

**BEFORE THE BOARD OF INQUIRY
TAMARIND DEVELOPMENT DRILLING APPLICATIONS**

EEZ100016

IN THE MATTER

of the Exclusive Economic Zone and
Continental Shelf (Environmental
Effects) Act 2012

AND

IN THE MATTER

of a Board of Inquiry appointed under
s52 of the Exclusive Economic Zone
and Continental Shelf (Environmental
Effects) Act 2012 to decide on
Tamarind Taranaki Limited's marine
consent and marine discharge consent
applications

**SUMMARY STATEMENT OF NON-EXPERT EVIDENCE OF
IAIN ALASTAIR MCCALLUM FOR TAMARIND TARANAKI LIMITED**

Dated: 6 November 2018

Govett Quilliam
THE LAWYERS

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MAY IT PLEASE THE BOARD

1. My name is Iain McCallum and I am the Drilling Manager for Tamarind Resources Pte Limited (“Tamarind”).
2. My primary evidence provides an overview of the activities that are planned to take place in the Tui Field during the intervention and development drilling campaign which is the subject of these Applications.
3. In this summary statement of evidence, I discuss the key aspects of my primary statement of non-expert evidence dated 20 July 2018 and update the Board on any significant refinements made by Tamarind due to ongoing planning and preparation of the project and with respect to the expert conferencing which I took part in.

Summary of my primary evidence

4. Tamarind can confirm that they have contracted the HYSY982 6th Generation semi-submersible drilling rig from a Norwegian drilling contractor, COSL Drilling Europe. The selected drilling rig has DNV CLEAN Class accreditation and is equipped with advanced pollution control systems with a high environmental standard.
5. My evidence gave an overview of the Proposal including a discussion on the well activities to be undertaken, the expected duration of these activities, and the potential impact to the environment. I also responded to issues raised by submitters.
6. Tamarind can confirm that at this stage its intention is to drill and complete 3 of the 5 side-track wells that are applied for within this consent. We are planning to re-enter 3 existing wells from 3 locations. However, our application is to drill up to 5 side track wells and this is so 2 contingency well options are available in the event it is necessary to re-drill one of the side-tracks from one of the 3 planned wells. At this stage, Tamarind does not plan to moor the rig, at more than 3 locations, but again an additional mooring

¹ *Review of Evidence Statements against Key Questions*, OGS, dated 30/8/18

location may be necessary in the event of an unforeseen incident or for operation requirements.

7. I can also confirm that the drilling rig will use 12 anchors at each location and that it is intended that four anchors will be pre-laid at the next location. I've detailed this information within the schematic in the Appendix 4 to my evidence. An independent mooring analysis has been completed that addresses a single line failure event. Results from the mooring analysis have shown that the consequence of a single line failure would be negligible, even in a 10-year weather event.
8. My evidence also includes an overview of the Marine Discharge Consent application, including technical details of the HYSY982 drain systems, including;
 - 8.1 Non-hazardous deck drain system;
 - 8.2 Hazardous drain system; and
 - 8.3 Fluids system (Enclosed)
9. There is clear separation between hazardous and non-hazardous areas of the rig. All drains, be it in the hazardous or non-hazardous systems, are contained, treated if necessary, and continually monitored on discharge points to ensure that any discharge fluid, does not have an oil content, above 15ppm.
10. I have confirmed that there are no open discharge points to the sea on this rig without an oil water separator, a monitor, an alarm and automatic shut off valves.
11. The pictorial within Appendix 2 of my primary evidence illustrates the various systems and processes within the HYSY982 drain systems.
12. Tamarind has, to the greatest extent practicable, engineered out all harmful substances from the fluids systems and systematically reduced any chemicals used to a minimum.

¹ 'Review of Evidence Statements against Key Questions', OGS, dated 30/8/18

13. Tamarind has also committed to ensuring no cuttings or synthetic based drilling fluids are disposed of offshore and will bring all cuttings back to shore for disposal.
14. My evidence also outlined the spill response requirements associated with the drilling programme, including;
 - 14.1 Spill Response Planning;
 - 14.2 Developing a Well Control Contingency Plan;
 - 14.3 Emergency Response Training;
 - 14.4 Setting up an Emergency Operations Centre; and
 - 14.5 Conducting drills and exercises to ensure the company is ready for such an event.
15. I consider my team is dedicated to reducing and minimising any adverse impacts on the environment to the greatest extent that is practicable when considering design, rig selection, drilling methods and strategy. I strongly believe that our drilling programme reflects best industry practice and that we have significantly reduced the harmful chemicals that will be used, when compared with previous campaigns.
16. Tamarind will also develop detailed processes and procedures to ensure any environmental impacts are minimised during the drilling activity, including the following measures:
 - 16.1 Rig Assurance Plan;
 - 16.2 Health Safety and Environmental Plan;
 - 16.3 Waste Management Plan;
 - 16.4 Emergency Spill Response Plan (EPA);
 - 16.5 Oil Spill Contingency Plan – (MNZ);
 - 16.6 Craft Risk Management Plan (MPI);
 - 16.7 Rig Safety Case (WorkSafe NZ);
 - 16.8 Well Examination Process (As required by the Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016 to be submitted to WorkSafe NZ)

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Conferencing

17. I have also engaged in conferencing with Mr Frank Broomhead to discuss the questions raised in his second report. Our joint witness statement dated 20 September 2018 has been filed with the Board and records that all 24 questions and clarifications raised by Mr Broomhead have been addressed satisfactorily by Tamarind and that no outstanding issues or queries exist with respect to operational matters.
18. In addition to the understandings and undertakings outlined in the joint witness statement, the key issues and matters of clarification raised by Mr Broomhead have been or will be addressed in assurance plans, pre-mobilisation audits and controls that will be in place to ensure that the drilling rig is operated as intended and in compliance with all relevant regulatory requirements.
19. I can confirm, as stated within the joint witness statement, that there are no additional operational consent conditions required to support this application.

IAIN ALASTAIR MCCALLUM

6 November 2018

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