

## COMMENTARY ON OFF-SHORE MINING AND PETROLEUM — PRACTICAL PROBLEMS

By P. C. Reid\*

Mr. Chairman, at the outset I should enter the usual caveat that any views I express here today need not necessarily represent those of my employer. I would like to endorse the tribute in Frank Hooke's commentary to the excellent paper which David Maloney has prepared and also to add my own compliments to the paper which has been prepared by Humphrey Williams on off-shore petroleum operations. In fact I think that there would be very few other lawyers in this country practising in the resources field who would have such a comprehensive knowledge of the commercial as well as the technical aspects of off-shore oil operations as both David Maloney and Humphrey Williams.

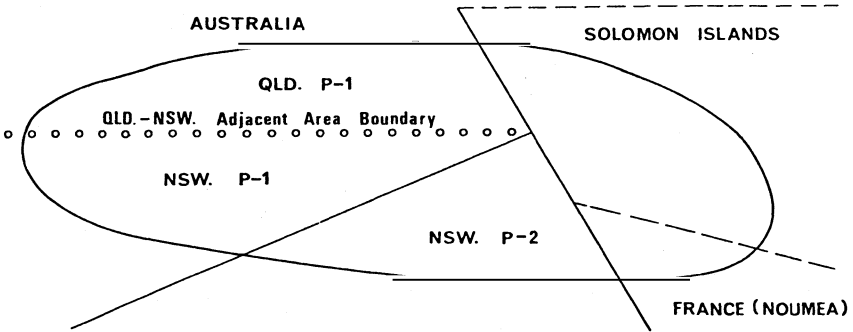
In the short time available to me today Mr. Chairman, I propose to raise a few personal observations which are intended to be more in the nature of questions rather than offering any solutions.

First of all the question of boundary disputes in off-shore areas whether they be at the international level, whether they be at the interstate level where adjacent area boundaries meet or whether they be as between two or more adjacent permits within the same State's adjacent area. I refer you the diagrams attached. I should emphasize that both these figures are purely fictitious and for the purposes of illustration only. If we could perhaps look at the first figure you will see that there is a common reservoir and just like off-shore oil spills, off-shore reservoirs often have no respect for boundaries. In fact, you may recall the Sunset and Troubador gas discoveries in the Bonaparte Gulf which both lie in the disputed area with Indonesia concerning the yet unresolved Timor sea bed boundary. You will also recall from David Maloney's comments that the Commonwealth Government has just passed through Parliament this week a series of amendments to the off-shore constitutional package which I referred to in my comments last year.

One of these amendments involves extending the off-shore adjacent area boundary along the Australian east coast to include the Coral Sea thus adding approximately one million square kilometres of additional off-shore territory to Queensland's adjacent area. The first figure is designed to show the situation where a single reservoir could overlap several boundaries. The boundary problem with this extended Coral Sea area adjacent area boundary is two-fold both in the east and in the west. Starting in the west first, the Minister when introducing the legislation in his second reading speech indicated that no exploration permits would be granted within 30 miles of the Great Barrier Reef. However no such restriction appears in the legislation itself, and even given the recent amendments to the *Acts (Interpretation) Act* I understand that it is not intended that these would go as far as elevating a Minister's second reading speeches to the status of receiving judicial recognition. At the eastern end of the new Coral Sea boundary there are still international delimitation negotiations which are yet to be finalised between the Australian Government and the Solomon Islands on the one hand and between the Australian Government and the French Government on behalf of Noumea on the other hand so that any permits granted within that undefined area could be subject to international dispute.

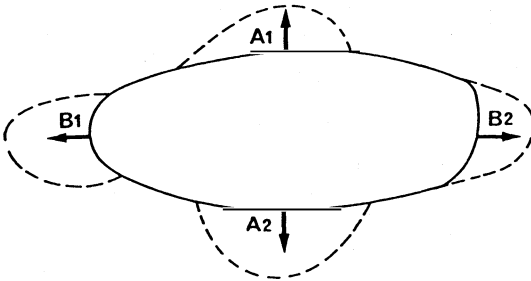
**Fig.1**

Reservoir Straddling: (i) International Boundaries  
(ii) Adjacent Area Boundaries  
and (iii) Adjoining Permit Boundaries



**Fig.2**

"BUMPS" and "EXTENSIONS" of Reservoir



A1 + A2 - Vertical Bumps  
B1 + B2 - Horizontal Extensions

What you see on the diagram is a proposed hypothetical boundary line when these international delimitation agreements are resolved and I must say I have not seen the proposed boundary lines so what you see here may bear no relation to the eventual product. However, it does show that you could have one reservoir falling both within Australian territory and also that of the Sololmon Islands and French Noumea; where you have the overlap between the Queensland, and the New South Wales adjacent area boundaries you could also have an overlap; even within the one adjacent area boundary such as I have shown for New South Wales you could have a further overlap. What this suggests is the need to provide the framework for unitisation for the effective and equitable development of such a reservoir. It is to be hoped that in the current international boundary negotiations such recognition is incorporated in the final Delimitation Agreements. I realise that in Section 59 of the current Australian off-shore legislation (PSLA) there is a provision for unitisation where a reservoir extends beyond a licence area but to the best of my knowledge there is no guidance at the domestic level as to the principles on which such a unit agreement should be based.

A further geological phenomenon is found in Figure 2 and this is shown as the process of enlargement of a reservoir by bumps and extensions as a result of further drilling and mapping. If you can look at the reservoir shown in Figure 2 (I am afraid my mapping does not extend to three dimensional mapping) and if you can imagine that reservoir on a three dimensional plane, you have the possibility of further extensions to that reservoir being mapped both on a vertical plane and on a horizontal plane as the field is developed. Of course this means that in the reservoir in fig. 1 you could have a single reservoir which initially did not overlap any of these boundaries, but as a result of development was found to extend into one of them. This would then be covered by a unitisation agreement. If you looked at the extension which I marked as B2, although originally this could be considered as an extension of the original reservoir, subsequent development may prove that it is in fact a separate discrete reservoir separated from the original reservoir by what is known as a seal. In this case if unitisation has already taken place it may then need to be undone.

Mr. Chairman I would also like to refer to one comment in David Maloney's paper where he suggests that in developing Joint Venture Agreements for off-shore operations it is preferable only to cover the exploration phase. I don't share his view on this point because in my experience we have found that it is necessary to look upon any off-shore operation as an integral activity involving both exploration and development stages. This is not simply for technical and for geological reasons, but for Government policy reasons, for example for the purpose of making submissions to the FIRB. I would welcome any further comments from the floor on this point.

Finally, Mr. Chairman, David Maloney refers in his paper to the submission which was prepared by the APEA Off-Shore Committee in August 1980 and sent to all Federal and State Ministers involved in administering the off-shore legislation which, coupled with the previous APEA submission of 1977, suggested an extensive series of possible amendments to the off-shore legislation based on the results of what is now 13 years of experience by the off-shore industry in operating under the PSLA. It is more in sorrow than anger that I note that in the latest series of amendments the opportunity was not taken either to incorporate any of these practical amendments, nor even to extend the opportunity for any dialogue between the relevant Government advisors and the lawyers representing the APEA

Off-Shore Committee. In conclusion Mr. Chairman I must endorse the final remarks in Mr. Frank Hooke's paper regretting this lack of consultation.

Thank you Mr. Chairman.

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