

IN THE MATTER OF THE UTILITIES  
COMMISSION ACT, SBC 1980, c. 60

and

IN THE MATTER OF AN APPLICATION BY  
HUSKY OIL OPERATIONS LTD.

DECISION  
March 15, 1982

Before D.B. Kilpatrick, Division Chairman,  
and B.M. Sullivan, Commissioner

TABLE OF CONTENTS

	<u>Page</u>
APPEARANCES	i
LIST OF EXHIBITS	ii
INTRODUCTION . . . . .	1
APPLICATION . . . . .	2
DECISION . . . . .	2

APPENDIX I

Commission Order COM-1-82

APPEARANCES

R.J. LUDGATE	for the British Columbia Utilities Commission
J.M. PASIEKA	for the Applicant
D. MORLEY	For the British Columbia Petroleum Corporation
R. GIROUX	For Westcoast Petroleum Ltd.
W. MUSCOBY D. JONES	for Texaco Canada Resources Ltd.
J. LOVASZ	for Dome Petroleum
D. LEACH	Hearing Officer
W.J. GRANT	Commission Staff
B.T. BARBER R. STEWART	Ministry Staff
AUDIOTRON ENTERPRISES LTD.	Court Reporters

LIST OF EXHIBITS

	<u>Exhibit No.</u>
Designation of Division Chairman D.B. Kilpatrick	1
Commission Order No. COM-14-81 dated December 15, 1981	2
Notice of Public Hearing as Placed in B.C. Gazette, Vancouver Sun and Calgary Herald	3
Common Purchaser Application, Silver Field, Lower Cretaceous Bluesky Sandstone, July 29, 1981, Husky Oil Operations Ltd.	4
Subsurface Pressure Measurements of Husky Pembina Silver. Prepared by Johnston Testers.	5
Intervention of Dome Petroleum Ltd., January 21, 1982	6
Silver Husky Pembina Silver c-92-K Well Log. Dual Induction - SFL, Compensated Neutron Formation Density	7
Ministry of Energy, Mines and Petroleum Resources, December, 1980. Gas Reserves - Master Data Sheet	8
Completion Report GPD et al Gleam d-90-J-94-H-6, January, 1973	9

HUSKY OIL OPERATIONS LTD.  
DECISION DATED MARCH 15, 1982

INTRODUCTION

On October 20, 1981, Husky Oil Operations Ltd. ("Husky") made application, pursuant to Section 83 of the Act, to the British Columbia Utilities Commission ("the Commission") for an Order of the Commission declaring the British Columbia Petroleum Corporation ("BCPC") to be a common purchaser of natural gas in the Silver Bluesky "A" Pool. The Application was set down for public hearing on February 8, 1982, by Order COM-14-81. Notice of public hearing was published by the Applicant and the Commission mailed copies of the notice to designated interested parties.

The Application was heard in public at the Commission Hearing Room in Vancouver, B.C. on February 8, 1982 by a Division of the Commission comprised of Mr. D.B. Kilpatrick, Division Chairman, and Mr. B.M. Sullivan, Commissioner.

### THE APPLICATION

Husky is the owner of the gas well Husky Pembina Silver c-92-K/94-H-6. The well was tested in March, 1980 and Husky determined the well AOF to be  $110.8 \times 10^3 \text{ m}^3/\text{d}$  with an average reservoir pressure of 6613 kPa. Husky has been unable to obtain a gas purchase contract with BCPC because of a lack of market for natural gas. Husky alleges that the c-92-K well is within the Silver Bluesky "A" pool and is being drained by production from the pool under existing gas purchase contracts between BCPC and other producers.

### DECISION

The Commission has reviewed the evidence concerning drainage presented by Husky and the objections raised by Dome Petroleum Limited ("Dome"). The Commission has concluded that the close agreement of the final pressure from the build-up run (6506 kPa gauge) and the pressure from the static gradient run (6515 kPa gauge) both at 1135.1 m (CF) in the well Husky Pembina Silver c-92-K/94-H-6 in March 1980 is sufficient evidence to overcome Dome's objections to a single recorder

reading. The further evidence from Husky's pressure measurement taken in January 1982 supports the view that drainage of gas from the spacing area of the c-92-K well has occurred and is continuing. This drainage is due to production of gas by other wells in the pool.

Husky indicated in their submission that there are two Bluesky pools in Silver, the Bluesky "A" pool and the Bluesky "B" pool (Exhibit 4, section 3, Bluesky sandstone hydrocarbon metres map). The Bluesky "B" pool has a gas-water contact at between 276.5 and 277.1 metres subsea and the Bluesky "A" pool has a gas-water contact at 289.6 metres subsea (Exhibit 4, section 3, Bluesky show map).

In cross-examination Husky stated that the well Husky Pembina Silver c-92-K/94-H-6 was perforated from 1156.5 to 1158.0 metres (274.7 to 276.2 metres subsea) and, after clean-up, produced essentially water-free. Following additional perforation and acidisation, an AOF test demonstrated a deliverability of  $16.9 \times 10^3 \text{ m}^3/\text{d}$  at 5515 kPa; the well produced about  $15 \text{ m}^3$  of water during clean-up and test but the analysis indicated acid and KCl contamination (from the completion fluids).

Dome claimed in their intervention that there are three Bluesky pools in Silver: a western pool No. 3 with a gas-water contact at 285.9 metres subsea, a north-central pool No. 2 with a gas-water contact at 276 subsea and an eastern pool No. 1 with a gas-water contact at 276 metres subsea. Dome includes the Husky well c-92-K and Texaco's c-94-K in their pool No. 1. Under cross-examination Dome were unable to explain to the satisfaction of the Commission why no salt-water was produced when c-94-K was drill-stem tested over the interval 275.8 to 283.8 metres subsea but flowed  $81.2 \times 10^3 \text{ m}^3/\text{d}$  of natural gas.

In view of the foregoing the Commission believes that the c-92-K and c-94-K wells should not be included in the Bluesky "B" pool but in the "A" pool as mapped by Husky.

With respect to the c-16-C/94-H-11 well in which Dome claims a gas-water contact at 281.3 metres subsea, the Commission notes that a drill test over the interval 275.2 to 283.2 produced  $117 \times 10^3 \text{ m}^3/\text{d}$  of gas with no formation water. Accordingly the Commission accepts Husky's interpretation that this well is in the Bluesky "A" pool.

With respect to the d-90-J/94-H-6 well the Commission has reviewed Dome's evidence concerning the recovery of



formation water from perforations at 278.6 m subsea and agrees that this well should be included in the Bluesky "B" pool.

The Applicant presented adequate evidence (Exhibit 4, section 7) and testimony that they were unsuccessful in attempts to obtain a gas purchase contract for the subject well.

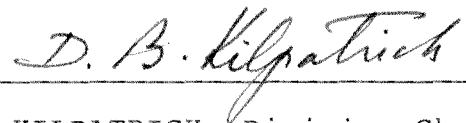
In light of the foregoing the Commission concludes that BCPC is a common purchaser of natural gas in the Silver Bluesky "A" pool, and will so order.

In testimony Husky accepted the formula for the allocation of Pool production based on volumetric daily gas allowables (DGA) as applied in previous common purchaser applications and there was no objection by other parties. The Commission therefore concludes that the volumetric gas allowables basis is the most appropriate method of allocating pool production.

The respective shares of the contracts in the Silver Bluesky "A" pool are as follows:

	DGA <u><math>10^3 \text{ m}^3</math></u>	<u>%</u>
Husky Pembina Silver c-92-K/94-H-16	22.6	6.4
Sum of all wells	352.1	100.0

DATED at the City of Vancouver, in the Province of  
British Columbia, this 15<sup>th</sup> day of March, 1982.



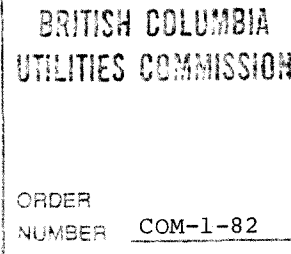
---

D.B. KILPATRICK, Division Chairman



---

B.M. SULLIVAN, Commissioner

PROVINCE OF BRITISH COLUMBIABRITISH COLUMBIA UTILITIES COMMISSION

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

and

IN THE MATTER OF an Application by  
Husky Oil Operations Ltd. for an Order  
declaring the British Columbia Petroleum  
Corporation a common purchaser of natural  
gas in the Silver Bluesky "A" Pool

BEFORE: D.B. Kilpatrick, )  
Division Chairman; and ) March 15, 1982  
B.M. Sullivan, )  
Commissioner )

O R D E R

WHEREAS Husky Oil Operations Ltd. ("Husky")  
applied October 20, 1981, pursuant to Section 83 of the Act,  
for an Order of the Commission declaring the British Columbia  
Petroleum Corporation ("BCPC") a common purchaser of natural  
gas from the Silver Bluesky "A" Pool; and

WHEREAS pursuant to Order COM-14-81 the British  
Columbia Utilities Commission ("the Commission") considered  
the Application at a public hearing in Vancouver on  
February 8, 1982; and

WHEREAS from the evidence with respect to well  
pressures and the geology of the area, the Commission  
concludes that the Applicant's well, Husky Pembina Silver  
c-92-K/94-H-6, is capable of production of natural gas from  
the Silver Bluesky "A" Pool; and

.../2

BRITISH COLUMBIA UTILITIES COMMISSION	
ORDER NUMBER	COM-1-82

WHEREAS it appears that Husky has made reasonable efforts to arrange a gas sales contract for the subject well with BCPC without success; and

WHEREAS the evidence further establishes that Husky is suffering drainage of natural gas because of an inability to bring the subject 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 Silver Bluesky "A" Pool effective the date of this Order.
2. The Applicant's well, Husky et al Pembina Silver c-92-K/94-H-6 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 for the Pool to the sum of the daily gas allowables determined for the 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 m<sup>3</sup> set for some wells. The gas pool boundary is that determined by the said Ministry.
4. The effective date on which the Applicant is entitled to share in the production and revenues from the 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 Pool as of the effective date.

5. That portion of total Pool production allocated to the Applicant 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 Applicant, by such method and timing as may be agreed upon by the interested parties to achieve that result.
6. If, by the effective date of the Applicant, existing producers in the Pool and the BCPC are unable to agree on a satisfactory method of reducing the gas volume purchase obligation of each existing contract in the Pool, the obligation of BCPC to purchase gas from each contract providing for delivery of gas from the Pool shall be reduced. The reduction shall apply to each contract in force at that time and shall be a percentage of the maximum volume of gas which BCPC is obliged at the time of reduction to purchase each day or each year (whichever is specified in the contract) applicable to lands within the Pool. The percentage shall be the same as that which the daily gas allowables of the wells or designated areas of the contract of the new producer is of the total of the daily gas allowables for the Pool. The effective date for all reductions to contracted volumes shall be the effective date of entitlements determined for the new producer.
7. Where the new well, Husky Pembina Silver c-92-K/94-H-6, 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.
8. Compliance with this Order shall not require the British Columbia Petroleum Corporation to purchase natural gas from the 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 15<sup>th</sup> day of March, 1982.

BY ORDER

*D. B. Kilpatrick*  
Division Chairman

# DOCUMENT SUMMARY

Document Id: 0126A  
 Document Name: DECISION - Husky Oil  
 Operator: S. Werner  
 Author: D.B. Kilpatrick

Comments: March 15, 1982

## STATISTICS

OPERATION	DATE	TIME	WORKTIME	KEYSTROKES
Created	03/12/82	09:02	1:11	7560
Last Revised	03/17/82	13:04	:04	74
Last Printed	03/17/82	13:08		
Last Archived	03/12/82	14:10	onto Diskette	0036A

Total Pages:	12	Total Worktime:	1:48
Total Lines:	136	Total Keystrokes:	9033

Pages to be printed: 12