

IN THE MATTER OF the Utilities Commission Act

and

IN THE MATTER OF an Application by
Baay Land Consultants Ltd.

DECISION

October 16, 1980

Before M. Taylor, Chairman,
D. B. Kilpatrick and J. D. V. Newlands, Commissioners

TABLE OF CONTENTS

	<u>Page</u>
APPEARANCES	
LIST OF EXHIBITS	
INTRODUCTION	1
THE FUNDAMENTAL ISSUES	
Issue #1 - The Status of Baay Land Well 10-18-83-19 W6M	2
Issue #2 - The Basis for Common Purchaser Status	3
Issue #3 - Allocation of Pool Production	4
- Mapping and Reservoir Simulation	5
- The Use of Current Reservoir Pressures	6
- The Appropriate Allocation	7
APPENDIX I	
Commission Order U-COM-2-80	

APPEARANCES

R. J. LUDGATE	for the British Columbia Utilities Commission
D. B. KIRKHAM	for the Applicant
A. W. MACDONALD	for Wainoco Oil & Gas Ltd.
D. MORLEY	for the British Columbia Petroleum Corporation

LIST OF EXHIBITS

1. British Columbia Energy Commission Order No. COM-12-80.
2. Application by Baay Land Consultants Ltd., July 15, 1980.
3. Advertisement in the Calgary Herald, August 19, 1980.
4. Letter to The Vancouver Sun, August 18, 1980, authorizing publication of Notice of Public Hearing.
5. Support data for use of Remaining Reserves as basis for contract sharing.
6. Series of correspondence from Baay Land Consultants Ltd., British Columbia Petroleum Corporation, Ministry of Energy, Mines and Petroleum Resources and Wainoco Oil & Gas Limited.
7. Net Gas Pay Table.
8. Map -- Wilder Halfway A Pool, Net Gas Pay, Ministry of Energy, Mines and Petroleum Resources.
9. Map -- Wilder Halfway A Pool, Net Gas Pay, Wainoco Oil & Gas Limited.
10. Share calculations by Baay Land Consultants Ltd. based on July 1979 well pressures.
11. Share calculations based on Wainoco Oil & Gas Limited Net Gas Pay at July 1979 well pressures.
12. Letter from Baay Land Consultants Ltd., signed by Wainoco Oil & Gas Limited, to acknowledge receipt of common purchaser application.
13. Ministry of Energy, Mines and Petroleum Resources, P over Z plot, Wilder Halfway A Pool.
14. Various calculations of Total Original Gas In Place in Wilder Halfway A Pool.
15. Structural Cross-Section A-A' for Wilder Halfway A Pool.
16. Reservoir Simulation Study No. 2, Wilder Halfway A Pool.

LIST OF EXHIBITS (con't)

17. Structural map of Wilder Halfway A Pool by Wainoco Oil & Gas Limited.
18. Intervention of Wainoco Oil & Gas Limited, August 22, 1980.
19. Pacific Wilder 13-01-84-20 Well Pressure Test.
20. Map -- Wainoco Halfway Net Pay map, April 1980.
21. Structural Cross-Section A-A' for Wilder Halfway A Pool.
22. Geological interpretation of high gas pay area.
23. Geological interpretation of Halfway sand with gas on water.
24. Isopach map of Wilder Halfway A Pool by Baay Land Consultants Ltd.

BAAY LAND CONSULTANTS LTD.

Decision dated October 16, 1980

INTRODUCTION

On July 15, 1980 Baay Land Consultants Ltd. ("Baay Land") made application to the British Columbia Energy Commission ("the Commission") for an Order of the Commission declaring the British Columbia Petroleum Corporation ("B.C.P.C.") to be a common purchaser of natural gas in the Wilder Halfway A pool. Following the Applicant's response to the Commission's request for additional information, the application was set down for public hearing commencing on September 3, 1980. Notice of hearing was published by the Applicant and the Commission mailed copies of the notice to designated interested parties. A submission received from Wainoco Oil & Gas Limited ("Wainoco"), on behalf of the owners of Wilder Unit #1 Working Interest, proved to be the only formal intervention in the proceedings.

DECISION

This decision is based on the Commission's conclusion as to the following three fundamental issues arising from the Application and evidence:

- I. The role of Baay Land's well #10-18-83-19 W6M in determination of common purchaser status for the Wilder Halfway A pool.
- II. Whether common purchaser status is justified on the evidence with respect to Baay Land's well #10-12-83-20 W6M.
- III. The appropriate allocation of future production from the pool as between Baay Land and Wainoco (i.e. the Wilder Unit #1 Working Interest).

ISSUE #I - BAAY LAND'S WELL #10-18-83-19 W6M

The Application by Baay Land for common purchaser treatment is based on evidence as to drainage of its two wells in the Wilder Halfway A pool; namely, wells designated as Baay Seagull 10-18-83-19 W6M and Baay et al Wilder 10-12-83-20 W6M.

Early in the proceedings it was established that the northernmost of the two wells, 10-18, is currently under contract to B.C.P.C. While Baay Land obviously felt that the gas production from lands underlying the 10-18 well was below what it should have been, the evidence shows that a contract was entered into and was representative of contracts being offered by B.C.P.C. at that time.

The Commission has concluded that it would be inappropriate to utilize the common purchaser provisions of the Act to provide the means of altering existing bona fide contracts. Accordingly, in the balance of this Decision, the Commission has treated Baay Land's 10-18 well as an existing producer in the pool and in the same category as the other existing producers (wells) in Wainoco's Wilder Unit #1.

ISSUE #II - THE BASIS OF COMMON PURCHASER STATUS

Baay Land's Well #10-12-83-20 W6M

No evidence was presented to refute the Applicant's claim that well #10-12 is complete in the Wilder Halfway A pool, as delineated by the Ministry of Energy, Mines and Petroleum Resources ("the Ministry"). The Commission therefore accepts that this well is completed in the pool concerned.

The pressure data of the Applicant and of Wainoco's wells in the pool supported the Applicant's contention that production from Wainoco's wells has been and continued to be the principal cause of drainage of gas from the spacing unit of Baay Land's #10-12 well.

Finally, the Applicant presented adequate evidence and testimony to demonstrate that he had been unsuccessful in attempts to obtain a gas purchase contract for well #10-12. Accordingly, the Commission will order that B.C.P.C. is found to be a common purchaser in the Wilder Halfway A pool effective as of the date of the Order.

ISSUE #III - ALLOCATION OF POOL PRODUCTION

Both the Applicant and Wainoco submitted extensive and contradictory technical evidence and testimony in efforts to establish the allocation of production to their respective advantage. With respect to the appropriate allocation of future production from the Wilder Halfway A pool, the Commission has considered in particular the following principal elements in the evidence adduced at the hearing:

- (i) The mapping and reservoir computer simulation approach to determining the relative Baay/Wainoco reserves in the pool.
- (ii) The use of current reservoir pressure data for determination of pool reserves.

1. Mapping and Reservoir Simulation

The Commission has concluded that the evidence presented by both Baay Land and Wainoco in support of their respective net pay maps of the Wilder Halfway A pool was insufficient to justify the choice, for purposes of estimating the distribution of reserves, of one map over the other. In particular the Commission has concluded that:

- the reservoir simulation studies, while providing an explanation of the recorded pressure behaviour, do not in themselves provide or support any single interpretation of the distribution of reserves in this pool.
- the pressure and petrophysical data from the well located at 13-01-84-20 strongly support the contention that the gas reserves identified in that well are not effectively connected to the accumulation proved by the wells to the south.

Accordingly, the Commission has concluded that additional well control would be required, to demonstrate any conclusive basis for accepting one interpretation of net pay distribution over the other. The Commission finds

no basis for comparison with the previously heard Sabine case, where there was an unusually high degree of well control in the "disputed" area of the Willow pool.

2. The Use of Current Reservoir Pressures

The Commission cannot accept as reasonable the Applicant's proposal that allocation of existing contracts should be based on remaining reserves, (i.e. reserves calculated from current reservoir pressures) rather than on original reserves.

The use of original reserves in matters concerning equity between interested parties is a long standing practice in both the petroleum industry and in the regulatory bodies concerned. As a matter of principle this has been upheld in all of the common purchaser hearings before this Commission to date.

Finally, it is generally accepted that the movement of hydrocarbons from undrilled leases into offsetting producing leases in the same pool cannot be avoided and represents a competitive advantage which should remain with the earlier wells. The Commission can find no reasonable basis for treatment of Baay Land as a special case in this respect.

THE APPROPRIATE ALLOCATION

Both the Applicant and Wainoco expressed preference that the Commission decision regarding allocation of future production from the pool be based on their respective net pay maps. For reasons already given, the Commission does not accept the allocation suggested by either map.

The Applicant's fall-back position was that, if the Commission found the maps unacceptable as the basis for decision, the Ministry's gas allowables would be an appropriate basis.

The Commission recognizes that the volumetric allowables approved and issued by the Ministry are directly related to original recoverable reserves as administered by the Ministry. Earlier in the proceedings the Wainoco panel agreed that both individual well allowables and area allowables provide a valid basis for estimating original gas in place. The magnitude of these allowables are a matter of public record and, except in very unusual circumstances, provide a fair and equitable basis for the allocation of existing contracts in the field.

The Commission has concluded that, for purposes of allocation, no distinction should be made between individual well allowables based on spacing areas, and Unit or Good Engineering Practice


(GEP) area allowables based on a map. In general the Commission believes there is a direct relationship between the methods of estimating the two types of allowables which, when issued, serve similar regulatory purposes under the Petroleum and Natural Gas Act.

The Commission therefore concludes that the gas allowables method based on original reservoir pressure data should be applied in determining the allocation of pool production in this case. The applicable Ministry allowables are:


Wainoco Unit	255.4 10^3m^3 per day
Baay 10-12	115.7 10^3m^3 per day
Baay 10-18	101.4 10^3m^3 per day

On the basis of the above allowables the Commission concludes that the Baay 10-12 well is entitled to a 24.48% share of total existing contract volume from the Wilder Halfway A pool, and will so order. As determined in Commission Order U-COM-1-80 and the related Decision dated September 26, 1980, how this share is to be taken from the existing contracts in the pool is a matter to be negotiated by the interested parties in the pool.

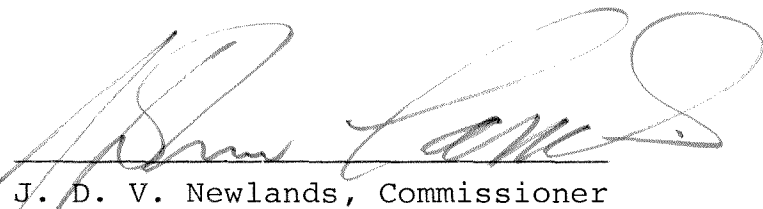
DATED at the City of Vancouver, in the Province of British
Columbia, this 16th day of October, 1980.



M. Taylor, Chairman



D. B. Kilpatrick, Commissioner



J. D. V. Newlands, Commissioner



BRITISH COLUMBIA UTILITIES COMMISSION	
ORDER NUMBER	U-COM-2-80

PROVINCE OF BRITISH COLUMBIA

BRITISH COLUMBIA UTILITIES COMMISSION

IN THE MATTER OF the Utilities Commission
Act SBC 1980, c. 60

and

IN THE MATTER OF an Application by Baay
Land Consultants Ltd. for an Order
declaring the British Columbia Petroleum
Corporation a common purchaser of natural
gas in the Wilder Halfway A Pool

BEFORE:	M. Taylor,)	
	Chairman;)	
	D. B. Kilpatrick,)	October 16, 1980
	Commissioner; and)	
	J. D. V. Newlands,)	
	Commissioner)	

O R D E R

WHEREAS Baay Land Consultants Ltd. ("Baay Land")
applied July 15, 1980 for an Order of the British Columbia
Energy Commission declaring the British Columbia Petroleum
Corporation ("B.C.P.C.") a common purchaser of natural gas
from the Wilder Halfway A Pool; and

WHEREAS pursuant to Order COM-12-80 the British
Columbia Energy Commission considered the application at a
public hearing in Vancouver on September 3, 1980 and Septem-
ber 4, 1980; and

WHEREAS all powers under the Energy Act with
respect to common purchaser legislation have been conferred
upon the British Columbia Utilities Commission ("the Commission")
by the Utilities Commission Act; and

WHEREAS the Applicant has a gas purchase contract
with the B.C.P.C. providing for production from the well Baay

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BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER U-COM-2-80

2

Seagull Wilder 10-18-83-19 W6M in the Wilder Halfway A Pool;
and

WHEREAS from the evidence with respect to well pressures and the geology of the area, the Commission concludes that the Applicant's well, Baay et al Wilder 10-12-83-20 W6M, is capable of production of natural gas from the Wilder Halfway A Pool; and

WHEREAS it appears that Baay Land has made reasonable efforts to arrange a gas sales contract for the 10-12-83 well with B.C.P.C. without success; and

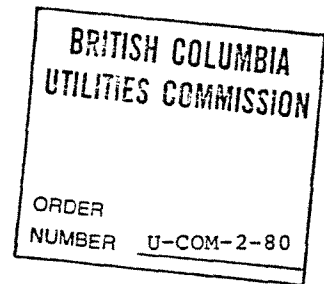
WHEREAS the evidence further establishes that Baay Land is suffering drainage of natural gas because of an inability to bring the 10-12-83 well into production.

NOW THEREFORE the Commission hereby orders as follows:

1. The British Columbia Petroleum Corporation is declared a common purchaser of natural gas from the Wilder Halfway A Pool effective the date of this Order.
2. The Applicant's well, Baay et al Wilder 10-12-83-20 W6M is capable of production from the said pool.
3. The contract quantity applicable to the production of natural gas from the said well shall be the lesser of the volume determined on the basis of the ratio of the daily gas allowable of the said well to the sum of the daily gas allowables determined for the Wilder Halfway A Pool, or the actual production capability. The term daily gas allowable refers to the volumetric allowable for natural gas wells and designated areas approved and issued from time to time by the Ministry of Energy, Mines and Petroleum Resources, exclusive of the minimum of 60,000 m³ set for some wells. The gas pool boundary is that determined by the said Ministry.

The applicable Ministry allowables are:

Baay 10-12	115.7 10 ³ m ³ per day
Wainoco Unit	255.4 10 ³ m ³ per day
Baay 10-18	101.4 10 ³ m ³ per day



The Baay 10-18-83 well is considered an existing producer, as is the Wainoco unit. The Baay 10-12-83 well is entitled to a 24.48% of total existing contract volumes from the Wilder Halfway A Pool.

4. The effective date on which the said well is entitled to share in the production and revenues from the common pool shall be the date on which the Applicant has completed all required of him to effect delivery of specification gas from the new well. If within thirty days of this effective date, the Applicant has failed to negotiate actual connection and makes a common carrier application, the said application, if successful, will establish his entitlement to share in the production and revenues from the common pool as of the effective date.
5. That portion of total pool production allocated to the said well will be taken from the existing contracts in the pool in such proportions as will maintain the relative share of pool production of each existing producer prior to the effective date applicable to the new well, by such method and timing as may be agreed upon by the interested parties to achieve that result.
6. Where the new well, Baay 10-12, proves unable to produce the gas volume allocated, the volume which the well fails to deliver shall be reallocated back to the producers whose contracts were reduced to accommodate the new well. Such reallocations will be made so as to maintain the relative share of pool production of each existing producer prior to the effective date applicable to the new well, by such method and timing as may be agreed upon by the interested parties to achieve that result.
7. Compliance with this Order shall not require the British Columbia Petroleum Corporation to purchase natural gas from the Wilder Halfway A Pool in a greater total amount or at a greater rate than required under gas purchase contracts for such Pool.

DATED at the City of Vancouver, in the Province of British Columbia, this 16th day of October, 1980.

BY ORDER

M. Ayler
Chairman