

ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

**BP CANADA ENERGY COMPANY
RATEABLE TAKE
BLACKSTONE BEAVERHILL LAKE A POOL**

**Decision 2003-016
Application No. 1273217**

1 DECISION

For the reasons stated in the report, the Board denies the subject application.

2 INTRODUCTION

2.1 Application, Intervention, and Hearing

BP Canada Energy Company (BP) applied to the Alberta Energy and Utilities Board (EUB/Board) under Section 36 of the Oil and Gas Conservation Act (the Act) for an order distributing production from the Blackstone Beaverhill Lake A Pool (the A Pool) among five wells located in Legal Subdivision (LSD) 11 of Section 22 of Township 44, Range 16, West of the 5th Meridian (LSD 11-22-44-16W5M), LSD 8-28-44-16W5M, LSD 7-33-44-16W5M, and LSD 4-10-45-16W5M (the 11-22, 2/11-22, 8-28, 7-33, and 4-10 wells respectively).

Canadian 88 Energy Corp. (Canadian 88), Husky Oil Operations Limited (Husky), and PCC Energy Corp. (PCC) filed submissions opposing the application. Devon Canada Corporation (Devon) filed a submission in support of the application.

The application was considered at a public hearing commencing on November 25, 2002, in Calgary, Alberta, before Acting Board Members C. A. Langlo, P.Geol., R. J. Willard, P.Eng., and R. G. Evans, P.Eng.

THOSE WHO APPEARED AT THE HEARING

Principals and Representatives
(Abbreviations Used in Report)

BP Canada Energy Company (BP)
R. A. Neufeld
R. L. Mooney

Witnesses

D. Lamb, P.Eng.
D. Anderson, P.Eng.
G. Lepine
G. Filek, P.Eng.
T. Prevet
C. Higgins
B. Slevinsky,
of Petrostudies Consultants Inc.

(continued)

THOSE WHO APPEARED AT THE HEARING (continued)

Principals and Representatives (Abbreviations Used in Report)	Witnesses
Canadian 88 Energy Corp. (Canadian 88) D. G. Davies	D. R. D. Phillips B. C. Fleming A. R. Clark, P.Geol. D. Boeckx, P.Geoph. I. C. Moller, P.Eng., of Moller & Associates Ltd. J. K. Farries, P.Eng., of Farries Engineering (1977) Ltd. J. Boyd, P.Geoph., of Boyd Exploration Consultants Ltd. Dr. F. Stoakes, P.Geol., of SCG Ltd. K. Braaten, P.Eng., of Gilbert Laustsen Jung Associates Ltd. J. Anhorn, P.Eng., of Gilbert Laustsen Jung Associates Ltd. S. Pilch, P.Eng., of Gilbert Laustsen Jung Associates Ltd.
Husky Oil Operations Limited (Husky) S. H. T. Denstedt S. Anderson	N. Eliuk, G.I.T. K. Beloglowka, P.Eng. R. Mallmes R. Steiner, P.Eng.
PCC Energy Corp. (PCC) J. Gruber	L. Watson, P.Geol.
Devon Canada Corporation (Devon) C. K. Yates, Q.C.	
Alberta Energy and Utilities Board staff J. P. Mousseau, Board Counsel K. Fisher S. Mangat P. Geis, P.Geol.	

2.2 Background

The A Pool is a deep, nonassociated sour gas pool located in west-central Alberta. The pool commenced production in January 1984 from a well in LSD 7-5-45-16W5M (the 2/7-5 well) and the 11-22 well. The area covering 28 sections, as shown on the attached figure, was unitized in

1995 as Blackstone Swan Hills Unit No. 1 (the unit). BP, the operator of the unit, has a 54.8 per cent interest in the unit, while Husky and Devon have 34.2 and 11.0 per cent interests respectively.

Husky acquired Section 10-45-16W5M (Section 10), located immediately outside of the unit, in 1996. Canadian 88 obtained an interest in the Swan Hills Member in the section as a result of a farm-in arrangement with Husky and drilled the 4-10 well in September 2001. The 4-10 well is owned by Canadian 88 and Husky, with each having a 50 per cent interest.

At present, the unit is producing from the 11-22, 2/11-22, 8-28, and 7-33 wells, with production flowing to the Ram River Gas Plant, located in LSD 6-2-37-10W5M. Production from unit wells is 2445 thousand cubic metres per day ($10^3 \text{ m}^3/\text{d}$). The 2/7-5 well was producing $196 \times 10^3 \text{ m}^3/\text{d}$ of gas and 805 m^3 of water per million (10^6) m^3 of gas prior to abandonment in 2001 due to increasing water production. While BP is the operator and conducts subsurface operations on the wells in the unit, Husky operates all of the production facilities between the wells and the plant.

The 4-10 well is operated by Canadian 88 and was placed on production on January 30, 2002, with cumulative gas production to December 2002 totaling $165.9 \times 10^6 \text{ m}^3$ and with rates increasing from $352.8 \times 10^3 \text{ m}^3/\text{d}$ to recent rates averaging $650.0 \times 10^3 \text{ m}^3/\text{d}$. Gas from the 4-10 well is also processed at the Ram River plant.

Cumulative gas production to December 2002 from the A Pool from unit wells and the 4-10 well totalled 17.054 billion (10^9) m^3 . Remaining gas-in-place reserves in the pool are estimated to be between 9.1 and $9.5 \times 10^9 \text{ m}^3$, based on the original gas-in-place estimates for the reef facies provided by Canadian 88 and BP respectively.

PCC presently holds an 8 per cent working interest in Section 9-45-16W5M, which is outside of the unit boundary. It is currently drilling a well in LSD 1 of the section (the 1-9 well), with BP as a participating partner holding a 55.8 per cent working interest. PCC anticipated that the well would penetrate the northeast corner of the A Pool.

3 ISSUES

The Board considers the issues respecting the application to be

- delineation of the A Pool,
- need for a rateable take order, and
- if there is a need for a rateable take order, the method of distributing production and the specific provisions of the order.

4 DELINEATION OF THE A POOL

4.1 Views of the Applicant

BP interpreted the A Pool to consist of the Swan Hills Member, which has a nonproductive platform overlain by a productive reef. It stated that although the Swan Hills Member consists of a series of depositional cycles, the extensive dolomitization of the reef resulted in excellent porosity and permeability and the pool acts essentially like a tank. BP mapped 9 wells, including the non-unit 4-10 well, into the A Pool. The applicant recognized that there was potential for a weak aquifer associated with the pool, but did not identify an interface. It also indicated that the source of the water production from the 2/7-5 and 11-22 wells was difficult to determine and could be coming from either the underlying Elk Point Formation or an aquifer within the Swan Hills. BP estimated the reserve life index of the A Pool with current production rates to be about 6.5 years and argued that no additional wells were required to adequately drain the pool. It noted that it was participating in the drilling of the new 1-9 well because if it did not, it would be in a penalty position and would also suffer significant drainage.

4.2 Views of the Interveners

4.2.1 Views of Canadian 88

Canadian 88 suggested that there was sparse well control within the A Pool, which made it difficult to interpret the exact nature of the geologic architecture within the Swan Hills Member. It interpreted the Swan Hills Member as consisting of a low-permeability platform overlain by a reef characterized by a highly developed porosity system and high permeability. It stated that the platform was a lower-quality reservoir unit and that it was difficult to assess its contribution to pool production. However, it argued that by analogy to the Hanlan area to the north, some portions of the platform could contribute to the overall gas production. Canadian 88 included the same wells in the pool as BP and interpreted an aquifer on the west flank of the pool. It estimated a reserve life index for the pool of 6 years. Canadian 88 used the 3-D seismic information that it collected in 1999 to select the location for the 4-10 well on the updip edge of the pool, and it noted that there was considerable risk involved in selecting the location. It believed that production from the 4-10 well would result in additional reserves being recovered from the A pool due to the well's structurally high location in a pool that was experiencing water influx.

4.2.2 Views of Husky

Husky agreed that all of the wells mapped into the A Pool by BP and Canadian 88 were in the pool. Husky also agreed with BP regarding the projected life of the A Pool. The intervener noted that if Section 10 had been included in the unit as a result of negotiations, Husky would not have supported the drilling of additional wells in the pool.

4.2.3 Views of PCC

PCC did not present a geological discussion or an interpretation of the A Pool.

4.3 Views of the Board

The Board notes that there was general agreement regarding the nature and delineation of the A Pool, as well as that the 4-10 well is located in the structurally highest part of the pool and has the capacity to produce significant reserves. The Board notes, however, that the parties disagreed on whether the platform portion of the Swan Hills Member was productive and on the source of the water production evident in the 2/7-5 and 11-22 wells, which are structurally lower in the pool than the 4-10 well. In the Board's view, there was no evidence to indicate that the platform is contributing gas reserves to the A Pool. The Board considers that insufficient evidence was available to allow it to determine the source of the water being produced from some wells in the A Pool. However, the Board is satisfied that production from structurally higher wells, such as the 4-10 well, will ensure that recovery from the pool is optimized.

5 NEED FOR A RATEABLE TAKE ORDER

5.1 Views of the Applicant

BP submitted that the unit's reserves in the A Pool were being inequitably drained by production from the 4-10 well. Based on mapping of pool volume, the applicant estimated that only 2 to 5 per cent of the initial gas in place of the A Pool underlay Section 10, depending on which map was used as a basis for the calculation. BP submitted that since it began production, the 4-10 well had produced 22 to 37 per cent of the initial gas in place underlying Section 10, again depending on which map was used to obtain the estimates. BP further estimated that the 4-10 well would produce 100 per cent of the estimated reserves underlying Section 10 by July 2003.

BP indicated that unit wells were producing at their capacities and that if the application were denied, the unit would need up to 30 additional wells drilled to fully alleviate drainage, or as many wells as could be justified economically to reduce the amount of drainage occurring. BP presented estimates indicating that, assuming production from the 1-9 well equal to that of the 4-10 well and production from existing wells in the pool, the 4-10 well would capture 16 per cent of the remaining reserves in the pool. The applicant estimated that drilling 2 additional unit wells in the pool would reduce the 4-10 well production share to 12 per cent, while drilling 6 additional unit wells would reduce the well's share to 8 per cent. BP argued that although additional wells drilled in the unit would accelerate production, they would not increase overall recovery from the pool. Given the high cost of drilling additional wells and bringing them on production, which it estimated to be about \$18.3 million per well, BP argued that any further drilling would result in overcapitalization of the pool.

BP considered the cost of drilling 30 wells to fully compete with the 4-10 well and the construction of associated transportation and processing capacity to be both uneconomic and unrealistic. It indicated that it had optimized the dehydration facility, which served the unit and other wells in the area, and it submitted that additional pipeline and processing capacity would be required to accommodate any new wells. The applicant concluded that the addition of any new wells, pipelines, or processing capacity to obtain accelerated production from the A pool would result in needless proliferation of facilities, have an unnecessary impact on the environment, and not constitute economic, orderly, and efficient development.

With respect to whether conservation would suffer as a result of accelerated production from the A Pool, BP submitted that the increased production that would occur from wells in the structurally higher area of the pool might cause earlier influx of water, resulting in some loss to ultimate pool recoveries.

BP argued that it had been unable to negotiate an agreement to include Section 10 in the unit and that negotiations to remedy the drainage of its reserves on a voluntary basis were at an impasse. BP considered that the reserves underlying Section 10 would not account for more than a 4 per cent interest in the unit, but noted that it had offered an 8 per cent share in consideration of the deliverability of the 4-10 well. However, this offer had not been accepted. The applicant argued that as the 4-10 well is currently producing over 20 per cent of the pool's production, Canadian 88 and Husky had no incentive to include Section 10 in the unit. The applicant acknowledged that there was an opportunity to include Section 10 in the unit in 1995, but stated that at that time the available geological and technical information suggested that Section 10 contained no productive reservoir. BP also submitted that, for the same reasons, the unit did not accept opportunities to obtain an interest in Section 10 through a Crown sale in 1996 or by farming-in on the section in 2000.

BP argued that the rule of capture applied only where there is a reasonable opportunity to compete for production. However, it concluded that it did not have a reasonable opportunity to obtain its share of reserves from the A Pool, and it requested that a rateable take order be issued to equitably distribute production.

5.2 Views of the Interveners

5.2.1 Views of Canadian 88

Canadian 88 did not dispute that the 4-10 well was draining some reserves underlying the unit. However, it argued that the application should be denied for three reasons. First, a rateable take order may be warranted if an owner's ability to produce was constrained by restrictions in pipeline or processing capacity or by a gas sales contract and there was no reasonable opportunity to alter or change the limitations to match a competitor's situation. Canadian 88 submitted that in this instance where the limitation was due only to a lack of wells and/or productive capacity, there was no basis for a rateable take order because the producer was not being deprived of the opportunity to produce its share of reserves. Canadian 88 argued that there were no facility constraints on the unit's ability to produce its share of gas, because existing spare capacity, interruptible service, and potential expansion of existing facilities and proposed facilities would provide enough pipeline and processing capacity for about 8 new wells of the productivity of the 4-10 well. It noted that drilling new wells to protect equity was an acceptable consequence of competitive operations. Canadian 88 also contended that there were no environmental considerations that would prohibit further drilling of unit lands.

Canadian 88 interpreted the rule of capture to mean that where facilities are not constrained, the ownership of petroleum and natural gas rights gives the owner the right to access and produce the reserves from its well subject to spacing and target restrictions.

Canadian 88's second reason for requesting a denial of the application was based on BP's opportunities to protect itself from competitive operations by including Section 10 in the unit when it was initially formed or by obtaining an interest in the section in 1996 and again in 2000; Canadian 88 noted that BP had declined these opportunities.

Canadian 88 said that the third reason that the Board should deny the application was that the applicant had not made a meaningful effort to resolve the matter through negotiation. Canadian 88 said that it preferred the unitization of Section 10, but not at any cost. It stated that during negotiations, BP and Devon appeared to be more interested in making a rateable take application than in working toward an agreement that was fair to all parties. Canadian 88 considered BP's offer to include Section 10 in the unit for an 8 per cent interest to be unacceptable, as the offer did not recognize well deliverability and other factors. Canadian 88 said that if BP had offered something close to its expectation of 21 per cent, based on the well's updip location and deliverability, the parties could have achieved a settlement. It acknowledged that negotiations would have proceeded better if there had been a common understanding of the rules regarding rateable take applications. It further added that the parties were too far apart to come to any resolution even if they had agreed to continue their negotiations through appropriate dispute resolution (ADR). Canadian 88 was of the opinion that productive negotiations between the parties would not progress until the BP application was rejected or denied.

Canadian 88 argued that there was no evidence to suggest that an increased production rate from the pool would increase water production and reduce ultimate recoveries from the pool. In this regard, it noted that the production log test on the 2/7-5 well showed that water coning did not appear to be rate sensitive.

Canadian 88 concluded that it would not have offered Husky a farm-in offer to drill the 4-10 well had it suspected that there was a risk of having the production severely restricted so as to benefit only the adjacent unit owners. Approval of the rateable take order in this instance would set a precedent that would discourage companies from drilling near competitors' pools if there was a reasonable expectation of extending the limits and knowledge of a reservoir. It further submitted that approval of BP's application would essentially sterilize the lands around the perimeter of existing pools, thereby reducing land sale activity and drilling activity.

5.2.2 Views of Husky

Husky submitted that under the common law rule of capture, BP's equitable share of production is that which it can recover in competition with others, having regard for the nature of the reservoir and the laws of general application. In Husky's opinion, BP had not been deprived of the opportunity to obtain its share of production from the pool. In addition, Husky argued that BP had not done all it could to address the matter.

Husky stated that the drainage complained of by BP could be attributed to the fact that BP had not taken advantage of opportunities to produce its share of gas from the pool. In Husky's opinion, there were no restrictions limiting the production from any of the unit wells and no capacity restrictions in the gathering and processing facilities. Husky submitted that based on October 2002 throughput, interruptible volumes available to BP and excess capacity at the Blackstone dehydration facility would be 2.292×10^6 m³/d, which would increase to 3.908×10^6

m³/d in August 2003. Husky also said that an expansion of the Blackstone pipeline system would be possible and would increase capacity by 2.832 10⁶ m³/d. It further noted that the Stolberg system, through which gas was transported to the Ram River plant, would have excess capacity of 6.428 10⁶ m³/d in August 2003 and that excess capacity of 6.004 10⁶ m³/d would be available in the Ram River plant in August 2003. In the event that there were restrictions in the Ram River plant, Husky argued, the KeySpan Strachan System would also be available. Husky further contended that the Burnt Timber and Erith gas transportation systems would also be available to transport gas. Husky concluded that there would be sufficient capacity in the existing area facilities to allow for the drilling of an additional six wells in the unit. It agreed, however, that there would be spacing, as well as facilities, constraints if 30 wells were drilled in the unit under the scenario suggested by BP. However, Husky indicated that to combat drainage, the unit could drill into three drilling spacing units that were available. With respect to the issue of environmental impacts associated with drilling of additional wells, Husky stated that the Board would have considered the impacts when applications were approved to drill the 1-9 and the 4-10 wells.

Husky argued that the application should be denied also because BP had not done everything in its power to protect its interests in the A Pool. It submitted that BP had not included Section 10 in the original unit or purchased or farmed into the rights when they became available. It stated that until BP became aware of the capability of the 4-10 well, BP and Devon showed no interest in Section 10, believing the A Pool did not extend to that area.

Husky also argued that BP had not done enough to protect its interests through negotiation. In Husky's opinion, BP chose the rateable take option as its primary means of resolving the matter, rather than as a last resort, and that this had influenced negotiations. Husky indicated that its preference was to unitize Section 10, which would allow the coordinated development of the A Pool. Following drilling of the 4-10 well, Husky initiated the first meeting between the unit owners and Canadian 88. However, Husky stated, negotiations had been frustrated by different positions of the parties involved. Husky considered BP's offer of an 8 per cent interest in the unit for the inclusion of Section 10 as unacceptable, as it did not recognize the 4-10 well's proven deliverability and its structurally superior location in the pool.

Husky submitted that there were no conservation reasons to restrict production from the A Pool. Rather, it considered a rateable take order in this case to be directly contrary to the Board conservation mandate, as such an order would inhibit risk exploitation on the edges of pools. Husky submitted that a rateable take order in this instance would obstruct economic and efficient development of resources by sterilizing lands around lands of common ownership.

For these reasons, Husky maintained that the application should be denied and pool development and unitization negotiations should proceed in a commercial manner.

5.2.3 Views of PCC

In argument, PCC submitted that the law of capture stands for the proposition that an owner is entitled to the gas that it reduces to possession through its wellbore. It noted that the rule of capture is modified by the statutory and regulatory regime in this province. It argued that in this environment, a producer's fair share of production is not what it actually produces but rather

what it demonstrates it is capable of producing. PCC submitted that an owner would not actually have to produce gas volumes to include those volumes in the owner's fair share, but the owner must demonstrate that it had the opportunity and the capability of doing so.

PCC submitted that the application for a rateable take order should be denied. It agreed with Canadian 88 and Husky that BP had not been deprived of the opportunity to obtain its equitable share of the pool production, as there were no facilities constraints in the area. PCC suggested that there was sufficient capacity to process gas from additional wells, as the production from the existing wells was declining. Further, PCC did not see any environmental issues that would limit the drilling of additional wells, although there were localized drilling restrictions in the area for the protection of Elk habitat. However, based on its experience with the 1-9 well, it maintained that all the conditions could be addressed appropriately and adequately. With respect to overcapitalization of the A Pool, PCC commented that the provisions of Section 4 of the Act did not make the Board a financial monitor for individual producers. It considered that competitive operations would be checked by internal commercial decision-making.

PCC also noted that while BP had declined some opportunities to include Section 10 in the unit or to purchase or farm-in on the section, the applicant was taking an opportunity to combat the drainage issue by participating in the drilling of the 1-9 well. PCC also noted that if the application were denied, BP had stated that it would avail itself of other options to address drainage. On that basis, PCC submitted that BP had opportunities to address the drainage issue and therefore a rateable take order was not warranted.

PCC considered that there was no conservation reason to control the production from the A Pool.

5.2.4 Views of Devon

Devon did not present evidence at the hearing but participated by way of cross-examination and argument.

Devon commented that the rule of capture applies only where regulatory requirements permitted its application. It considered the rule of capture and competitive operations to be secondary to regulation.

Devon supported BP in this application for a rateable take order. It favoured unitization as a means to eliminate unnecessary wells and facilities and to protect correlative rights. It contended that the unit made every effort to include Section 10 in the unit. However, the negotiations failed and the only way the unit had to obtain its fair share of the pool production was a rateable take order. It suggested that issuance of a rateable take order would promote unitization and would discourage the drilling of unnecessary high-cost, high-risk wells. Devon concluded that denial of the application would result in uneconomic, disorderly, and inefficient development of resources, with unnecessary impacts and risks.

5.3 Views of the Board

The Board acknowledges that the rule of capture is a fundamental principle of common law and

entitles the owner of valid oil or gas rights to any oil or gas that it produces through its well, regardless of whether the oil and gas produced originally underlay property owned by the producer. However, the rateable take provisions within the Act authorize the Board to modify the rule of capture and override the competitive operations that are the normal practice in Alberta. The Board considers that a rateable take order would constitute a serious intervention in normal operations and any application for such an order must be given very careful consideration. In this regard, the Board considers that the necessary conditions for rateable take applications and orders are adequately reflected in the legislation and the available EUB guide.

The Board believes that before it can approve an application for a rateable take order, the applicant must demonstrate that it is being deprived of an opportunity to obtain its share of production from the pool. In this context, the Board considered

- whether the applicant's reserves are being drained subsequent to the completion of a well on the applicant's property, and whether the drainage would likely continue;
- whether the applicant has had reasonable opportunities to address the drainage, including
 - maximizing the production from its existing wells,
 - drilling new wells to increase its share of production from the pool,
 - addressing any facilities constraints that may be limiting the volume of gas the applicant can produce from existing and new wells, and
 - entering into negotiations to make a voluntary arrangement to address the drainage issue;
- whether the above opportunities represent economic, orderly, and efficient development of the A Pool; and
- whether there are any conservation reasons for the Board to impose production rate limitations on the A Pool.

Regarding drainage, the Board notes that no specific evidence was presented disputing BP's argument that unit gas is being drained as a result of production from the 4-10 well. The Board accepts that some gas underlying the unit lands is flowing to the 4-10 well, given its updip location in the pool, and that this drainage will likely continue if the situation is unchanged. However, a situation where one operator encounters a thicker or higher productivity zone or develops a more productive well is not, in and of itself, sufficient reason to justify regulatory intervention to equalize production rates.

The Board next considered whether BP has made reasonable attempts to resolve the drainage issue on a voluntary basis and whether it continues to have reasonable opportunities to address the drainage without a rateable take order. The Board does not consider BP's past failure to pursue opportunities to protect its interest to be a factor that, of itself, would cause the Board to reject the subject application. Rather, the Board is concerned about whether or not BP continues to have any reasonable opportunities to address the drainage issue.

The Board believes that although there was a suggestion that negotiations between the parties to include Section 10 in the unit were limited, such negotiations did occur and no mutually acceptable agreement was reached. The Board also notes that the decision to terminate the

negotiation was not fully the decision of BP and believes that, notwithstanding the divergent views of the parties, negotiations and potentially ADR could still result in a mutually acceptable solution being reached. In this instance, the Board also believes that the character of the reservoir is such that sharing of production from existing wells through unitization or other negotiated means would provide the best long-term solution.

The Board accepts that the existing wells in the unit are producing at their capacity and that absent a rateable take order or a negotiated settlement, BP's only remaining option to address the drainage issue is to drill additional wells. In this regard, the Board considered

- whether it would be reasonable to expect BP to drill additional wells, and whether such wells would constitute development that is not economic, orderly, and efficient; and
- whether there are any facility constraints that would need to be addressed if additional wells were drilled, and if so, whether such constraints constitute an impractical and unreasonable option for BP.

In considering the above questions, the Board notes BP's statement that the unit would drill as many additional wells as could be justified economically to reduce the amount of drainage occurring. The Board believes that a few wells could alleviate a significant amount of drainage. The Board considers that given the lack of environmental or other constraints, the drilling of new wells to maintain a competitive position in a pool such as this is acceptable. The Board also notes that no environmental or public concerns were specifically raised regarding the 1-9 and 4-10 wells.

With respect to gathering and processing facilities, the Board accepts that there are currently no capacity restrictions in the gathering and processing facilities that limit production from existing unit wells. However, the Board received contradictory evidence as to whether sufficient capacity to accommodate some additional production could be obtained on a reasonable basis. The Board has reviewed the evidence carefully and concludes that reasonable alternatives and opportunities are available for BP to obtain capacity. These opportunities could be some combination of expanding existing facilities and taking advantage of excess capacity that becomes available in existing or new facilities.

Finally, from the evidence available, the Board is satisfied that increased production from updip areas of the A Pool will not reduce ultimate recovery from the pool. Therefore, the Board concludes that there is no need for production controls in the A Pool for conservation reasons.

The Board concludes that there are reasonable opportunities for BP to combat drainage in the A Pool and to obtain the needed facilities to accommodate additional production. The Board also concludes that such development would not result in a breach of the Board's mandate to ensure economic, orderly, and efficient development of the A Pool. Furthermore, there was no convincing evidence to suggest that production rates from the A Pool should be limited for conservation reasons or that there are particular environmental conditions that would indicate that there should be no further drilling into the A Pool. The Board also considers that negotiations for an agreement between the owners of the 4-10 well and the unit remains the preferred alternative to drilling additional wells. The Board concludes that BP is not being

deprived of a reasonable opportunity to obtain an equitable share of production from the A Pool and that the application should therefore be denied.

6 PROVISIONS OF A RATEABLE TAKE ORDER

Because the Board has denied the application, it believes that there is no need to address the method of distributing production among wells in the pool or the specific provisions of a rateable take order.

Dated at Calgary, Alberta, on February 14, 2003.

ALBERTA ENERGY AND UTILITIES BOARD

[Original signed by]

C. A. Langlo, P.Geol.
Presiding Acting Board Member

[Original signed by]

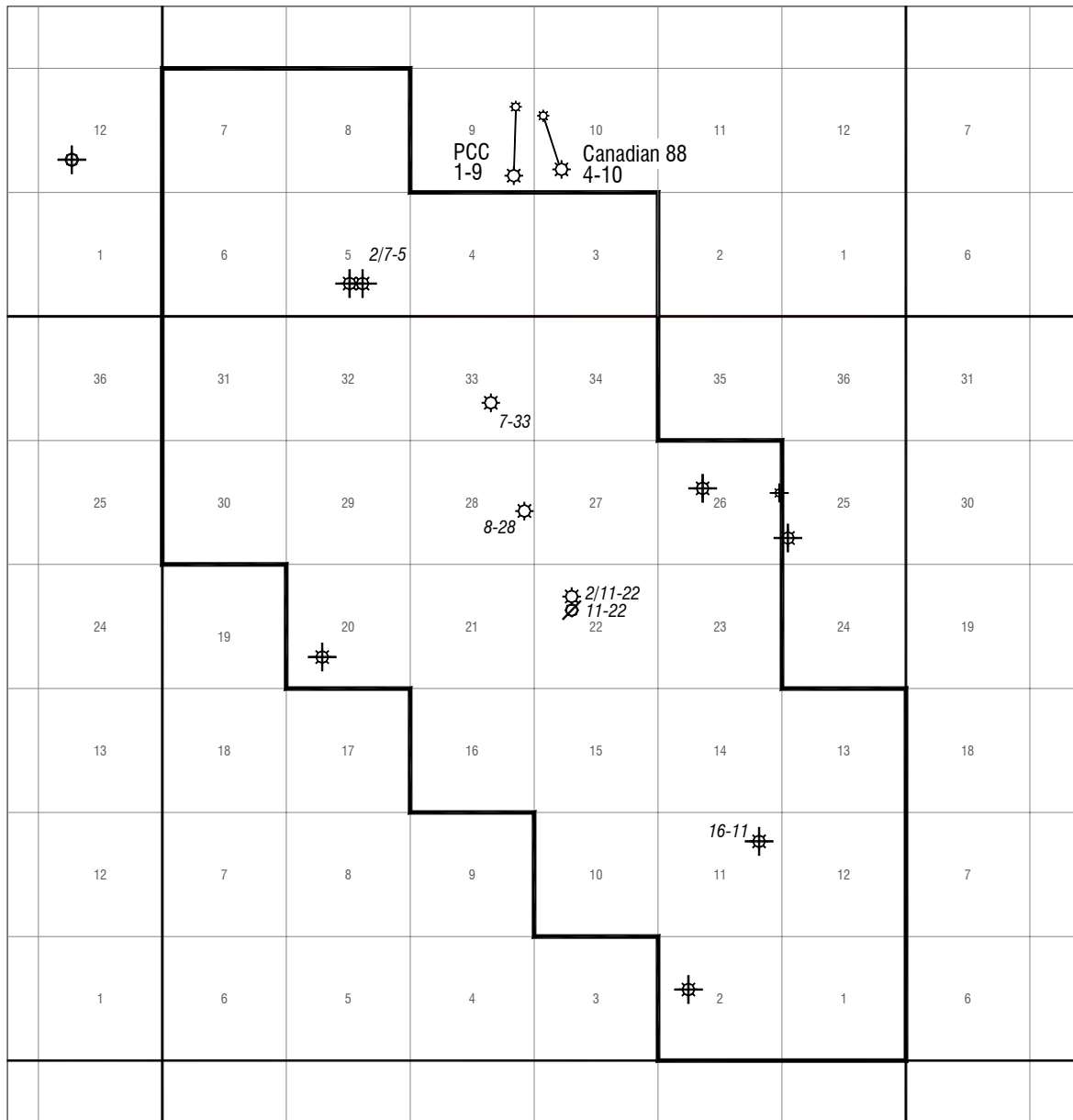
R. G. Evans, P.Eng.
Acting Board Member

[Original signed by]

R. J. Willard, P.Eng.
Acting Board Member

R.16

R.15W.5M.



T.45

T.44

Legend

- Gas well
- Abandoned gas well
- Abandoned well
- Suspended well
- Blackstone Swan Hills Unit No. 1

Blackstone Area Overview
 Application No. 1273217
 BP Canada Energy Company

Decision 2003-016