Burbidge, A.A. and N. L. McKenzie 1978. *The Islands of the North-West Kimberley, Western Australia*. Dept. of Fisheries & Wildlife, Perth, W.A.

Bureau of Meteorology 2006. Accessed 23/01/06 <<http://www.bom.gov.au/climate/averages/tables/>>.

DEH 2005. *Australian National Guidelines for Whale and Dolphin Observation*. Department of the Environment and Heritage, Canberra, Australia.

DEH 2006. EPBC Search Tool, accessed 4<sup>th</sup> April 2006  
<<http://www.deh.gov.au/erin/ert/epbc/index.html>>

DoIR 1998. *Drilling Fluids Management*. Western Australian Department of Industry and Resources, Perth, Western Australia.

DoIR 2003. *Location and Estimated Period of Humpback Whale Activity in Western Australia*. Western Australian Department of Industry and Resources, Perth, Western Australia.

Gellatly, D.C. & Sofoulis, J. 1973. Yampi, W.A. *1:250,000 Geological Series – Explanatory Notes Sheet SE/51-3*. Australian Geological Survey, Canberra, A.C.T.

Watts, C.H.S. & Aslin, H.J. 1981. *The Rodents of Australia*. Angus & Robertson, Sydney.

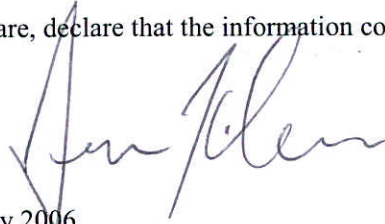
## 7. Signatures and Declarations

**Section 489 of the EPBC Act states that the provision of false or misleading information is an offence punishable on conviction by imprisonment and fine.**

### 7.1. Signature of person making the referral

I, Sean Kildare, declare that the information contained in this form is, to my knowledge, true and not misleading.

Signature:



Date: 1<sup>st</sup> May 2006

---

### 7.2. Signature of person proposing to take the action

I, Shinsuke Ban, declare that the information contained in this form is, to my knowledge, true and not misleading.

Signature:



Date: 1<sup>st</sup> May 2006

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### 7.3. Declaration of person nominated as proponent in Section 1.3, if different from person proposing to take the action

I, .....(full name), being (or agent acting on behalf of) the person nominated in Section 1.3 of this referral form as the nominated proponent agree to be designated as the proponent for the action described above if it is decided that the action requires approval under Part 9 of the EPBC Act.

Signature:

Date

Signature of person proposing to take the action:

Date

---



**Fill in Section 7.4 if you believe that the proposal is not likely to have a significant impact on matters protected by the EPBC Act and that the proposal is therefore not a controlled action. Fill in Section 7.5 if you believe that the proposal is likely to have a significant impact on a protected matter and that the proposal is therefore a controlled action. (Note: This Section must be completed in *all cases* except where the referral is made by a State or Territory or a Commonwealth agency in relation to an action to be taken by another person.)**

**7.4. If you think your proposed action is not likely to have a significant impact on any of the matters listed in the table below, then you should select and complete the following statement and you should not mark any of the boxes in the table below.**

I .....(full name), being the person making this referral and the person proposing to take the action (or agent acting on behalf of the person) believe that the action described in this referral **is not a controlled action.**

**Briefly provide reasons why you believe your proposed action is not a controlled action:**  
(Note: For an explanation of the term “controlled action”, see the Referral Guide.)

**OR**

**7.5. If you think that your proposed action is likely to have a significant impact on any of the matters listed in the table below, then you should select and complete the following statement. You must then mark ‘Yes’ against those matters on which you think it will have a significant impact, in the table below.**

I, Sean Kildare, being the person making this referral and the person proposing to take the action (or agent acting on behalf of the person) believe that the action described in this referral **is a controlled action because of the following provisions of the Act:**

<b>Significant Impact Likely</b>	<b>Controlling Provision</b>
No	<b>World Heritage property</b> (Sections 12 and 15A - significant impacts on the values of a World Heritage property)
No	<b>National Heritage places</b> (Sections 15B and 15C – significant impacts on the values of a National Heritage place)
No	<b>Ramsar Wetland</b> (Sections 16 and 17B - significant impacts on the ecological character of a Ramsar wetland)
Yes	<b>Threatened species or ecological communities</b> (Section 18 and Section 18A - significant impacts on a listed threatened species or a listed threatened ecological community)
Yes	<b>Migratory species</b> (Sections 20 and 20A - significant impacts on a listed migratory species)

<b>Significant Impact Likely</b>	<b>Controlling Provision</b>
No	<b>Nuclear action</b> (Sections 21 and 22A - nuclear actions)
Yes	<b>Commonwealth marine area</b> (Sections 23, 24 and 24A - actions relating to the Commonwealth marine area and fishing in coastal waters managed by the Commonwealth)
No	<b>Commonwealth land</b> (Sections 26 and 27A - actions relating to Commonwealth land)
No	<b>Commonwealth action</b> (Section 28 - actions by the Commonwealth having a significant impact on the environment)

**Briefly provide reasons why you believe your proposed action is a controlled action:**  
(Note: For an explanation of the term “controlled action”, see the Referral Guide.)

INPEX Browse Ltd believes that the proposed Ichthys Field Development will have no effect on World Heritage Property, National Heritage Places, Ramsar Wetland or Commonwealth Land. The proposed development is not likely to have significant impacts on threatened species or migratory species. Given the development involves offshore facilities and a subsea pipeline in Commonwealth marine waters, and given the large scale of development involved, the project should be subject to formal assessment under Commonwealth and Western Australian environmental impact assessment processes. Formal assessment will utilise a proactive approach by the proponent to survey and describe the environmental values in the development region, and to develop appropriate management approaches to mitigate risk to these values.

If the person making this referral is, or is representing, a *small business* ( a business having fewer than 20 employees), please provide an estimate of the time taken to complete this form.

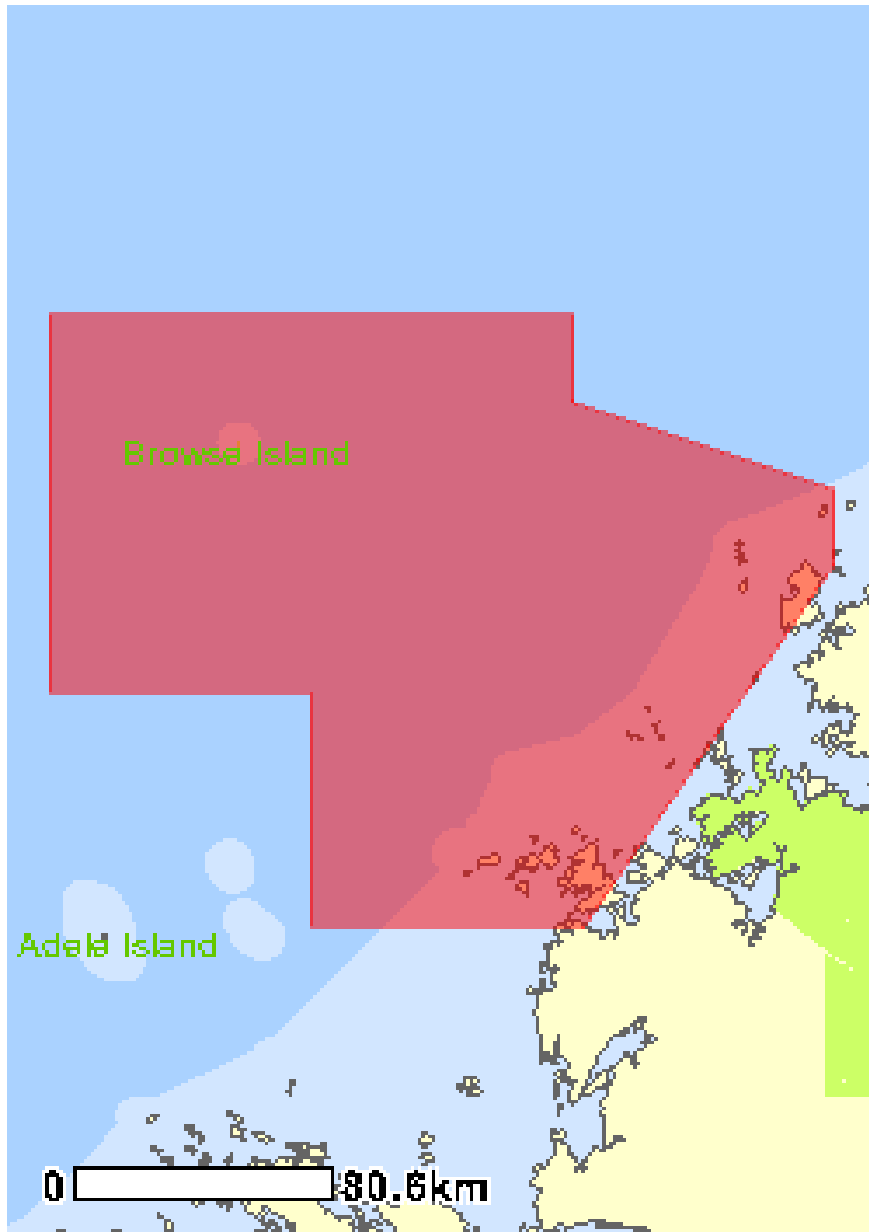
***Please Include***

- The time spent reading the instructions, working on the questions and obtaining the information; and
  - The time spent by all employees in collecting and providing this information.
- hours                  minutes

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END OF FORM

## Appendix 1 EPBC Search Area April 06\*



<b>Point 1</b>	14	degrees	15	minutes	south	125	degrees	15	minutes	east
<b>Point 2</b>	14	degrees	0	minutes	south	124	degrees	30	minutes	east
<b>Point 3</b>	13	degrees	45	minutes	south	124	degrees	30	minutes	east
<b>Point 4</b>	13	degrees	45	minutes	south	123	degrees	0	minutes	east
<b>Point 5</b>	14	degrees	50	minutes	south	123	degrees	0	minutes	east
<b>Point 6</b>	14	degrees	50	minutes	south	123	degrees	45	minutes	east
<b>Point 7</b>	15	degrees	30	minutes	south	123	degrees	45	minutes	east
<b>Point 8</b>	15	degrees	30	minutes	south	124	degrees	32	minutes	east
<b>Point 9</b>	14	degrees	28	minutes	south	125	degrees	15	minutes	east

\*Source: DEH 2006.