



## ICHTHYS GAS FIELD



### 2008 ACEA GOLD AWARD OF MERIT FOR SPECIALIST SERVICES

#### Location

Maret Island, Western Australia

#### Client

INPEX Browse Limited

#### Year

2008

Coffey Geotechnics was appointed by INPEX Browse Ltd to manage the geotechnical investigations for the nearshore and onshore facilities at the Maret Islands for the potential to receive LNG via a nominal 190km long subsea pipeline from the Ichthys Gas Fields.

Engineering technical advice was also provided on the foundation conditions for the construction of the harbour and offloading facilities, nearshore pipeline approaches and the associated gas processing and storage structures.

Coffey Geotechnics worked closely with Coffey Environments who managed the occupational health and safety (OHS) systems and worked closely with INPEX to develop and implement a strong safety and environmental culture for the project.



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Numerous challenges on this project were associated with the investigations being held in a remote, environmentally sensitive location. The team was able to achieve extraordinary outcomes in a number of ways:

### Geotechnical Challenges

There were large variations in water depth and the presence of very soft sediments at some locations which meant boreholes had to be drilled from a “floating” position.

No fresh water was available on the islands and salt water was not permitted to be used for drilling purposes. To overcome this challenge, small-scale desalination of sea water was implemented to ensure environmental impact was kept to a minimum.

### Logistical Innovation

Due to the site complexity, an innovative approach was used to transport the drilling rig and equipment, using a Kawasaki BK117 helicopter. Working with other logistics contractors and INPEX, a safe, reliable method of airlifting drill rig equipment was employed to ensure a minimum environmental footprint was achieved.

### Excellent Health and Safety record

All contractors worked together to identify risks and develop procedures to minimise risks. Best practice in health and safety management was promoted and an excellent health and safety record was achieved.

### Indigenous Stakeholders

Local traditional owners (TOs) were present during the drilling operations to oversee any issues of cultural significance. Coffey's worked with the TOs to ensure their concerns and advice were accounted for. The TOs were very pleased with how this program was conducted.

As an international company in the oil and gas industry, environmental considerations were an extremely important factor for our client. Coffey Geotechnics and Coffey Environments were able to provide innovative solutions which disturbed less than 0.1 % of the area – an extremely minimal impact. A traditional onshore drilling operation could have impacted on more than 10% of the islands.

