

OIL AND GAS COMMISSION

August 23, 2001

9000-2850-59240-15 OGC - 01163

Mr. Jack R. Jones Reservoir Engineer BP Canada Energy Company 240 - 4th Avenue Calgary AB T2P 2H8

BP Experimental Tight Gas (07) 9000 BY Experimental Tight Gas (07) 6430

Dear Mr. Jones:

EXPERIMENTAL SCHEME FOR TIGHT GAS DEVELOPMENT RE: **NOEL AREA, NIKANASSIN FORMATION**

The Commission has reviewed your application dated July 16, 2001 requesting experimental scheme approvals to test the viability of tight gas development in the Nikanassin formation of the Noel area in northeast British Columbia.

Attached are Approvals 01-15-007 and 01-15-008 for the application granted under section 100 of the Petroleum and Natural Gas Act. The schemes are considered experimental as application of specialized completion techniques is involved. No objections were received following the publication of a notice of your application in the B.C. Gazette. It should be noted that the scheme area for the approvals includes some lands presently held under Drilling Licenses. Approval amendment must be requested to reflect the lands BP controls once lease selections have been made.

In accordance with section 57 of the Drilling & Production Regulation all well reports and well data within the scheme area will be held confidential for a period of 3 years.

Please note that the progress reports, as specified in item 5 of the approval, must be submitted on an annual basis with the first one due on August 31, 2002.

Sincerely. Approval Letters to Industry GEP, SWD, CONCURRENT PROD, PRESSURE MAINTENANCE, WATERFLOOD, ETC. Copy 9 Wellfile (originals) 59240 Craig Gibson, P. Eng. Daily Resource Revenue Manager S. Chicorelli Reservoir Engineering and Geology R. Stefik G. Farr Attachments P. Attariwala D. Krezanoski

THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT OIL AND GAS COMMISSION

IN THE MATTER of the experimental scheme of BP Canada Energy Company (Operator) for tight gas development of the Nikanassin formation in the Noel area of NE British Columbia.

NOW THEREFORE, the Commission, pursuant to section 100 of the <u>Petroleum and Natural Gas Act</u>, R.S.B.C. 1996, c.361, hereby orders as follows:

- 1. The experimental scheme for the development and completion of tight gas from the Nikanassin formation in the Noel area, as such proposal is described in the application to the Commission dated July 16, 2001 is hereby approved, subject to terms and conditions herein contained.
- 2. The area of the experimental scheme consists of units 78-80, 88-90, 96-100 of Block C, units 71-73, 81-83, 91-93 of Block D, units 1-3, 11-19, 21-29 of Block E, units 6-10, 16-20 and 26-30 of Block F/93-P-8.
- 3. The gas wells within the scheme area may be produced without individual well allowable restrictions.
- 4. The requirements of Section 10 of the Drilling and Production Regulation are hereby waived, provided that gas wells within the scheme area are not completed nearer than 250 m to the sides of the approved scheme area.
- 5. The Operator must submit a progress report to the Commission annually. The progress report is due within 60 days after the end of each period and must contain:
 - a) the daily average rate of gas and water produced during each month for each producing well, and for the project as a whole,
 - b) the monthly cumulative gas and water production from each producing well, and for the project as a whole,
 - c) details of any workover or fracture treatment program done on any of the wells with results of the workovers or fracture treatment,
 - d) a discussion of the overall performance of the scheme,
 - e) an evaluation of bottom hole pressures and any other data collected,
 - f) Any other information that is considered necessary, in the opinion of the Commission, to evaluate the progress, performance and efficiency of the scheme.
- 6. The operations of the experimental scheme will be subject to review by the Commission. The Manager, Reservoir Engineering and Geology or the Manager, Operations Engineering, may issue guidelines regarding the operations of the scheme.
- 7. The approval or any condition of it may be modified or rescinded, if deemed appropriate.

Craig Gibson

Manager

Reservoir Engineering and Geology

APPROVAL 01-15-008

THE PROVINCE OF BRITISH COLUMBIA PETROLEUM AND NATURAL GAS ACT OIL AND GAS COMMISSION

IN THE MATTER of the experimental scheme of BP Canada Energy Company (Operator) for tight gas development of the Nikanassin formation in the Noel area of NE British Columbia.

NOW THEREFORE, the Commission, pursuant to section 100 of the <u>Petroleum and Natural Gas Act</u>, R.S.B.C. 1996, c.361, hereby orders as follows:

- 1. The experimental scheme for the development and completion of tight gas from the Nikanassin formation in the Noel area, as such proposal is described in the application to the Commission dated July 16, 2001 is hereby approved, subject to terms and conditions herein contained.
- 2. The area of the experimental scheme consists of units 58-60, 68-70, 72-80, 82-90, 94, 95, 98, 99 of Block J, units 51, 61, 71-73, 81-83 of Block K/93-P-1 and units 4, 5, 8 and 9 of Block B/93-P-8.
- 3. The gas wells within the scheme area may be produced without individual well allowable restrictions. .
- 4. The requirements of Section 10 of the Drilling and Production Regulation are hereby waived, provided that gas wells within the scheme area are not completed nearer than 250 m to the sides of the approved scheme area.
- 5. The Operator must submit a progress report to the Commission annually. The progress report is due within 60 days after the end of each period and must contain:
 - a) the daily average rate of gas and water produced during each month for each producing well, and for the project as a whole,
 - b) the monthly cumulative gas and water production from each producing well, and for the project as a whole,
 - c) details of any workover or fracture treatment program done on any of the wells with results of the workovers or fracture treatment,
 - d) a discussion of the overall performance of the scheme,
 - e) an evaluation of bottom hole pressures and any other data collected,
 - f) Any other information that is considered necessary, in the opinion of the Commission, to evaluate the progress, performance and efficiency of the scheme.
- 6. The operations of the experimental scheme will be subject to review by the Commission. The Manager, Reservoir Engineering and Geology or the Manager, Operations Engineering, may issue guidelines regarding the operations of the scheme.
- 7. The approval or any condition of it may be modified or rescinded, if deemed appropriate.

Craig Gibson

Manager

Reservoir Engineering and Geology

DATED AT the City of Victoria, in the Province of British Columbia, this day of August, 2001.