

AUSTRALIAN PETROLEUM LEGISLATION AND THE CANADIAN EXPERIENCE

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THE PURPOSE OF THE PAPER

For Australia, the time cannot be far off when the repeal of the *Petroleum Search Subsidy Act*¹ will signify the establishment of self-sufficiency in the oil producing industry. Now is the time when a modern legal framework for that industry is being fashioned. On one hand, the task is to refurbish older statutes to fit current requirements²; on the other hand, the challenge is to forge new links of co-operation between the Commonwealth and the states so that offshore petroleum and natural gas may be developed³. This demand for revision and innovation will not abate, for the dynamism of the oil industry creates a continuing need for legislation.⁴ In this situation, it is to be expected that legislators will seek guidance from the experience of other countries. Australia's legislators have done so in the past,⁵ and may be expected to do so in the future. In particular, they have studied Canadian petroleum legislation, for Canada and Australia share a common legal and political heritage, and Canada has a mature petroleum industry.

The purpose of this paper is to describe the salient features of petroleum legislation in Canada so as to facilitate this comparative study. Especially will this purpose be achieved if the exposure of contrasts between the Australian and Canadian situations inhibits the temptation to make superficial generalisations about what ought to be done in Australia based on what is done in Canada.

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¹ Under *The Petroleum Search Subsidy Act 1967*, the Commonwealth policy of granting subsidies to oil companies equal to fifty per cent of approved exploration expenditures is extended to cover operations completed before 30 June, 1969. Since exploration started, about A\$60,000,000 has been paid or committed by the Commonwealth in subsidies. See Mr. Fairbairn, Minister for National Development, Commonwealth Parliamentary Debates, 10 May, 1967, pp. 1929, 1930.

² For example, the *Petroleum Act 1936-1954*, Western Australia, is under study for revision.

³ The reference is to the joint Commonwealth-States codes for offshore petroleum development which are expected to be brought before the respective Parliaments in August or September 1967.

⁴ *Canadian Oil and Gas*, Butterworths, Canada, provides an up-to-date service on all petroleum legislation in Canada. Ten issues per year are required to keep the texts of the statutes and regulations current. The writer is co-author of the publication with D. E. Lewis, Q.C., of Calgary.

⁵ The government of Victoria, for example, engaged Dr. Charles R. Hetherington, of Calgary, as a consultant on its legislative needs.

A subsidiary purpose of this paper is to reveal the important role played by lawyers in the development of the petroleum industry in Canada.⁶ Not only are there the complex legal services required in all great industries in connection with corporate organisation, finance and taxation, but also there are special legal services required in the petroleum industry by reason of its intensive involvement with mineral and surface rights in land, and with joint ventures for development. To mention the obvious requirements, land rights are needed for drilling and producing operations, for storage purposes, for roads, for pipelines, and for gas processing plants. Joint ventures, even among the major oil companies, underlie most exploration and production operations, and are implicit in most conservation schemes.⁷ It is likely that such a high demand for specialised legal services will be generated in Australia as the petroleum industry expands. This special need for lawyers will never be so dramatic as is Australia's current need for geophysicists, geologists and petroleum engineers, but there will nevertheless be a challenge presented to the law schools and to the legal profession not to lag in servicing the legal needs of this great new industry.

THE INDUSTRY BACKGROUND

1. *The Current Stage of Development*

The main contrast is said to be that Canada has a mature oil industry while the industry in Australia is in an early stage of development. This contrast is taken to warrant a generalisation that greater incentives to exploration and development must be offered in Australia than in Canada. Certainly, the onshore oil industry in western Canada is a mature industry measured in terms of annual production⁸ and proven reserves.⁹ Perhaps more significantly, its capital requirements for exploration and development are now self-generated.¹⁰ But, like Australia, Canada is a vast country.¹¹ In addition to the sedimentary basin underlying the western plains, there are important sedimentary areas lying offshore from British Columbia on the west coast, and offshore in the Gulf of the St. Lawrence River and in the Atlantic Ocean on

⁶ The writer has developed this subject at greater length in *A Perspective on Petroleum Law*, 1 Canadian Legal Studies 152 (1966). This publication is the journal of the Association of Canadian Law Teachers, and is published by Butterworths, Canada.

⁷ The Barracouta and Marlin fields are being developed as a joint venture of Esso Exploration and Production Australia Inc. and Haematite Explorations Proprietary Ltd., the latter being a subsidiary of B.H.P.

⁸ 918,000 barrels per day at 31 December, 1965.

⁹ Estimated at 8.2 billion barrels (oil, condensate and l.p.g.'s) as of 31 December, 1965.

¹⁰ The gross value of production of oil and gas in Canada at approximately \$750,000,000 exceeded total industry expenditure for the first time about three years ago. These figures are based only on rough estimates.

¹¹ Canada's area is 3.85 million sq. miles. For Australia, the figure is 2.97 million sq. miles.

the east coast, and there is a vast sedimentary basin in the Arctic.¹² Though basic exploratory work is going forward, and some exploratory drilling has taken place,¹³ these areas await initial discoveries to spur development. The legislators responsible for these regions have incentive problems similar to those facing Australian legislators.¹⁴ If one is seeking mature experience in legislating for these regions, the likelihood is that Canadians will be turning to the Australian scene, for it is in Australia that an offshore industry will first be established,¹⁵ and Australia is providing a lead by offering the industry the benefits of a single, comprehensive offshore petroleum code.¹⁶ If an obvious generalisation may be permitted based on the experience of the industry in western Canada, it is that there is no incentive that can match the discovery of oil in commercial quantities at a low cost per barrel to spur development.¹⁷

2. Strategic and Economic Needs and Goals

Australia's strategic need for a domestic oil supply is greater than Canada's owing to Australia's greater isolation from major oil-producing areas and to the dependence of Australia on ocean carriage of imported oil. Her economic needs, in terms of improved balance of payments, stimulation of domestic industry, and increased government revenues, are no less than those of Canada.

Both Canada and Australia have their petroleum development policies aimed primarily at achieving national self-sufficiency in oil. Because their production goals are geared to supplying domestic requirements, their problems are not to be identified with those of the petroleum exporting countries such as Algeria, Libya, Nigeria, Venezuela, and the countries of the Middle East.¹⁸ Canada has already achieved self-sufficiency in production.¹⁹ Indeed, the province of Alberta

¹² The western Canada sedimentary basin is estimated at 960,000 cubic miles. The Arctic sedimentary basin is more roughly estimated at approximately 500,000 cubic miles.

¹³ One test well was drilled on Ellesmere Island by a consortium of approximately 25 Canadian independents at a cost in excess of \$1,000,000. Peter Bowden Drilling Co. Ltd. was the operator.

¹⁴ Under s. 86 of the *Canada Oil and Gas Land Regulations* (SOR/61-253) an incentive royalty rate of only five per cent pertains to the first five years of commercial exploitation in the case of offshore wells or of onshore wells north of latitude 70°.

¹⁵ Esso will soon be drilling developments wells to produce its gas discoveries in the Barracouta and Marlin fields in the Bass Strait between Victoria and Tasmania.

¹⁶ See note 3, *supra*.

¹⁷ For the period 1961-65, the average cost per barrel of finding and developing oil and gas reserves was \$1.16 for the United States, but only \$0.47 for Canada.

¹⁸ These countries have established an organisation called O.P.E.C. (Organisation of Petroleum Exporting Countries) to further their common interests as petroleum exporters. The aims and functions of O.P.E.C. are evaluated in Mughraby, *Permanent Sovereignty Over Oil Resources* (Lebanon, 1966).

¹⁹ At 31 December, 1965, Canada's consumption of petroleum was 1,167,000 barrels per day. Her production capacity was 1,800,000 barrels per day.

has at present a shut-in capacity (i.e. capability to produce oil in excess of market requirements) almost equal to total Canadian domestic needs,²⁰ and the Athabaska Tar sands provide a further reserve far in excess of present Canadian requirements.²¹ Nevertheless, Canada's "national oil policy"²² aims only at increasing levels of oil production proportionally to increasing domestic consumption.

On the other hand, Australia has proven reserves of oil equal only to ten per cent of her domestic requirements,²³ and the Commonwealth government has as the goal of its petroleum search subsidy program the attainment of self-sufficiency, hopefully in ten to fifteen years.²⁴ Just keeping up with the annual growth in the rate of consumption in a highly industrialised country like Australia challenges the petroleum industry to find new oil reserves at an annual rate of at least seven per cent.

3. *Onshore versus Offshore Development*

Canada's oil industry began in Turner Valley in the foothills of the Rocky Mountains in 1913 with flush production and feverish speculation.²⁵ The first world war dampened the speculation, and succeeding dry holes tempered the enthusiasm. Fresh waves of speculation and enthusiasm followed further discoveries in the Turner Valley field in 1924 and in 1936. But, until 1947 and 1948, when the Leduc and Redwater fields were discovered in the vicinity of Edmonton, the story of exploration was like the Australian story of recent years — namely, the expenditure of millions of dollars in a seemingly endless succession of disappointments.²⁶ The 1947 and 1948 discoveries ushered in a new era of exploration that has been richly rewarded by the Establishment of the western plains as a major oil-producing region, ranking ninth in

²⁰ The shut-in capacity at 31 December, 1965, was 882,000 barrels per day.

²¹ A recent estimate of recoverable reserves is 85 billion barrels of oil. The first production permit for 100,000 barrels per day was granted to Great Canadian Oil Sands Ltd. in 1963.

²² The National Oil Policy was established in 1959 following the recommendation of the Borden Commission on Energy. It divided Canada through eastern Ontario, leaving the eastern portion to continue to be supplied by foreign crude (mostly Venezuelan) shipped through the port of Montreal, and allocating the remainder of Canada to be supplied by western Canadian crude. Targets for increasing annual production of Canadian crude were declared for voluntary compliance by the oil companies.

²³ The Honourable Mr. Fairbairn, Minister for National Development, Commonwealth Parliamentary Debates, 10 May, 1967, p. 1930.

²⁴ See note 1, *supra*.

²⁵ The Turney Valley field.

²⁶ The total expenditure on petroleum exploration, public and private, up to 31 December, 1966, was A\$443,327,000. See *Petroleum Search in Australia*, Petroleum Information Bureau (Australia).

the world.²⁷ Nor has the pace of discovery diminished. Rather, the build-up of knowledge about the geology of the region and the improving techniques in seismology have increased the discovery rate. Finally, the discovery of sediments of great thickness and producibility in the north-western corner of Alberta since 1963 has brought the finding cost per barrel to its lowest point in the history of Canadian oil.²⁸ Reserves established in this small region in the next few years are expected to equal the total reserves established to date in the rest of the Canadian plains.²⁹

In the light of the continuing success of the onshore industry in Canada, offshore prospects have engendered relatively minor interest. Basic seismic exploration is proceeding off the east and west coasts, but public attention has been focussed more on the political and legal skirmishes to determine ownership of offshore minerals as between the federal and the provincial governments³⁰ than on the terms and conditions which are to govern their exploitation. The legislation which at present applies offshore is, in most cases, the same legislation as applies to onshore development,³¹ and in most cases requires up-dating to suit offshore requirements. Only the federal legislation, which governs the northern territories and the Arctic Islands, as well as the offshore regions, has been exclusively designed for the exploration and development problems of remote and inaccessible regions.³²

On the other hand, in Australia the offshore prospects are much more favourable than those onshore. The Moonie³³ and Barrow Island³⁴ oilfields, and the many gas discoveries,³⁵ give promise of continued success onshore, but it is the offshore discovery of natural

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1966 (estimated '000 barrels)	
United States	3,041,380
Russia	1,807,300
Venezuela	1,238,863
Saudi Arabia	869,544
Kuwait	831,761
Iran	784,076
Libya	550,080
Iraq	498,882
Canada	317,176

Source: Petroleum Press Service.

²⁸ In 1964 it was \$0.27 per barrel. See note 18, *ante*.

²⁹ Approximately 7,500,000,000 barrels.

³⁰ See M/S 13, *post*.

³¹ Some of the legislation, such as the *Canada Oil and Gas Land Regulations* (SOR/61-253), the *British Columbia Petroleum and Natural Gas Act 1965* and the Manitoba "*Far North*" *Regulations* Part VI of Man. Reg. 14/47, expressly provide for offshore exploration and development.

³² *Canada Oil and Gas Land Regulations* (SOR/61-253).

³³ This field is located in Queensland, approximately 100 miles west of Brisbane. Production commenced in 1964.

³⁴ Production should commence this year from this remote island off the coast of Western Australia.

³⁵ Gas from the Gidgealpa and Moomba fields of South Australia is to be piped to Adelaide. A pipeline to take gas from the Roma area in Queensland to Brisbane is under consideration.

gas in the Barracouta and Marlin fields,³⁶ so close to the markets of Melbourne and Sydney, and the prospects of the Marlin field for major reserves of oil, that currently excite Australian interest. Certainly, from the point of view of legislation, the Australian offshore development will not take a "back seat" to onshore development, nor will the legislation lose sight of offshore requirements owing to preoccupation with onshore problems. Indeed, the endeavour to compromise the contest between the Commonwealth and the state governments over ownership of the offshore minerals by legislating common codes for offshore development in Australia³⁷ has focussed political interest on the terms and conditions of exploitation of petroleum resources to an extent unknown in Canada, where such matters have usually been negotiated between government experts and industry representatives, with no political interest aroused except over such far-reaching considerations as private ownership versus public ownership of trans-continental pipelines,³⁸ or the desirable degree of foreign ownership and control of Canadian oil companies.³⁹

To sum up, offshore developments in Canada are very much in second place, and Australian legislators are not likely to find explicit guidance for the preparation of their offshore petroleum codes except possibly in the Canadian federal and British Columbia legislation. The reverse process is more likely to occur — Canadians will borrow from the Australian experience.

At this point, if not sooner, one might be expected to ask what are the characteristic differences between offshore and onshore development that require separate legislative treatment. These differences obviously stem from the difference between land operations and sea operations. Apart from the apparent technical differences which marine operations entail, the main difference is that on land the physical base of operations is ready-made, whereas at sea it must be provided through ships or drilling platform, with the economic consequence that the cost per offshore well is usually many times greater than the cost per onshore well.⁴⁰ Therefore, ordinarily, the incentives to exploration must be greater for the offshore venture than for the onshore one. Another reason why incentives must be greater is that the number of submerged regions throughout the world made prospective by the new offshore

³⁶ These fields lie in the Gippsland Basin in Bass Strait. The discovery wells were drilled in 1965 and 1966.

³⁷ See note 3, *ante*.

³⁸ The Trans-Canada Pipeline debates in the House of Commons in 1956 contributed to the defeat of the Liberal party government of Prime Minister Louis St. Laurent in the election of 1957.

³⁹ Foreign ownership and control of industries in Canada is currently a political issue. The Honourable Walter Gordon, formerly Finance Minister, is the chief advocate of policies aimed at increasing Canadian ownership. See Gordon, *A Choice for Canada* (1966).

⁴⁰ A factor of *ten* times might be average.

technology far outstrips the capacity of that technology. To keep these differences in perspective, it should be noted that onshore wells in remote and inaccessible regions can be just as expensive as offshore wells,⁴¹ and just as demanding on technology. The cost difference is of greatest significance with respect to exploratory wells. Once discovery has been made, the extent and producibility of the reserves per well will determine the development cost per barrel of oil.⁴²

4. Oil versus Natural Gas Development

Until the building of the Trans-Canada pipeline in the late 1950s, the discovery of natural gas in western Canada was of doubtful benefit. The small local domestic and industrial requirements for natural gas had long been met from gas fields located near the urban centres.⁴³ The finding of gas without oil meant at most that the duration of a freehold oil and gas lease⁴⁴ would be continued indefinitely without further obligation on the oil company other than the payment of a nominal "shut-in" gas-well royalty. But any return on the oil company's investment in the well would have to await the development of far-off markets in eastern Canada and of export markets in the United States. Now these markets have been established by the construction of thousands of miles of major pipelines to the east, to the west, and to the south. The natural gas industry has substantially enhanced the productivity of the Canadian petroleum industry. It has entailed very large investments in gas processing plants, some of them located in extremely remote regions of western Canada, bringing new social development in terms of roads and community services. The natural gas industry, playing second fiddle when it played at all in the earlier years, now has a solo part in Canada, with the prospect of playing an increasingly important part in the future.

The chief effect of early indifference to natural gas is that petroleum legislation in western Canada was initially designed only for the requirements of oil. Gradually, as the significance of natural gas increased, provisions dealing specially with natural gas were introduced into the legislation. Today, in Alberta for example, the terms and conditions applying to natural gas discovered in Crown lands are basically

⁴¹ The Ellesmere Island well in the Canadian Arctic cost in excess of \$1,000,000.

⁴² By far the most important fact is the amount of recoverable reserves of oil to be attributed to each well. Other factors which can increase development costs are divided ownership or spacing regulations which necessitate the drilling of more wells than necessary. In the United States, onshore oil is more costly to produce than offshore oil.

⁴³ The City of Medicine Hat in southern Alberta has been supplied with natural gas from a nearby field since 1908.

⁴⁴ The phrase "freehold oil and gas lease" refers to the least contract made by a private owner of petroleum rights. The extent of such private ownership in Canada is stated at p. M/S 10, *post*.

different from those applying to oil, so that there are, in reality, separate codes of legislation for oil and for gas. If exploration activities under a Crown petroleum and natural gas reservation result in the discovery of a gas well, then the discoverer may carve out of the reservation a natural gas licence,⁴⁵ to be followed by natural gas leases,⁴⁶ *restricted to the gas-producing zone*. These tenements are more favourable to the holder than their counterparts would be should oil, or oil and gas, be discovered. Generally speaking, the relinquishment provisions, whereby parts of the natural gas licence must be surrendered to the Crown, are designed to permit the discoverer of natural gas to obtain under lease all of the producing zone which his discovery and development wells may delineate,⁴⁷ including an entire gas field if one is proved within the limits of the licence,⁴⁸ whereas the oil discoverer is subject to terms of relinquishment which probably will require him to surrender some of the producing formation back to the Crown to be sold by the Crown at public tender as Crown reserves.⁴⁹ The duration of the Crown natural gas lease is twenty-one years renewable for further terms of twenty-one years so long as natural gas may be produced in commercial quantities,⁵⁰ whereas the duration of the Crown oil and gas lease is only ten years with renewal thereafter limited to those portions of the lease on which there are producing wells.⁵¹ The rentals for natural gas licences and leases are lower than for the equivalent oil and gas tenements.⁵² Finally, the royalty rate on gas is a fixed rate of sixteen and two-thirds per cent, whereas the royalty rate on oil varies from eight per cent to sixteen and two-thirds per cent according to the monthly production per well.⁵³ These natural gas provisions recognise that the establishment of markets for natural gas requires high initial capital investment of a fixed nature in production and processing facilities and pipelines, and that therefore the discoverer must be able to commit the entire reserves of a gas field to a market for a long period at fixed costs, and that, until the market is established, he should be able to hold the tenement at low cost.

In Australia, natural gas will have an important role from the

⁴⁵ *Natural Gas Licence Regulations*, 1962 (O.C. 776/62), s. 4(i). The discoverer retains his interest in the petroleum and natural gas reservation minus the natural gas licence.

⁴⁶ *Ibid.*, s. 17(1).

⁴⁷ *Ibid.*, s. 17(2).

⁴⁸ *Ibid.*, s. 17(4).

⁴⁹ *Petroleum and Natural Gas Reservation Regulations 1962*, (O.C. 607/62), ss. 26-31.

⁵⁰ *Mines and Minerals Act 1962*, (S.A. 1962, c. 49), s. 149.

⁵¹ *Ibid.*, ss. 125-132. This statement is an over-simplification of these complicated provisions.

⁵² For a natural gas lease, the annual rental is 33½ cents per acre (*ibid.*, s. 150(1)) as compared with an annual rental of \$1.00 per acre for an oil and gas lease (*ibid.*, s. 113). If there is no market for the gas, the rental may be reduced to 10 cents an acre (*ibid.*, s. 150(2)).

⁵³ *Petroleum and Natural Gas Royalty Regulations* (Alta. Reg. 80/62), s. 1.

beginning of commercial production. In fact, it will be natural gas piped to Adelaide and to Melbourne and Sydney that will provide the first significant imprint on the public mind of the importance to Australia of a domestic petroleum industry. It has been eagerness to develop natural gas that has spurred legislators of the Commonwealth and state governments to reach agreement on offshore legislation so that Victoria could enact the *Petroleum (Barracouta and Marlin Fields Agreement) Act 1967* to confirm the Esso-Haematite tenements and enable the companies to proceed with their \$150,000,000 investment to bring gas to Melbourne.⁵⁴

Natural gas does not receive special treatment in the Australian petroleum statutes. The reason is that the terms and conditions generally governing petroleum exploration and development are not unsuited to the needs of the natural gas industry. Certainly the proposed offshore code and the state petroleum statutes in general meet the requirements of low-cost holding pending market development, of long term production licences at a fixed royalty, and of relinquishment provisions which permit the retention of an entire discovery.⁵⁵ Rather, the question might be how well they are suited to the requirements of oil production.⁵⁶

THE LEGAL AND CONSTITUTIONAL BACKGROUND

1. *Ownership of Petroleum Resources*

In the Canadian west, where the petroleum industry is established, Crown ownership of petroleum resources predominates, but, unlike Australia, there is significant private ownership as well owing to a mineral reservation policy that left mineral rights already vested in private persons unimpaired when the policy was put into effect.⁵⁷ In 1887, an order-in-council was passed reserving mineral rights to the

⁵⁴ Sir Henry Bolte, Premier of Victoria, introducing the bill for second reading. See Victorian Parliamentary Debates, 21 February, 1967, p. 3019.

⁵⁵ The offshore codes will provide for a rental of twenty cents per square mile, not exceeding \$2,000 per permit, a production licence for a 21-year term at a ten per cent royalty rate, renewable for 21 years thereafter at a predetermined royalty rate, and relinquishment terms whereby, in lieu of returning four-ninths of the discovery to the Crown, the permittee can obtain production licences covering the entire discovery within the area of his permit by paying an additional royalty of between one per cent and two and one half per cent on the entire licence, see the Ministers' statements of 16 November 1965, 30 June 1966, and 7 April 1967. The Barracouta and Marlin Fields Agreement set the additional royalty at one per cent, making a total royalty of eleven per cent. Under the 1962 amendment to the *Queensland Petroleum Acts 1923 to 1958*, the discoverer of petroleum may obtain leases of the deposits, each not to exceed 100 square miles (s. 28). The term of the lease is 21 years, renewable for further periods of 21 years (s. 31(b)) at a royalty fixed at ten per cent for the first 21-year term (s. 40A).

⁵⁶ The writer has written a critique of the new Australian common code to be published in the next issue of the *University of British Columbia Law Review*.

⁵⁷ For a general statement of the historical background of petroleum land policies in Canada, see the writer's article *Petroleum Land Policies Contrasted*, 36 U. Color. L. Rev. 187 (1964).

Crown in all those lands west of the Third Meridian which had not already been entered for settlement.⁵⁸ In 1889 an order-in-council similarly reserved mineral rights from Crown patents granted for lands east of the Third Meridian.⁵⁹ Because the tide of settlement, flowing from east to west, had just begun to reach the Alberta and Saskatchewan plains in 1887, the lands which were not affected by these mineral reservations were of minor proportions except in eastern Saskatchewan and Manitoba. In result, most of the petroleum rights in Alberta, all of these rights in the Yukon and North-west Territories and in the Peace River Block of British Columbia, as well as substantial rights in Saskatchewan and Manitoba, were appropriated to public ownership. Further exceptions from public ownership were the petroleum rights in the subsidy lands granted to the Canadian Pacific Railway⁶⁰ and in the land retained by the Hudson's Bay Company.⁶¹

Many of these railway lands, as well as the Hudson's Bay Company lands and the early settled lands, were located in the southern half of Alberta where the Leduc and Redwater discoveries initiated the modern period of petroleum development. Now the tide of exploration and development has swept northwards into the regions where petroleum rights belong exclusively to the Crown. But this period, when petroleum search was centred on lands which were privately owned as much as they were publicly owned, has left strong and enduring imprints on Canadian petroleum law.

The first imprint is the injection of a substantial element of private law, more alike to the situation in the United States where private law dominates the acquisition of petroleum rights, and unlike the situation in Australia where the legal relationships between the state and the grantee are in the realm of public law more than of private law. A consequence is that in Canada, like the United States, the lawyer feels more at home in dealing with petroleum rights. His talents are called forth in conveyancing and in drawing contracts, and the conceptual problems he faces are in the familiar fields of property and corporate law, even if specific questions, such as whether a freehold oil and gas lease confers a *profit a' prendre* on the grantee, or whether a unitisation agreement effects a cross-conveyance of producing leases, are new and untried. Indicative of this involvement of private law is the fact that almost all of the reported oil and gas cases in Canada, numbering over 200, deal with freehold oil and gas leases or other private contracts.

A second imprint is fragmentation of ownership of petroleum rights to a degree unknown in Australia. The normal situation for privately

⁵⁸ P.C. 1070 of 31 October, 1887. The third meridian runs through Saskatchewan.

⁵⁹ P.C. 2167 of 17 September, 1889.

⁶⁰ The C.P.R. received approximately 32,000,000 acres.

⁶¹ The H.B.C. lands comprised 7,000,000 acres.

owned mineral rights would be holdings of 160 to 640 acres. In result, oil companies were required to obtain oil and gas leases from a multitude of owners in order to control sufficient petroleum rights to warrant drilling a favourable prospect.⁶² Another result was that there was never any possibility of a relatively few oil companies gaining monopoly holdings of mineral rights.⁶³ Finally, this fragmentation necessitated strict conservation practices and strong conservation agencies from the beginning of development to ensure equitable treatment of owners and to minimize waste resulting from unco-ordinated drilling and producing operations.⁶⁴

These imprints have left their marks on the legislation governing the disposition of Crown-owned petroleum rights as well, for in parts of Alberta, Saskatchewan and Manitoba the rules governing lessees of Crown petroleum rights may often have to mesh with the regimes imposed on them by their inter-mixed freehold oil and gas leases.

In the northern parts of the western provinces where petroleum exploration is now concentrating, and in the Yukon and North-west Territories and the Arctic Islands, exclusive Crown ownership of mineral rights presents conditions comparable to those in Australia where state legislation has vested all petroleum rights in the Crown.⁶⁵ Similar vesting legislation has been enacted in some of the eastern provinces of Canada.⁶⁶

⁶² A feature of the late 1940s and the early 1950s were the "land plays" which swept the Canadian prairies, bringing hundreds of "landmen" to the towns and farms to acquire freehold oil and gas leases.

⁶³ There are about 600 oil companies holding interests in petroleum rights in Alberta.

⁶⁴ See M/S p. 27, *post*.

⁶⁵ See, for example, s. 5 of the Queensland *Petroleum Acts 1923 to 1958*. Section 5 provides that:

5. Notwithstanding anything to the contrary contained in any Act or in any grant, instrument of title, or other document, it is hereby declared that petroleum or helium on or below the surface of all land in Queensland, whether alienated in fee-simple or not so alienated from the Crown, and if so alienated whensoever alienated, are and always have been the property of the Crown.

The New South Wales *Petroleum Act 1955-1965* has a similar vesting provision. In addition, s. 3(2) makes the Act applicable to the sea-bed and subsoil of the continental shelf contiguous to the state and outside the territorial waters. The other states have similar statutes: Queensland, *Mineral Resources (Adjacent Submarine Areas) Act 1964*; South Australia, *Mining (Petroleum) Amendment Act 1963*; Tasmania, *Mining Act 1929-1962*; Victoria, *Underseas Mineral Resources Act 1963*; Western Australia, *Petroleum Act Amendment Act 1959*. These statutes are the subject of comment by J. B. Thomas, *The Off-Shore Mineral Resources Legislation*, 38 Aust. L. Jo. 408 (1965).

⁶⁶ Newfoundland, *Petroleum and Natural Gas Act 1965* (S.N. 1965, c. 56), s. 3; Nova Scotia, *Petroleum and Natural Gas Act* (R.S.N.S. 1954, c. 215), s. 2; Prince Edward Island, *Oil, Natural Gas and Minerals Act* (S.P.E.T. 1957, c. 24), ss. 27, 28. Quebec has reserved minerals since 1880, see *The Mining Act* (S.Q. 1965, c. 34), ss. 5-11.

2. Federal and State Relationships

(a) Ownership of resources

The contest between Canada and the provinces over mineral resources began in the decades before 1930 when the prairie provinces charged that the federal administration was too lenient with Crown lessees and insufficiently aggressive in stimulating exploration.⁶⁷ At that time, while the original confederating provinces⁶⁸ and British Columbia and Prince Edward Island owned unalienated natural resources within their respective boundaries,⁶⁹ the Dominion owned these resources in the prairie provinces, having retained them for dominion purposes when these provisions were carved out of the North-west Territories in 1870 and in 1905.⁷⁰ In 1930 the Dominion transferred natural resources to the prairie provinces to place them on an equal footing with the other Canadian provinces.⁷¹

At the present time the situation is that each of the ten Canadian provinces owns such natural resources within its boundaries as have not been alienated from the Crown. The Dominion government owns natural resources in the Yukon and North-west Territories and in the Arctic Islands.⁷² When the facts of substantial private ownership of minerals and of uncertainty of ownership of offshore minerals are placed alongside, it is obvious that the Canadian ownership pattern is much more complicated than the pattern in Australia. Of course, such complication is grist to the lawyer's mill. A not inconsiderable portion of the Canadian oil and gas law cases has involved mineral title problems,⁷³ and the majority of these have been contests between the Crown in the right of a province and a private individual who is claiming the Crown's mineral title as a matter of construction of a Crown grant or on application of the Torrens system principle of indefeasibility of title.⁷⁴

In Australia each state owns the mineral resources within its bound-

⁶⁷ This history is stated at length by the writer in *Petroleum Land Policies Contrasted*, 36 U. Color. L. Rev. 187 (1964).

⁶⁸ The four provinces at Confederation were Ontario, Quebec, New Brunswick and Nova Scotia.

⁶⁹ Section 109 of the *B.N.A. Act 1867* (Imp.) c.3 continued ownership of resources in the confederating provinces, and s. 92 gave the provincial legislatures jurisdiction over the management and sale of public lands.

⁷⁰ *Manitoba Act 1870* (Can.) c. 3, confirmed by *British North America Act 1871* (Imp.) c. 28; *Alberta Act 1905* (Can.) c. 3; *Saskatchewan Act 1905* (Can.) c. 42.

⁷¹ *The Natural Resources Agreements*, 1930.

⁷² As the Territories move towards provincial status, the question of ownership of natural resources arises anew. The subject is dealt with by the writer in *Ownership of Natural Resources in the Territories*, 5 Alta. L. Rev. (1967).

⁷³ The cases are digested in Lewis and Thompson, *Canadian Oil and Gas* (Butterworths, Toronto).

⁷⁴ The Torrens system, borrowed from Australia, applies in the western provinces of Canada.

daries.⁷⁵ In consequence of the vesting statutes,⁷⁶ there are no privately owned freehold petroleum rights. The Commonwealth owns minerals in the Northern Territories and in Papua and New Guinea. The situation therefore parallels the Canadian one, but without the complication of private ownership. Further, the Australians are resolving the dispute over ownership of offshore minerals.

(b) *Offshore petroleum rights*

The Australian position was described by Sir Henry Bolte, Premier of Victoria, last February as follows:⁷⁷

Briefly the objective of these extensive Commonwealth State discussions was to reach agreement on a scheme that would give certainty of legal title to operators in offshore areas who undertake the very substantial expenditure involved in offshore petroleum exploration and exploitation, and at the same time enable constitutional issues to be put on one side, thus avoiding the wasteful, costly, and seemingly inconclusive litigation of the kind that has beset the United States of America for many years, and is now starting to show up in Canada between Ottawa and the Provinces. I am pleased to be able to inform honorable members that, except for one or two matters which it is hoped will soon be resolved, complete agreement has been reached on the form and content of the scheme of joint Commonwealth-State offshore petroleum legislation, which will provide for a "Common Code" for oil and gas operations.

Details of the scheme have been released in government statements of 16 November 1965, 30 June 1966, and 7 April 1967. Implementary legislation has been passed by the parliaments of the Commonwealth and the State, and came into operation on April 1, 1968. So far as the federal-state aspect is concerned, the scheme provides for a 60/40 split of the standard ten per cent royalty in favour of the states, and also gives the states rentals and any additional royalty negotiated under the relinquishment provisions. The code will apply to territorial waters as well as to the submerged lands of the continental shelf beyond.⁷⁸

The extent of this Australian accomplishment in co-operative federalism can be indicated by stating that the United States' offshore conflict began in the 1930s with offshore drilling in the Gulf of Mexico, passed through several landmark decisions of the Supreme Court of the United States in 1947 and 1950,⁷⁹ was compromised by Congress in 1953⁸⁰ after presidential vetoes of bills giving the submerged lands to the

⁷⁵ *Commonwealth Act*, s. 85.

⁷⁶ See note 65, *ante*.

⁷⁷ *Victoria Parliamentary Debates*, 21 Feb., 1967, pp. 3019-3020.

⁷⁸ The writer is unsure whether the code will apply to inland waters.

⁷⁹ *U.S. v. California*, 332 U.S. 19 (1947); *U.S. v. Louisiana*, 339 U.S. 699 (1950); *U.S. v. Texas*, 339 U.S. 707 (1950).

⁸⁰ *The Submerged Lands Act*, 67 Stat. 29 (1953); *The Outer Continental Shelf Act*, 67 Stat. 462 (1953).

states,⁸¹ and is still being resolved by judicial determination of the details of the compromise.⁸² In Canada, at a time when the recurring tensions between Ottawa and the provinces were at high point, there was little prospect of a political settlement putting aside constitutional issues. Instead, the power of direct reference of such issues to the Supreme Court of Canada was utilised. On 26 April 1965, by order-in-council P.C. 1965 - 750, the Dominion government referred to the court the following questions:

1. In respect of the lands, including the mineral and other natural resources, of the sea bed and subsoil seaward from the ordinary low-water mark on the coast of the mainland and the several islands of British Columbia, outside the harbours, bays, estuaries and other similar inland waters, to the outer limits of the territorial sea of Canada, as defined in the Territorial Sea and Fishing Zones Act, Statutes of Canada 1964, Chapter 22, as between Canada and British Columbia,

- (a) Are the said lands the property of Canada or British Columbia?
- (b) Has Canada or British Columbia the right to explore and exploit the said lands?
- (c) Has Canada or British Columbia legislative jurisdiction in relation to the said lands?

2. In respect of the mineral and other natural resources of the sea bed and subsoil beyond that part of the territorial sea of Canada referred to in Question 1, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the mineral and other natural resources of the said areas, as between Canada and British Columbia,

- (a) Has Canada or British Columbia the right to explore and exploit the said mineral and other natural resources?
- (b) Has Canada or British Columbia legislative jurisdiction in relation to the said mineral and other natural resources?

Australians versed in constitutional and international law will read the Canadian decision⁸³ in favour of the federal government with great interest and a substantial familiarity,⁸⁴ and they will speculate to what extent it might foretell the decision were the Australian question to be placed before the courts. In Canada, the decision has by no means settled the issue. Provincial premiers still assert provincial claims to the offshore minerals which they say can be satisfied only by negotiations with the federal government. Meanwhile, offshore venturers in Canada lay their chips on red for the provinces or white for Ottawa,

⁸¹ President Truman vetoed these bills in 1946.

⁸² *U.S. v. California* (1965), 33 L.W. 4445. The history of the litigation is outlined in Lumb, *The Law of the Sea and Australian Off-shore Areas* (U. of Queensland, 1966).

⁸³ The decision of the Supreme Court of Canada in the *Offshore Minerals Reference* is not yet reported.

⁸⁴ The issues were similar to those outlined by Mr. Lumb in *The Law of the Sea and Australian Off-shore Areas*. U. of Queensland, 1966.

and most cover both, considering that paying twice for permits is a precaution sensibly taken notwithstanding the decision in the *Offshore Minerals Reference*.

Australian politicians, then, can be proud of achieving a "Common Code" for offshore petroleum. There are obvious advantages in avoiding Commonwealth-State dispute, and in providing oil companies with a single, uniform code of operations. Not so obvious, but possibly of greater long-run significance for Australia, is that the joint scheme will prevent the various governments from entering into competition to attract exploration capital at a cost to the public interest of excessively attractive terms of development. There has already occurred "sweetening of the pot" retaliation by one government in Canada to the introduction of new and more attractive terms of exploration by another government,⁸⁵ and such competition could conceivably enter a "runaway" stage should discoveries of oil in new regions initiate substantial shifts of exploration and development capital.

On the debit side of the account, the joint offshore code will undoubtedly entail rigidity owing to the difficulties inherent in gaining seven acceptances to proposed revisions. It has already been mentioned that the dynamism of the oil industry requires constant legislative lubricant.⁸⁶ The writer can be excused some scepticism when he contemplates the task of keeping the "Common Code" current.⁸⁷

It would be misleading to leave the impression that the Canadian scene is one of mindless competition between governments. Canadians invented the term "co-operative federalism". Part of its structure is a Mines Ministers' Conference which meets annually at ministerial level and reviews the work of its many committees. One such committee is the Oil and Gas Committee which comprises government and oil industry representatives and deals with common problems including the preparation of model statutes.⁸⁸

(c) *The division of legislative powers*

The constitutional gymnast in a federal country enjoys a field day of legal problems in the structuring of the petroleum industry — so much so that the Second Annual Seminar of the Canadian Petroleum Law Foundation in 1963 was devoted exclusively to constitutional law problems in petroleum legislation.⁸⁹ These problems have already been noted with respect to ownership of offshore petroleum. Now they will be

⁸⁵ The introduction of the federal *Canada Oil and Gas Lands Regulations* in 1961 set a new pattern for incentives.

⁸⁶ See footnote 4, *ante*.

⁸⁷ The writer's critique of the Australian common code will appear in the next issue of the *University of British Columbia Law Review*.

⁸⁸ The process is explained by D. E. Lewis, Q.C., in *Provincial-Federal Cooperation*, 3 *Alta. L. Rev.* 412 (1964).

⁸⁹ The seminar papers are published in 3 *Alta. L. Rev.* 367-423 (1963).

examined in the economic aspects of the petroleum industry. In Canada they involve both the pipe-lining and marketing of oil and gas, and the issues are so basic as to affect the entire structure and organisation of the industry.⁹⁰

The pipelining problems begin the moment that a pipeline crosses a provincial boundary or the Canada-United States boundary, or a connection is made between pipelines on either side of such boundaries. The provinces have pipeline legislation which, under Heads 10, 13 and 16 of s.92 of the *British North America Act 1967*, can competently control intraprovincial pipelines. But Head 10, which gives to the provinces jurisdiction over local works and undertakings, excepts such as connect the province with any other province or extend beyond the limits of the province, and jurisdiction over these extra-provincial works and undertakings is given to the federal parliament by Head 29 of section 91. Therefore, the pipeline that began its existence under provincial legislation could find its status questioned by reason of connection with an inter-provincial or extra-provincial pipeline under federal jurisdiction. The flow of crude oil from the field through gathering lines and intra-provincial trunk lines is usually interrupted by storage before the crude oil is committed to inter-provincial pipelines, though the entire movement is usually automated and substantially under one control system. With respect to natural gas, the movement from field to market is even more completely integrated so that it may be said that the householder in Montreal who turns up his thermostat to call for more heat thereby opens the valves on a gas well 3,000 miles away in Alberta. Canadian courts have jurisdiction back along the line, but potentially such jurisdiction could reach to the well-head. Co-operation between federal and provincial authorities has permitted a pipeline system to develop under which, generally speaking, only the main trunk carriers across Canada are federally regulated, and the rest are under provincial laws for incorporation and supervision. But constitutional law authorities warn that this structure could well be upset by judicial decision.⁹¹

The Australian constitution, according to the writer's brief acquaintance with its provisions, has no counterpart to the Canadian clauses concerning local or inter-provincial works and undertakings. Should the Victorian Gas and Fuel Corporation's proposed natural gas pipeline be connected to a New South Wales pipeline, or should Esso pipe its gas from the offshore Barracouta and Marlin fields directly to a point in New South Wales, the question whether federal or state jurisdiction or both is involved falls to be determined by the complex implications of

⁹⁰ The background pipelining and marketing legislation and the constitutional provisions in Canada are thoroughly explained in Glen. W. Acorn, *The Background*, 3 Alta. L.R. 367 (1964).

⁹¹ G. A. Holland, *The Federal Case*, 3 Alta. L. Rev. 393 (1964).

ss. 51, 92 and 99 of the *Commonwealth Act*, which give the Commonwealth a "trade and commerce" power (s. 51), but, with respect to inter-state trade, ensure freedom of trade (s. 92) and the absence of state preference (s. 99). Should the Victorian parliament also prohibit the export of natural gas to another state or to foreign markets except with state permission, the aim being to ensure adequate reserves of gas for state consumption and that the gas will be processed in Victoria before export, then the constitutional issues become more complex. The validity of just such legislation of the province of Alberta prohibiting export of gas without a provincial permit⁹² is questioned as an interference with inter-provincial and foreign trade, both matters of federal competence. The issue is further embroiled by the inclusion in Alberta natural gas leases of a condition that the gas not be used outside the province except with the consent of the Lieutenant-Governor in Council on pain of forfeiture of the lease.⁹³ At once the question arises "Can the province indirectly restrict the export of gas through the exercise of its proprietary powers as owner of the gas that it cannot directly impose by legislation owing to constitutional limitations?"

The reference to the Commonwealth "trade and commerce" power leads to the last aspect of petroleum legislation in Canada that invites speculation as to constitutional validity. That aspect is market prorationing of oil and of gas. Canadian provinces, as do the Australian states, have power to regulate industries within their boundaries, and legislative measures to conserve oil and gas by prohibiting wasteful practices and by controlling production methods fall within this power. But in Alberta, following the long-established practice in the United States, conservation legislation includes the prorationing of producible oil to market demand.⁹⁴ With the realisation that during the past decade Alberta has had a "shut-in" production capacity of more than fifty per cent, the purpose of prorationing to avoid distress marketing of this excess capacity and to promote equitable sharing of the limited market is obvious, and the connection of prorationing with conservation as a means of preventing economic waste becomes clear. But a system by which nominations for crude purchases are received from refiners and brokers inside and outside the province each month to determine the total market demand, and by which this demand is then allocated by formula to pools and wells in the province under the authority of a government conservation agency, has many of the earmarks of a marketing scheme regulating a flow of trade that crosses provincial boundaries, and such a scheme likely trenches on the federal "trade and commerce power" under Head 2 of s. 91 of the *British North*

⁹² *The Gas Resources Preservation Act 1956* (S.A. 1956, c. 19).

⁹³ The imposition of such a condition is authorised by s. 152 of *The Mines and Minerals Act 1962* (S.A. 1962, c. 49).

⁹⁴ *The Oil and Gas Conservation Act* (S.A. 1957, c. 63), s. 36.

America Act 1867.⁹⁵ This constitutional problem posed by the production of oil in excess of demand is one that Australians would not mind having. While prorationing of oil may yet be far off, the necessity of prorationing gas may not be a distant prospect for Australia. "Rateable-take" orders are not uncommon in United States jurisdictions,⁹⁶ and Canadian provinces have gas prorationing provisions in their statutes,⁹⁷ ready to be used should the public interest require that gas markets be shared.

A tribute should be paid to the lawyers who, despite the constitutional difficulties, have succeeded in providing their oil company clients with a workable national framework for their industry. However readily the critic can find flaws in the structure, the fact remains that court challenges have not occurred and that governments seem, for the time being at least, to have reached a satisfactory accommodation of their respective interests.

OIL AND GAS TENEMENTS

1. *Permits, Licences and Leases*

The onshore petroleum legislation of the Australian states and territories exhibits more uniformity in dealing with the disposition of state-owned oil and gas than do the Canadian statutes.⁹⁸ The general pattern of this legislation is a three-stage system, including a permit to cover basic exploration over a wide area, a licence over a much smaller area authorising drilling, and a lease to cover the production stage. The new offshore petroleum code will provide for a two-stage system.⁹⁹ A permit will cover all stages of exploration including drilling, and a licence, the equivalent of the onshore lease, will cover production.

Under the three-stage system, the basic exploration permit may include up to 5,000 square miles in New South Wales and Victoria, or 10,000 square miles in the territories.¹⁰⁰ Area reduction occurs when the permittee exchanges his exploration permit for a prospecting licence, for generally speaking the maximum area of the licence is 200 square miles,¹⁰¹ though there is no limit on the number of licences that may be

⁹⁵ John R. Ballem, *Constitutional Validity of Provincial Oil and Gas Legislation*, 41 Can. Bar Rev. 199 (1963).

⁹⁶ *Northern Natural Gas Co. v. State Corporation Commission* (1963) 83 S., Ct. 646.

⁹⁷ *The Oil and Gas Conservation Act* (S.A. 1957, c. 63), s. 36.

⁹⁸ The analysis which follows is based in part on a table of comparison of petroleum legislation in Australia and Papua-New Guinea made available to the writer by Mr. Neil Dakin, of Esso Standard Oil (Australia) Ltd. The western Canadian legislation is similarly compared in Appendix I, Div. E of Lewis and Thompson, *Canadian Oil and Gas*, Vol. 3 (Butterworths, Toronto).

⁹⁹ The code is described in Ministers' statements of 16 November, 1965, 30 June, 1966, and 7 April, 1967. The evolution of the code is described in detail by the writer in an article to be published in the next issue of the *University of British Columbia Law Review*.

¹⁰⁰ There is no maximum in Western Australia and South Australia.

¹⁰¹ It is 2,500 square miles in the territories.

obtained. Further area reduction may take place at the leasing stage, which usually occurs when petroleum is discovered. The maximum size of the lease is 100 square miles (500 square miles in the territories), but only in Western Australia and the territories is a 50% reduction of the licence area required.

The offshore petroleum code will introduce a new two-stage area-reduction scheme. First, the permit, which may include a maximum area of approximately 10,000 square miles, will be reduced by fifty per cent on each five-year renewal after the initial six-year period. Second, on discovery, the permittee will be required to nominate a location covering nine graticular blocks (5° of arc of longitude by 5° of arc of longitude — approximately twenty-five square miles) out of which he may select any five blocks for a production licence.¹⁰² The remaining four blocks must then be relinquished to the Crown. In response to objections from the oil companies, the system has been modified by giving the permittee the option of taking production licences covering the entire 9-block location if he agrees to pay a royalty to be negotiated between one per cent and two and one half per cent in addition to the basic ten per cent royalty on all the nine blocks.¹⁰³

As to the duration of permits, licences and leases in Australia, it may be said in very general terms that the exploration and prospecting stages will sustain the operator for at least ten years, subject to the area reductions mentioned. The production lease or licence lasts for twenty-one years¹⁰⁴ and can be renewed. The rate of royalty generally is ten per cent. As has been previously mentioned, no differentiation is made between oil and gas.¹⁰⁵

When these terms and conditions of permits, licences and leases are given on overview, they appear more in conformity with world-wide trends in petroleum legislation than do their counterparts in the western provinces of Canada.¹⁰⁶ The explanation must be that the prevalence of private ownership of petroleum¹⁰⁷ and the early involvement of government departments before trends were established elsewhere enabled the evolution in western Canada of indigenous legislation

¹⁰² In the Ministers' statements of 16 November, 1965, the selection was limited to four blocks, but this figure was increased to five in the statement of 30 June, 1966.

¹⁰³ This modification appears in the Ministers' statement of 7 April, 1967. The idea of additional royalty was borrowed from *Oil and Gas Land Order No. 1, 1961* (SOR/61-461 as amended by SOR/61-540), *Canadian Oil and Gas, Vol. 2, Fed. (3B)*, which introduced this feature into the federal *Canada Oil and Gas Land Regulations* (SOR/61-253), *Canadian Oil and Gas, Vol. 2, Fed. (4)*.

¹⁰⁴ The term is only 15 years in Victoria and 20 years in New South Wales.

¹⁰⁵ See M/S p. 8, *ante*.

¹⁰⁶ This sweeping generalisation is based on studies made in the graduate program in petroleum law at the Faculty of Law, University of Alberta. In particular, references are Martin M. Olisa, *Oil and Gas Rights in Africa* (Graduate thesis, Alberta, 1967); *Survey of Mining Legislation* (ECAFE Mineral Resources Development Series 9, U.N.).

¹⁰⁷ See M/S p. 10, *ante*.

governing Crown petroleum.¹⁰⁸ Certainly, the Canadian legislation is markedly different from the legislation governing public domain lands in the United States¹⁰⁹ and from the petroleum codes in the Middle East and in African and South American countries.

The major differences that mark off the legislation in western Canada from that in Australia are to be found in the differing treatment of oil and of gas, as already noted,¹¹⁰ and in the terms and conditions governing basic exploration, size and duration of permits and leases, area reduction and rates of royalty.

The Canadian legislation normally provides for a basic two-stage system comprising an exploration permit or reservation to be followed by a lease.¹¹¹ Elaborations on this system cover the Crown reserves established by the area reduction rules, and, as previously mentioned, natural gas. The first difference is that basic geophysical exploration may be carried out anywhere without a permit, subject to consent to enter on occupied lands, and subject to the licensing of operators and equipment.¹¹²

The difference with respect to size of permits and leases is that, generally speaking, permits and leases are smaller in area in western Canada. This difference stems from maximum acreage limits, which, at 100,000 acres for permits and 9 square miles for leases,¹¹³ to take the Alberta example, are substantially smaller than their equivalents in the Australian states. It also derives from the fragmentation of ownership between the Crown and private persons in the settled areas, and from the operation of the Canadian Crown reserve system. Generally speaking, the Canadian permit may endure for a period of approximately ten years, and in this respect is similar to the combined effect of the Australian permit and prospecting licence. But Canadian legislation does not require a discovery before the permittee may convert to lease as to the Australian statutes, which provide that a twenty-one-year renewable production lease may be obtained only when discovery is made. The Canadian lease, which can be acquired without discovery, expires at the end of ten years unless a discovery occurs, in which case it will endure so long as commercial production continues.

¹⁰⁸ The first uniquely petroleum law in Canada was an order-in-council of 1898, P.C. 1822. Petroleum leases were introduced in 1910 by P.C. 414. This history is recounted by the writer in *Petroleum Land Policies Contrasted*, 36 U. Color. L. Rev. 187 (1964).

¹⁰⁹ *The Mineral Leasing Act 1920*, 41 Stat. 437 (1920), 30 U.S.C. 181.

¹¹⁰ See M/S p. 10, *ante*.

¹¹¹ See *Comparison of the Legislation in Regard to the Acquisition of Crown Petroleum and Natural Gas Rights in Western Canada*, App. I, Div. E., Lewis and Thompson, *Canadian Oil and Gas*, Vol. 3 (Butterworths, Toronto).

¹¹² *Alberta Geophysical Regulations* (O.C. 148/59), *Canadian Oil and Gas*, Vol. 2, Alta. (5); *Mobile Equipment Licensing Act* (S.A. 1959, c. 53), *Canadian Oil and Gas*, Vol 2, Alta. (32).

¹¹³ The figures given are for Alberta reservations and leases. Larger permits and leases are provided for in offshore and remote areas of British Columbia and the Yukon and North-west Territories.

It is with respect to area reduction provisions that the most significant difference appears. This difference marks off the Canadian legislation from that in other parts of the world. Area reduction provisions may have two objectives — one is to avoid long-term monopoly holding by encouraging the entry of new operators for a second round of exploratory activities; the second is to give to the state a portion of the fruits of discovery. In most parts of the world, and in the Australian states, the relinquishment provisions are directed primarily to the first objective. In the western Canadian provinces they are directed to both. The proposed offshore code in Australia has borrowed from the Canadian precedent, for its two-stage relinquishment scheme has, as the object of the first stage, the opening up of a permit area to new operators, and, as the object of the second stage, the sharing by the Crown in the benefits of the permittee's discovery.¹¹⁴

The Canadian area-reduction scheme, based on the Alberta example, accomplishes this second objective by requiring the permittee in the seventh or eighth year of his permit or reservation, if not sooner, to "go to lease" on not more than fifty per cent of the acreage under a selection system that requires him to choose leases in square shapes of not more than nine square miles or in rectangular shapes of not more than eight square miles either on a checkerboard pattern or on a pattern with one-mile corridors between the leases. The remaining acreage then comprises "Crown reserves" to be disposed of under a bid system either as Crown Reserves Drilling Reservations¹¹⁵ or as leases.¹¹⁶

With respect to royalty rates, the Canadian difference in the western provinces is that a sliding scale applied to each producing well rather than a fixed royalty on oil is prescribed.¹¹⁷ An obvious purpose of the sliding scale is to maximize revenues to the Crown in the case where a well has a high rate of production, and so royalties as high as sixteen and two-thirds per cent may be payable.¹¹⁸ A less obvious purpose, but one that has had more application in areas where well-spacing is relatively close owing mainly to fragmented ownership, is to prevent wells from being prematurely abandoned owing to low producibility. To

¹¹⁴ See note 101, *ante* where the option of paying additional royalty to acquire the relinquished blocks is explained in the accompanying text.

¹¹⁵ The Crown Reserve Drilling Reservation, bid for by cash bonus, requires the grantee to drill by the second or, at the latest, the third year, and permits him to lease a portion of the reservation increasing in accordance with the depth of the well. See *Crown Reserve Drilling Reservation Regulations* (O.C. 1296/57), *Canadian Oil and Gas*, Vol. 2, Alta. (6). The purpose of this tenement is to encourage drilling which will help evaluate the remaining Crown reserves.

¹¹⁶ At the Crown Reserve sale on 31 January, 1967, the Province of Alberta received \$19,319,235 in cash bonuses for oil and gas leases.

¹¹⁷ A comparative table of royalty rates applicable in western Canada is set forth as Appendix II in Volume 3 of *Canadian Oil and Gas* (Butterworths, Toronto).

¹¹⁸ Wells in the prolific Rainbow Lake field of north-western Alberta may attract this high rate.

accomplish this purpose, royalties may be as low as five per cent.¹¹⁹ Royalties on natural gas are fixed, and range from a low of five per cent for the first three years in the Territories to a high of sixteen and two-thirds per cent in Alberta.

2. *Joint Operating Agreements*

One of the remarkable things about oil companies is the extent to which they have exploited the possibilities of joint venturing in business. The manner in which they combine their resources of capital and technology to spread the risk and to achieve efficiency in exploration and production provides an example which other industries might emulate. The incentive to joint venturing is not difficult to identify in terms of risk. The case of the exploratory well on Ellesmere Island in the Arctic, where more than twenty-five Canadian companies combined to share the cost of the venture (a dry hole),¹²⁰ is an obvious example of spreading the risk. A more ordinary example is the typical "farmout" agreement where Company A, long on risk capital but short on good drilling prospects, agrees to drill a well on lands held under lease by Company B, which is pleased to have Company A carry the costs of drilling. In consideration of drilling the well, Company A earns an undivided interest in the lands, which the parties then proceed to develop under a joint operating agreement. Even the major international oil companies enter into joint operating agreements for the purpose of spreading their investment in the never-ending hunt for oil reserves.

The incentive in terms of efficiency requires some explanation. The petroleum reservoir, like a manufacturing plant or any other unit of production, will operate at peak efficiency only under unified, or, at least highly integrated, management. But the petroleum reservoir, unlike the manufacturing plant, may have a multiplicity of owners and operators. This fragmentation is more acute in regions, such as parts of the United States and Canada, where private freehold ownership of oil and gas is mingled with state ownership,¹²¹ but it is even prevalent where petroleum is exclusively state-owned. The reservoir may be large enough to underlie several producing licences owned by different oil companies, or it may have had the misfortune (for the discoverer) of being a small reservoir lying at the juncture of several producing licences. Wherever the working interests in a reservoir are

¹¹⁹ This is the rate in British Columbia for wells that have a monthly production up to 600 barrels. The Alberta minimum is eight per cent. In 1962 the average royalty for all wells in the province was approximately nine per cent, indicating that the majority of the wells produced at the lower end of the sliding scale. The prorationing scheme, which has since been modified, contributed to this low average rate.

¹²⁰ This will cost in excess of \$1,000,000.

¹²¹ See M/S p. 10, *ante*.

divided among two or more oil companies, the efficient operation of the reservoir is jeopardized unless, by agreement, the reservoir is treated as a unit for production purposes or production operations are highly integrated. A major function of a state conservation agency is to ensure that efficient production methods are employable, and to this end it will enforce a degree of integration by prescribing the spacing of wells and by allocating maximum efficient producing rates to each well. But these conservation techniques are blunt instruments compared with a unified production plan. To achieve this unified plan, oil companies will diligently strive to negotiate the so-called "unitization agreement". Because this agreement requires the modification of the terms of individual leases as well as the submission of the working interests to the unified plan of operations, it may involve literally hundreds of signatories, including private and government lessors, holders of over-riding royalties, and lessees and their co-venturers.

A less sophisticated, but nevertheless important, example of the efficiency principle at work to give incentive to co-venturing is the "dry-hole contribution agreement", which, in essence, is a contract for the purchase of geological information. The co-venturing nature of this agreement is that the contributing party, though not a partner in the well, is involved in the exploration risk because he has to contribute to the costs of drilling the well only if it proves to be a dry hole. Further, the contributing party usually has a presence at the site of operations, for the agreement usually gives him the right to have his geologist on location at the well-site.

Co-venturing, then, operates to spread the risk in exploration and production activities, it permits the efficient working of reservoirs, and it enables economies to be effected in obtaining geological information. Moving a stage beyond exploration and production, co-venturing has an important role in gas processing and in pipelining, though in these cases the incentive is not so likely to lie in risk-spreading as in sharing the ancillary benefits of discovering a petroleum reservoir by employing capital in a protected, utility-type investment.

Practising lawyers in Australia may well have found their first deep involvement in petroleum law to be the preparation of farmout and joint operating agreements. They will know that it may take months for the parties to negotiate and settle the complex clauses dealing with definitions, participating interests, the designation of operator, the budgeting for and authorisation of expenditure, the rights of taking independent drilling action, the maintenance of leases, the method of accounting, the ownership of production, the sharing of information, the terms of indemnity, the provision of insurance, the obligations with respect to after-acquired leases, the provisions for "take-over" of operations, and finally the provisions for the abandonment of wells and for

the surrender of leased lands, to name most, but not all of them.¹²² They also know that impatient management will not suspend activities while lawyers labour, and that geologists and engineers, and their thousands of dollars in expense, will be committed to leased lands when only the barest of terms of agreement are specified in an exchange of letters between the parties.

Maybe they will rest easier to learn that the Supreme Court of Canada upheld as enforceable a letter agreement by which parties agreed to exchange twenty per cent interests in British Columbia gas permits.¹²³ In this case the Court found that the intention of the parties was expressed with "precision and a commendable economy in the use of words", but the warning of another Judge¹²⁴ that the letter agreement may "constitute a fertile breeding ground for disputes and litigation" must not be overlooked.

THE PUBLIC INTEREST

In countries like Australia and Canada, the extent to which the public interest is fostered by legislation regulating the petroleum industry may be tested by asking three main questions:

(1) Does the legislation serve a proper balance between the interests of the present generation in maximum exploitation at the present time and the interests of future generations in the conservation and preservation of petroleum resources for the future?

(2) Does the legislation achieve the maximum revenue returns to the state consistent with a desirable pace of exploration and development?

(3) Has the legislation served to balance on one hand the need for foreign investment to develop a flourishing petroleum industry and on the other hand the need to maintain and foster the positive values of national sovereignty?

Each question poses a confrontation between values of the widest and most uncertain implications. Answers, therefore, must depend on the broadest of generalisations, but nevertheless, for Canada, at least, they will be attempted as a conclusion to this paper.

1. *Conservation of Petroleum Resources*

Each of the producing provinces in Canada has a conservation agency operating under statutory provisions which prescribe its responsibilities,

¹²² Lewis and Thompson, *Canadian Oil and Gas* (Butterworths, Toronto), Vol. 1, Div. C, contains forms of joint operating agreements. The Oil and Gas Committee (legal sub-committee) of the Mines Ministers' Conference has published model operating and unitization agreements.

¹²³ *Calvan Consolidated Oil and Gas Co. Ltd. v. Manning* (1959), S.C.R. 253, 17 D.L.R. (2d) 1.

¹²⁴ *Hudson's Bay Oil and Gas Co. Ltd. v. Dynamic Petroleum Ltd.* (1958), 26 W.W.R. 504, affirmed on appeal, 28 W.W.R. 480.

among others, to be the conservation of petroleum resources and the prevention of waste.¹²⁵ Its wide conservation powers can best be indicated by reviewing the definition of "wasteful operations" that it is authorised to regulate.¹²⁶ These include drilling and production methods, including the spacing of wells, that tend to reduce recoverable reserves or to cause excessive surface loss or destruction of petroleum, the improper use of reservoir energies, the failure to use secondary recovery methods, the flaring of gas that can be economically stored or recovered and marketed, the end-use of gas for other than fuel or light, the inefficient storage of oil and gas, and, finally, the production of oil or gas in excess of proper storage facilities or of transportation and marketing facilities or of market demand.

The conservation agency stands as watch-dog of production practices, and it has teeth. In Alberta, the Oil and Gas Conservation Board is an independent corporation whose members have a statutory tenure and an independent revenue through a special tax imposed on oil production. The Board's staff numbers in the hundreds, mostly technical personnel, many of whom are located in field offices for on-the-spot supervision of operations. The Board has wide powers to hold hearings, to make orders, and to recommend the making of regulations by the Lieutenant-Governor-in-Council. Enough has been said to indicate that conservation practices in the widest sense in which they are known in the North American continent are ensured through sophisticated legislation and administration.

But this is conservation in an immediate sense. No attempt is made to ration oil in order to conserve it for future needs, and, were any government in Canada so inclined, it would find its philosophy of conservation challenged,¹²⁷ apart from the adverse political reaction that would be aroused by a policy of rationing oil when reserves are more than adequate to meet immediate needs. The present does not recognise a bondage to the future to this extent of self-sacrifice!

Industry operates on the basis that a desirable ratio of proven reserves of oil to current production is thirteen to one, and there is concern that proven reserves in the United States in recent years have fallen below what this ratio requires.¹²⁸ In Canada they are higher than this requirement.

¹²⁵ Alberta, *Oil and Gas Conservation Act* (S.A. 1957, c. 63), *Canadian Oil and Gas*, Vol. 2, Alta. (8); British Columbia, *Petroleum and Natural Gas Act 1965* (S.B.C. 1965, c. 33), Part XII, Conservation, *Canadian Oil and Gas*, Vol. 2, B.C. (1); Saskatchewan, *Oil and Gas Conservation Act* (R.S.S. (1953), c. 327), *Canadian Oil and Gas*, Vol. 3, Sask. (3); Manitoba, *The Mines Act* (R.S.M. 1954, c. 166), Part II, *Canadian Oil and Gas*, Vol. 3, Man. (1).

¹²⁶ See, for example, Alberta, *Oil and Gas Conservation Act*, *supra*, s. 2(u).

¹²⁷ The philosophies of resource conservation are analysed in Zimmermann, *Conservation in the Production of Petroleum*, Yale University Press, 1957.

¹²⁸ In 1965, the remaining reserve years at current production were 12.1. Source: A.P.I.

With respect to gas, the policy of the government in Alberta, which is the major supplier of eastern Canada and also of export gas to the United States, is to ensure at the time of granting a permit to remove gas from the province that the present and future needs of persons within the province will be served having in mind the established reserves of gas and the trends in discovery of new reserves.¹²⁹ It will be noticed that Canada's federal nature intrudes at this point, for it is a provincial supply to which this conservation requirement is directed. In the case of export of gas to the United States, a federal permit is required as well, and in this case, the National Energy Board is charged with a similar responsibility to ensure that the needs of Canada as a whole are served.¹³⁰

Within this limited scope the needs of future generations are taken into account in Canada. It would require Solomon-like prescience and Wilson-like politics for a government to do more.

2. *Public Revenues from Petroleum*

The relationship between public revenues and the rate of investment of private capital in exploration and production operations is obvious. Where private capital has free choice as to which investment opportunity will be pursued (and there are relatively few restrictions on the nationality of investors in petroleum laws throughout the world),¹³¹ then, if risk and other intangible considerations are equal, profitability will be the governing factor. The higher are the public revenues to be derived from the production of petroleum, the lower will the profitability be. Public revenues cannot be gauged only in terms of fees, rentals, royalties and bonuses paid for production licences. Taxes paid by oil producers are equally public revenues, and the amounts of these usually reflect the amount of revenue received from the other sources.¹³² Further, there are, in addition to such revenues, indirect benefits flowing from a producing oil industry which, in terms of improved balance of payments, industrialisation, and social development, may be far more important to the public interest than the direct revenue gains.

In any attempt to compare the public revenues derived from the

¹²⁹ *Gas Resources Preservation Act* (S.A. 1956, c. 19), *Canadian Oil and Gas*, Vol. 2, Alta. (16), s. 8(3).

¹³⁰ *The National Energy Board Act* (S.C. 1959, c. 46), *Canadian Oil and Gas*, Vol. 2, Can. (12), s. 83(a).

¹³¹ For a summary of restrictions on investment, see *The Status of Permanent Sovereignty over Natural Wealth and Resources*, U.N. Secretariat (A/AC, 97/5/Rev. 2; E/3511; A/AC 97/13 (1962)).

¹³² In Middle East, African and South American countries, the combined effect of the petroleum laws and the income tax laws is to provide the state a share of the net revenues of the oil company, the usual split being 50/50, though there have been recent departures from this formula in some of the joint venture arrangements, see Mughraby, *Permanent Sovereignty Over Oil Resources* (Lebanon, 1966), p. 95 *et. seq.*

exploitation of petroleum resources between one state and another, there are insuperable difficulties because of the many variables that intrude, such as political stability of the area, the markets available, and the inaccessibility of the region, to name but a few.¹³³ When the state is part of a federal structure, the attempt is made more difficult because of the division of revenues and responsibilities between the federal government and the regional governments. In Alberta, for example, it is a straightforward matter to state the total amount of direct revenues derived from fees, rentals, royalties and bonuses and to calculate this amount as a percentage of the total value of production.¹³⁴ But a comparison of these figures with corresponding revenues received by the United States government from the public domain lands is largely superficial unless the revenues received by the respective governments from taxation and from all other sources are also taken into account.¹³⁵

A more helpful exercise, and one more immediate to the lawyer's interests, is to analyze the legal mechanisms which are employed by a government in the raising of public revenues from the production of petroleum and to evaluate their effectiveness.

Again using Alberta as the Canadian example, because it is the largest producer, these legal mechanisms are found to be fees, rentals, royalties and bonuses. The fees are unimportant because they represent merely the recovery of administrative expenses, though, by their size, they may also operate to deter operators with limited financial backing. Rents are charged in Alberta at all stages of reservation and lease, and continue notwithstanding that royalties are being paid. Before discovery they serve more as incentives to exploration than as a source of revenue because liberal expenditure credits and grouping privileges will permit the rental to be offset provided the equivalent is in fact spent on exploration. After discovery, the rental, at a substantial amount of \$1.00 per acre for an oil and gas lease, provides a steady revenue which will fluctuate only as total holdings of producing oil and gas tenements rise and fall. Because this fluctuation is not extreme from year to year, the rental provides an element of stability in Crown revenues.

The royalty represents the public's investment in the success or

¹³³ An industry approach is to deduct fifty per cent of gross revenues from production as costs and to calculate the government share in terms of royalties and taxes as a percentage of the remainder. A figure of approximately fifty per cent for the total government share is considered normal.

¹³⁴ In 1966, the total revenue from fees, rentals, royalties and bonuses was \$227,606,288. The royalty of \$75,265,613 may be taken as approximately ten per cent of the total value of production. The percentage take, therefore, is close to 227,606,288

$$\frac{75,000,000}{227,606,288} = 32.9\%$$

¹³⁵ The writer commented on this comparison in *Petroleum Land Policies Contrasted*, 36 U. Color. L. Rev. 187 (1964), at p. 218.

failure of the exploration venture.¹³⁶ On a sliding scale,¹³⁷ the royalty per well falls away as a lower rate of production reduces the operator's profitability. Where a well has high reserves attributed to it and a high rate of production, the royalty rate climbs to a maximum of sixteen and two-thirds per cent so that the public revenues will share in the bonanza. This approach to royalties recognises that the cost of producing oil is not mainly a direct factor of the amount produced, as in the case of coal or other hard minerals, but is more a factor of the reserves found by a well and the producibility of the reservoir. The sliding scale also promotes efficiency in producing operations. The public as well as the operator will benefit from increased production per well. In consequence, the government is challenged to provide regulations that will encourage the operator to employ enhanced recovery techniques and other efficiencies in production methods.¹³⁸

The bonus in Alberta is a cash price paid by the successful tenderer for a parcel of Crown reserves.¹³⁹ At the time of sale, the government department and the tenderers, or some of them, usually have sufficient information about the producing prospects of the parcel as a result of nearby discoveries that the transaction can be likened to the buying and selling of oil in place. In this way the state reaps a direct benefit from discovery. In amount, the total bonus payments have exceeded total royalty payments in the earlier years of the Alberta production history, and therefore the bonus system has provided a means of anticipating the ultimate benefits of production at a time when the under-developed economy of the province needed stimulating. In the long run, because the trend of adding to reserves year by year by new discoveries is likely to continue, and the Crown reserve system will continue to operate, the

¹³⁶ The revenues received by the government of Alberta break down as follows:

	1962-63	1963-64	1964-65	1965-66	1966-67
Fees and rentals	38,648,476	38,522,813	48,032,061	57,017,924	52,240,050
Royalty	51,038,312	56,797,130	62,094,571	68,634,351	80,214,493
Bonuses	30,498,553	52,894,139	91,908,326	121,050,115	106,225,023

¹³⁷

Monthly production
in barrels
0 to 750
750 to 2,700
2,700 and over

Crown royalty for month
in barrels
8%
60 plus 20% of number over 750
16½%

¹³⁸ The new producing spacing units and the new prorating system introduced in Alberta in 1965 following public hearings by the Oil and Gas Conservation Board in 1964 have the effect of materially favouring wells producing from reservoirs with high reserves so that such wells will have substantially greater allowables under the new system than under the old. In result, the percentage royalty and the Crown's share of production, will be substantially enhanced. See General Regulations under the *Oil and Gas Conservation Act* (Alta. Reg. 4/57 as amended), *Canadian Oil and Gas*, Vol. 2, Alta. (9A), s. 111b.

¹³⁹ At the Crown reserve sale held in Edmonton on Tuesday, 25 April, 1967, the provincial government accepted bids totalling \$22,512,291.39 for 120 parcels. The largest single price paid was \$1,971,200 for 320 acres in the Zama North area.

total return from bonus payments should be maintained at a reasonably steady level, though it will be subject to fluctuation from time to time as discoveries lag or flourish, and can suffer serious disruption should there be major changes in the tax structure.¹⁴⁰

The more important role of the bonus system, however, is to provide a mechanism whereby market forces can be brought to bear to ensure that the public revenues will receive a fair share of the fruits of petroleum discovery, particularly in those cases where nature has proved excessively bountiful. Thus, when Time Magazine announces that General de Gaulle's Societe Nationale des Petroles d'Aquitaine,¹⁴¹ through its Canadian subsidiary, Bariff Oil, has acquired reserves of 250 million barrels of oil worth \$250 million for an investment of \$23 million in western Canadian leases and exploration, Canadians, and particularly Albertans, can be gracious in acknowledging d'Aquitaine's good fortune by the realisation that the high reserves and producibility of its Rainbow Lake discovery will attract the highest royalty rates and that the Crown reserves proven thereby will earn the highest bonus bids in a highly competitive market.¹⁴²

In summation, it does not seem possible to make meaningful comparisons as to the public benefits received in different countries from the exploitation of petroleum resources, but it is possible to evaluate the techniques employed to obtain revenue. The Alberta example shows a flexible system in which the public revenues increase both as a percentage of gross revenues from production¹⁴³ and as a function of the market-place with respect to the present value of oil in place. It is a system particularly suited to the requirements of a government that does not possess a basic taxing power. It has resulted in a government that is the envy of others in Canada for its exceedingly large per capita public revenues derived otherwise than through taxation.¹⁴⁴

3. National Sovereignty over Petroleum Resources.

The assertion of sovereignty over national resources as a principle of international law has been a goal of under-developed countries finally expressed, after a decade of argument and debate, in the United Nations Resolution of 14 December, 1962. The assertion is directed more

¹⁴⁰ Bonus payments for Crown reserves are expensed by oil companies under federal income tax laws.

¹⁴¹ The company is a subsidiary of *Entreprise de Recherches et d'Activites Petrolieres*, a state enterprise of France.

¹⁴² Canadian issue of *Time Magazine*, 9 June, 1967.

¹⁴³ The Province of Saskatchewan has experimented with a net revenue lease, but reaction of most oil companies is unfavourable, see *Petroleum and Natural Gas Regulations*, 1963 (O.C. 976/63), *Canadian Oil and Gas*, Vol. 3, Sask. (2), s. 38(5), 40.

¹⁴⁴ Alberta is the only province in Canada that does not impose a tax on consumer sales. At the last session of the legislature, the *Estate Tax Rebate Act* (S.A. 1967, c. 18) was enacted. This statute is intended to "relieve the tax burden on Alberta estates", and to "make Alberta attractive to many corporations and individuals . . .".

against the private international oil companies than it is against other states.¹⁴⁵ A political arm of this assertion of sovereignty is the Organisation of Petroleum Exporting Countries, and one of its aims is to renegotiate the long-standing oil concession agreements in the Middle East with a view to gaining recognition of the concept of mutual equivalence of contractual advantages.¹⁴⁶

Canada does not have problems of sovereignty over resources in this context. Its petroleum legislation simply does not enable substantial monopoly to be deployed at the producing end of the petroleum industry, nor are inordinately long tenements granted. But Canada has had political concern expressed over the extent of foreign control of corporations engaged in the petroleum industry.

In a federal country this kind of concern may wear a double aspect. Western Canada, 3,000 miles distant from the financial houses of Toronto or Montreal, has often been as ready to regard as foreign the capital invested from eastern Canada as capital invested from other parts of the world. It does not require a regional chauvinism to recognise that there are opposing interests in a widespread country between areas rich in undeveloped natural resources and areas rich in the endowments of population and industry. When there is a federal structure as well, these regional interests will find expression in government policy. In Canada, the provincial governments do not in any way restrict foreign individuals or corporations from investing in petroleum resources,¹⁴⁷ and, in the western provinces, if not in all the provinces, there is firm opposition to measures which would retard the flow of investment of outside capital in support of some federal concept of national sovereignty.

The federal government has attempted to legislate a "Canadian content" into the exploration and exploitation of the "Canada lands" in the Yukon and North-west Territories and in the Arctic,¹⁴⁸ and has experimented with fiscal measures aimed at encouraging Canadian participation in foreign companies engaged in the resource extraction industries. Opinion within the present government at Ottawa is sharply divided on these issues.¹⁴⁹ The Minister of Trade and Commerce¹⁵⁰

¹⁴⁵ Mughraby, *Permanent Sovereignty Over Oil Resources* (Lebanon, 1966),

¹⁴⁷ Foreign corporations need only register in the province to do business. at p. 39.

¹⁴⁸ *Ibid.*, at p. 151.

¹⁴⁹ These attempts are analyzed by the writer in *Sovereignty and Natural Resources — A Study of Canadian Petroleum Legislation*, 1 Valparaiso U. L. Rev. 284 (1967), at pp. 290-295.

¹⁵⁰ The former Minister of Finance, the Honourable Walter L. Gordon, is the leading spokesman for the introduction of nationalistic policies with respect to investment. In his book, *A Choice for Canada* (1966), he singles out the petroleum industry, with its sixty-nine per cent non-resident ownership in 1961, for attack.

¹⁵⁰ The Honourable Mr. Robert Winters, as reported in *Canadian Weekly Bulletin*, 19 July, 1967, a publication of the Department of External Affairs, Ottawa.

presents the view that "In the final analysis, it does not matter very much who owns the capital — it is the use to which it is put that counts, and this is a field in which the Government can be the determining influence". He also comments that "what foreign capital does in Canada is a matter for the Government to determine. It is up to us to state the rules of the game, and we have done so".

Just what are the rules of the game so far as the petroleum resources are concerned? Legal advisers to governments in the western provinces have shown some considerable ingenuity in resolving the tension between the need to control resource development as the national interest may dictate from time to time and the need of investors to exercise their acquired rights unimpeded and undiminished. They have, in effect, reserved the overriding sovereignty of the public interest by the legal mechanism of clauses in Crown leases requiring the oil company lessee to accept as binding by force of the agreement any and all legislative and regulatory changes which may be enacted or promulgated from time to time in the future.¹⁵¹ In the British Columbia lease, to choose the simplest example of these clauses, the document reads:

"The lessor doth hereby demise unto the lessee, in accordance with and subject to the provisions of the *Petroleum and Natural Gas Act*, all Crown petroleum and natural gas in the location herein described, and the lessee doth hereby covenant and agree at all times to perform, observe, and comply with the provisions of the said Act, and amendments made thereunto from time to time enacted, and the provisions of any regulations which may from time to time be made under the authority thereof, and all such provisions as are from time to time enacted or made shall be deemed to be incorporated into these presents and shall bind the lessee in the same manner and to the same extent as if the same, as they are enacted, made or amended, were set out herein as covenants on the part of the lessee."

But legal powers do not exist in a vacuum. For a government to reserve the legal power to modify the terms of oil agreements means little if the use of the power clouds the investment climate and impairs the confidence of investors. In the end, the worth of this legal mechanism, as of all terms and conditions in permits and leases, must be measured in the light of the willingness of foreign investors to participate in the petroleum industry and of informed and responsible governments to accept them. In other words, when all that the expert can say about the terms of petroleum legislation has been said, it is political judgment that must determine what those terms shall in fact be.

CONCLUSION

Of course, oil companies do not like to have such clauses inserted in permits and leases. To the contrary, the industry will seek to entrench

¹⁵¹ This legal mechanism is the subject of the author's article, *Sovereignty and Natural Resources — A Study of Canadian Petroleum Legislation*, 1 Valparaiso U. L. Rev. 284 (1967).

so far as possible such basic matters as the extent of acreage to be earned by exploration, the duration of leases and the rate of royalty. There is nothing sinister about this penchant for vested rights. If there is a choice of investments, it is only natural that, other things being equal, the choice will be made in favour of the investment that has greatest security.

In Alberta, and in Canada generally, the oil industry has confidence in the security of investments. This confidence is founded on respect for the knowledge, energy, and decisiveness of the public administrators, and for their clear integrity and their firmness that the public interest shall provide the parameters for industry action. It is founded on the realization that, within those parameters, the public administrators and the politicians view the industry as a partner in service of mutual aims. After all, apart from all other indirect benefits, government shares approximately a fifty per cent interest in the proceeds of oil and gas production, and this interest, in common sense, commands a close industry-government co-operation.

Much of this co-operation must be centred on the petroleum legislation. The Mines Ministers' Conference in Canada and the role of its Oil and Gas Committee in preparing draft statutes has already been mentioned as an example of co-operation at the federal-provincial level.¹⁵² Within each province, co-operation in the preparation and drafting of legislation proceeds in the closest way. Committees of the Canadian Petroleum Association, the Canadian Gas Association, and the Independent Petroleum Association of Canada, the three chief industry organizations, maintain constant liaison with the government departments for the review and amendment of statutes. The industry representatives are invited to make drafts, and to comment on and revise drafts of new statutes. In 1962, when Alberta embarked on a major revision of its *Mines and Minerals Act*¹⁵³ and its *Oil and Gas Conservation Act*¹⁵⁴ it proceeded through an Oil and Gas Law Revision Committee which included the Deputy Minister of Mines and Minerals, the Chairman of the Conservation Board, and representatives from two of the industry associations.¹⁵⁵ The Committee received approximately 40 written submissions from oil companies, and spent many weeks reviewing these submissions before pen was put to paper in the drafting of the new legislation. These drafts were then reviewed by the committee, and by the oil companies, themselves, in clause by clause fashion. Through this participation, legislation of a highly technical and complex nature reached the industry, which would live by its terms, only after

¹⁵² See M/S p. 16, *ante*.

¹⁵³ S.A. 1962, c. 49.

¹⁵⁴ S.A. 1957, c. 63.

¹⁵⁵ The writer was a member of the committee.

the most thorough investigation to ensure that, within the parameters of public interest, it would be responsive to industry needs.

Alongside these institutions for providing an efficient legislative structure for the industry, there is a Canadian Petroleum Law Foundation, whose members comprise lawyers in industry, in practice, and in the law schools. An annual oil and gas law seminar is a principal undertaking of the Foundation. The papers presented at these seminars and published in the *Petroleum Law Supplement of the Alberta Law Review* have provided much of the reference material for this article. Two newer efforts of the Foundation are a prize for legal writing, and a fellowship for graduate studies in petroleum law.

If there is a lesson to be learned from the Canadian experience, it may be a fuller realization by Australians that they, too, are partners in interest with the oil industry, and should strive for the kind of government-industry co-operation that can best promote this partnership.