



# Phase 3 Final Proceeding Under Bitumen Conservation Requirements in the Athabasca Wabiskaw-McMurray

December 21, 2005

**ALBERTA ENERGY AND UTILITIES BOARD**

Decision 2005-122 Addendum: Phase 3 Final Proceeding Under Bitumen Conservation Requirements in the Athabasca Wabiskaw-McMurray

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## Contents

1	Decision .....	1
2	Issues.....	2
3	Views of the Board .....	2
3.1	Gas Pooling and Regions of Influence .....	2
3.1.1	Divide McMurray R and McMurray Undefined (U/D) 074 Pools.....	3
3.1.2	Hangingstone McMurray DDD Pool.....	3
3.1.3	Hangingstone Wabiskaw-McMurray D and McMurray K3K Pools.....	3
3.1.4	Hardy Wabiskaw-McMurray A Pool .....	4
3.1.5	Kirby Upper Mannville B4B and C4C Pools .....	5
3.1.6	Kirby Upper Mannville I Pool.....	5
3.1.7	Kirby Upper Mannville O3O Pool .....	6
3.1.8	Kirby Upper Mannville U2U Pool .....	6
3.1.9	Kirby Upper Mannville V2V and O4O Pools .....	6
3.1.10	Leismer McMurray Z3Z Pool .....	6
3.2	Potentially Recoverable Bitumen .....	6
3.2.1	Potentially Recoverable Bitumen in the McMurray Formation .....	7
3.2.2	Potentially Recoverable Bitumen in the Kirby Wabiskaw Valley-fill .....	7
3.3	Continuity of Mudstones and Shales .....	11
3.3.1	Wabiskaw D Shale and Wabiskaw C Mudstone .....	11
3.3.2	McMurray A2 and B2 Mudstones .....	12
3.3.3	Kirby Wabiskaw C Interval.....	14
3.4	Effect of Associated Gas Production on SAGD Bitumen Recovery Based on Reservoir Modelling .....	14
3.5	Other Matters.....	16
3.5.1	Pressure Monitoring Requirements .....	16
3.5.2	Need for ID 99-1 Applications for Uncompleted Wells in the RGS Area Given “Produce” Status .....	16
3.5.3	Role of ID 99-1 in the Phase 3 Proceedings.....	17
3.5.4	Resource Management Reports .....	18
4	Production Status Decision .....	19
	Figure 1 Schematic of Wabiskaw-McMurray Stratigraphic Models .....	20
	Legend for Tables 1A and 2A.....	21
	Table 1A Wabiskaw-McMurray Intervals Denied Gas Production .....	23
	Table 2A Wabiskaw-McMurray Intervals Approved Gas Production .....	55
	Table 3 Corrections to Tables 1 and 2.....	63



## **ALBERTA ENERGY AND UTILITIES BOARD**

**Calgary Alberta**

### **PHASE 3 FINAL PROCEEDING UNDER BITUMEN CONSERVATION REQUIREMENTS IN THE ATHABASCA WABISKAW-MCMURRAY**

**Addendum  
Decision 2005-122  
Proceeding No. 1347905**

#### **1 DECISION**

On November 10, 2005, the Alberta Energy and Utilities Board (EUB/Board) in *Decision 2005-122* decided that gas production from the intervals listed in Table 1 of that decision must remain shut in (for those intervals previously shut in by an interim shut-in order) or must be shut in by January 1, 2006. The Board also decided that gas was allowed to be produced from the intervals listed in Table 2 of that decision, subject to *Interim Directive (ID) 99-1*<sup>1</sup> applications being required for those intervals that have never produced and/or been completed. *Decision 2005-122*, as it was issued on November 10, 2005, is attached to this Addendum.

The decision resulted in the following considerations and requirements:

- 1) The Board recognizes that some unusual circumstances may arise as a result of this decision and, therefore, it may be appropriate for the Board to grant relief from some of its regulatory requirements. For example, there are requirements related to the suspension and abandonment of wells, pipelines, and other field facilities and requirements pertaining to long-term inactive wells that can trigger liability management considerations. Therefore, the Board is prepared to consider requests for relief from such requirements.
- 2) In overlapping gas pools where one pool is allowed to produce and another is required to be shut in, there must be segregation between the pools in all wellbores or both pools must be shut in. In order to demonstrate segregation in the wellbore, zonal segregation tests must be conducted and submitted to the EUB in accordance with Section 11.150(1) and (2) of the *Oil and Gas Conservation Regulations* to confirm that segregation has been established between a pool that is permitted to produce gas and a pool that is not permitted to produce gas.

This addendum provides the following additional considerations and requirements:

- 1) The Board will discuss with interested parties the need for additional pressure monitoring requirements in the *Regional Geological Study* (RGS) area.<sup>2</sup>
- 2) The Board will require, effective March 31, 2006, annual resource management reports (RMRs) for EUB-approved oil sands schemes that are within the RGS area. These reports are

<sup>1</sup> *Interim Directive (ID) 99-1: Gas/Bitumen Production in Oil Sands Areas—Application, Notification, and Drilling Requirements*, February 3, 1999, and amendments.

<sup>2</sup> The area defined in *Report 2003-A: Athabasca Wabiskaw-McMurray Regional Geological Study*, December 31, 2003.

to include the same information specified in the Surmont<sup>3</sup> and Chard-Leismer<sup>4</sup> decisions; however, rather than requiring separate resource management reports, the operators of the schemes can provide the information as part of the annual performance presentations required for the schemes.

- 3) The Board will initiate a process to address the need to shut in gas production from the Leismer McMurray J4J Pool.

The reasons for *Decision 2005-122* are provided in this addendum. In reaching its decision, the Board considered the evidence submitted at the hearing. Although the Board has typically summarized the evidence and views of the hearing participants in its decision reports, it has not done so in this report. Instead, the Board provided a list of the issues to the hearing participants before the start of the closing arguments, and the closing and reply arguments of the participants are attached in electronic format (see CD at the end of this report)<sup>5</sup>.

## 2 ISSUES

The Board considers the issues to be

- gas pooling and regions of influence,
- potentially recoverable bitumen,
- continuity of mudstones and shales,
- effect of associated gas production on steam-assisted gravity drainage (SAGD) bitumen recovery based on reservoir modelling, and
- other matters.

## 3 VIEWS OF THE BOARD

### 3.1 Gas Pooling and Regions of Influence

The Board reviewed the geological and engineering evidence submitted in its consideration of gas pooling and regions of influence. This section of the report contains details on pooling decisions for pools where significant issues were raised at the hearing. The Board has generally accepted recommendations by parties for pools about which significant issues were not raised and those pools are not addressed in this section. A schematic taken from the RGS stratigraphic models for the Wabiskaw-McMurray is attached as Figure 1 to illustrate the nomenclature for the intervals used in this report.

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<sup>3</sup> *Decision 2000-22: Gulf Canada Resources Limited—Request for the Shut-in of Associated Gas, Surmont Area*, March 2000.

<sup>4</sup> *Decision 2003-023: Chard Area and Leismer Field, Athabasca Oil Sands Area—Applications for the Production and Shut-in of Gas*, March 18, 2003.

<sup>5</sup> Used with the permission of Amicus Reporting Group.

### **3.1.1 Divide McMurray R and McMurray Undefined (U/D) 074 Pools**

The Board agrees with Stylus Exploration Inc. (Stylus) that the 7-28-82-12W4M well (McMurray R Pool, McMurray B2 sequence [B2]) and the 6-27-82-12W4M well (McMurray U/D Pool, channel sand) should remain as separate single-well pools based on the B2 regional and channel sands in the intervening wells AA/8-28 and AA/15-28-82-12W4M being structurally low and bitumen bearing.

### **3.1.2 Hangingstone McMurray DDD Pool**

The Board agrees with the EUB Staff Submission Group (SSG) that based on similar gas/bitumen contacts, the McMurray A1 sequence (A1) in the 2-17 and 5-18-82-9W4M wells (McMurray DDD Pool) are in the same pool as the McMurray Channel sand in the 6-19-82-9W4M well (previously the McMurray RRR Pool). The Board agrees with the SSG that the initial pressures on the 6-19 and 2-17 wells are similar, indicating that they could be in the same pool.

The SSG recommended not allowing the McMurray A2 sequence (A2) in the 2-17 well (previously the McMurray ZZ Pool) to produce. The Board agrees with the SSG that this interval has a porosity base that is within 5 meters (m) of the gas/bitumen contact in the McMurray Channel in the 6-19 well. Therefore this interval should be pooled with the McMurray DDD Pool.

### **3.1.3 Hangingstone Wabiskaw-McMurray D and McMurray K3K Pools**

The SSG contested the production status of the A2 in the 8-7 and 6-17-81-7W4M and in the 11-13 and 10-14-81-8W4M wells. As a result of the second interim hearing, the Board removed these wells from the D Pool and placed them in a pool designated as the K3K Pool, which was allowed to produce by *Decision 2004-062*.<sup>6</sup>

The Board agrees with the SSG's interpretation of a gas/bitumen contact in the A2 in the 11-20-81-7W4M well at 275.9 m above sea level and also that there is a difference of 6.5 m between the porosity base of 6-17 and the gas/bitumen contact of 11-20. In determining pooling, the Board has taken into consideration the original regional dip present at the time of emplacement of the oil, as well as the present-day structure. The Board believes that prior to degradation of the oil into bitumen, the Wabiskaw/McMurray deposit was dipping to the southwest, with the original oil accumulation located downdip of the original gas cap. The Board notes that there is gas and no bitumen in the A2 in the wells in the K3K Pool and that these wells would have originally been downdip from the 11-20 well. The Board believes that the pooling recommended by the SSG does not reflect the original reservoir, as it would place the gas in the A2 of the K3K Pool structurally downdip of the original oil in the 11-20 well. The Board therefore interprets that the gas in the K3K Pool is a separate pool from the gas and bitumen in the D Pool.

The Board agrees with the SSG that the gas zone in the 14-1-81-8W4M well (previously the McMurray B2B Pool) correlates structurally with the wells in the K3K Pool. The Board also agrees with the SSG that the 14-1 well encountered a depleted initial pressure of 1544

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<sup>6</sup> *Decision 2004-062: Review of Wells with Wabiskaw-McMurray Intervals Previously Allowed to Produce Gas by Decision 2003-023—Chard Area and Leismer Field*, July 27, 2004.

kilopascals (kPa) in March 1997. The Board believes the pressure depletion in the 14-1 well was caused by production from the K3K Pool, which commenced production in September 1991, and has therefore interpreted the 14-1 well as part of the K3K Pool.

### **3.1.4 Hardy Wabiskaw-McMurray A Pool**

The Board agrees with Paramount Energy Operating Corp. (Paramount) that an integration of engineering, geophysics, and geology is the preferred approach for determining pooling. However, this is contingent upon there being sufficient good quality data to do the analysis and the data being properly integrated. Paramount initially determined areas based on wells that had similar trends of pressure data and subsequently looked at these areas with respect to production decline, geophysical, and geological data.

The Board does not agree with Paramount that there is sufficient good quality pressure data to reliably separate the A Pool into 25 laterally disconnected areas containing 48 pools. As stated in *Decision 2004-045*,<sup>7</sup> “The Board acknowledges that there are significant limitations to the use of pressure data in determining gas pooling in the areas under consideration. These limitations are due to both the quantity and quality of the pressure data, including the lack of historical pressure data, commingling of production and pressure measurements from different stratigraphic intervals, insufficient shut-in times and, in some cases, the use of surface pressures.” The Board continues to have this view and believes that it applies to the A Pool.

The Board notes that the main premise of the Paramount study is that there are separate high-permeability pools in which there is good connection between wells in the pools. The Board does not believe that permeability data from core or permeabilities estimated from pressure transient analysis prove that there must be continuous high permeability between wells within pools in the area. There were a limited number of core permeability measurements from the upper gas-bearing strata that were likely taken from the better parts of the reservoir. Permeability estimates from pressure transient analysis were primarily from short-term tests with limited radiiuses of investigation, and the longer-term tests showed decreases in transmissibility as the pressure transients moved away from the wellbores. In the Board’s view, some wells within the area of the pooling study may be better connected than others, but this does not mean that the better quality areas are not connected through poorer quality reservoir.

With respect to production decline analysis in relation to pooling, the Board agrees with the SSG that Paramount’s contention that pool decline analysis supports its high-permeability multipool model has little merit, because any combination of the widely varying well declines is likely to generate widely varying pool declines, which would suggest alternative pooling.

Paramount acknowledged that the geology in the Hardy Area presents a very complex picture, one it, along with others, has had difficulty interpreting. The Board notes that Paramount’s suggested pooling does not reflect the structure map submitted in its study or the gas/oil contact difference of 4 m that Paramount said it used to determine continuity or discontinuity within or between pools. Although the pooling scenario put forward by Paramount is a possible interpretation, the Board does not believe that it is adequately supported by the available geological data.

<sup>7</sup> *Decision 2004-045: Phase 3 Proceedings Under Bitumen Conservation Requirements and Applications for Approval to Produce Gas in the Wabiskaw-McMurray Area*, May 31, 2004.

Although Paramount submitted data based on two-dimensional (2-D) seismic to support its pooling conclusions, it indicated that three-dimensional (3-D) seismic data would be required to confirm communication in or out of the pools. Paramount stated that seismic data may not be the best indicator of pool boundaries and that a lack of a bright spot could be an indicator of either no gas or that the reservoir itself had deteriorated. The Board notes that in some cases Paramount's interpretation of seismic data showed bright spot responses that were not consistent with its pooling interpretations.

The Board notes that Paramount stated that it made no attempt to look at the pool boundaries with a high degree of accuracy. Paramount indicated that where the difference between the volumetric and material balance reserves estimates was greater than 40 or 50 per cent, it would question the pooling. In this regard, the Board notes that a comparison between the reserves estimated by volumetrics and material balance shows that there was greater than a 50 per cent difference in 8 out of 24 of Paramount's pools in the area. The Board concludes that Paramount's pooling interpretations are not definitive enough to redefine gas pools for the purpose of allowing gas production.

### **3.1.5 Kirby Upper Mannville B4B and C4C Pools**

The Board agrees with Canadian Natural Resources Limited (CNRL), ISH Energy Ltd. (ISH), and the SSG that the 11-25, AA/6-35, and 02/6-35-73-8W4M wells are in the B4B Pool. The Board interprets the 5-36-73-8W4M well to represent the eastern edge of the gas pool, with its porosity top at the pool's gas/water contact. The Board agrees with ISH and the SSG that the 6-34, 9-34, and 10-34-073-08W4 wells should remain in the B4B Pool, based on structure and their proximity to offsetting pool wells. The Board also agrees with the SSG that the 4-3-74-8W4M well does not have gas pay and therefore has removed it from the pool.

The Board agrees with CNRL and the SSG that the 10-4-74-8W4M well (C4C Pool) should remain a single-well pool, based on the pressure measured in it remaining constant from September 2000 to January 2004 while the adjacent Kirby Upper Mannville B4B, V2V, and U2U Pools were producing.

### **3.1.6 Kirby Upper Mannville I Pool**

The Board agrees with the SSG that the Wabiskaw B valley-fill intervals in the 10-8, 10-29, 11-31, and 12-34-74-6W4M; 11-23 and 2-36-74-7W4M; 11-5-75-6W4M; and 7-1 and 10-1-75-7W4M wells should be amalgamated with the I Pool, since the intervals have gas/water contacts similar to other wells in this area of the I Pool. The wells are also in adjacent drilling spacing units to other wells in the I Pool.

The Board also agrees with the SSG that the gas-bearing Wabiskaw B valley-fill intervals in the 12-16 and 3-21-74-7W4M wells share a common aquifer with the I Pool and are therefore in the same region of influence. This is indicated by the depleted pressure in the 12-16 well of 1668 kPa taken on January 21, 2001, before there was any production from the 3-21 and 12-16 wells. The Board believes that the most reasonable drainage source is production from I Pool wells in township 74-6W4M. The Board has pooled the Wabiskaw B valley-fill interval in the 3-21 well with the I Pool due to similar gas/water contacts, whereas it interprets the 12-16 well to be a separate single-well pool. See Section 3.1.9 for further discussion regarding the 12-16 well.

### **3.1.7 Kirby Upper Mannville O3O Pool**

The Board disagrees with ISH that the 9-3-74-9W4M well should be included in the O3O Pool. The Board agrees with the SSG that the 9-3 well had a depleted initial pressure of 1788 kPa on January 4, 1996, before it was placed on production. Offsetting wells 15-4, 16-5, and 12-9-74-9W4M in the O3O Pool had pressures above 1900 kPa in January and February 1996. This indicates to the Board that production from these wells could not have depleted the pressure in the 9-3 well. Pressures in offsetting wells 02/10-14 and 1-23-74-9W4M in the Kirby Upper Mannville U2U Pool taken in January 1996 were about 1700 kPa, indicating that the pressure depletion in the 9-3 well could have been caused by production from the U2U Pool. Therefore the 9-3 well will remain in the U2U Pool.

### **3.1.8 Kirby Upper Mannville U2U Pool**

The Board agrees with CNRL, ISH, and the SSG that gas/water contacts in the AA/6-35 and 02/6-35-73-8W4M wells are similar to those in the Kirby Upper Mannville B4B Pool. Therefore the Board has removed these wells from the U2U Pool and added them to the B4B Pool. The Board agrees with the SSG that based on logs and structure, the AA/5-36-73-8W4M well is wet at the top of the Wabiskaw B valley-fill and has therefore removed it from the pool.

### **3.1.9 Kirby Upper Mannville V2V and O4O Pools**

The Board agrees with the SSG that the 7-36-73-8W4M well should remain in the V2V Pool, based on intervening structurally low bitumen wells between it and the B4B Pool to the west. The Board also agrees with CNRL, ISH, and the SSG that the 12-16-74-7W4M (Kirby Upper Mannville O4O Pool) well is a single-well pool separate from the V2V Pool, based on its gas/water contact being above the base of gas in the V2V Pool by more than 2 m.

### **3.1.10 Leismer McMurray Z3Z Pool**

The SSG contested the production status of the McMurray B1 sequence (B1) in the 12-36-79-7W4M well, based on its interpretation that the gas/bitumen contact difference of 5.9 m between the B1 of 12-36 and the channel gas at the 12-31-79-6W4M well is within the RGS tolerance of 10 m across the pool. As a result, the SSG interprets the intervals to be in the same pool.

The Board believes that the McMurray B1 in the 12-36 well is in a separate pool from the McMurray channel in the 12-31 well for two reasons. First, the Board interprets a gas/water contact in the A1 at the 12-36 well, which is 19 m structurally higher than the gas/bitumen in the McMurray channel at 12-31. Second, the Board interprets a bitumen/water contact in the B2 at the 12-36 well, which is 3.1 m structurally higher than the gas/bitumen contact in the McMurray channel at the 12-31 well.

## **3.2 Potentially Recoverable Bitumen**

The SSG raised two general issues regarding potentially recoverable bitumen: accommodation space<sup>8</sup> and an expanded definition of potentially recoverable bitumen. The SSG argued that the

<sup>8</sup> Accommodation space refers to the amount of vertical thickness of the stratigraphic interval that has the potential to be sand bearing in the vicinity of the wellbore.

use of 20 m of accommodation space as a cutoff for McMurray channel sands should be confirmed as a component of the definition. In the SSG's view, the use of accommodation space is not appropriate for the Wabiskaw, because the distribution of sands and shales and the thickness of the stratigraphic intervals are generally more predictable within the Wabiskaw sands and valley-fills than in the McMurray. CNRL acknowledged that accommodation space is a concept that must be considered, but it did not support a specific cutoff. CNRL argued that accommodation space is a measure of the possibility that a channel can fit in a space, so the Board must also consider the probability of a channel being deposited and charged with bitumen. In *Decision 2004-045*, the Board stated that it accepts that the concept of accommodation space provides a reasonable interpretation of the potential for bitumen to exist in sands deposited in a fluvial/estuarine setting where the existing well control is insufficient to define closely the extent and thickness of the sands. It also stated that it accepts the use of 20 m of accommodation space as an appropriate cutoff for the McMurray channel sands and for the Wabiskaw sands in the Kirby Field, where the environment of deposition appears to be similar in character to the McMurray sands. The Board maintains its view regarding accommodation space stated in *Decision 2004-045* for the McMurray, but also agrees with the SSG that accommodation space is not appropriate for the Wabiskaw.

The SSG also argued that the Board should have regard for the expanded definition of potentially recoverable bitumen contained in EUB *General Bulletin (GB) 2003-28*.<sup>9</sup> The expanded definition is: "The EUB's conservation mandate inherently requires consideration of the long-term development of bitumen resources. Current commercial in situ technologies in the Athabasca Wabiskaw McMurray are new and developing; therefore, these schemes do not define potentially recoverable bitumen. The EUB must also consider the bitumen resource that is exploitable with reasonably foreseeable technology and economic conditions. For example, the EUB expects that existing projects will develop lesser quality resources as they expand."<sup>10</sup> Paramount argued that the expanded definition is equivalent to suggesting that the pilot results be ignored, since they may not reflect actual future activity. As stated in *GB 2003-28*, "The Board's task is to ensure that energy resources are conserved and not wasted, having regard for both the near- and long-term interests of all Albertans."<sup>11</sup> The Board believes that the expanded definition is consistent with the stated mandate of the Board and therefore should be part of the considerations in determining potentially recoverable bitumen. The Board will therefore give consideration to modifying its definition of potentially recoverable bitumen.

The rest of this section deals with the specific aspects of potentially recoverable bitumen related to the McMurray and Wabiskaw valley-fill.

### **3.2.1 Potentially Recoverable Bitumen in the McMurray Formation**

Paramount generated stochastic simulations in order to quantify facies distribution, reservoir properties, and bitumen content of the McMurray reservoir in the Corner McMurray C, Corner McMurray G, Hangingstone McMurray X/NNN, and Hangingstone McMurray KKK Pools (the study area) for the purpose of predicting potentially recoverable bitumen. The Board understands stochastic simulation in this context to be the random interpolation of facies and reservoir

<sup>9</sup> *General Bulletin (GB) 2003-28: Bitumen Conservation Requirements—Athabasca Wabiskaw-McMurray*, July 22, 2003.

<sup>10</sup> *GB 2003-28*, page 7.

<sup>11</sup> *GB 2003-28*, page 1.

properties in three dimensions between control points (wells) using horizontal and vertical variogram models chosen for each property to determine the variability of the reservoir property being simulated. The Board believes that although Paramount's efforts were directed at providing a valuable tool to better understand both the bitumen resource and its ultimate recovery, a number of shortcomings in the process it used hampered its ability to do that.

Paramount used discriminant analysis to relate quantitative data from well logs to observed lithofacies from a small number of cores in the study area and, thereby, to provide lithofacies and reservoir parameters (pseudocores) for wells with only logs. The Board accepts that the log and core interpretations in this part of the simulation process were reasonable and that the pseudocores that Paramount generated generally reflect the stratigraphy of the Wabiskaw/McMurray intervals.

Paramount used the characteristics derived from log data by discriminant analysis to establish vertical variances of rock types and reservoir properties in the McMurray reservoir. It plotted these variances on variograms, which represent the statistical variance of a property between data points as a function of the distance between the data points. Variograms quantitatively reflect the general observation that samples taken close together tend to be more similar than samples taken farther apart. Within a well vertical distances between sample points are usually measured in metres or tens of metres, whereas between wells horizontal distances may be several orders of magnitude greater and variances are thus harder to quantify unless closely spaced wells are available. Variograms constructed from observed variances and distances are referred to as experimental variograms.

The Board notes that geostatistics recognizes that the distribution of points on experimental variograms can generally be fitted to one of several theoretical patterns. These theoretical curves, called variogram models, are used in numeric simulations to establish the spatial variability (degree of homogeneity) of whatever characteristic or property is being simulated. The Board believes that Paramount's fitting of theoretical variogram models to experimental vertical variograms constructed from lithofacies and reservoir property data was not always appropriate, especially where it attempted to fit a variogram model to a very small number of experimental data points. In several instances, either none of the experimental data points fell on the variogram model curve or the model curve did not appear to follow the trend of the experimental points. Paramount indicated that it used only spherical variogram models to represent the experimental variograms in simulating the McMurray reservoir, and the Board believes that this fact may, in part, account for the lack of fit between the experimental vertical variograms and the variogram models. The Board believes that the variogram models chosen by Paramount did not fit the experimental data in many cases, and this may have caused the lack of continuity of facies in the simulations.

Paramount used several outcrops of the McMurray Formation to estimate the horizontal variance of reservoir properties subjectively from outcrop appearance. While the outcrops were useful in terms of potentially representing the stratigraphy in question, the Board notes that the outcrops were not measured or subdivided into lithofacies corresponding to those established in the subsurface from well logs. As well, the outcrops were located relatively far from the wells being studied, and Paramount did not provide evidence to show that the outcrops were in the same depositional systems as the McMurray Formation in the study area. The Board also observes that Paramount did not determine horizontal experimental variograms for use in its simulations and

assumes that Paramount estimated horizontal variances and chose horizontal variogram models and their parameters subjectively. The Board believes that these estimated parameters of the variogram model used have introduced more randomness than expected into the simulations, with the result that the distribution of simulated facies and reservoir properties, particularly bitumen saturation, is more random than would be expected in a channel-dominated environment such as the McMurray. The Board also observes that although Paramount's evaluation of well data demonstrates the presence of significant thickness of potentially recoverable bitumen, the choice of variograms eliminates the possibility of this being laterally continuous in the study area. The Board is therefore not prepared to accept Paramount's horizontal variance results and the resulting simulations as reliable.

Paramount used stochastic simulation to produce computer block models of the McMurray reservoir. The Board accepts that stochastic simulation is primarily the introduction of variance into a smoothed model resulting from the interpolation algorithm used. The process is therefore very dependent on the variogram model used for the property being simulated. The use of an inappropriate variogram model could result in either too much or too little variability in the property being simulated. The Board notes that Paramount used only a spherical variogram model for its simulations and is therefore not satisfied, as noted above, that the results are representative of the bitumen resource in the areas studied.

Differing views were expressed by participants about the credibility of Paramount's stochastic simulations of the McMurray and their ability to predict areas of potentially recoverable bitumen. The SSG expressed concern that the stochastic simulations were "pixilated" (i.e., properties were too discontinuous), whereas Nexen said that the stochastic simulations were insufficiently random. The Board notes that the sizes of the cells ("pixels") used in the stochastic simulations do not appear to be related to the dimensions of channels or other lithofacies in the McMurray and this fact, when combined with the use of variogram models that may not be appropriate, may help explain the lack of horizontal continuity in the simulations.

The Board believes that the results of Paramount's stochastic simulations are overly pessimistic in terms of lateral continuity of facies and associated reservoir properties. The Board believes that some lateral continuity of facies is to be expected, for example, along trend in channel sandstones. It therefore believes that Paramount's assessments of potentially recoverable bitumen based on its simulations may be overly conservative.

The Board believes that geostatistical modelling and stochastic simulation can be used under appropriate circumstances to provide useful information on potentially recoverable bitumen. However, such modelling must include sufficiently representative data with adequate spacing of data points and appropriate procedures. The Board agrees with the SSG, Petro-Canada, and Nexen that the data density derived from gas well spacing in this case is not sufficient to be reliable. As a result, Paramount was unable to generate good horizontal variograms. Therefore, the Board believes that the geostatistical modelling and stochastic simulations provided by Paramount do not represent what the Board should rely upon to determine potentially recoverable bitumen. For the same reasons, the Board believes that they do not provide an acceptable framework for reservoir flow simulation.

### 3.2.2 Potentially Recoverable Bitumen in the Kirby Wabiskaw Valley-fill

In *Decision 2004-045*, the Board stated that the Wabiskaw sands in southern portions of the study area (Kirby Field) may be of valley-fill origin and thus may be similar to the McMurray in their depositional setting. ISH concluded that the sedimentary features and ichnology of the Wabiskaw B valley-fill are clearly not consistent with deposition in an estuarine environment. ISH submitted that the most likely depositional setting of the Wabiskaw was in a delta, building into a storm-dominated marine environment. ISH stated that the Wabiskaw B valley-fill and the McMurray were not deposited in the same environments and are therefore fundamentally different reservoirs. CNRL agreed and added that this difference should be reflected in different cutoffs. The Board accepts that the Wabiskaw B valley-fill in the Kirby Field is not comparable to the McMurray.

The Board also believes, however, that there are differences between the Wabiskaw B valley-fill at Kirby and the Wabiskaw in the Tar-Ells area. The SSG submitted that in Tar-Ells the Wabiskaw sands were predictable in terms of their thickness and quality and the 10 m net thickness cutoff almost matched the gross stratigraphic interval, with little potential to be much thicker. In the first interim decision, the Board accepted that the potential for development of commercial projects may be reduced in this type of reservoir. It therefore allowed gas production in Tar-Ells where the average thickness of Wabiskaw bitumen pay is less than 15 m and a regionally correlatable mudstone separates the Wabiskaw from the underlying McMurray. The Board notes that the Wabiskaw B valley-fill deposit in the Kirby Field has the potential for net bitumen to be much thicker than 10 m and in the east-central areas net bitumen can be as thick as 30 m. The Board also notes that the total Wabiskaw interval in the Kirby Field may be over 40 m thick. Since the Board believes there are differences between Tar-Ells and Kirby, it will continue to use a 10 m net bitumen thickness cutoff and will not apply an average bitumen pay for the Wabiskaw B valley-fill for the Kirby Field.

In Tar-Ells, when the RGS did not identify regional mudstones as being present, all of the Wabiskaw sands were considered to be in communication. In this case, the SSG used the total of the net bitumen in all sands to determine whether a pool should be recommended to be shut in or allowed to produce. In the Kirby Field, however, the SSG did not combine the bitumen thickness of the Wabiskaw B valley-fill and the underlying Wabiskaw D valley-fill, although it concluded that no regional sealing shales were present. The SSG indicated that this may have been an oversight on its part. The Board notes that when both the Wabiskaw B and D are taken into consideration, even the western part of the Kirby Field has the potential to have as much as 30 m of bitumen. The Board therefore considers that there is greater potential for commercial development of the Wabiskaw in the Kirby Field than there is in Tar-Ells.

The Board agrees with CNRL that use of the 6 weight per cent bitumen cutoff as a proxy for 50 per cent bitumen saturation has the potential to overstate net bitumen pay in the Wabiskaw B valley-fill, where the porosity is greater than 27 per cent. However, the Board notes that the 6 weight per cent cutoff map from the RGS, the 8 weight per cent cutoff map, and the 50 per cent saturation cutoff map provided by the SSG indicate that there is greater than 10 m of net bitumen pay within the region of influence of all the Kirby gas pools contested at the final hearing, with the exception of the single-well Kirby Upper Mannville C4C Pool. In this case, only the 8 weight per cent cutoff indicates that no potentially recoverable bitumen underlies the pool. The Board believes that an 8 weight per cent cutoff corresponds to 50 per cent bitumen saturation when the

porosity of the sand is between 33 and 34 per cent. However, the Board does not believe that this porosity represents the average log porosity of the Wabiskaw B valley-fill. The Board concludes that the use of an 8 weight per cent cutoff would exclude bitumen in zones with saturations greater than 50 per cent. The Board continues to believe that a 6 weight per cent cutoff is the most appropriate proxy for the 50 per cent bitumen saturation.

CNRL and ISH argued that cemented horizons in the Wabiskaw B valley-fill at Kirby are sufficiently laterally continuous to act as barriers to the vertical growth of a SAGD steam chamber such that the chamber will be prevented from contacting the overlying Wabiskaw gas. Based on this, they indicated that these cemented zones are likely to act as local seals. Conversely, the SSG argued that the cemented horizons are discontinuous concretions that do not create seals. The Board notes that there was no evidence of gas being trapped below the cemented horizons within the bitumen zone, suggesting that the intervals may be discontinuous. The Board does not believe that there was adequate evidence presented to show conclusively that the cemented horizons are continuous.

With respect to the potential for SAGD in the Kirby Wabiskaw B valley-fill, CNRL argued that the poorer characteristics of the Wabiskaw compared to the McMurray reduced the potential for commercial development. ISH argued the Wabiskaw bitumen resource at Tar-Ells is better quality than that at Kirby and that technology other than SAGD will be required to recover the bitumen at Kirby. Both CNRL and ISH raised concerns with the SSG's argument that the Wabiskaw B valley-fill at Kirby is similar to the Clearwater at Cold Lake where SAGD has been undertaken. Although the Board agrees that the bitumen resource in the Kirby Wabiskaw B valley-fill may be less attractive than the McMurray or the Clearwater at Cold Lake, when the expanded definition of potentially recoverable bitumen is considered, the Board does not believe that the Wabiskaw bitumen resource can be ruled out as a candidate for future development.

### **3.3 Continuity of Mudstones and Shales**

#### **3.3.1 Wabiskaw D Shale and Wabiskaw C Mudstone**

The SSG and Nexen expressed concern about both the competency of this unit to limit the spread of a SAGD steam chamber and the ability to accurately determine the thickness of the D shale. The SSG and Nexen submitted that well logs do not indicate the presence or thickness of the D shale consistently or reliably. The SSG also argued that pressure data for the 6-20 and 11-30-80-6W4M wells show that the D shale cannot be relied on as a regional barrier even where the core thickness correlates with the log thickness and is greater than 0.5 m.

Nexen submitted core data from 134 wells in the Long Lake area, in addition to data from 18 wells presented in the first interim hearing. Both Nexen and the SSG agreed that the interval studied by Nexen is not equivalent to the D shale, but is a unit interpreted by the SSG to be the Wabiskaw C mudstone. The Board is satisfied that the thicknesses of the units estimated by the RGS and Nexen are comparable to within 0.1 to 0.2 m where only the C mudstone is present and where both Nexen and the RGS are evaluating the same interval. As a result of Nexen's study, the Board acknowledges that there may be some thickness discrepancies between log interpretation and core data.

The SSG also argued that well logs do not predict the presence or thickness of the Wabiskaw D shale consistently or reliably. The SSG reviewed 166 cores, which it stated were complete, over

the D shale in the RGS area. The SSG submitted photographs for the majority of the cores, but it did not indicate on the photographs the top and base that it used to determine the thickness of the C mudstone or the D shale. The Board also notes that the core in the photographs was often broken and rubble, which would not allow for accurate thickness measurements. Although the SSG submitted that it had complete core, the Board is not satisfied that the evidence supports this conclusion. The Board was unable to verify the core thickness measurements submitted by the SSG. However, it notes that as a result of a comparison of the SSG and the Nexen core studies, the C mudstone, which had not been previously recognized by the RGS, has been identified.

The Board agrees with Nexen and the SSG that due to its sandy nature, with the possible presence of interconnecting burrows, the C mudstone is not a seal, and it also agrees that the C mudstone cannot be differentiated from the D shale solely on well logs. The Board notes that the SSG recognized the C mudstone to be present in Townships 84 to 86 inclusive based on core data and that there was no evidence from core to show that the C mudstone is present in the RGS study area south of Township 84 to Township 73. Having regard for the limited core data, the Board assumes that between Townships 84 and 73, the shale the RGS has determined from well logs is the D shale. The Board agrees with Nexen that only the C mudstone may be present between the gas in the Wabiskaw C sand and the underlying thick bitumen in Nexen's Long Lake area.

The SSG reviewed the static gradient pressures taken on the Wabiskaw C sand at the 6-20 and 11-30-80-6W4M wells and concluded that both wells were in single-well pools that exhibit depleted initial pressures and that the depletion may be occurring through the D shale. The Board reviewed the surrounding wells and interprets gas pay in the Wabiskaw C sand based on gas effect evident on logs in the 00/10-30, AA/11-30, and 00/07-29-80-6W4M wells. The Board believes that there is an alternative explanation for the depleted initial pressures in the 6-20 and 11-30 wells. Gas production from the Wabiskaw C zone in the 11-28-80-6W4M/2 well may have caused the pressure depletion in the 6-20 and 11-30 wells because of limited communication between the Wabiskaw C gas zones in these wells. The Board therefore believes that the pressure evidence submitted is inconclusive in showing pressure depletion through the D shale.

The Board believes that all available data must be used to identify the presence and thickness of an interval. The Board has not changed its assumption that where the D shale is greater than or equal to 0.5 m thick, it will remain competent in the presence of a steam chamber. However, the Board recognizes that there are limitations in accurately and consistently determining a 0.5 m shale thickness from well logs. An interpretation difference of only centimetres may affect a decision regarding gas production. Based on this concern, the Board believes that it is prudent to require that the thickness of the D shale determined from well logs must be greater than or equal to 1.0 m throughout the region of influence to allow production of overlying Wabiskaw C gas. The Board notes that this criterion relates only to the Wabiskaw D shale, because it agrees with the SSG that there are not similar concerns regarding the capability of logs for determining the thickness and character of the McMurray A2 and B2 mudstones, as the mudstones always occur at the base of the coarsening-up sequences and are more uniform in thickness.

### **3.3.2 McMurray A2 and B2 Mudstones**

Petro-Canada submitted that seal geometry and integrity of the A2 and/or B2 mudstones are important factors when determining seal reliability in the Chard Area. Petro-Canada believed

that seal geometry is compromised by the stratigraphic framework of the McMurray and that seal integrity is compromised by vertical structural displacement as a result of underlying salt dissolution. Petro-Canada submitted pressure data that it interpreted to confirm vertical pathways through the A2 mudstone.

Petro-Canada argued that pressure data from a piezometer in the 10-14-79-7W4M well within a water-bearing McMurray channel sand below the A2 mudstone indicated pressure depletion as a result of communication across the A2 mudstone. It interpreted that the depletion was the result of an adjacent gas pool producing from the McMurray A sequence. The SSG interpreted the sand immediately below the A2 mudstone to be the B1 and agreed with Petro-Canada that the piezometer was set within a McMurray channel sand. The Board agrees with Petro-Canada that there is pressure depletion in this water-bearing McMurray interval.

The RGS interprets no sealing shale between the B1 and the underlying McMurray channel sand; therefore the porosity in the B1 and the McMurray Channel sand in the 10-14 well is considered to be in communication. Since the Leismer McMurray J4J Pool immediately west of the 10-14 well is producing from the B1 and B channel sands, the Board believes that the pressure depletion may be due to communication between the B1 of the J4J Pool and the B1 of the 10-14 well. Because there may be another explanation for the depleted pressure at the piezometer in the 10-14 well, the Board does not believe that the evidence conclusively shows failure of the sealing capability of the A2 mudstone. Since gas production from the Leismer McMurray J4J Pool was not contested by any party at the final hearing, the Board will initiate a follow-up process to determine if there is a need to shut in gas production from this pool.

Petro-Canada also submitted that gas well pressure data indicate pressure depletion in the A sequence sand of the 11-33-79-7W4M well. Petro-Canada interpreted pressure depletion in the 11-33 well to be the result of gas production from the B sequence sand of the 12-35 well because the 11-33 well had never produced. Its explanation of the cause of the communication was faulting-induced failure of the A2 mudstone.

Petro-Canada interpreted a gas/water contact to be present in the McMurray A sequence sand of the 11-33 well and acknowledged that the A sequence sand of the 12-35 well is wet. The Board agrees with CNRL that the water in the A sequence sand of the 11-33 well would be expected to displace the gas in the underlying B sequence sands in the 12-35 well if there were a breach in the A2 mudstone. Therefore, the Board does not agree with Petro-Canada's interpretation. The Board believes pressure transmission through a common aquifer between the 11-33 well and adjacent producing wells in the Leismer Wabiskaw McMurray A gas pool may have caused the pressure depletion in the 11-33 well.

The Board sees no conclusive evidence of a breach in the A2 mudstone from these studies. The Board continues to agree with the SSG that the McMurray A2 and McMurray B2 mudstones, where present throughout a region of influence, will separate underlying bitumen from the effects of depleting the overlying gas zone.

The SSG questioned the continuity of the A2 regional mudstone underlying the Kirby Upper Mannville O3O Pool. The Board agrees with CNRL and ISH that the A2 mudstone is present at the 16-5-74-9W4M well, based on its stratigraphic position relative to other pool wells and its log character as defined by the RGS. While the Board agrees that channelling may have the potential to erode the A2 mudstone adjacent to the 16-5 well, it notes that the evidence suggested

by the SSG in the 9-34-73-8W4M well of erosion of the A2 mudstone is caused by the Wabiskaw D valley-fill. The Board notes that the Wabiskaw D valley-fill is not deposited in the area of the O3O Pool and that its depositional extent, as depicted in the RGS, is limited west of Range 8W4M. The Board interprets the channel in the 16-5 well to be an A channel, as interpreted by the RGS in offsetting wells, and notes that in all the wells where an A channel exists within the vicinity of the pool, the A2 mudstone has been preserved. As a result, the Board believes that the A2 mudstone is present throughout the region of influence of the O3O Pool.

### 3.3.3 Kirby Wabiskaw C Interval

ISH and CNRL questioned the sealing capability and continuity of the Wabiskaw C interval in the Kirby Upper Mannville II and V2V Pools. CNRL and ISH submitted that the Wabiskaw C interval in the Kirby Field acts as a regional seal between the Wabiskaw B valley-fill and the underlying Wabiskaw D valley-fill and McMurray channel sands, based on evidence of trapped gas and/or water below the C interval. The SSG submitted that a core study of the II Pool showed that the Wabiskaw C interval has the potential to be absent, is inconsistently cemented, and could be highly bioturbated and bitumen stained. In the case of the V2V Pool, the SSG noted that the Wabiskaw C consists of highly bioturbated and bitumen-stained sands and muds, with large vertical burrows. CNRL stated that even where the Wabiskaw C interval is bioturbated or burrowed, with a sufficiently tortuous path, the Wabiskaw C need only provide enough isolation such that a steam chamber operating in the underlying Wabiskaw D valley-fill would not penetrate vertically to the overlying gas over the operating life of the well pair.

Although the Wabiskaw C interval may be locally sealing, the Board concludes that due to bioturbation, bitumen staining, and inconsistency in cementation, it cannot be relied upon as a regional seal. To be considered a local seal for a pool, there must be direct evidence that the seal is present throughout the region of influence. This evidence is lacking for the II and V2V Pools, and the Board notes that the evidence of trapped gas and/or water is found in wells north of the II Pool and not in any of the wells in the pool.

### 3.4 Effect of Associated Gas Production on SAGD Bitumen Recovery Based on Reservoir Modelling

The Board notes that there is still very limited applicable field experience or publicly available data regarding the effect of associated gas production on SAGD bitumen recovery. Although Paramount referred to the Surmont pilot of ConocoPhillips Canada Resources Corp. showing hydraulic communication between the steam chamber and an overlying thief zone, Petro-Canada pointed out that the operator of the pilot had reported that since the pilot test was ongoing, the effect of the thief zone on ultimate bitumen recovery remains unknown. Paramount also referred to Nexen's Long Lake SAGD scheme encountering a lean zone (i.e., a bitumen zone with high water saturation), but it subsequently argued that the lean zone was not an analog to a depleted gas zone. The information provided in both cases did not assist the Board in determining the effect of associated gas production on SAGD bitumen recovery.

Paramount submitted that reservoir modelling could be used to show that SAGD bitumen recovery was essentially insensitive to overlying gas pool pressure. As discussed in Section 3.2, Paramount's modelling consisted of four 3-D geostatistical pool models with stochastic simulation for the Corner McMurray C, Corner McMurray G, Hangingstone McMurray X/NNN,

and Hangingstone McMurray KKK Pools. These geostatistical models were upscaled to four 3-D reservoir flow models for which Paramount reduced the water saturation in the gas zones in an attempt to history match the gas pool pressures. From these 3-D reservoir flow models, Paramount extracted six 2-D models that it used to predict SAGD performance at three different gas zone pressures (200, 600, and 1200 kPa). Paramount also conducted sensitivity runs on the 2-D models by replacing the simulated variable bitumen zone properties with a uniform clean sand that extended from the base of the McMurray to within 10 m of the gas zones. Finally, Paramount constructed generic 3-D reservoir flow models where the simulated variable geology was replaced with a uniform clean sand and used these models to predict SAGD performance at two different gas zone pressures (600 and 1900 kPa).

As discussed in Section 3.2, the Board believes that Paramount's geostatistical modelling with stochastic simulation does not provide an acceptable framework for reservoir flow simulation. In the Board's view, this compromises the reliability of the 3-D pool and 2-D SAGD flow models, since the geological descriptions in these models are based on the geostatistical models.

With respect to Paramount's 3-D pool flow modelling, the Board agrees with Petro-Canada and the SSG that there are insufficient pressure data to perform an effective history match of the 3-D pool models. Also, there are no SAGD schemes in these pools to provide data against which the models could be history matched. Consequently, the Board does not believe that the 3-D pool models were effectively calibrated by way of history matching.

With respect to the 2-D SAGD models, the Board is not convinced that these models adequately represent the pools from which the models were extracted. The Board notes that the areas of the models were less than 1 per cent of the areas of the pools from which the models were extracted. As in the case of the 3-D pool models, there are no SAGD data to history match to validate the 2-D models. Paramount confirmed that the 2-D SAGD models used confined gas zones. It stated that once communication existed between the SAGD steam chamber and the gas zone, the results of the confined 2-D models were essentially invalidated and the generic 3-D SAGD models had to be used.

With respect to the generic 3-D SAGD models, the Board does not believe that it can rely on the results of the models initially submitted by Paramount in which the well indices were specified rather than calculated by the models. This is because, as submitted by Petro-Canada, the vendor of the simulator stated that there was a specific round-off error in the version of the model used by Paramount when the injectivity well index was set at 10 000. When the well indices were calculated by the models, the models predicted that the 1900 kPa case would recover about 6 per cent more bitumen than the 600 kPa case at an instantaneous steam-oil ratio (SOR) cutoff of 4.5. With respect to comparing the predicted recoveries between the high- and low-pressure cases, Paramount stated that either the instantaneous or cumulative SOR could be used as an economic limit. Paramount subsequently stated that it believed that any comparison between bitumen recoveries should be based on the same cumulative steam injection. The Board believes it is reasonable to compare the recoveries between the high- and low-pressure cases using an instantaneous SOR cutoff of 4.5 based on Paramount's statement in its submission that in the Athabasca area an upper economic limit SOR of roughly 4.5 has been adopted. The reference cited by Paramount for this economic limit provides cutoff SORs for three SAGD schemes in the McMurray and, as shown by the SSG, the references for these three schemes indicate that the cutoff SORs used by the operators of the schemes are instantaneous SORs.

Paramount confirmed that its generic 3-D SAGD model runs did not include a blowdown (or wind-down) phase. The Board would expect the bitumen recovery during the blowdown phase of the 1900 kPa case to be greater than that of the 600 kPa case. While no specific evidence was presented at this hearing, the Board notes that the Chard-Leismer decision states that EnCana estimated that wind-down recovery could decrease from about 7 per cent at 1900 kilopascals absolute (kPaa) to about 2 per cent at 200 kPaa.

Considering the limitations and deficiencies in Paramount's models and what the Board believes are the appropriate results from Paramount's generic 3-D SAGD model runs, the Board is not convinced that Paramount's modelling work can be used to conclude that SAGD bitumen recovery is insensitive to the pressure of the associated gas pools. The Board maintains its previous conclusion that producing gas that is associated with potentially recoverable bitumen and thereby reducing the reservoir pressure presents an unacceptable risk to SAGD bitumen recovery.

### **3.5 Other Matters**

#### **3.5.1 Pressure Monitoring Requirements**

Two proposals were made to the Board regarding the need for additional pressure monitoring requirements. Because of the risk of natural communication existing between overlapping pools (which can be vertically separated by as little as 0.5 m), the SSG proposed that segregation testing should be performed on those wells where one interval has been allowed to produce and another interval was required to be shut in. The proposed ongoing pressure monitoring of the shut-in zones would help to determine both wellbore segregation and whether natural pressure communication is occurring between different pools. Petro-Canada requested that the Board order a pressure monitoring program throughout its Chard lease area to aid in the determination of reservoir continuity within the Wabiskaw-McMurray. Petro-Canada stated that since considerations that warrant a pressure monitoring program in the Chard area may be applicable to the broader regional area, it would support a Board initiative to order pressure monitoring throughout the Athabasca area where it is warranted.

Nexen supported a pressure monitoring program following consultation with industry, and CNRL supported the idea of a program subject to the extent and cost of the program being determined by further consultation with industry. Paramount indicated there were many questions that needed to be answered before it could support a program. The Board believes there would be merit in pursuing this further but agrees that further consultation with industry is needed before deciding whether any new pressure monitoring requirements should be implemented and, if so, what form they should take. The EUB intends to discuss this further with interested parties.

#### **3.5.2 Need for *ID 99-1* Applications for Uncompleted Wells in the RGS Area Given “Produce” Status**

The SSG recommended that the Board require an *ID 99-1* application for wells with gas intervals that were given a “produce” status as a result of this hearing but that have never produced and/or been completed. There were mixed views from the other parties regarding the SSG’s recommendation, which varied from agreement, to partial agreement (applications should be required only for intervals that were not part of the filed evidence in this hearing), to

disagreement. Considering the complex geology of the Wabiskaw-McMurray, the Board will require *ID 99-1* applications for these intervals, since that would provide for an assessment of data collected subsequent to their completion.

### **3.5.3 Role of *ID 99-1* in the Phase 3 Proceedings**

The Board stated in *Decision 2004-088*<sup>12</sup> that it would consider criteria from *ID 99-1* in the Phase 3 final hearing if the evidence in the hearing indicated that those criteria are relevant. Paramount argued that *ID 99-1* has the force of law and must be followed in this proceeding. Paramount submitted that the SSG failed to address *ID 99-1* criteria and therefore its recommendations were not supported by adequate evidence.

*ID 99-1* was originally issued by the EUB on February 3, 1999. It stated that the requirements for an application for approval to produce gas from wells drilled or completed in the defined oil sands strata after July 1, 1998, were being incorporated into the *Oil and Gas Conservation Regulations* and/or the *Oil Sands Conservation Regulation*. The *Oil and Gas Conservation Regulations* were subsequently amended to include Section 3.011, which states:

**3.011** No person shall produce gas from a well completed in the oil sands strata prior to obtaining an approval from the Board in accordance with section 3 of the Oil Sands Conservation Regulation (AR 76/88), unless the Board has exempted the well from the application of this section. [AR 47/99 s3]

The *Oil Sands Conservation Regulation* was also amended to include the following in Section 3:

**3(3)** No person shall produce gas from a well completed in the oil sands strata prior to obtaining an approval from the Board, unless the Board has exempted the well from the application of this subsection.

**(4)** An application to produce gas in accordance with subsection (3) must be made by the well licensee and include the documentation required by the Board.

**(5)** Where it appears to the Board that the ultimate recovery of crude bitumen in the oil sands strata may be affected by gas production, the Board may, on its own initiative or on application by an affected party, make any order or directive it considers necessary to effect the conservation of the crude bitumen in any particular case.

**(6)** Subsections (3), (4) and (5) do not apply to the production of solution gas. [AR 76/88 s3; 48/99]

Subsections 3(3) and 3(4) require a licensee to make an application to the Board for approval to produce gas from a well drilled or completed in the defined oil sands strata unless the well is exempted by the Board. *ID 99-1* specifies the exemptions, in particular that an application is not required for wells completed prior to July 1, 1998. *ID 99-1* supplements subsections 3(3) and 3(4) of the *Oil Sands Conservation Regulation*. It sets out the application process, the application areas, the information requirements, and the notification requirements applicable to an application under that subsection. It establishes what is required in order for a licensee to secure the EUB's approval to produce gas from a well that is not at the time of the application permitted to produce gas from the oil sands strata.

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<sup>12</sup> *Decision 2004-088: Phase 3 Final Proceeding Under Bitumen Conservation Requirements, Athabasca Wabiskaw-McMurray, Prehearing Meeting Decision*, October 14, 2004.

The EUB's Bitumen Conservation Requirements, introduced in *GB 2003-28*, were initiated to assess and address the risk that gas production posed to the ultimate recovery of bitumen in the Athabasca Oil Sands Area. The Bitumen Conservation Requirements are expressly contemplated and authorized by subsection 3(5) of the *Oil Sands Conservation Regulation*. Although the Board stated that it was prepared to consider *ID 99-1* applications during and even as part of the proceedings under the Bitumen Conservation Requirements, the focus of the Bitumen Conservation Requirements was primarily on existing gas production. The EUB's authority under subsection 3(5) of the *Oil Sands Conservation Regulation* exists independent from the application requirements under subsection 3(3) of the regulation (and, by implication, the requirements of *ID 99-1*).

In the Board's view, it is not required to make its decisions in the Phase 3 Proceeding based solely on the criteria set out in *ID 99-1*. The Phase 3 Proceeding is not an application or a collection of applications for approval to produce gas from a well that is completed in the oil sands strata but not yet allowed to produce; it is the final part of an EUB-initiated process to identify on a regional basis where gas production poses a risk to the recovery of bitumen and to take appropriate measures to reduce or remove that risk. The Board notes that the Bitumen Conservation Requirements and the application requirements under *ID 99-1* share the common goal of protecting the bitumen resource. The issues discussed during the Phase 3 hearings coincided generally with the Information Requirements set out in Section 1.3 of *ID 99-1*. While the Board is not surprised by this result, it was nevertheless not prepared at the outset of the hearing to require that parties meet *ID 99-1* information requirements. The Board expressly stated in Sections 3.5 and 3.6 of *Decision 2004-088* that it would not prescribe the criteria it would use to make production decisions in the Phase 3 final hearing, nor would it impose restrictions on the evidence parties may present. The Board also stated in *Decision 2004-088* that the applicability of *ID 99-1* criteria to the production decisions facing the Board in the Phase 3 final hearing could itself be an issue for the hearing.

### **3.5.4 Resource Management Reports**

In the Surmont and Chard-Leismer decisions, the Board required certain oil sands leaseholders to submit annual reports on the management of the resources on their oil sands leases, including an assessment of the effect that the pressure of the overlying gas zone has on the recovery of bitumen by SAGD. The content of the reports was specified in the decision reports. The Board believes that RMRs with the same content should be required for other areas within the RGS study area. Therefore, the Board will require, effective March 31, 2006, annual RMRs for EUB-approved oil sands schemes within the RGS study area. However, rather than requiring that separate RMRs be submitted for these schemes, the Board believes the information required could be provided as part of the performance presentations required for these schemes. The Board notes that some resource information, such as drilling and completion data, piezometer data, other well test data, log data, core data, and petrographic data, is being collected for areas outside the EUB scheme approval areas. The Board expects that this information will be provided to the EUB as part of its existing information submission requirements and that operators should be prepared to provide their interpretation of the information if requested by the EUB.

#### **4 PRODUCTION STATUS DECISION**

On the basis of its findings in the preceding sections, the Wabiskaw-McMurray gas intervals considered to be associated with potentially recoverable bitumen are not allowed to produce. These intervals are listed in Table 1A. Those gas intervals not considered to be associated with potentially recoverable bitumen are allowed to produce, subject to *ID 99-1* applications being required for those intervals that have never produced and/or been completed. These intervals are listed in Table 2A. Decisions regarding the production status of intervals were made on a pool basis. The pools referred to in Tables 1 and 2 of *Decision 2005-122* dated November 10, 2005, are the EUB's designated pools prior to pooling changes resulting from this decision. The pools referred to in Tables 1A and 2A are the EUB's designated pools after pooling changes resulting from this decision, which will be effective January 1, 2006.

There are five differences between Tables 1 and 2 compared to Tables 1A and 2A: Tables 1A and 2A include columns providing the reasons for the decision, pooling changes resulting from this decision, missing intervals, corrected well IDs, and deletion of intervals with no gas pay. Corrected intervals are listed in Table 3 and the corrections are included in Tables 1A and 2A of this report.

Dated in Calgary, Alberta, on December 21, 2005.

#### **ALBERTA ENERGY AND UTILITIES BOARD**

*<original signed by>*

J. D. Dilay, P.Eng.  
Board Member

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

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G. D. Williams, Ph.D., P.Geol.  
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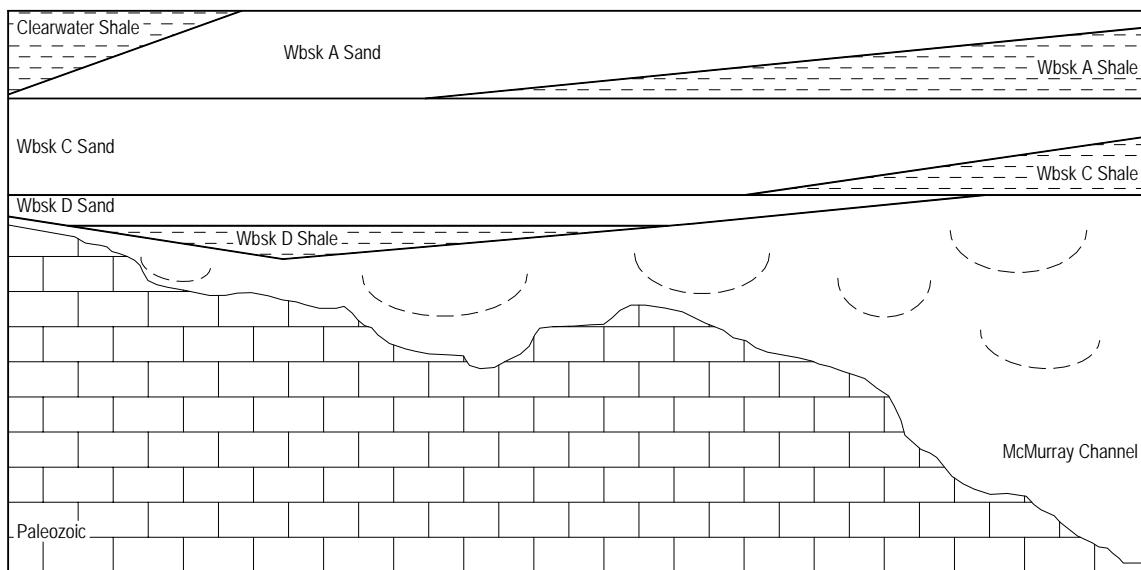
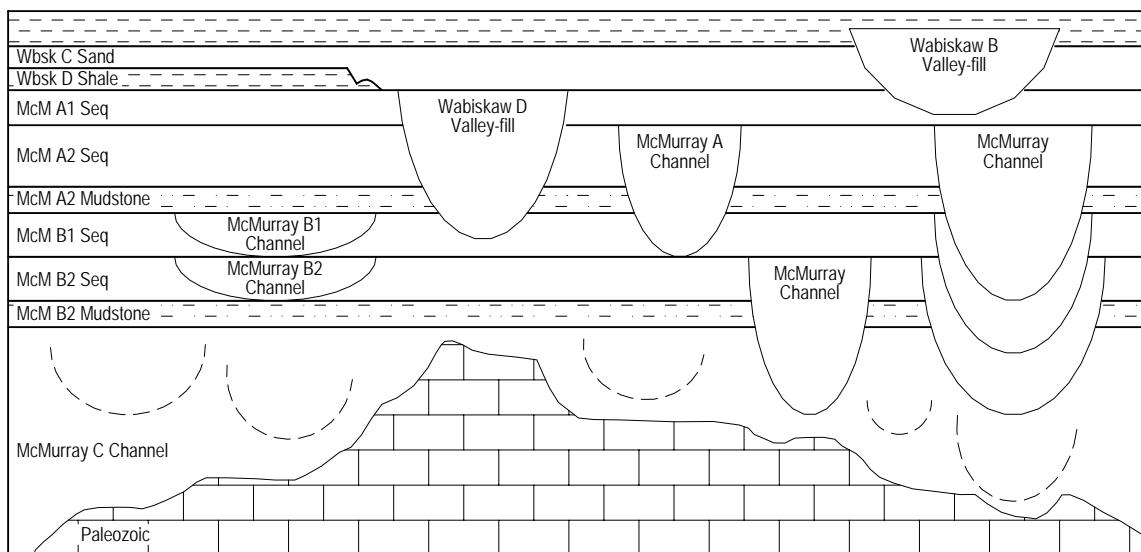


Figure 1. Schematic of Wabiskaw-McMurray stratigraphic models—RGS main study area (top) and RGS northern study area (bottom) (taken from *Report 2003-A: Athabasca Wabiskaw-McMurray Regional Geological Study*, December 31, 2003)

## **Legend for Decision 2005-122 Addendum, Tables 1A and 2A**

### Decision Code

PRB - Potentially recoverable bitumen present  
RMA - Regional mudstone/shale absent  
RMP - Regional mudstone/shale present  
PSD - Pressure data support decision  
ACC - Accommodation space present  
NPRB - No potentially recoverable bitumen  
PC - Pooling change, wells pooled differently than RGS

### Note

PRB or RMA applies over the entire region of influence. For example, if a regional shale is present in one well but not in another well in the same pool, the code PRB or RMA is applied to all wells in the pool, as this is the reason for the shut-in of the pool.

### Company Abbreviations

ANADARKO	ANADARKO CANADA CORPORATION
BAAY LAND	BAAY LAND CONSULTANTS LTD.
BP	BP CANADA ENERGY COMPANY
CALPINE	CALPINE CANADA RESOURCES COMPANY
CANNAT	CANNAT RESOURCES INC.
CNRL	CANADIAN NATURAL RESOURCES LIMITED
CONOCO	CONOCOPHILLIPS CANADA RESOURCES CORP.
DEVON AOG	DEVON AOG CORPORATION
DEVON ARL	DEVON ARL CORPORATION
DEVON	DEVON CANADA CORPORATION
ENCANA	ENCANA OIL & GAS CO. LTD.
ENCANA C.	ENCANA CORPORATION
FIRST	FIRST CHICAGO INVESTMENT CORPORATION
GULF	GULF CANADA LIMITED
HUSKY	HUSKY OIL OPERATIONS LIMITED
ISH	ISH ENERGY LTD.
IMPERIAL	IMPERIAL OIL RESOURCES LIMITED
JCOS	JAPAN CANADA OIL SANDS LTD.
MEG	MEG ENERGY CORP.
NEXEN	NEXEN CANADA LTD.
NORTHSTAR	NORTHSTAR ENERGY CORPORATION
OPTI	OPTI CANADA INC.
PARAMOUNT	PARAMOUNT RESOURCES LTD.
PET	PARAMOUNT ENERGY OPERATING CORP.
PETRO-CANADA	PETRO-CANADA
PRIMEWEST	PRIMEWEST ENERGY INC.
SHELL	SHELL CANADA LIMITED
STYLUS	STYLUS EXPLORATION INC.
SUNCOR	SUNCOR ENERGY INC.
SUPERMAN	SUPERMAN RESOURCES INC.
TALISMAN	TALISMAN ENERGY INC.
VIKING	VIKING ENERGY LTD.

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CHARD	MCMURRAY KKK	00/07-13-080-07W4/0	310.2	319.5	McM Channel	CNRL	PRB, RMA
		00/07-14-080-07W4/0	327.8	328.5	McM Channel	CNRL	PRB, RMA
CLYDEN	MCMURRAY P	00/10-27-080-06W4/0	246.9	256.9	McM Channel	CNRL	PC, PRB, RMA
		00/11-28-080-06W4/0	284.2	295.8	McM Channel	CNRL	PC, PRB, RMA
CORNER	MCMURRAY A	00/11-34-080-06W4/0	249.5	260.0	McM Channel	CNRL	PC, PRB, RMA
		00/05-31-080-09W4/0	416.0	418.5	McM A1 Seq	PET	PRB, RMA
MCMURRAY W	MCMURRAY Y	00/07-25-075-13W4/0	507.0	513.0	McM Channel	VIKING	PRB, RMA
		00/11-30-076-12W4/0	496.8	501.5	McM Channel	CNRL	ACC
MCMURRAY AA	MCMURRAY C	00/09-13-080-09W4/0	418.0	421.0	McM A1 Seq	PET	PRB, RMA
		00/10-36-080-10W4/0	418.0	420.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/11-04-081-09W4/0	529.3	682.0	McM Channel	PET	PRB, RMA
		00/14-04-081-09W4/0	425.5	427.5	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	02/14-04-081-09W4/0	427.0	428.0	McM A1 Seq	PET	PRB, RMA
		00/09-05-081-09W4/0	426.0	428.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/09-05-081-09W4/0	428.0	430.0	McM A2 Seq	PET	PRB, RMA
		00/06-07-081-09W4/0	421.3	424.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/06-07-081-09W4/0	425.0	434.0	McM Channel	PET	PRB, RMA
		00/15-08-081-09W4/0	423.2	424.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/12-09-081-09W4/0	418.0	420.0	McM A1 Seq	PET	PRB, RMA
		00/13-09-081-09W4/0	418.5	420.5	McM A1 Seq	GULF	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/13-09-081-09W4/0	420.7	424.0	McM Channel	GULF	PRB, RMA
		00/12-16-081-09W4/0	425.0	429.0	McM Channel	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	02/12-16-081-09W4/0	431.0	434.2	McM Channel	PET	PRB, RMA
		00/06-01-081-10W4/0	419.0	421.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/10-11-081-10W4/0	424.2	427.0	McM A1 Seq	PET	PRB, RMA
		00/10-11-081-10W4/0	427.0	438.5	McM Channel	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/03-12-081-10W4/0	425.0	426.0	McM A1 Seq	PET	PRB, RMA
		00/03-12-081-10W4/0	427.1	436.0	McM Channel	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/12-13-081-10W4/0	422.3	424.5	McM A1 Seq	PET	PRB, RMA
		00/12-13-081-10W4/0	425.1	433.3	McM Channel	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/08-16-080-10W4/0	422.0	432.5	McM Channel	PET	PRB, RMA
		00/14-27-080-10W4/0	415.5	418.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/14-27-080-10W4/0	418.0	432.8	McM Channel	PET	PRB, RMA
		00/14-28-080-10W4/0	417.2	419.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/14-28-080-10W4/0	419.0	433.0	McM Channel	PET	PRB, RMA
		00/09-33-080-10W4/0	417.5	421.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/09-33-080-10W4/0	424.0	435.0	McM Channel	PET	PRB, RMA
		00/11-34-080-10W4/0	420.0	421.0	McM A1 Seq	PET	PRB, RMA
MCMURRAY AA	MCMURRAY C	00/11-34-080-10W4/0	432.2	436.0	McM Channel	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CORNER (cont.)	MCMURRAY C (cont.)	00/05-35-080-10W4/0	416.0	419.5	McM A1 Seq	PET	PRB, RMA
		00/05-35-080-10W4/0	426.0	436.0	McM Channel	PET	PRB, RMA
		00/03-03-081-10W4/0	421.8	423.5	McM A1 Seq	PRIMEWEST	PRB, RMA
		00/08-04-081-10W4/0	423.0	424.0	McM A1 Seq	PET	PRB, RMA
		00/08-04-081-10W4/0	427.0	437.0	McM Channel	PET	PRB, RMA
		00/08-05-081-10W4/0	433.0	436.5	McM Channel	PET	PRB, RMA
	MCMURRAY CC	00/10-28-081-09W4/0	428.5	436.0	McM Channel	PET	PRB, RMA
	MCMURRAY D	00/09-31-080-10W4/0	419.5	421.5	McM A1 Seq	PET	PRB, RMA
		00/09-31-080-10W4/0	425.0	438.0	McM Channel	PET	PRB, RMA
		00/11-32-080-10W4/0	423.8	425.0	McM A1 Seq	PET	PRB, RMA
		00/11-32-080-10W4/0	427.0	441.0	McM Channel	PET	PRB, RMA
	MCMURRAY G	00/09-10-081-09W4/0	430.2	432.4	McM A1 Seq	PET	PRB, RMA
		00/09-10-081-09W4/0	435.0	435.8	McM A2 Seq	PET	PRB, RMA
		00/13-11-081-09W4/0	428.0	429.8	McM A1 Seq	PET	PRB, RMA
		00/13-11-081-09W4/0	429.8	431.8	McM A2 Seq	PET	PRB, RMA
		00/02-14-081-09W4/0	432.5	433.7	McM A1 Seq	GULF	PRB, RMA
		00/11-14-081-09W4/0	430.7	433.0	McM A1 Seq	PET	PRB, RMA
		00/04-15-081-09W4/0	424.5	427.4	McM A1 Seq	GULF	PRB, RMA
		00/10-23-081-09W4/0	429.4	430.8	McM A1 Seq	PET	PRB, RMA
		00/10-23-081-09W4/0	431.7	434.0	McM Channel	PET	PRB, RMA
		00/07-25-081-09W4/0	426.6	427.8	McM A1 Seq	PET	PRB, RMA
		00/07-25-081-09W4/0	428.0	431.5	McM Channel	PET	PRB, RMA
		00/07-26-081-09W4/0	425.0	426.3	McM A1 Seq	PET	PRB, RMA
		00/07-26-081-09W4/0	427.0	430.5	McM Channel	PET	PRB, RMA
		00/06-27-081-09W4/0	419.0	421.3	McM A1 Seq	PET	PRB, RMA
		00/06-27-081-09W4/0	421.7	428.8	McM Channel	PET	PRB, RMA
	MCMURRAY J	00/08-23-080-10W4/0	419.0	419.8	McM Channel	PET	PRB, RMA
	MCMURRAY K	00/06-02-080-10W4/0	436.0	437.0	McM A1 Seq	PET	PRB, RMA
		00/15-03-080-10W4/0	432.3	433.0	McM A1 Seq	CALPINE	PRB, RMA
	MCMURRAY MM	00/10-28-081-09W4/0	419.0	421.5	McM A1 Seq	PET	PRB, RMA
	MCMURRAY P	00/15-03-080-10W4/0	440.8	441.5	McM Channel	CALPINE	PRB, RMA
	MCMURRAY PP	00/08-23-080-10W4/0	423.0	429.0	McM Channel	PET	PRB, RMA
	MCMURRAY Q	00/10-13-080-10W4/0	429.0	431.0	McM A1 Seq	PET	PRB, RMA
		00/07-14-080-10W4/0	419.2	422.0	McM A1 Seq	PET	PRB, RMA
		00/07-14-080-10W4/0	422.0	424.6	McM Channel	PET	PRB, RMA
		00/08-15-080-10W4/0	422.0	424.0	McM A1 Seq	PET	PRB, RMA
		00/08-15-080-10W4/0	425.0	425.8	McM Channel	PET	PRB, RMA
		00/08-16-080-10W4/0	419.5	420.0	McM A1 Seq	PET	PRB, RMA
		00/08-23-080-10W4/0	415.4	417.0	McM A1 Seq	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CORNER (cont.)	MCMURRAY Q (cont.)	00/16-24-080-10W4/0	418.7	421.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/16-24-080-10W4/0	421.0	426.3	McM Channel	ENCANA C.	PRB, RMA
		00/08-25-080-10W4/0	420.5	423.0	McM A1 Seq	PET	PRB, RMA
	MCMURRAY U	00/05-31-080-08W4/0	459.5	460.6	McM B1 Seq	NORTHSTAR	PRB, RMA
		00/11-34-080-09W4/0	448.5	449.5	McM B1 Seq	ENCANA C.	PRB, RMA
		00/11-35-080-09W4/0	447.0	450.0	McM B1 Seq	ENCANA C.	PRB, RMA
		00/10-36-080-09W4/0	456.0	456.5	McM B1 Seq	ENCANA	PRB, RMA
		00/05-01-081-09W4/0	447.1	448.5	McM B1 Seq	PET	PRB, RMA
	MCMURRAY U/D-061	00/08-15-080-10W4/0	427.5	428.4	McM Channel	PET	PRB, RMA
DIVIDE	MCMURRAY FF	00/07-08-082-12W4/0	473.4	482.8	McM Channel	ANADARKO	PRB, RMA
		00/16-08-082-12W4/0	453.5	460.0	McM Channel	HUSKY	PRB, RMA
		00/07-09-082-12W4/0	479.4	480.6	McM B2 Seq	PET	PC, PRB, RMA
	MCMURRAY HH	00/14-31-081-12W4/0	473.5	476.5	McM Channel	HUSKY	PRB, RMA
	MCMURRAY K	00/08-02-082-12W4/0	497.0	498.0	McM B2 Seq	STYLUS	PC, PRB, RMA
		00/07-03-082-12W4/0	478.7	482.4	McM Channel	STYLUS	PRB, RMA
	MCMURRAY S	00/05-16-082-12W4/0	467.3	474.7	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-065	00/07-09-082-12W4/0	490.0	496.5	McM C Channel	PET	PRB, RMA
	MCMURRAY U/D-066	00/10-17-082-12W4/0	454.0	458.8	McM C Channel	PET	PRB, RMA
	MCMURRAY Y	00/14-05-082-12W4/0	481.7	482.8	McM B2 Seq	PET	PC, PRB, RMA
		00/08-06-082-12W4/0	475.9	477.0	McM Channel	PET	PRB, RMA
		00/01-07-082-12W4/0	469	471.4	McM Channel	CNRL	PRB, RMA
		00/11-01-082-13W4/0	439.8	441.2	McM B2 Seq	HUSKY	PC, PRB, RMA
DUNCAN	MCMURRAY CCC	00/07-29-077-12W4/0	451.5	452.2	McM B1 Seq	CNRL	PRB, RMA
	MCMURRAY III	00/06-22-077-12W4/0	456.0	457.0	McM Channel	CNRL	PRB, RMA
		00/15-22-077-12W4/0	450.5	452.1	McM Channel	CNRL	PRB, RMA
	MCMURRAY YY	00/15-18-077-12W4/0	461.7	462.4	McM Channel	CNRL	PRB, RMA
		00/12-20-077-12W4/0	454.0	455.6	McM Channel	CNRL	PRB, RMA
		00/10-13-077-13W4/0	469.5	471.8	McM Channel	CNRL	PRB, RMA
EAGLENEST	MCMURRAY U/D-001	00/15-14-101-13W4/0	537.0	538.0	McM Channel	ENCANA	PRB, RMA
	WABISKAW U/D-002	00/15-14-101-13W4/0	526.5	531.0	Wbsk D Sand	ENCANA	PRB, RMA
	WABISKAW U/D-003	AA/15-14-101-13W4/0	530.0	530.8	Wbsk D Sand	IMPERIAL	PRB, RMA
	WABISKAW U/D-004	AA/16-17-101-13W4/0	481.0	488.4	Wbsk D Sand	IMPERIAL	PRB, RMA
	WABISKAW U/D-007	00/02-20-101-13W4/0	462.0	467.0	Wbsk D Sand	ENCANA	PRB, RMA
ELLS	WABISKAW C	00/11-19-094-15W4/0	207.9	208.5	Wbsk A Sand	CNRL	PRB, RMA
		00/13-30-094-15W4/0	216.7	222.5	Wbsk A Sand	ENCANA	PRB, RMA
		AA/16-30-094-15W4/0	213.3	217.0	Wbsk A Sand	SHELL	PRB, RMA
		00/12-31-094-15W4/0	219.8	226.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/14-26-094-16W4/0	224.5	231.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/11-35-094-16W4/0	232.0	239.0	Wbsk A Sand	ENCANA	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
ELLS (cont.)	WABISKAW C (cont.)	03/06-36-094-16W4/0	225.3	232.2	Wbsk A Sand	ENCANA	PRB, RMA
		00/05-06-095-15W4/0	235.6	240.8	Wbsk A Sand	ENCANA	PRB, RMA
		AA/05-06-095-15W4/0	234.0	239.3	Wbsk A Sand	SHELL	PRB, RMA
		00/08-07-095-15W4/0	262.0	269.5	Wbsk A Sand	ENCANA	PRB, RMA
		AA/08-07-095-15W4/0	263.0	272.5	Wbsk A Sand	SHELL	PRB, RMA
		00/05-09-095-15W4/0	238.0	241.5	Wbsk A Sand	ENCANA	PRB, RMA
		AA/05-10-095-15W4/0	231.9	234.1	Wbsk A Sand	SHELL	PRB, RMA
		00/05-17-095-15W4/0	275.5	280.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/02-18-095-15W4/0	276.2	280.0	Wbsk A Sand	ENCANA	PRB, RMA
		AA/16-18-095-15W4/0	282.5	289.5	Wbsk A Sand	SHELL	PRB, RMA
		AA/06-21-095-15W4/0	264.6	266.4	Wbsk A Sand	SHELL	PRB, RMA
		00/05-09-095-16W4/0	232.5	234.1	Wbsk A Sand	ENCANA	PRB, RMA
		00/06-10-095-16W4/0	236.4	241.0	Wbsk A Sand	ENCANA	PRB, RMA
		AA/08-11-095-16W4/0	253.6	258.2	Wbsk A Sand	SHELL	PRB, RMA
		00/03-12-095-16W4/0	254.2	257.8	Wbsk A Sand	ENCANA	PRB, RMA
		AA/03-16-095-16W4/0	224.9	228.6	Wbsk A Sand	SHELL	PRB, RMA
		00/12-16-095-16W4/0	235.5	239.5	Wbsk A Sand	ENCANA	PRB, RMA
		00/06-25-095-16W4/0	268.0	272.7	Wbsk A Sand	ENCANA	PRB, RMA
		00/15-34-095-16W4/0	252.0	255.0	Wbsk A Sand	ENCANA	PRB, RMA
		AA/15-34-095-16W4/0	253.3	258.5	Wbsk A Sand	SHELL	PRB, RMA
		00/06-36-095-16W4/0	264.0	268.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/03-06-096-15W4/0	275.5	280.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/02-02-096-16W4/0	253.2	260.0	Wbsk A Sand	ENCANA	PRB, RMA
		00/02-10-096-16W4/0	308.9	313.3	Wbsk A Sand	ENCANA	PRB, RMA
		00/09-11-096-16W4/0	301.8	306.5	Wbsk A Sand	ENCANA	PRB, RMA
		00/09-14-096-16W4/0	337.0	341.5	Wbsk A Sand	ENCANA	PRB, RMA
		00/07-16-096-16W4/0	355.8	359.3	Wbsk A Sand	ENCANA	PRB, RMA
		00/16-23-096-16W4/0	359.7	364.2	Wbsk A Sand	ENCANA	PRB, RMA
		00/03-25-096-16W4/0	349.5	355.5	Wbsk A Sand	ENCANA	PRB, RMA
		00/03-25-096-16W4/0	356.0	361.8	Wbsk C Sand	ENCANA	PRB, RMA
		AA/03-25-096-16W4/0	351.0	354.5	Wbsk A Sand	IMPERIAL	PRB, RMA
		AA/03-25-096-16W4/0	356.5	357.5	Wbsk C Sand	IMPERIAL	PRB, RMA
		AA/03-25-096-16W4/0	359.5	361.5	Wbsk C Sand	ENCANA	PRB, RMA
		00/08-26-096-16W4/0	374.0	379.5	Wbsk A Sand	ENCANA	PRB, RMA
	WABISKAW U/D-011	00/03-06-096-15W4/0	293.0	296.0	Wbsk D Sand	ENCANA	PRB, RMA
	WABISKAW U/D-017	00/03-06-096-15W4/0	291.0	292.0	Wbsk C Sand	ENCANA	PRB, RMA
GLOVER	MCMURRAY A	00/10-31-075-10W4/0	449.4	455.0	McM Channel	PET	PRB, RMA
		00/11-32-075-10W4/0	457.0	458.0	McM Channel	PET	PRB, RMA
HANGINGSTONE	MCMURRAY BB	00/05-27-082-09W4/0	445.7	447.3	McM A1 Seq	NORTHSTAR	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HANGINGSTONE (cont.)	MCMURRAY BB (cont.)	00/08-29-082-09W4/0	438.2	441.3	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/02-33-082-09W4/0	439.2	442.7	McM A1 Seq	NORTHSTAR	PRB, RMA
	MCMURRAY C	00/10-20-081-08W4/0	432.8	438.5	McM Channel	PET	PRB, RMA
	MCMURRAY DDD	00/02-17-082-09W4/0	437.5	439.0	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/02-17-082-09W4/0	440.5	443.0	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/05-18-082-09W4/0	427.0	428.0	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/06-19-082-09W4/0	430.6	432.5	McM Channel	NORTHSTAR	PRB, RMA
	MCMURRAY E	00/09-10-081-10W4/0	440.0	441.0	McM B1 Seq	PET	PRB, RMA
	MCMURRAY G	00/12-15-081-10W4/0	447.0	458.5	McM Channel	PET	PRB, RMA
		00/09-21-081-10W4/0	445.0	449.5	McM Channel	PET	PRB, RMA
		00/07-22-081-10W4/0	448.3	451.5	McM Channel	PET	PRB, RMA
	MCMURRAY G2G	00/06-05-081-08W4/0	468.0	471.0	McM Channel	NORTHSTAR	PRB, RMA
		00/05-06-081-08W4/0	455.2	467.0	McM Channel	NORTHSTAR	PRB, RMA
		00/13-08-081-08W4/0	463.0	465.0	McM Channel	NORTHSTAR	PRB, RMA
	MCMURRAY G3G	00/01-22-084-11W4/0	292.2	294.2	McM B1 Seq	NORTHSTAR	PRB, RMA
		AA/01-22-084-11W4/0	290.5	292.0	McM B1 Seq	PETRO-CANADA	PRB, RMA
	MCMURRAY H2H	00/08-21-081-08W4/0	449.0	455.0	McM Channel	PET	PRB, RMA
		00/11-22-081-08W4/0	444.7	451.0	McM Channel	CALPINE	PRB, RMA
		00/12-23-081-08W4/0	445.1	448.0	McM Channel	CALPINE	PRB, RMA
		00/13-14-082-10W4/0	431.0	432.0	McM Channel	PET	PRB, RMA
	MCMURRAY I	00/09-20-081-10W4/0	437.0	439.8	McM Channel	PET	PRB, RMA
	MCMURRAY III	00/10-09-082-10W4/0	419.0	423.4	McM A1 Seq	PET	PRB, RMA
		00/07-10-082-10W4/0	420.5	422.0	McM A1 Seq	PET	PRB, RMA
	MCMURRAY JJ	00/06-31-082-09W4/0	436.5	437.8	McM A Channel	NORTHSTAR	PRB, RMA
	MCMURRAY K2K	00/16-16-081-08W4/0	461.0	463.0	McM Channel	PET	PRB, RMA
	MCMURRAY KK	00/10-19-082-10W4/0	425.5	426.8	McM B1 Seq	PET	PRB, RMA
		00/03-30-082-10W4/0	423.6	428.4	McM Channel	PET	PRB, RMA
	MCMURRAY KKK	00/12-28-081-10W4/0	427.0	431.2	McM Channel	PET	PRB, RMA
	MCMURRAY L2L	00/09-19-081-08W4/0	430.2	434.0	McM Channel	PET	PRB, RMA
	MCMURRAY LLL	00/11-35-082-08W4/0	445.0	450.0	McM Channel	NORTHSTAR	PRB, RMA
		00/06-03-083-08W4/0	445.0	447.0	McM A Channel	NORTHSTAR	PRB, RMA
	MCMURRAY NNN	00/11-19-081-09W4/0	431.2	432.8	McM Channel	PET	PRB, RMA
	MCMURRAY O2O	00/14-11-082-08W4/0	443.4	460.0	McM Channel	NORTHSTAR	PRB, RMA
	MCMURRAY P2P	AA/06-25-082-08W4/0	451.0	460.0	McM Channel	PETRO-CANADA	PRB, RMA
	MCMURRAY PP	00/12-12-082-11W4/0	435.3	436.5	McM Channel	PET	PRB, RMA
	MCMURRAY QQQ	00/10-09-082-10W4/0	423.4	427.0	McM Channel	PET	PRB, RMA
		00/07-10-082-10W4/0	424.5	431.0	McM A Channel	PET	PRB, RMA
	MCMURRAY U	00/05-13-084-11W4/2	320.0	322.2	McM Channel	NORTHSTAR	PRB, RMA
		00/13-13-084-11W4/0	310.2	311.5	McM Channel	PETRO-CANADA	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HANGINGSTONE (cont.)	MCMURRAY U (cont.)	00/06-14-084-11W4/0	314.5	316.8	McM Channel	NORTHSTAR	PRB, RMA
		AA/06-14-084-11W4/0	312.5	314.3	McM Channel	PETRO-CANADA	PRB, RMA
		AA/09-15-084-11W4/0	301.8	302.5	McM Channel	PETRO-CANADA	PRB, RMA
		F1/02-23-084-11W4/0	299.0	300.0	McM Channel	JCOS	PRB, RMA
	MCMURRAY U/D-043	00/07-10-082-10W4/0	446.7	449.0	McM C Channel	PET	PRB, RMA
	MCMURRAY U/D-051	00/12-27-082-10W4/0	432.3	433.0	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-096	00/10-25-082-10W4/0	425.5	426.5	McM A1 Seq	PET	PRB, RMA
	MCMURRAY U/D-108	00/05-16-081-10W4/0	455.0	459.3	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-181	00/11-01-081-11W4/0	427.5	428.6	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-187	AB/06-12-083-08W4/0	441.0	442.0	McM Channel	PETRO-CANADA	PRB, RMA
	MCMURRAY U/D-188	AA/05-24-081-10W4/0	432.5	436.0	McM Channel	JCOS	PRB, RMA
	MCMURRAY X	00/11-19-081-09W4/0	422.9	426.5	McM A1 Seq	PET	PRB, RMA
		00/12-30-081-09W4/0	425.5	429.0	McM A1 Seq	PET	PRB, RMA
		00/10-25-081-10W4/0	430.0	431.0	McM A1 Seq	PET	PRB, RMA
		00/10-25-081-10W4/0	434.0	435.5	McM Channel	PET	PRB, RMA
		00/10-26-081-10W4/0	432.2	434.0	McM Channel	PET	PRB, RMA
	MCMURRAY Y	00/10-09-082-09W4/0	439.5	440.1	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/07-15-082-09W4/0	454.0	455.0	McM Channel	NORTHSTAR	PRB, RMA
	MCMURRAY YYY	00/11-05-082-08W4/0	432.7	433.5	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/11-05-082-08W4/0	434.0	439.5	McM Channel	NORTHSTAR	PRB, RMA
		00/10-06-082-08W4/0	432.4	434.0	McM A1 Seq	PETRO-CANADA	PRB, RMA
		00/10-06-082-08W4/0	434.2	437.7	McM A2 Seq	PETRO-CANADA	PRB, RMA
		02/10-06-082-08W4/0	432.0	434.0	McM A1 Seq	NORTHSTAR	PRB, RMA
		02/10-06-082-08W4/0	434.0	436.4	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/08-07-082-08W4/0	431.2	433.0	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/08-07-082-08W4/0	433.9	439.5	McM Channel	NORTHSTAR	PRB, RMA
		00/01-01-082-09W4/0	436.2	437.2	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/10-11-082-09W4/0	447.2	449.5	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/10-11-082-09W4/0	450.0	457.0	McM Channel	NORTHSTAR	PRB, RMA
		00/06-12-082-09W4/0	458.5	459.2	McM A2 Seq	NORTHSTAR	PRB, RMA
		02/06-12-082-09W4/0	452.0	453.3	McM A1 Seq	NORTHSTAR	PRB, RMA
		02/06-12-082-09W4/0	454.3	457.0	McM A2 Seq	NORTHSTAR	PRB, RMA
	MCMURRAY Z	00/15-15-082-09W4/0	449.8	452.3	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/15-15-082-09W4/0	452.8	457.0	McM Channel	NORTHSTAR	PRB, RMA
		00/15-16-082-09W4/0	443.5	447.8	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/15-16-082-09W4/0	449.3	451.3	McM Channel	NORTHSTAR	PRB, RMA
		00/07-22-082-09W4/0	453.5	455.8	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/11-23-082-09W4/0	451.9	453.0	McM A1 Seq	NORTHSTAR	PRB, RMA
	MCMURRAY Z2Z	00/06-11-081-08W4/0	440.0	446.0	McM B1 Channel	NORTHSTAR	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HANGINGSTONE (cont.)	WABISKAW A	00/07-30-082-07W4/0	443.3	443.8	Wbsk C Sand	NORTHSTAR	PRB, RMA
		00/11-35-082-08W4/0	443.0	444.0	Wbsk C Sand	NORTHSTAR	PRB, RMA
		00/16-36-082-08W4/0	434.8	435.5	Wbsk C Sand	NORTHSTAR	PRB, RMA
		00/06-01-083-08W4/0	440.0	440.5	Wbsk C Sand	NORTHSTAR	PRB, RMA
		00/07-02-083-08W4/0	448.0	448.5	Wbsk C Sand	NORTHSTAR	PRB, RMA
	WABISKAW-MCMURRAY A	00/13-19-082-08W4/0	455.0	456.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/13-19-082-08W4/0	459.2	460.0	McM Channel	NORTHSTAR	PRB, RMA
		00/07-30-082-08W4/0	453.2	454.6	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/07-30-082-08W4/0	455.8	458.2	McM Channel	NORTHSTAR	PRB, RMA
		00/01-36-082-09W4/0	432.5	435.1	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/01-36-082-09W4/0	435.1	441.1	McM Channel	NORTHSTAR	PRB, RMA
	WABISKAW-MCMURRAY D	00/11-20-081-07W4/0	406.7	407.5	McM A2 Seq	CALPINE	PRB, RMA
		00/06-29-081-07W4/0	411	412.5	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/06-29-081-07W4/0	413.1	414.3	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/06-30-081-07W4/0	428	429.7	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/06-30-081-07W4/0	430.3	431	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/11-32-081-07W4/0	437.0	438.9	McM A1 Seq	CALPINE	PRB, RMA
		00/11-32-081-07W4/0	439.5	440.7	McM A2 Seq	CALPINE	PRB, RMA
		00/11-25-081-08W4/0	443.0	445.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/11-25-081-08W4/0	445.0	447.5	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/15-26-081-08W4/0	438.0	439.5	Wbsk D Valley Fill	CALPINE	PRB, RMA
		00/15-26-081-08W4/0	439.5	441.3	McM A2 Seq	CALPINE	PRB, RMA
		00/15-26-081-08W4/0	446.0	447.2	McM Channel	CALPINE	PRB, RMA
		02/15-27-081-08W4/0	442.1	443.2	McM A Channel	CALPINE	PRB, RMA
		02/15-27-081-08W4/0	448.0	451.5	McM Channel	CALPINE	PRB, RMA
		00/15-28-081-08W4/0	433.3	435.0	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/15-28-081-08W4/0	440.0	442.0	McM Channel	NORTHSTAR	PRB, RMA
		00/11-29-081-08W4/0	430.0	433.5	McM A2 Seq	PET	PRB, RMA
		00/07-31-081-08W4/0	433.3	435.4	McM A2 Seq	PET	PRB, RMA
		00/06-33-081-08W4/0	433.5	435.4	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/06-33-081-08W4/0	438.4	445.0	McM Channel	NORTHSTAR	PRB, RMA
		00/09-34-081-08W4/0	437.0	442.0	McM A Channel	NORTHSTAR	PRB, RMA
		00/09-34-081-08W4/0	445.0	445.8	McM B1 Seq	NORTHSTAR	PRB, RMA
		02/09-34-081-08W4/0	435.0	438.0	McM A Channel	NORTHSTAR	PRB, RMA
		00/07-35-081-08W4/0	439.8	441.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/07-35-081-08W4/0	441.0	446.0	McM A Channel	NORTHSTAR	PRB, RMA
		00/11-36-081-08W4/0	446.0	447.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/11-36-081-08W4/0	449.5	453.0	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/10-24-081-09W4/0	429.5	432.0	McM A2 Seq	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HANGINGSTONE (cont.)	WABISKAW-MCMURRAY D (cont.)	00/08-07-082-07W4/0	448.9	453.5	McM A Channel	NORTHSTAR	PRB, RMA
		00/15-01-082-08W4/0	444	452.8	McM Channel	NORTHSTAR	PRB, RMA
		00/07-02-082-08W4/0	446	447.8	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/07-02-082-08W4/0	450	451.4	McM Channel	NORTHSTAR	PRB, RMA
		00/08-12-082-08W4/0	444.3	446.5	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/08-12-082-08W4/0	448.8	451	McM A Channel	NORTHSTAR	PRB, RMA
	WABISKAW-MCMURRAY E	00/13-03-082-08W4/0	436.1	437.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/13-03-082-08W4/0	437.6	445.0	McM Channel	NORTHSTAR	PRB, RMA
		00/12-04-082-08W4/0	432.8	436.0	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/12-04-082-08W4/0	437.0	441.0	McM Channel	NORTHSTAR	PRB, RMA
		00/07-09-082-08W4/0	440.5	441.1	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/07-09-082-08W4/0	442.2	443.2	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/14-11-082-08W4/0	436.0	437.6	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/14-11-082-08W4/0	438.5	440.4	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/07-16-082-08W4/0	450.8	452.5	Wbsk D Valley Fill	NORTHSTAR	PRB, RMA
		00/10-16-082-08W4/0	453.0	453.7	McM A Channel	PETRO-CANADA	PRB, RMA
		00/15-17-082-08W4/0	453.4	454.5	McM A1 Seq	NORTHSTAR	PRB, RMA
		02/15-17-082-08W4/0	454.0	454.8	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/07-21-082-08W4/0	453.5	454.0	McM A1 Seq	NORTHSTAR	PRB, RMA
		00/07-21-082-08W4/0	454.9	456.2	McM A2 Seq	NORTHSTAR	PRB, RMA
		00/15-22-082-08W4/0	457.0	459.3	McM A2 Seq	NORTHSTAR	PRB, RMA
		AA/10-23-082-08W4/0	455.0	456.0	McM A2 Seq	PETRO-CANADA	PRB, RMA
		00/06-27-082-08W4/0	450.0	452.0	McM A2 Seq	NORTHSTAR	PRB, RMA
HARDY	MCMURRAY J	00/08-34-076-04W4/0	349.0	350.0	McM A1 Seq	STYLUS	PRB, RMA
		00/11-02-077-04W4/0	345.0	348.0	McM A1 Seq	PET	PRB, RMA
		00/11-03-077-04W4/0	346.5	350.0	McM A1 Seq	PET	PRB, RMA
		00/07-07-077-04W4/0	339.2	349.6	McM Channel	PET	PRB, RMA
		00/03-15-077-04W4/0	336.0	338.5	McM A1 Seq	PET	PRB, RMA
		00/03-15-077-04W4/0	338.5	341.0	McM Channel	PET	PRB, RMA
		00/02-18-077-04W4/0	343.0	351.0	McM Channel	PET	PRB, RMA
	MCMURRAY QQ	00/02-18-077-04W4/0	341.0	343.0	McM A1 Seq	PET	PRB, RMA
	MCMURRAY Z	00/11-30-075-04W4/0	387.5	389.9	McM A1 Seq	STYLUS	PRB, RMA
		00/02-35-075-05W4/0	389.8	393.2	McM A1 Seq	STYLUS	PRB, RMA
		00/01-01-076-05W4/0	380.3	382.0	McM A1 Seq	DEVON	PRB, RMA
	MCMURRAY ZZ	00/09-06-077-04W4/0	329.0	342.5	McM Channel	PET	PRB, RMA
	WABISKAW G	00/07-06-076-04W4/0	398.0	401.0	Wbsk C Sand	DEVON	PRB, RMA
		00/01-01-076-05W4/0	376.8	380.0	Wbsk C Sand	DEVON	PRB, RMA
	WABISKAW U/D-011	00/11-30-075-04W4/0	381.7	387.0	Wbsk C Sand	STYLUS	PRB, RMA
	WABISKAW-MCMURRAY A	00/11-16-076-04W4/0	369.0	370.0	Wbsk C Sand	TALISMAN	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HARDY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/13-17-076-04W4/0	373.7	377.2	Wbsk C Sand	PET	PRB, RMA
		00/13-17-076-04W4/0	378.0	380.5	McM A1 Seq	PET	PRB, RMA
		00/13-17-076-04W4/0	385.5	392.7	McM Channel	PET	PRB, RMA
		00/13-19-076-04W4/0	345.7	348.0	Wbsk C Sand	PET	PRB, RMA
		00/13-19-076-04W4/0	348.8	352.0	McM A1 Seq	PET	PRB, RMA
		00/13-20-076-04W4/0	366.0	369.0	Wbsk C Sand	PET	PRB, RMA
		00/13-20-076-04W4/0	370.0	384.0	McM Channel	PET	PRB, RMA
		00/10-21-076-04W4/0	363.9	367.2	Wbsk C Sand	PETRO-CANADA	PRB, RMA
		00/06-22-076-04W4/0	375.0	378.0	Wbsk C Sand	TALISMAN	PRB, RMA
		00/06-28-076-04W4/0	342.5	346.2	Wbsk C Sand	STYLUS	PRB, RMA
		00/06-28-076-04W4/0	347.0	352.2	McM Channel	STYLUS	PRB, RMA
		00/10-30-076-04W4/0	347.2	348.6	Wbsk D Valley Fill	PETRO-CANADA	PRB, RMA
		00/07-31-076-04W4/0	333.8	336.5	Wbsk C Sand	PET	PRB, RMA
		00/07-31-076-04W4/0	337.5	338.5	McM A1 Seq	PET	PRB, RMA
		00/13-32-076-04W4/0	332.0	335.5	Wbsk C Sand	PET	PRB, RMA
		00/13-32-076-04W4/0	336.5	338.2	McM A1 Seq	PET	PRB, RMA
		00/13-32-076-04W4/0	341.2	346.8	McM Channel	PET	PRB, RMA
		00/06-33-076-04W4/0	334.5	337.6	Wbsk C Sand	STYLUS	PRB, RMA
		00/06-33-076-04W4/0	338.8	351.3	McM Channel	STYLUS	PRB, RMA
		00/08-34-076-04W4/0	344.4	348.0	Wbsk C Sand	STYLUS	PRB, RMA
		00/15-35-076-04W4/0	346.0	349.8	Wbsk C Sand	PET	PRB, RMA
		AA/03-30-076-05W4/0	331.8	333.0	Wbsk D Valley Fill	ENCANA	PRB, RMA
		AA/03-30-076-05W4/0	336.0	337.7	McM Channel	ENCANA	PRB, RMA
		00/07-30-076-05W4/0	315.2	316.0	Wbsk C Sand	DEVON ARL	PRB, RMA
		00/07-30-076-05W4/0	319.0	320.8	McM A1 Seq	DEVON ARL	PRB, RMA
		00/07-32-076-05W4/0	328.5	329.0	Wbsk C Sand	PET	PRB, RMA
		00/07-32-076-05W4/0	331.0	331.9	McM A1 Seq	PET	PRB, RMA
		00/07-32-076-05W4/0	335.0	344.5	McM Channel	PET	PRB, RMA
		00/08-33-076-05W4/0	322.3	323.0	Wbsk C Sand	PET	PRB, RMA
		00/08-33-076-05W4/0	324.0	325.7	McM A1 Seq	PET	PRB, RMA
		00/06-34-076-05W4/0	318.5	321.5	Wbsk C Sand	PET	PRB, RMA
		00/06-34-076-05W4/0	322.1	324.6	McM A1 Seq	PET	PRB, RMA
		00/06-34-076-05W4/0	334.1	342.9	McM Channel	PET	PRB, RMA
		00/06-35-076-05W4/0	329.0	331.5	McM A1 Seq	PET	PRB, RMA
		00/12-36-076-05W4/0	324.7	327.0	Wbsk C Sand	PET	PRB, RMA
		00/12-36-076-05W4/0	328.0	329.0	McM A Channel	PET	PRB, RMA
		00/08-25-076-06W4/0	324.0	326.8	McM Channel	DEVON	PRB, RMA
		00/11-02-077-04W4/0	340.5	344.0	Wbsk C Sand	PET	PRB, RMA
		00/11-03-077-04W4/0	341.2	345.0	Wbsk C Sand	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HARDY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/09-06-077-04W4/0	325.0	328.2	Wbsk C Sand	PET	PRB, RMA
		00/07-07-077-04W4/0	336.7	338.5	Wbsk C Sand	PET	PRB, RMA
		00/02-18-077-04W4/0	337.4	340.0	Wbsk C Sand	PET	PRB, RMA
		00/05-19-077-04W4/0	316.0	319.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/05-19-077-04W4/0	323.1	329.0	McM Channel	PET	PRB, RMA
		00/06-20-077-04W4/0	336.5	339.4	Wbsk C Sand	PET	PC, PRB, RMA
		00/07-30-077-04W4/0	325.8	327.5	Wbsk C Sand	SUPERMAN	PC, PRB, RMA
		00/07-30-077-04W4/0	328.5	331.0	Wbsk D Valley Fill	SUPERMAN	PRB, RMA
		00/07-30-077-04W4/0	338.5	342.5	McM Channel	SUPERMAN	PRB, RMA
		00/02-31-077-04W4/0	318.2	320.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/02-31-077-04W4/0	321.0	327.1	McM Channel	PET	PRB, RMA
		00/03-01-077-05W4/0	323.6	324.5	Wbsk C Sand	PET	PRB, RMA
		00/03-01-077-05W4/0	327.4	334.5	McM Channel	PET	PRB, RMA
		00/05-03-077-05W4/0	313.5	318.0	Wbsk C Sand	PET	PRB, RMA
		00/05-03-077-05W4/0	319.0	336.0	McM Channel	PET	PRB, RMA
		00/11-04-077-05W4/0	330.0	332.0	Wbsk C Sand	PET	PRB, RMA
		00/11-04-077-05W4/0	333.0	351.0	McM Channel	PET	PRB, RMA
		00/06-05-077-05W4/0	334.0	336.0	Wbsk C Sand	PET	PRB, RMA
		00/06-05-077-05W4/0	336.0	338.3	McM A1 Seq	PET	PRB, RMA
		00/06-05-077-05W4/0	342.0	349.7	McM Channel	PET	PRB, RMA
		00/01-07-077-05W4/0	331.0	334.0	McM A1 Seq	PET	PRB, RMA
		00/06-08-077-05W4/0	354.4	359.0	McM Channel	PET	PRB, RMA
		00/06-09-077-05W4/0	347.0	351.0	McM Channel	PET	PRB, RMA
		00/05-10-077-05W4/0	341.0	346.0	McM A2 Seq	PET	PRB, RMA
		00/07-11-077-05W4/0	332.0	333.5	Wbsk C Sand	PET	PRB, RMA
		00/07-11-077-05W4/0	335.0	337.3	McM A1 Seq	PET	PRB, RMA
		00/07-11-077-05W4/0	344.5	355.0	McM Channel	PET	PRB, RMA
		00/05-12-077-05W4/0	334.0	336.0	Wbsk C Sand	PET	PRB, RMA
		00/05-12-077-05W4/0	337.0	338.7	McM A1 Seq	PET	PRB, RMA
		00/05-12-077-05W4/0	340.0	350.0	McM Channel	PET	PRB, RMA
		00/04-13-077-05W4/0	336.0	338.0	McM A1 Seq	PET	PRB, RMA
		00/04-13-077-05W4/0	339.3	347.4	McM Channel	PET	PRB, RMA
		00/11-18-077-05W4/0	317.0	319.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/11-18-077-05W4/0	319.8	336.0	McM Channel	PET	PRB, RMA
		00/11-19-077-05W4/0	316.6	317.3	Wbsk C Sand	PET	PC, PRB, RMA
		00/11-19-077-05W4/0	318.2	325.5	McM A1 Seq	PET	PRB, RMA
		00/08-20-077-05W4/0	325.0	326.2	Wbsk C Sand	PET	PC, PRB, RMA
		00/08-20-077-05W4/0	327.0	330.5	McM A1 Seq	PET	PRB, RMA
		00/11-21-077-05W4/0	322.5	323.5	Wbsk C Sand	CNRL	PC, PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HARDY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/11-21-077-05W4/0	324.0	330.5	McM Channel	CNRL	PRB, RMA
		00/07-22-077-05W4/0	338.4	339.5	Wbsk C Sand	PET	PC, PRB, RMA
		00/07-22-077-05W4/0	341.0	344.7	McM A1 Seq	PET	PRB, RMA
		00/05-24-077-05W4/0	343.8	346.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/05-24-077-05W4/0	347.1	348.5	McM A1 Seq	PET	PRB, RMA
		00/05-24-077-05W4/0	352.5	356.0	McM Channel	PET	PRB, RMA
		00/12-25-077-05W4/0	332.8	333.8	Wbsk C Sand	PET	PC, PRB, RMA
		00/12-25-077-05W4/0	336.0	352.0	McM Channel	PET	PRB, RMA
		00/07-26-077-05W4/0	342.5	343.5	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/07-26-077-05W4/0	344.5	348.0	McM A1 Seq	CNRL	PRB, RMA
		00/07-27-077-05W4/0	330.2	332.0	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/07-27-077-05W4/0	333.0	334.2	McM A1 Seq	CNRL	PRB, RMA
		00/07-27-077-05W4/0	335.0	343.5	McM Channel	CNRL	PRB, RMA
		00/11-28-077-05W4/0	324.2	326.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/11-28-077-05W4/0	326.5	330.5	McM A1 Seq	PET	PRB, RMA
		00/05-30-077-05W4/0	319.0	320.4	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/05-30-077-05W4/0	321.0	325.5	McM Channel	CNRL	PRB, RMA
		00/11-31-077-05W4/0	331.0	341.5	McM Channel	DEVON	PRB, RMA
		00/10-33-077-05W4/0	337.2	338.5	Wbsk C Sand	PET	PC, PRB, RMA
		00/10-33-077-05W4/0	339.2	342.0	McM A1 Seq	PET	PRB, RMA
		00/10-33-077-05W4/0	343.0	345.6	McM Channel	PET	PRB, RMA
		00/10-34-077-05W4/0	332.3	334.0	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/10-34-077-05W4/0	335.0	337.4	McM A1 Seq	CNRL	PRB, RMA
		00/10-34-077-05W4/0	340.6	344.0	McM Channel	CNRL	PRB, RMA
		00/05-35-077-05W4/0	338.5	339.5	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/05-35-077-05W4/0	340.5	343.0	McM A1 Seq	CNRL	PRB, RMA
		00/10-36-077-05W4/0	333.0	335.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/10-36-077-05W4/0	336.0	337.0	McM A1 Seq	PET	PRB, RMA
		00/10-36-077-05W4/0	339.5	345.0	McM Channel	PET	PRB, RMA
		00/10-10-077-06W4/0	324.2	324.8	Wbsk D Valley Fill	DEVON ARL	PRB, RMA
		00/07-13-077-06W4/0	321.2	323.0	Wbsk D Valley Fill	PRIMEWEST	PRB, RMA
		AA/11-24-077-06W4/0	320.0	322.0	Wbsk D Valley Fill	MEG	PRB, RMA
		AA/11-24-077-06W4/0	326.5	330.0	McM Channel	MEG	PRB, RMA
		00/07-25-077-06W4/0	321.0	325.6	Wbsk D Valley Fill	DEVON	PRB, RMA
		00/02-26-077-06W4/0	323.0	323.5	Wbsk D Valley Fill	SUPERMAN	PRB, RMA
		00/07-35-077-06W4/0	327.5	338.4	McM Channel	SUPERMAN	PRB, RMA
		00/09-36-077-06W4/0	322.3	324.0	Wbsk C Sand	DEVON	PC, PRB, RMA
		00/09-36-077-06W4/0	325.3	327.3	Wbsk D Valley Fill	DEVON	PRB, RMA
		00/09-36-077-06W4/0	327.3	337.0	McM Channel	DEVON	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HARDY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/08-06-078-04W4/0	323.7	324.7	Wbsk C Sand	PET	PC, PRB, RMA
		00/08-06-078-04W4/0	326.0	328.0	McM A1 Seq	PET	PRB, RMA
		00/15-07-078-04W4/0	335.5	336.5	Wbsk C Sand	PET	PC, PRB, RMA
		00/08-01-078-05W4/0	329.1	330.4	Wbsk C Sand	PET	PC, PRB, RMA
		00/08-01-078-05W4/0	331.5	333.2	McM A1 Seq	PET	PRB, RMA
		00/07-02-078-05W4/0	332.5	333.0	Wbsk C Sand	CNRL	PC, PRB, RMA
		00/07-02-078-05W4/0	334.0	335.5	McM A1 Seq	CNRL	PRB, RMA
		00/07-02-078-05W4/0	336.0	338.0	McM A2 Seq	CNRL	PRB, RMA
		00/05-04-078-05W4/0	338.0	338.8	Wbsk C Sand	PET	PC, PRB, RMA
		00/05-04-078-05W4/0	339.5	361.2	McM Channel	PET	PRB, RMA
		00/08-05-078-05W4/0	328.9	330.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/08-05-078-05W4/0	331.0	333.0	McM A1 Seq	PET	PRB, RMA
		00/08-05-078-05W4/0	334.0	335.5	McM A2 Seq	PET	PRB, RMA
		00/11-06-078-05W4/0	329.2	334.5	McM A2 Seq	DEVON	PRB, RMA
		00/05-07-078-05W4/0	332.1	332.8	Wbsk C Sand	PET	PC, PRB, RMA
		00/05-07-078-05W4/0	333.7	337.4	McM A2 Seq	PET	PRB, RMA
		00/05-08-078-05W4/0	321.0	321.5	Wbsk C Sand	PET	PC, PRB, RMA
		00/05-08-078-05W4/0	322.0	324.0	McM A1 Seq	PET	PRB, RMA
		00/05-08-078-05W4/0	325.0	328.0	McM A2 Seq	PET	PRB, RMA
		00/06-12-078-05W4/0	333.1	334.0	Wbsk C Sand	PET	PC, PRB, RMA
		00/06-12-078-05W4/0	335.0	336.4	McM A1 Seq	PET	PRB, RMA
		00/13-01-078-06W4/0	348.5	349.2	McM A1 Seq	SUPERMAN	PRB, RMA
		00/02-02-078-06W4/0	345.2	350.2	McM Channel	SUPERMAN	PRB, RMA
		00/12-11-078-06W4/0	360.0	364.4	McM A Channel	DEVON	PRB, RMA
KIRBY	MCMURRAY U/D-64	AA/01-34-075-06W4/0	359.0	360.0	McM Channel	ENCANA C.	PC, PRB, RMA
	MCMURRAY U/D-64	AA/03-35-075-06W4/0	352.0	354.5	McM Channel	ENCANA C.	PC, PRB, RMA
	UPPER MANNVILLE B4B	00/11-25-073-08W4/0	459.0	460.2	Wbsk B Valley Fill	CNRL	PC, PRB, RMA
		00/06-34-073-08W4/0	467.5	469.5	Wbsk B Valley Fill	PETRO-CANADA	PRB, RMA
		00/09-34-073-08W4/0	463.0	467.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-34-073-08W4/0	460.7	464.4	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-34-073-08W4/0	574.0	933.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		02/06-35-073-08W4/0	458	461	Wbsk B Valley Fill	CNRL	PC, PRB, RMA
		AA/06-35-073-08W4/0	460.7	461.6	Wbsk B Valley Fill	CNRL	PC, PRB, RMA
		02/07-03-074-08W4/0	448.2	450.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-03-074-08W4/0	452.1	454.4	Wbsk B Valley Fill	CNRL	PRB, RMA
	UPPER MANNVILLE C4C	00/10-04-074-08W4/0	456.9	457.5	Wbsk B Valley Fill	CNRL	PRB
	UPPER MANNVILLE I	00/02-29-072-06W4/0	501.0	502.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/09-30-072-06W4/0	499.0	500.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/10-31-072-06W4/0	506.0	507.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/10-25-072-07W4/0	488.5	489.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/10-36-072-07W4/0	502.0	505.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/05-30-073-04W4/0	414.0	427.5	Wbsk B Valley Fill	BP	PRB, RMA
		02/05-30-073-04W4/0	414.0	425.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/05-31-073-04W4/0	407.5	417.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-31-073-04W4/0	408.5	417.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-02-073-05W4/0	443.0	444.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/13-09-073-05W4/0	431.0	433.0	Wbsk B Valley Fill	ENCANA	PRB, RMA
		W0/13-10-073-05W4/0	437.0	440.0	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/16-10-073-05W4/0	433.0	436.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/12-11-073-05W4/0	433.0	436.3	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/15-11-073-05W4/0	430.4	436.0	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/07-12-073-05W4/0	448.4	452.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/12-13-073-05W4/0	436.0	443.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/14-13-073-05W4/0	541.3	798.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/15-13-073-05W4/0	428.6	435.8	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/10-14-073-05W4/0	432.0	436.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/16-14-073-05W4/0	513.2	743.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/11-15-073-05W4/0	434.0	437.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/16-15-073-05W4/0	437.0	438.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/11-16-073-05W4/0	433.2	436.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		02/11-16-073-05W4/0	433.0	436.4	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		03/11-16-073-05W4/0	507.7	721.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/12-17-073-05W4/0	430.0	433.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		02/12-17-073-05W4/0	430.0	433.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/13-17-073-05W4/0	517.8	722.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/10-19-073-05W4/0	413.9	417.6	Wbsk B Valley Fill	BP	PRB, RMA
		00/03-20-073-05W4/0	425.0	428.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-21-073-05W4/0	423.0	428.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-21-073-05W4/0	428.4	429.2	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-22-073-05W4/0	431.3	437.8	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-22-073-05W4/0	419.0	425.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-23-073-05W4/0	424.0	433.0	Wbsk B Valley Fill	BP	PRB, RMA
		03/10-23-073-05W4/0	425.0	434.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-24-073-05W4/0	425.0	434.7	Wbsk B Valley Fill	BP	PRB, RMA
		02/10-24-073-05W4/0	425.0	435.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-25-073-05W4/0	422.8	437.7	Wbsk B Valley Fill	BAAY LAND	PRB, RMA
		02/07-25-073-05W4/0	422.8	437.7	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-25-073-05W4/0	422.5	435.0	Wbsk B Valley Fill	BP	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/16-26-073-05W4/0	413.0	425.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/16-26-073-05W4/0	415.0	427.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-27-073-05W4/0	410.9	420.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-29-073-05W4/0	408.0	415.6	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-32-073-05W4/0	400.0	405.8	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-33-073-05W4/0	405.0	410.1	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-34-073-05W4/0	401.0	413.5	Wbsk B Valley Fill	BP	PRB, RMA
		02/08-34-073-05W4/0	401.2	414.6	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-35-073-05W4/0	403.4	416.6	Wbsk B Valley Fill	BP	PRB, RMA
		02/07-35-073-05W4/0	401.5	413.7	Wbsk B Valley Fill	BP	PRB, RMA
		03/07-35-073-05W4/0	401.0	411.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-36-073-05W4/0	407.5	421.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/08-36-073-05W4/0	407.0	420.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-04-073-06W4/0	457.0	459.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/06-05-073-06W4/0	472.0	473.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/06-06-073-06W4/0	485.0	485.4	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/06-07-073-06W4/0	471.6	473.2	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/06-08-073-06W4/0	458.6	462.3	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/07-08-073-06W4/0	532.9	814.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/11-09-073-06W4/0	435.5	444.8	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/14-09-073-06W4/0	554.5	793.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/05-10-073-06W4/0	443.0	447.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/04-15-073-06W4/0	442.0	448.6	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/11-15-073-06W4/0	431.0	434.1	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/02-16-073-06W4/0	429.8	434.2	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/01-17-073-06W4/0	441.8	444.4	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/11-17-073-06W4/0	431.2	432.3	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/06-18-073-06W4/0	438.6	440.5	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/02-21-073-06W4/0	421.0	424.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-22-073-06W4/0	419.2	422.8	Wbsk B Valley Fill	BP	PRB, RMA
		00/16-22-073-06W4/0	421.2	426.3	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-25-073-06W4/0	410.0	413.3	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-26-073-06W4/0	415.0	416.4	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-32-073-06W4/0	398.5	402.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-33-073-06W4/0	401.5	406.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-34-073-06W4/0	392.6	397.2	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-36-073-06W4/0	396.3	400.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-11-073-07W4/0	487.5	492.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/10-12-073-07W4/0	469.9	476.2	Wbsk B Valley Fill	ENCANA C.	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/05-14-073-07W4/0	481.0	482.9	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/06-16-073-07W4/0	497.0	499.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/10-16-073-07W4/0	502.8	504.0	Wbsk B Valley Fill	ENCANA	PRB, RMA
		AA/09-20-073-07W4/0	485.5	487.4	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-20-073-07W4/0	485.0	486.7	Wbsk B Valley Fill	CNRL	PRB, RMA
		02/10-20-073-07W4/0	482.0	484.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		05/11-20-073-07W4/0	480.0	482.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		AA/14-20-073-07W4/0	479.7	483.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/15-20-073-07W4/0	482.0	485.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		02/15-20-073-07W4/0	477.0	478.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		04/15-20-073-07W4/0	482.0	485.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		AA/16-20-073-07W4/0	482.0	486.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		AA/02-21-073-07W4/0	495.0	497.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		AA/04-21-073-07W4/0	483.5	487.3	Wbsk B Valley Fill	CNRL	PRB, RMA
		AA/08-21-073-07W4/0	489.5	492.2	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/09-21-073-07W4/0	482.0	484.3	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-21-073-07W4/0	486.0	488.9	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/14-21-073-07W4/0	486.0	487.6	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/09-22-073-07W4/0	467.4	469.8	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-23-073-07W4/0	460.0	463.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/11-23-073-07W4/0	460.5	464.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-24-073-07W4/0	439.0	439.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-24-073-07W4/0	439.0	440.0	Wbsk B Valley Fill	BP	PRB, RMA
		AA/08-30-073-07W4/0	481.3	482.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-30-073-07W4/0	478.0	478.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-05-074-04W4/0	368.0	381.1	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-06-074-04W4/0	365.0	383.5	Wbsk B Valley Fill	BP	PRB, RMA
		02/12-06-074-04W4/0	365.0	382.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-07-074-04W4/0	346.0	366.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-08-074-04W4/0	344.0	357.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/03-09-074-04W4/0	376.3	384.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/05-17-074-04W4/0	337.0	352.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/05-17-074-04W4/0	337.5	352.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-17-074-04W4/0	337.0	351.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-18-074-04W4/0	343.3	359.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/01-01-074-05W4/0	380.0	397.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-01-074-05W4/0	373.0	389.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/16-01-074-05W4/0	360.0	377.7	Wbsk B Valley Fill	BAAY LAND	PRB, RMA
		00/10-02-074-05W4/0	372.7	385.0	Wbsk B Valley Fill	BP	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/09-03-074-05W4/0	371.3	387.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-03-074-05W4/0	372.3	387.3	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-04-074-05W4/0	387.0	397.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-05-074-05W4/0	385.0	391.4	Wbsk B Valley Fill	BP	PRB, RMA
		02/07-05-074-05W4/0	387.5	394.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/05-06-074-05W4/0	371.7	381.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-06-074-05W4/0	375.0	383.2	Wbsk B Valley Fill	BP	PRB, RMA
		00/15-07-074-05W4/0	365.5	376.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/15-07-074-05W4/0	365.3	372.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-08-074-05W4/0	377.5	386.0	Wbsk B Valley Fill	BP	PRB, RMA
		02/12-08-074-05W4/0	378.0	387.4	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-09-074-05W4/0	364.5	374.3	Wbsk B Valley Fill	BP	PRB, RMA
		00/05-11-074-05W4/0	369.0	382.4	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-12-074-05W4/0	352.7	369.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-13-074-05W4/0	398.7	415.1	Wbsk B Valley Fill	BP	PRB, RMA
		02/10-13-074-05W4/0	399.0	414.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-14-074-05W4/0	389.9	405.2	Wbsk B Valley Fill	BP	PRB, RMA
		02/10-14-074-05W4/0	390.0	404.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-16-074-05W4/0	398.7	409.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/14-16-074-05W4/0	393.0	398.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-17-074-05W4/0	392.0	403.1	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-18-074-05W4/0	374.6	384.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-19-074-05W4/0	396.2	407.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/15-20-074-05W4/0	401.0	406.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-21-074-05W4/0	418.0	424.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-21-074-05W4/0	405.7	412.4	Wbsk B Valley Fill	BAAY LAND	PRB, RMA
		00/06-22-074-05W4/0	392.6	401.2	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-30-074-05W4/0	431.0	435.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-30-074-05W4/0	432.7	441.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/13-01-074-06W4/0	381.0	391.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-02-074-06W4/0	397.0	401.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-04-074-06W4/0	398.7	403.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-05-074-06W4/0	388.0	393.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-07-074-06W4/0	403.3	407.2	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-08-074-06W4/0	389.0	396.0	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/10-09-074-06W4/0	379.0	384.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-11-074-06W4/0	386.0	397.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-12-074-06W4/0	377.5	389.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-13-074-06W4/0	373.4	381.9	Wbsk B Valley Fill	BP	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/10-15-074-06W4/0	371.0	381.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/14-16-074-06W4/0	377.0	386.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/14-17-074-06W4/0	390.0	398.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-19-074-06W4/0	402.0	404.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/06-20-074-06W4/0	386.5	393.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/07-20-074-06W4/0	386.0	392.7	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-21-074-06W4/0	374.0	381.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-22-074-06W4/0	370.0	382.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-23-074-06W4/0	377.4	384.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/08-24-074-06W4/0	391.5	400.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-24-074-06W4/0	386.0	397.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/04-25-074-06W4/0	410.5	416.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-25-074-06W4/0	428.2	437.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/03-26-074-06W4/0	400.5	405.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-26-074-06W4/0	412.2	421.1	Wbsk B Valley Fill	BP	PRB, RMA
		00/03-27-074-06W4/0	386.0	391.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-27-074-06W4/0	417.0	420.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/09-28-074-06W4/0	382.5	384.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/10-29-074-06W4/0	382.2	384.7	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/09-30-074-06W4/0	400.9	403.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/11-31-074-06W4/0	386.0	388.2	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/08-33-074-06W4/0	390.6	393.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-34-074-06W4/0	411.0	412.0	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/03-21-074-07W4/0	442.5	444.5	Wbsk B Valley Fill	CNRL	PC, PRB, RMA
		00/11-23-074-07W4/0	415.0	417.2	Wbsk B Valley Fill	CNRL	PC, PRB, RMA
		00/05-24-074-07W4/0	412.5	415.5	Wbsk B Valley Fill	BP	PRB, RMA
		00/02-25-074-07W4/0	406.6	408.0	Wbsk B Valley Fill	BP	PRB, RMA
		00/12-36-074-07W4/0	395.8	398.7	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/11-05-075-06W4/0	382.2	383.4	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/07-01-075-07W4/0	384.2	386.2	Wbsk B Valley Fill	BP	PC, PRB, RMA
		00/10-01-075-07W4/0	384.0	386.0	Wbsk B Valley Fill	BP	PC, PRB, RMA
	UPPER MANNVILLE II	00/10-34-074-09W4/0	435.0	436.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/16-35-074-09W4/0	448.1	449.5	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-01-075-09W4/0	439.0	441.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-02-075-09W4/0	433.0	433.5	Wbsk B Valley Fill	ISH	PRB, RMA
	UPPER MANNVILLE J	00/10-05-073-07W4/0	450.6	451.2	Wbsk B Valley Fill	ENCANA C.	PRB
		00/11-07-073-07W4/0	449.0	450.0	Wbsk B Valley Fill	ENCANA C.	PRB
		00/07-19-073-07W4/0	485.0	486.0	Wbsk B Valley Fill	CNRL	PRB
		00/10-03-073-08W4/0	475.5	476.5	Wbsk B Valley Fill	PETRO-CANADA	PRB

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE J (cont.)	00/10-08-073-08W4/0	475.0	476.0	Wbsk B Valley Fill	ENCANA C.	PRB
		00/06-09-073-08W4/0	472.0	472.5	Wbsk B Valley Fill	ENCANA	PRB
		00/06-10-073-08W4/0	474.5	475.5	Wbsk B Valley Fill	ENCANA C.	PRB
		00/10-13-073-08W4/0	462.0	463.5	Wbsk B Valley Fill	ENCANA C.	PRB
		00/11-14-073-08W4/0	471.6	475.2	Wbsk B Valley Fill	ENCANA	PRB
		00/10-15-073-08W4/0	479.8	482.2	Wbsk B Valley Fill	ENCANA C.	PRB
		00/09-17-073-08W4/0	464.0	465.0	Wbsk B Valley Fill	ENCANA	PRB
		00/10-17-073-08W4/0	462.3	463.2	Wbsk B Valley Fill	ENCANA C.	PRB
		00/15-18-073-08W4/0	454.0	456.3	Wbsk B Valley Fill	ENCANA C.	PRB
		00/09-19-073-08W4/0	451.5	453.0	Wbsk B Valley Fill	CNRL	PRB
		00/16-20-073-08W4/0	459.0	463.0	Wbsk B Valley Fill	ISH	PRB
		00/16-21-073-08W4/0	485.3	486.7	Wbsk B Valley Fill	ISH	PRB
		00/16-22-073-08W4/0	483.2	484.2	Wbsk B Valley Fill	ISH	PRB
		00/16-23-073-08W4/0	461.2	462.8	Wbsk B Valley Fill	ISH	PRB
		00/10-24-073-08W4/0	456.4	460.5	Wbsk B Valley Fill	CNRL	PRB
		00/01-25-073-08W4/0	461.5	463.5	Wbsk B Valley Fill	CNRL	PRB
	UPPER MANNVILLE O4O	00/12-16-074-07W4/0	443.5	444.5	Wbsk B Valley Fill	ISH	PC, PRB, RMA
	UPPER MANNVILLE U2U	00/05-26-073-08W4/0	476.4	477.6	Wbsk B Valley Fill	ISH	PRB, RMA
		00/11-27-073-08W4/0	476.8	478.2	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-29-073-08W4/0	500	943	Wbsk B Valley Fill	ISH	PRB, RMA
		00/11-29-073-08W4/0	451.5	454.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-30-073-08W4/0	438	440	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/05-31-073-08W4/0	439.5	443.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/14-31-073-08W4/0	514.9	916	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/06-32-073-08W4/0	441.8	443.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-33-073-08W4/0	462	463	Wbsk B Valley Fill	PETRO-CANADA	PRB, RMA
		02/10-33-073-08W4/0	460.2	463.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/02-25-073-09W4/0	431.0	433.0	Wbsk B Valley Fill	PET	PRB, RMA
		00/10-25-073-09W4/0	494	592	Wbsk B Valley Fill	PET	PRB, RMA
		00/16-27-073-09W4/0	427.0	429.0	Wbsk B Valley Fill	PET	PRB, RMA
		00/09-35-073-09W4/0	429	431.5	Wbsk B Valley Fill	PET	PRB, RMA
		00/10-35-073-09W4/0	536.0	715.0	Wbsk B Valley Fill	PET	PRB, RMA
		00/07-36-073-09W4/0	436.0	439.0	Wbsk B Valley Fill	PET	PRB, RMA
		00/10-36-073-09W4/0	534.0	686.0	Wbsk B Valley Fill	PET	PRB, RMA
		00/03-05-074-08W4/0	449.0	451.7	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/01-06-074-08W4/0	442.2	444.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/06-06-074-08W4/0	436.0	437.0	Wbsk B Valley Fill	PETRO-CANADA	PRB, RMA
		00/11-01-074-09W4/0	424.4	426.8	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-02-074-09W4/0	428.5	430.5	Wbsk B Valley Fill	CNRL	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE U2U (cont.)	00/09-03-074-09W4/0	423.0	426.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-11-074-09W4/0	423.5	424.8	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-14-074-09W4/0	420.0	421.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		02/10-14-074-09W4/0	420.7	423.2	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/01-23-074-09W4/0	421.0	427.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/04-24-074-09W4/0	421.0	422.0	Wbsk B Valley Fill	CNRL	PRB, RMA
	UPPER MANNVILLE V2V	00/07-36-073-08W4/0	486.7	487.8	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-18-074-07W4/0	460.0	461.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/14-18-074-07W4/0	459.2	461.2	Wbsk B Valley Fill	ISH	PRB, RMA
		00/05-19-074-07W4/0	458.0	459.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-01-074-08W4/0	483.0	483.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/07-07-074-08W4/0	439.5	441.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/06-08-074-08W4/0	456.6	459.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-09-074-08W4/0	456.5	458.8	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-10-074-08W4/0	453.7	455.6	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/02-11-074-08W4/0	467.0	468.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-11-074-08W4/0	473.2	475.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/12-11-074-08W4/0	453.3	455.4	Wbsk B Valley Fill	ISH	PRB, RMA
		00/09-12-074-08W4/0	472.9	473.9	Wbsk B Valley Fill	ISH	PRB, RMA
		00/14-12-074-08W4/0	480.3	482.6	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-13-074-08W4/0	470.3	474.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/11-13-074-08W4/0	477.5	480.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/13-13-074-08W4/0	468.0	469.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/09-14-074-08W4/0	462.3	463.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/10-14-074-08W4/0	458.7	460.2	Wbsk B Valley Fill	ISH	PRB, RMA
		00/11-14-074-08W4/0	455.0	457.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/12-14-074-08W4/0	450.8	453.5	Wbsk B Valley Fill	ISH	PRB, RMA
		00/15-14-074-08W4/0	456.0	457.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/16-14-074-08W4/0	464.5	467.0	Wbsk B Valley Fill	ISH	PRB, RMA
		00/06-15-074-08W4/0	447.0	448.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/01-16-074-08W4/0	453.3	456.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/01-17-074-08W4/0	454.3	456.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-17-074-08W4/0	456.0	457.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/01-18-074-08W4/0	444.1	446.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/02-19-074-08W4/0	427.0	429.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/09-20-074-08W4/0	446.0	447.8	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/11-22-074-08W4/0	469.0	471.5	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/12-23-074-08W4/0	462.3	464.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/06-24-074-08W4/0	465.9	466.8	Wbsk B Valley Fill	ISH	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	UPPER MANNVILLE V2V (cont.)	00/10-12-074-09W4/0	429.0	432.0	Wbsk B Valley Fill	CNRL	PRB, RMA
		00/10-13-074-09W4/0	422.0	423.0	Wbsk B Valley Fill	CNRL	PRB, RMA
	UPPER MANNVILLE YYY	00/08-13-072-06W4/0	474.1	477.3	Wbsk B Valley Fill	ENCANA	PRB, RMA
		00/07-14-072-06W4/0	471.0	472.8	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
		00/08-16-072-06W4/0	477.0	478.0	Wbsk B Valley Fill	ENCANA C.	PRB, RMA
	WABISKAW-MCMURRAY A	00/07-19-074-04W4/0	407.0	408.5	Wbsk C Sand	BP	PRB, RMA
		02/07-20-074-04W4/0	396.5	398.0	Wbsk C Sand	BP	PRB, RMA
		02/07-20-074-04W4/0	398.0	401.5	McM A1 Seq	BP	PRB, RMA
		00/10-29-074-04W4/0	386.0	390.0	Wbsk C Sand	BP	PRB, RMA
		00/10-29-074-04W4/0	390.0	392.0	McM A1 Seq	BP	PRB, RMA
		00/11-30-074-04W4/0	371.0	372.0	Wbsk C Sand	BP	PRB, RMA
		00/11-30-074-04W4/0	373.5	376.0	McM A1 Seq	BP	PRB, RMA
		02/15-30-074-04W4/0	366.0	369.0	McM A Channel	BP	PRB, RMA
		00/03-31-074-04W4/0	361.0	362.0	Wbsk C Sand	DEVON AOG	PRB, RMA
		00/03-31-074-04W4/0	362.0	369.0	McM A Channel	DEVON AOG	PRB, RMA
		02/03-31-074-04W4/0	364.5	371.0	McM A Channel	DEVON AOG	PRB, RMA
		00/06-31-074-04W4/0	361.5	362.0	Wbsk C Sand	DEVON AOG	PRB, RMA
		00/06-31-074-04W4/0	362.0	369.5	McM A Channel	DEVON AOG	PRB, RMA
		00/10-25-074-05W4/0	375.0	376.0	Wbsk C Sand	BP	PRB, RMA
		00/10-25-074-05W4/0	377.0	381.0	McM A1 Seq	BP	PRB, RMA
		02/10-25-074-05W4/0	376.0	377.0	Wbsk C Sand	BP	PRB, RMA
		02/10-25-074-05W4/0	377.0	379.0	McM A1 Seq	BP	PRB, RMA
		00/14-35-074-05W4/0	377.0	378.0	Wbsk C Sand	BP	PRB, RMA
		00/14-35-074-05W4/0	380.5	390.0	McM A Channel	BP	PRB, RMA
		03/14-35-074-05W4/0	379.0	380.0	Wbsk C Sand	BP	PRB, RMA
		03/14-35-074-05W4/0	382.0	387.0	McM A Channel	BP	PRB, RMA
		03/14-35-074-05W4/0	390.0	390.6	McM A Channel	BP	PRB, RMA
		00/02-36-074-05W4/0	351.5	353.0	Wbsk C Sand	BP	PRB, RMA
		00/03-36-074-05W4/0	347.5	351.0	Wbsk C Sand	BP	PRB, RMA
		00/03-36-074-05W4/0	351.0	353.0	McM Channel	BP	PRB, RMA
		00/11-01-075-05W4/0	356.0	359.0	Wbsk C Sand	BP	PRB, RMA
		00/13-02-075-05W4/0	390.0	391.1	Wbsk C Sand	BP	PRB, RMA
		00/08-09-075-05W4/0	372.0	374.0	Wbsk C Sand	DEVON AOG	PRB, RMA
		02/08-09-075-05W4/0	373.0	374.3	Wbsk C Sand	DEVON AOG	PRB, RMA
		00/15-10-075-05W4/0	376.5	379.0	McM A1 Seq	BP	PRB, RMA
		00/13-11-075-05W4/0	364.7	370.0	Wbsk C Sand	BP	PRB, RMA
		00/05-12-075-05W4/0	362.0	365.8	Wbsk C Sand	BP	PRB, RMA
		00/04-14-075-05W4/0	371.8	377.0	Wbsk C Sand	DEVON AOG	PRB, RMA
		00/02-15-075-05W4/0	367.0	370.5	Wbsk C Sand	BP	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
KIRBY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/02-15-075-05W4/0	370.5	379.0	Wbsk D Valley Fill	BP	PRB, RMA
		00/07-15-075-05W4/0	368.2	370.5	Wbsk C Sand	BP	PRB, RMA
		00/07-15-075-05W4/0	370.5	378.5	Wbsk D Valley Fill	BP	PRB, RMA
		02/07-15-075-05W4/0	368.2	370.5	Wbsk C Sand	BP	PRB, RMA
		02/07-15-075-05W4/0	370.5	378.5	Wbsk D Valley Fill	BP	PRB, RMA
		00/08-16-075-05W4/0	372.0	374.8	McM A1 Seq	DEVON AOG	PRB, RMA
		00/01-21-075-05W4/0	370.8	374.6	McM A1 Seq	DEVON AOG	PRB, RMA
		00/03-22-075-05W4/0	369.6	370.0	Wbsk C Sand	DEVON AOG	PRB, RMA
		00/03-22-075-05W4/0	371.0	374.0	McM A1 Seq	DEVON AOG	PRB, RMA
		00/11-22-075-05W4/0	373.8	376.0	McM A1 Seq	DEVON AOG	PRB, RMA
		00/04-23-075-05W4/0	364.9	370.0	Wbsk C Sand	DEVON ARL	PRB, RMA
		AA/11-23-075-05W4/0	363.0	364.0	McM A1 Seq	CNRL	PRB, RMA
		00/06-27-075-05W4/0	377.5	380.0	McM A1 Seq	DEVON AOG	PRB, RMA
		00/06-28-075-05W4/0	376.0	380.0	McM A1 Seq	DEVON AOG	PRB, RMA
		00/12-30-075-05W4/0	372.5	377.0	Wbsk D Valley Fill	DEVON	PRB, RMA
		00/11-32-075-05W4/0	368.5	369.5	Wbsk C Sand	PET	PRB, RMA
		00/11-32-075-05W4/0	370.0	374.8	Wbsk D Valley Fill	PET	PRB, RMA
		00/01-33-075-05W4/0	367.9	369.0	Wbsk C Sand	TALISMAN	PRB, RMA
		00/01-33-075-05W4/0	370.6	374.3	McM A1 Seq	TALISMAN	PRB, RMA
		00/11-33-075-05W4/0	363.5	366.0	Wbsk C Sand	TALISMAN	PRB, RMA
		00/11-33-075-05W4/0	366.0	369.5	Wbsk D Valley Fill	TALISMAN	PRB, RMA
		02/11-33-075-05W4/0	363.5	366.0	Wbsk C Sand	TALISMAN	PRB, RMA
		02/11-33-075-05W4/0	366.0	369.5	Wbsk D Valley Fill	TALISMAN	PRB, RMA
		00/04-34-075-05W4/0	370.2	371.3	McM A1 Seq	TALISMAN	PRB, RMA
		02/04-34-075-05W4/0	370.2	371.3	Wbsk D Valley Fill	TALISMAN	PRB, RMA
		00/12-26-075-06W4/0	350.8	353.0	Wbsk D Valley Fill	DEVON	PRB, RMA
		AA/01-35-075-06W4/0	353.0	355.1	Wbsk D Valley Fill	ENCANA C.	PC, PRB, RMA
		AA/03-35-075-06W4/0	345.0	345.9	Wbsk C Sand	ENCANA C.	PC, PRB, RMA
		AA/03-35-075-06W4/0	346.1	349.0	Wbsk D Valley Fill	ENCANA C.	PC, PRB, RMA
		00/06-36-075-06W4/0	356.5	357.0	Wbsk C Sand	DEVON	PRB, RMA
		00/06-36-075-06W4/0	357.0	359.5	Wbsk D Valley Fill	DEVON	PRB, RMA
		00/11-04-076-05W4/0	359.5	360.5	Wbsk C Sand	PET	PRB, RMA
		00/11-04-076-05W4/0	361.3	366.7	McM Channel	PET	PRB, RMA
		00/10-05-076-05W4/0	363.6	366.0	Wbsk C Sand	PET	PRB, RMA
		00/10-05-076-05W4/0	366.4	371.3	McM Channel	PET	PRB, RMA
		00/04-01-076-06W4/0	358.3	359.5	Wbsk C Sand	DEVON	PRB, RMA
		00/04-01-076-06W4/0	359.5	367.0	Wbsk D Valley Fill	DEVON	PRB, RMA
		AA/02-02-076-06W4/0	360.0	361.0	Wbsk C Sand	ENCANA C.	PRB, RMA
		AA/02-02-076-06W4/0	362.0	362.7	Wbsk D Valley Fill	ENCANA C.	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	AA/04-02-076-06W4/0	356.0	357.0	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/15-02-076-06W4/0	337.0	339.8	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/04-03-076-06W4/0	351.5	353.0	Wbsk C Sand	DEVON	PRB, RMA
		AA/06-03-076-06W4/0	350.5	351.5	Wbsk C Sand	ENCANA C.	PRB, RMA
LEISMER	MCMURRAY A3A	00/02-17-078-08W4/0	320.0	323.0	McM Channel	PET	PRB, RMA
	MCMURRAY AA	00/11-04-080-09W4/0	434.3	440.0	McM B1 Seq	EnCana	PRB, RMA
		00/11-04-080-09W4/0	440.0	447.0	McM B2 Seq	EnCana	PRB, RMA
		00/07-05-080-09W4/0	440.0	448.0	McM B1 Seq	ENCANA	PRB, RMA
		00/06-06-080-09W4/0	439.0	449.0	McM Channel	ENCANA C.	PRB, RMA
		00/11-07-080-09W4/0	437.0	446.2	McM Channel	ENCANA	PRB, RMA
	MCMURRAY B3B	00/10-06-077-10W4/0	449.0	452.6	McM Channel	PET	PRB, RMA
	MCMURRAY EEE	00/10-22-077-11W4/0	470.0	472.4	McM Channel	PET	PRB, RMA
	MCMURRAY I4I	00/09-18-079-07W4/0	310.5	315.2	McM B1 Channel	CNRL	PC, PRB, RMA
		00/09-19-079-07W4/0	312.0	317.0	McM B1 Channel	CNRL	PC, PRB, RMA
		00/05-20-079-07W4/0	310.8	316.5	McM B1 Channel	CNRL	PC, PRB, RMA
		00/04-30-079-07W4/0	323.5	329.0	McM Channel	ENCANA C.	PRB, RMA
		00/11-24-079-08W4/0	320.8	325.5	McM B1 Seq	CNRL	PC, PRB, RMA
	MCMURRAY K2K	00/08-16-078-10W4/0	392.5	393.0	McM A1 Seq	PET	PRB, RMA
		00/08-16-078-10W4/0	393.5	394.0	McM A2 Seq	PET	PRB, RMA
		00/05-20-078-10W4/0	414.0	416.0	McM A1 Seq	PET	PRB, RMA
		00/06-21-078-10W4/0	402.0	402.7	McM A1 Seq	PET	PRB, RMA
	MCMURRAY NN	00/11-15-077-11W4/0	448.5	458.2	McM Channel	PET	PRB, RMA
	MCMURRAY OO	00/09-07-077-10W4/0	460.8	464.5	McM Channel	PET	PRB, RMA
		00/09-12-077-11W4/0	450.5	457.0	McM Channel	PET	PRB, RMA
		00/09-13-077-11W4/0	467.4	468.0	McM Channel	PET	PRB, RMA
	MCMURRAY P	00/07-29-078-09W4/0	419.0	421.0	McM C Channel	ENCANA C.	PRB, RMA
	MCMURRAY P2P	00/09-13-077-11W4/0	461.7	462.6	McM B1 Seq	PET	PRB, RMA
	MCMURRAY Q	00/03-20-079-08W4/0	375.0	378.5	McM C Channel	ENCANA C.	PRB, RMA
		00/08-13-079-09W4/0	383.0	384.5	McM C Channel	ENCANA C.	PRB, RMA
	MCMURRAY Q4Q	AA/03-04-076-06W4/0	363.0	364.0	McM B1 Seq	DEVON ARL	PRB, RMA
	MCMURRAY QQ	00/06-14-079-10W4/0	391.8	401.0	McM Channel	PET	PRB, RMA
		00/07-14-079-10W4/0	392.3	400.0	McM Channel	PET	PRB, RMA
		00/08-15-079-10W4/0	421.0	421.8	McM Channel	PET	PRB, RMA
	MCMURRAY SS	00/05-27-077-11W4/0	460.0	465.0	McM B1 Seq	PET	PRB, RMA
	MCMURRAY TT	00/06-35-077-11W4/0	461.3	464.3	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-325	00/12-09-079-10W4/0	423.0	424.0	McM Channel	PET	PRB, RMA
	MCMURRAY U/D-386	00/16-03-080-08W4/0	385.0	387.0	McM C Channel	NORTHSTAR	PRB, RMA
	MCMURRAY U/D-392	AA/11-23-077-06W4/0	326.0	328.0	McM Channel	MEG	PRB, RMA
	MCMURRAY V3V	00/05-33-078-10W4/0	404.0	408.6	McM B1 Seq	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	MCMURRAY V3V (cont.)	00/12-03-079-10W4/0	417.3	418.0	McM B1 Seq	PET	PRB, RMA
		00/12-09-079-10W4/0	417.0	418.3	McM B1 Seq	PET	PRB, RMA
		00/02-16-079-10W4/0	428.5	429.0	McM B1 Seq	PET	PRB, RMA
	MCMURRAY X	00/09-32-079-09W4/0	452.0	453.0	McM C Channel	ENCANA C.	PRB, RMA
	MCMURRAY Y3Y	00/06-07-079-09W4/0	397.0	402.5	McM Channel	ENCANA	PRB, RMA
		00/06-18-079-09W4/0	412.2	413.8	McM Channel	ENCANA	PRB, RMA
		00/03-24-079-10W4/0	425.0	425.5	McM B1 Seq	ENCANA C.	PRB, RMA
		00/03-24-079-10W4/0	430.0	431.0	McM B1 Seq	ENCANA C.	PRB, RMA
	MCMURRAY Z2Z	00/03-09-078-08W4/0	315.1	318.2	McM Channel	PET	PRB, RMA
		00/03-14-078-08W4/0	302.9	305.0	McM A2 Seq	PET	PRB, RMA
		00/05-15-078-08W4/0	299.0	302.0	McM Channel	PET	PRB, RMA
		00/12-22-078-08W4/0	312.0	313.0	McM Channel	PET	PRB, RMA
		00/11-23-078-08W4/0	296.4	299.0	McM A2 Seq	PET	PRB, RMA
		00/06-28-078-08W4/0	312.6	313.0	McM Channel	PET	PRB, RMA
	WABISKAW K	00/10-27-078-09W4/0	367.6	368.8	Wbsk C Sand	PARAMOUNT	PRB, RMA
		00/16-28-078-09W4/0	377.0	378.0	Wbsk C Sand	PET	PRB, RMA
		00/07-29-078-09W4/0	392.0	393.0	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/07-32-078-09W4/0	400.6	401.0	Wbsk C Sand	ENCANA	PRB, RMA
	WABISKAW U/D-086	00/06-08-078-10W4/0	411.0	412.0	Wbsk C Sand	PET	PRB, RMA
	WABISKAW-MCMURRAY A	00/11-17-077-07W4/0	299.6	302.2	Wbsk C Sand	DEVON	PRB, RMA
		00/06-20-077-07W4/0	301.8	305.5	Wbsk C Sand	DEVON	PRB, RMA
		AA/14-27-077-07W4/0	290.3	291.0	Wbsk C Sand	NEXEN	PRB, RMA
		00/10-29-077-07W4/0	292.0	293.5	Wbsk C Sand	DEVON	PRB, RMA
		00/06-30-077-07W4/0	290.8	292.5	Wbsk C Sand	DEVON ARL	PRB, RMA
		00/02-31-077-07W4/0	289.8	291.0	Wbsk C Sand	NEXEN	PRB, RMA
		00/07-32-077-07W4/0	286.7	289.2	Wbsk C Sand	DEVON ARL	PRB, RMA
		AA/15-32-077-07W4/0	291.0	292.0	Wbsk C Sand	NEXEN	PRB, RMA
		00/16-32-077-07W4/0	292.8	295.4	Wbsk C Sand	DEVON ARL	PRB, RMA
		AA/06-34-077-07W4/0	296.2	297.2	Wbsk C Sand	NEXEN	PRB, RMA
		00/08-34-077-07W4/0	294.6	295.8	Wbsk C Sand	BP	PRB, RMA
		00/09-34-077-08W4/0	300.0	302.4	Wbsk C Sand	BP	PRB, RMA
		00/11-36-077-08W4/0	296.2	297.5	Wbsk C Sand	BP	PRB, RMA
		00/11-02-078-07W4/0	298.9	300.0	Wbsk C Sand	DEVON	PRB, RMA
		00/06-03-078-07W4/0	287.0	288.5	Wbsk C Sand	DEVON	PRB, RMA
		00/07-04-078-07W4/0	289.0	291.0	Wbsk C Sand	BP	PRB, RMA
		00/06-05-078-07W4/0	276.4	280.0	Wbsk C Sand	BP	PRB, RMA
		00/08-05-078-07W4/0	286.8	289.5	Wbsk C Sand	BP	PRB, RMA
		00/09-07-078-07W4/0	291.0	293.0	Wbsk C Sand	BP	PRB, RMA
		00/11-07-078-07W4/0	294.2	295.0	Wbsk C Sand	BP	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/16-09-078-07W4/0	282.2	283.5	Wbsk C Sand	BP	PRB, RMA
		00/08-10-078-07W4/0	272.0	273.8	Wbsk C Sand	DEVON	PRB, RMA
		00/05-15-078-07W4/0	268.2	269.5	Wbsk C Sand	DEVON	PRB, RMA
		00/06-16-078-07W4/0	280.1	281.6	Wbsk C Sand	BP	PRB, RMA
		00/11-17-078-07W4/0	277.4	278.1	Wbsk C Sand	BP	PRB, RMA
		00/10-19-078-07W4/0	283.0	284.0	Wbsk C Sand	DEVON	PRB, RMA
		00/10-20-078-07W4/0	280.0	281.0	Wbsk C Sand	DEVON	PRB, RMA
		00/12-21-078-07W4/0	260.0	260.4	Wbsk C Sand	DEVON ARL	PRB, RMA
		00/05-22-078-07W4/0	242.8	244.1	Wbsk C Sand	CNRL	PRB, RMA
		00/11-23-078-07W4/0	269.0	270.0	Wbsk C Sand	DEVON ARL	PRB, RMA
		00/15-26-078-07W4/0	272.1	273.0	Wbsk C Sand	CNRL	PRB, RMA
		00/15-26-078-07W4/0	274.0	278.8	McM A2 Seq	CNRL	PRB, RMA
		00/10-27-078-07W4/0	284.0	285.5	Wbsk C Sand	CNRL	PRB, RMA
		00/13-27-078-07W4/0	283.0	284.5	Wbsk C Sand	CNRL	PRB, RMA
		00/07-28-078-07W4/0	289.3	290.2	Wbsk C Sand	DEVON	PRB, RMA
		00/07-29-078-07W4/0	281.5	282.5	Wbsk C Sand	DEVON	PRB, RMA
		00/06-30-078-07W4/0	286.5	289.5	Wbsk C Sand	DEVON	PRB, RMA
		00/12-31-078-07W4/0	288.6	289.2	Wbsk C Sand	DEVON ARL	PRB, RMA
		00/05-34-078-07W4/0	282.0	283.5	Wbsk C Sand	CNRL	PRB, RMA
		00/05-34-078-07W4/0	284.0	285.5	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/11-34-078-07W4/0	282.0	282.8	Wbsk C Sand	CNRL	PRB, RMA
		00/16-34-078-07W4/0	281.0	282.8	Wbsk C Sand	CNRL	PRB, RMA
		00/16-34-078-07W4/0	283.0	286.5	McM A2 Seq	CNRL	PRB, RMA
		00/07-35-078-07W4/0	277.0	277.7	Wbsk C Sand	CNRL	PRB, RMA
		00/07-35-078-07W4/0	279.2	281.9	McM A2 Seq	CNRL	PRB, RMA
		00/06-36-078-07W4/0	266.7	267.5	Wbsk C Sand	CNRL	PRB, RMA
		00/06-36-078-07W4/0	268.0	277.0	McM A2 Seq	CNRL	PRB, RMA
		00/13-36-078-07W4/0	287.5	288.3	Wbsk C Sand	CNRL	PRB, RMA
		00/13-36-078-07W4/0	289.0	290.5	McM A2 Seq	CNRL	PRB, RMA
		00/03-03-078-08W4/0	295.5	298.5	Wbsk C Sand	BP	PRB, RMA
		00/03-09-078-08W4/0	310.8	312.7	Wbsk C Sand	PET	PRB, RMA
		00/10-12-078-08W4/0	292.3	294.5	Wbsk C Sand	PET	PRB, RMA
		00/03-14-078-08W4/0	299.0	302.0	Wbsk C Sand	PET	PRB, RMA
		00/05-15-078-08W4/0	296.1	298.0	Wbsk C Sand	PET	PRB, RMA
		00/02-16-078-08W4/0	295.0	298.0	Wbsk C Sand	PET	PRB, RMA
		00/02-17-078-08W4/0	316.2	318.5	Wbsk C Sand	PET	PRB, RMA
		00/15-20-078-08W4/0	307.8	309.0	Wbsk C Sand	PET	PRB, RMA
		00/10-21-078-08W4/0	306.2	307.3	Wbsk C Sand	PET	PRB, RMA
		00/12-22-078-08W4/0	309.0	311.0	Wbsk C Sand	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/11-23-078-08W4/0	293.8	295.5	Wbsk C Sand	PET	PRB, RMA
		00/11-26-078-08W4/0	293.0	294.4	Wbsk C Sand	PET	PRB, RMA
		00/09-27-078-08W4/0	289.5	291.2	Wbsk C Sand	PET	PRB, RMA
		00/06-28-078-08W4/0	306.0	309.0	Wbsk C Sand	PET	PRB, RMA
		00/08-29-078-08W4/0	310.3	313.0	Wbsk C Sand	PET	PRB, RMA
		00/09-34-078-08W4/0	296.1	297.6	Wbsk C Sand	PET	PRB, RMA
		00/11-36-078-08W4/0	295.4	297.0	Wbsk C Sand	PET	PRB, RMA
		00/11-06-079-06W4/0	290.0	291.0	Wbsk C Sand	CNRL	PRB, RMA
		00/11-06-079-06W4/0	292.0	296.8	McM A2 Seq	CNRL	PRB, RMA
		00/12-31-079-06W4/0	288.2	289.2	Wbsk C Sand	CNRL	PRB, RMA
		00/13-01-079-07W4/0	287.0	288.0	Wbsk C Sand	CNRL	PRB, RMA
		00/13-01-079-07W4/0	289.0	293.5	McM A2 Seq	CNRL	PRB, RMA
		02/13-01-079-07W4/0	288.0	289.0	Wbsk C Sand	CNRL	PRB, RMA
		02/13-01-079-07W4/0	290.0	296.0	McM A2 Seq	CNRL	PRB, RMA
		00/11-03-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL	PRB, RMA
		00/11-03-079-07W4/0	289.0	290.5	McM A Channel	CNRL	PRB, RMA
		00/01-04-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL	PRB, RMA
		00/05-04-079-07W4/0	290.0	291.2	Wbsk C Sand	CNRL	PRB, RMA
		00/10-05-079-07W4/0	294.4	295.0	Wbsk C Sand	CNRL	PRB, RMA
		00/12-05-079-07W4/0	297.0	298.2	Wbsk C Sand	CNRL	PRB, RMA
		02/09-06-079-07W4/0	291.8	293.2	Wbsk C Sand	CNRL	PRB, RMA
		02/09-06-079-07W4/0	294.5	296.0	McM A Channel	CNRL	PRB, RMA
		00/10-06-079-07W4/0	287.2	289.2	Wbsk C Sand	PET	PRB, RMA
		00/09-07-079-07W4/0	291.8	293.0	Wbsk C Sand	CNRL	PRB, RMA
		00/09-07-079-07W4/0	294.0	296.0	McM A1 Seq	CNRL	PRB, RMA
		00/11-08-079-07W4/0	296.0	297.0	Wbsk C Sand	CNRL	PRB, RMA
		00/11-08-079-07W4/0	298.5	300.2	McM A1 Seq	CNRL	PRB, RMA
		00/03-09-079-07W4/0	301.0	302.7	Wbsk C Sand	CNRL	PRB, RMA
		00/03-09-079-07W4/0	303.5	306.0	McM A Channel	CNRL	PRB, RMA
		00/02-10-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL	PRB, RMA
		00/02-10-079-07W4/0	289.0	290.0	McM A1 Seq	CNRL	PRB, RMA
		00/02-10-079-07W4/0	290.0	293.0	McM A2 Seq	CNRL	PRB, RMA
		00/10-10-079-07W4/0	291.0	293.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-11-079-07W4/0	282.7	283.5	Wbsk C Sand	CNRL	PRB, RMA
		00/10-11-079-07W4/0	285.0	288.8	McM A2 Seq	CNRL	PRB, RMA
		00/09-12-079-07W4/0	282.7	283.7	Wbsk C Sand	CNRL	PRB, RMA
		00/09-12-079-07W4/0	284.3	289.0	McM A Channel	CNRL	PRB, RMA
		00/10-12-079-07W4/0	281.3	281.9	Wbsk C Sand	CNRL	PRB, RMA
		00/10-12-079-07W4/0	283.0	287.2	McM A Channel	CNRL	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/04-13-079-07W4/0	283.0	284.0	Wbsk C Sand	CNRL	PRB, RMA
		00/04-13-079-07W4/0	284.8	287.0	McM A1 Seq	CNRL	PRB, RMA
		00/04-13-079-07W4/0	287.0	289.0	McM A2 Seq	CNRL	PRB, RMA
		00/11-13-079-07W4/0	269.0	270.0	Wbsk C Sand	CNRL	PRB, RMA
		00/11-13-079-07W4/0	271.0	275.5	McM A Channel	CNRL	PRB, RMA
		AA/10-14-079-07W4/0	295.4	296.0	Wbsk C Sand	PETRO-CANADA	PRB, RMA
		AA/10-14-079-07W4/0	297.7	299.5	McM A2 Seq	PETRO-CANADA	PRB, RMA
		00/01-15-079-07W4/0	292.8	294.5	Wbsk C Sand	CNRL	PRB, RMA
		00/01-15-079-07W4/0	295.5	299.0	McM A Channel	CNRL	PRB, RMA
		00/06-15-079-07W4/0	305.0	309.0	McM A Channel	CNRL	PRB, RMA
		00/13-16-079-07W4/0	307.0	310.5	McM A Channel	CNRL	PRB, RMA
		00/12-17-079-07W4/0	301.0	303.0	McM A1 Seq	CNRL	PRB, RMA
		00/03-18-079-07W4/0	301.0	301.2	Wbsk C Sand	CNRL	PRB, RMA
		00/09-18-079-07W4/0	299.0	300.2	Wbsk C Sand	CNRL	PRB, RMA
		00/09-18-079-07W4/0	301.3	304.5	McM A Channel	CNRL	PRB, RMA
		00/09-19-079-07W4/0	301.2	302.5	Wbsk C Sand	CNRL	PRB, RMA
		00/09-19-079-07W4/0	304.7	306.5	McM A1 Seq	CNRL	PRB, RMA
		00/05-20-079-07W4/0	300.0	301.0	Wbsk C Sand	CNRL	PRB, RMA
		00/05-20-079-07W4/0	302.2	304.5	McM A1 Seq	CNRL	PRB, RMA
		00/04-21-079-07W4/0	308.2	309.0	Wbsk C Sand	CNRL	PRB, RMA
		00/04-21-079-07W4/0	310.3	314.0	McM A Channel	CNRL	PRB, RMA
		00/07-21-079-07W4/0	313.2	315.0	McM A1 Seq	CNRL	PRB, RMA
		00/12-22-079-07W4/0	312.0	312.6	Wbsk C Sand	CNRL	PRB, RMA
		00/12-22-079-07W4/0	314.0	316.7	McM A1 Seq	CNRL	PRB, RMA
		00/10-25-079-07W4/0	295.3	296.2	Wbsk C Sand	CNRL	PRB, RMA
		00/04-27-079-07W4/0	304.2	305.2	Wbsk C Sand	CNRL	PRB, RMA
		00/04-27-079-07W4/0	306.5	308.0	McM A1 Seq	CNRL	PRB, RMA
		02/04-28-079-07W4/0	307.0	308.0	Wbsk C Sand	CNRL	PRB, RMA
		00/04-30-079-07W4/0	313.0	314.5	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/04-30-079-07W4/0	316.0	317.8	McM A1 Seq	ENCANA C.	PRB, RMA
		00/11-33-079-07W4/0	318.0	319.8	Wbsk C Sand	CNRL	PRB, RMA
		00/11-33-079-07W4/0	320.5	321.8	McM A1 Seq	CNRL	PRB, RMA
		00/12-35-079-07W4/0	304.7	305.2	Wbsk C Sand	CNRL	PRB, RMA
		00/12-36-079-07W4/0	288.2	289.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-01-079-08W4/0	295.0	296.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-01-079-08W4/0	298.0	299.6	McM A2 Seq	CNRL	PRB, RMA
		00/10-02-079-08W4/0	299.8	301.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-02-079-08W4/0	302.2	303.8	McM A2 Seq	CNRL	PRB, RMA
		00/07-03-079-08W4/0	307.0	309.0	Wbsk C Sand	PET	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/04-10-079-08W4/0	320.0	321.5	Wbsk C Sand	CNRL	PRB, RMA
		00/11-11-079-08W4/0	306.0	308.0	Wbsk C Sand	PET	PRB, RMA
		00/10-12-079-08W4/0	297.5	298.4	Wbsk C Sand	PET	PRB, RMA
		00/09-13-079-08W4/0	299.0	300.0	Wbsk C Sand	CNRL	PRB, RMA
		00/13-13-079-08W4/0	307.5	308.5	Wbsk C Sand	CNRL	PRB, RMA
		00/01-14-079-08W4/0	305.0	306.2	Wbsk C Sand	CNRL	PRB, RMA
		00/11-15-079-08W4/0	335.0	336.5	Wbsk C Sand	CNRL	PRB, RMA
		00/13-15-079-08W4/0	336.3	338.0	Wbsk C Sand	CNRL	PRB, RMA
		00/11-16-079-08W4/0	341.3	342.0	Wbsk C Sand	CNRL	PRB, RMA
		00/03-20-079-08W4/0	346.0	346.8	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/01-21-079-08W4/0	334.0	335.0	Wbsk C Sand	CNRL	PRB, RMA
		00/03-22-079-08W4/0	331.5	333.0	Wbsk C Sand	CNRL	PRB, RMA
		00/16-22-079-08W4/2	346.2	348.0	Wbsk C Sand	CNRL	PRB, RMA
		00/12-23-079-08W4/2	332.6	333.3	Wbsk C Sand	CNRL	PRB, RMA
		00/11-24-079-08W4/2	309.8	312.7	Wbsk C Sand	CNRL	PRB, RMA
		00/01-26-079-08W4/0	338.0	339.5	Wbsk C Sand	EnCana C.	PRB, RMA
		00/03-28-079-08W4/0	352.0	353.0	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/04-29-079-08W4/0	372.5	374.0	Wbsk C Sand	EnCana	PRB, RMA
		00/10-36-079-08W4/0	332.6	334.6	Wbsk C Sand	EnCana C.	PRB, RMA
		00/07-06-080-06W4/0	288.3	290.0	Wbsk C Sand	CNRL	PRB, RMA
		00/06-02-080-07W4/0	306.3	308.5	Wbsk C Sand	PETRO-CANADA	PRB, RMA
		00/11-06-080-07W4/0	337.0	339.0	Wbsk C Sand	NORTHSTAR	PRB, RMA
		00/14-12-080-08W4/0	356.5	358.5	Wbsk C Sand	PET	PRB, RMA
	WABISKAW-MCMURRAY B	00/11-16-076-06W4/0	319.0	323.0	Wbsk D Valley Fill	Devon	PRB, RMA
	WABISKAW-MCMURRAY C	00/06-07-079-09W4/0	392.0	393.8	Wbsk C Sand	ENCANA	PRB, RMA
		00/06-07-079-09W4/0	393.8	395.5	McM A1 Seq	ENCANA	PRB, RMA
		00/08-08-079-09W4/0	398.5	400.5	McM A1 Seq	ENCANA C.	PRB, RMA
		00/08-08-079-09W4/0	400.5	406.0	McM Channel	ENCANA C.	PRB, RMA
		00/11-16-079-09W4/0	413.5	415.0	Wbsk C Sand	ENCANA C.	PRB, RMA
		00/11-16-079-09W4/0	415.3	417.4	McM A1 Seq	ENCANA C.	PRB, RMA
		02/11-16-079-09W4/0	414.0	415.0	Wbsk C Sand	PET	PRB, RMA
		02/11-16-079-09W4/0	415.3	417.0	McM A1 Seq	PET	PRB, RMA
		00/12-16-079-09W4/0	418.3	421.0	McM A1 Seq	PET	PRB, RMA
		00/05-17-079-09W4/0	397.7	401.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/05-17-079-09W4/0	401.0	406.2	McM Channel	ENCANA C.	PRB, RMA
		00/06-18-079-09W4/0	401.0	401.7	Wbsk C Sand	ENCANA	PRB, RMA
		00/06-18-079-09W4/0	401.7	403.1	McM A1 Seq	ENCANA	PRB, RMA
		00/08-19-079-09W4/0	410.5	413.5	McM A1 Seq	ENCANA C.	PRB, RMA
		00/08-19-079-09W4/0	417.0	420.0	McM Channel	ENCANA C.	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY C (cont.)	00/09-21-079-09W4/0	411.3	412.5	Wbsk C Sand	EnCana	PRB, RMA
		00/09-21-079-09W4/0	412.5	413.3	McM A1 Seq	EnCana	PRB, RMA
		00/07-10-079-10W4/0	407.6	408.5	McM A1 Seq	PET	PRB, RMA
		00/10-12-079-10W4/0	393.0	394.0	McM A1 Seq	ENCANA	PRB, RMA
		00/07-13-079-10W4/0	409.0	410.2	McM A1 Seq	ENCANA C.	PRB, RMA
		00/06-14-079-10W4/0	384.0	387.5	McM A1 Seq	PET	PRB, RMA
		00/07-14-079-10W4/0	384.0	388.0	McM A1 Seq	PET	PRB, RMA
		00/08-15-079-10W4/0	409.8	410.8	McM A1 Seq	PET	PRB, RMA
		00/02-16-079-10W4/0	421.6	424.0	McM A1 Seq	PET	PRB, RMA
		00/06-23-079-10W4/0	409.0	412.0	McM A1 Seq	PET	PRB, RMA
		00/03-24-079-10W4/0	416.0	419.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/12-25-079-10W4/0	432.0	435.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/15-26-079-10W4/0	432.5	434.0	McM A1 Seq	PET	PRB, RMA
		00/06-35-079-10W4/0	433.5	435.0	McM A1 Seq	PET	PRB, RMA
	WABISKAW-MCMURRAY D	AA/12-13-077-08W4/0	301.5	303.0	Wbsk C Sand	NEXEN	PRB, RMA
		00/14-13-077-08W4/0	301.2	302.4	Wbsk C Sand	BP	PRB, RMA
		00/07-14-077-08W4/0	312.0	313.0	Wbsk C Sand	BP	PRB, RMA
		00/07-14-077-08W4/0	314.3	315.3	McM A Channel	BP	PRB, RMA
		00/09-15-077-08W4/0	308.0	310.0	Wbsk C Sand	BP	PRB, RMA
		00/10-16-077-08W4/0	302.7	303.8	Wbsk C Sand	BP	PRB, RMA
		00/12-21-077-08W4/0	310.4	311.5	Wbsk C Sand	BP	PRB, RMA
		00/06-22-077-08W4/0	300.0	301.2	Wbsk C Sand	BP	PRB, RMA
		00/02-23-077-08W4/0	313.2	314.5	Wbsk C Sand	BP	PRB, RMA
		00/02-23-077-08W4/0	315.5	316.2	McM A1 Seq	BP	PRB, RMA
		00/04-23-077-08W4/0	308.0	309.0	Wbsk C Sand	BP	PRB, RMA
		AA/06-23-077-08W4/0	300.0	301.1	Wbsk C Sand	NEXEN	PRB, RMA
		00/06-24-077-08W4/0	300.0	301.2	Wbsk C Sand	BP	PRB, RMA
		AA/14-24-077-08W4/0	300.0	301.0	Wbsk C Sand	NEXEN	PRB, RMA
		00/07-26-077-08W4/0	293.5	295.0	Wbsk C Sand	BP	PRB, RMA
		AA/07-26-077-08W4/0	294.2	295.6	Wbsk C Sand	PETRO-CANADA	PRB, RMA
	WABISKAW-MCMURRAY E	00/10-26-079-09W4/0	413.0	414.5	McM A1 Seq	ENCANA	PRB, RMA
		00/11-27-079-09W4/0	410.0	411.8	McM A1 Seq	ENCANA C.	PRB, RMA
		00/10-28-079-09W4/0	409.0	410.0	Wbsk C Sand	EnCana	PRB, RMA
		00/10-28-079-09W4/0	410.0	410.8	McM A1 Seq	EnCana	PRB, RMA
		00/10-28-079-09W4/0	412.2	413.0	McM A2 Seq	EnCana	PRB, RMA
		00/01-29-079-09W4/0	415.0	417.0	McM A1 Seq	ENCANA	PRB, RMA
		00/09-32-079-09W4/0	428.0	430.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/06-34-079-09W4/0	410.0	411.5	McM A1 Seq	ENCANA C.	PRB, RMA
		00/06-34-079-09W4/0	412.2	412.5	McM A2 Seq	ENCANA C.	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
LEISMER (cont.)	WABISKAW-MCMURRAY E (cont.)	00/10-35-079-09W4/0	407.1	408.5	McM A1 Seq	ENCANA C.	PRB, RMA
		00/11-04-080-09W4/0	426.5	428.0	McM A1 Seq	EnCana	PRB, RMA
		00/11-04-080-09W4/0	428.0	429.5	McM A2 Seq	EnCana	PRB, RMA
		00/11-07-080-09W4/0	434.0	436.0	McM A1 Seq	ENCANA	PRB, RMA
		00/06-08-080-09W4/0	437.1	438.0	McM A1 Seq	CNRL	PRB, RMA
		00/12-16-080-09W4/0	432.0	433.5	McM A1 Seq	EnCana	PRB, RMA
		00/12-16-080-09W4/0	433.5	434.0	McM A2 Seq	EnCana	PRB, RMA
		00/12-17-080-09W4/0	430.0	431.5	McM A1 Seq	ENCANA	PRB, RMA
		00/12-17-080-09W4/0	436.5	437.0	McM Channel	ENCANA	PRB, RMA
		00/08-20-080-09W4/0	429.3	431.2	McM A1 Seq	ENCANA C.	PRB, RMA
		00/08-20-080-09W4/0	431.2	433.0	McM Channel	ENCANA C.	PRB, RMA
		00/08-29-080-09W4/0	425.0	427.0	McM A1 Seq	ENCANA C.	PRB, RMA
		00/08-29-080-09W4/0	427.0	429.0	McM Channel	ENCANA C.	PRB, RMA
LIEGE	WABISKAW U/D-051	00/11-09-096-17W4/0	455.0	456.0	Wbsk C Sand	PET	PRB, RMA
NEWBY	MCMURRAY C2C	00/15-07-082-05W4/0	209.5	219.0	McM Channel	PET	PRB, RMA
		00/02-18-082-05W4/0	207.0	221.0	McM Channel	PET	PRB, RMA
	MCMURRAY ZZZ	00/11-03-082-05W4/0	200.0	208.0	McM Channel	CNRL	PRB, RMA
		00/10-04-082-05W4/0	203.0	213.5	McM Channel	PET	PRB, RMA
		00/07-05-082-05W4/0	216.0	221.0	McM Channel	PET	PRB, RMA
		00/02-08-082-05W4/0	208.0	220.0	McM Channel	PET	PRB, RMA
		00/07-09-082-05W4/0	187.0	208.5	McM Channel	PET	PRB, RMA
		00/02-10-082-05W4/0	205.0	209.0	McM Channel	CNRL	PRB, RMA
	WABISKAW N	00/14-11-084-06W4/0	244.0	244.8	Wbsk D Valley Fill	PET	PRB, RMA
	WABISKAW S	00/05-07-084-05W4/0	190.5	192.1	Wbsk C Sand	CNRL	PRB, RMA
		00/02-01-084-06W4/0	228.3	229.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-01-084-06W4/0	230.0	231.7	Wbsk C Sand	CNRL	PRB, RMA
		00/01-02-084-06W4/0	266.5	268.0	Wbsk C Sand	PET	PRB, RMA
		00/15-02-084-06W4/0	267.2	268.2	Wbsk C Sand	PARAMOUNT	PRB, RMA
		00/08-12-084-06W4/0	212.0	213.0	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW T	00/06-09-084-06W4/0	236.3	237.5	Wbsk C Sand	CNRL	PRB, RMA
		00/05-10-084-06W4/0	219.3	221.0	Wbsk C Sand	CNRL	PRB, RMA
		00/07-16-084-06W4/0	206.0	207.0	Wbsk C Sand	CNRL	PRB, RMA
		00/09-17-084-06W4/0	210.2	211.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-20-084-06W4/0	214.2	214.8	Wbsk C Sand	CNRL	PRB, RMA
		00/10-21-084-06W4/0	194.5	196.0	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW U/D-050	AA/02-11-086-07W4/0	183.0	184.8	Wbsk C Sand	NEXEN	PRB, RMA
	WABISKAW U/D-052	AA/06-23-086-07W4/0	173.8	176.0	Wbsk C Sand	OPTI	PRB, RMA
	WABISKAW U/D-053	AA/11-23-086-07W4/0	171.0	172.5	Wbsk C Sand	OPTI	PRB, RMA
		AA/06-28-086-07W4/0	185.3	186.7	Wbsk C Sand	CANNAT	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
NEWBY (cont)	WABISKAW U/D-054	AA/07-26-086-07W4/0	162.0	163.9	Wbsk C Sand	OPTI	PRB, RMA
	WABISKAW U/D-055	AA/07-33-086-07W4/0	169.0	170.5	Wbsk C Sand	CANNAT	PRB, RMA
	WABISKAW U/D-060	00/15-31-083-05W4/0	223.0	223.7	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW U/D-061	00/12-05-084-05W4/0	223.4	224.5	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW U/D-063	00/14-11-084-06W4/0	241.6	243.0	Wbsk C Sand	PET	PRB, RMA
	WABISKAW U/D-075	00/15-17-085-06W4/0	170.5	171.5	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW U/D-081	AA/11-01-086-07W4/0	174.6	177.0	Wbsk C Sand	SUNCOR	PRB, RMA
	WABISKAW V	00/10-25-085-06W4/0	163.2	164.5	Wbsk C Sand	CNRL	PRB, RMA
		00/10-26-085-06W4/0	154.2	155.0	Wbsk C Sand	CNRL	PRB, RMA
		00/10-27-085-06W4/0	168.0	169.6	Wbsk C Sand	CNRL	PRB, RMA
	WABISKAW Y	00/12-14-084-06W4/0	203.0	204.0	Wbsk C Sand	PET	PRB, RMA
	WABISKAW-MCMURRAY J	00/06-09-084-06W4/0	239.7	240.0	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/06-09-084-06W4/0	240.4	241.5	McM A1 Seq	CNRL	PRB, RMA
		00/06-09-084-06W4/0	243.0	250.0	McM Channel	CNRL	PRB, RMA
		00/05-10-084-06W4/0	222.0	222.7	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/05-10-084-06W4/0	223.8	224.8	McM A1 Seq	CNRL	PRB, RMA
		00/05-10-084-06W4/0	225.0	231.0	McM Channel	CNRL	PRB, RMA
		00/12-14-084-06W4/0	205.5	206.1	Wbsk D Valley Fill	PET	PRB, RMA
		00/12-14-084-06W4/0	207.0	209.0	McM Channel	PET	PRB, RMA
		00/07-16-084-06W4/0	211.0	211.9	McM A1 Seq	CNRL	PRB, RMA
		00/07-16-084-06W4/0	213.7	222.7	McM Channel	CNRL	PRB, RMA
		00/09-17-084-06W4/0	213.0	213.7	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/09-17-084-06W4/0	214.3	215.8	McM A1 Seq	CNRL	PRB, RMA
		00/09-17-084-06W4/0	217.3	225.0	McM Channel	CNRL	PRB, RMA
		00/10-20-084-06W4/0	217.8	219.2	McM A1 Seq	CNRL	PRB, RMA
		00/10-21-084-06W4/0	197.4	198.1	Wbsk D Valley Fill	CNRL	PRB, RMA
		00/10-21-084-06W4/0	198.5	209.0	McM Channel	CNRL	PRB, RMA
RESDELN	MCMURRAY JJ	00/06-12-084-07W4/0	297.5	304.0	McM B1 Seq	PET	PRB, RMA
	MCMURRAY PP	00/03-18-084-06W4/0	303.0	310.0	McM Channel	PET	PRB,RMA
	MCMURRAY RR	00/03-13-084-07W4/0	273.0	274.8	McM A1 Seq	PET	PRB,RMA
		00/10-24-084-07W4/0	253.5	255.5	McM A1 Seq	PET	PRB,RMA
	MCMURRAY U/D-060	00/03-18-084-06W4/0	318.5	319.3	McM Channel	PET	PRB,RMA
	MCMURRAY U/D-061	00/03-13-084-07W4/0	290.5	291.2	McM Channel	PET	PRB,RMA
	MCMURRAY U/D-073	00/06-12-084-07W4/0	308.3	314.7	McM Channel	PET	PRB,RMA
	WABISKAW U/D-012	00/05-07-084-06W4/0	305.0	306.0	Wbsk C Sand	PARAMOUNT	PC,PRB,RMA
	WABISKAW U/D-013	00/03-18-084-06W4/0	292.4	293.5	Wbsk C Sand	PET	PRB,RMA
	WABISKAW-MCMURRAY A	00/05-07-084-06W4/0	307.8	308.5	Wbsk D Valley Fill	PARAMOUNT	PRB,RMA
		00/05-07-084-06W4/0	309.0	310.7	McM A1 Seq	PARAMOUNT	PRB,RMA
		00/05-07-084-06W4/0	311.8	322.0	McM Channel	PARAMOUNT	PRB,RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
RESDELN (cont.)	WABISKAW-MCMURRAY A (cont.)	00/03-18-084-06W4/0	296.2	298.0	McM A1 Seq	PET	PRB,RMA
		00/03-13-084-07W4/0	272.0	272.5	Wbsk D Valley Fill	PET	PRB,RMA
		00/03-13-084-07W4/0	275.9	284.0	McM Channel	PET	PRB,RMA
TAR	MCMURRAY U/D-035	00/12-28-099-14W4/0	521.0	523.2	McM Channel	ENCANA	PRB, RMA
	MCMURRAY U/D-036	00/03-14-099-14W4/0	524.5	525.5	McM Channel	ENCANA	ACC
	WABISKAW K	00/12-28-099-14W4/0	512.0	517.0	Wbsk C Sand	ENCANA	PRB, RMA
	WABISKAW O	00/11-23-098-14W4/0	551.0	553.0	Wbsk C Sand	ENCANA	PRB, RMA
		00/03-35-098-14W4/0	537.3	539.6	Wbsk C Sand	ENCANA	PRB, RMA
		00/01-01-099-14W4/0	532.0	535.0	Wbsk C Sand	ENCANA	PRB, RMA
		AA/07-01-099-14W4/0	538.8	540.7	Wbsk C Sand	IMPERIAL	PRB, RMA
	WABISKAW P	00/05-33-098-14W4/0	528.0	529.7	Wbsk C Sand	ENCANA	PRB, RMA
		00/09-03-099-14W4/0	522.7	525.8	Wbsk C Sand	ENCANA	PRB, RMA
		AA/07-09-099-14W4/0	511.3	512.0	Wbsk C Sand	IMPERIAL	PRB, RMA
	WABISKAW S	00/11-07-099-14W4/0	474.5	478.1	Wbsk C Sand	ENCANA	PRB, RMA
	WABISKAW U	00/11-07-099-14W4/0	472.0	472.6	Wbsk C Sand	ENCANA	PRB, RMA
		00/02-08-099-14W4/0	501.0	505.6	Wbsk C Sand	ENCANA	PRB, RMA
		00/09-17-099-14W4/0	511.6	515.0	Wbsk C Sand	ENCANA	PRB, RMA
	WABISKAW U/D-018	AA/12-12-099-15W4/0	457.8	459.3	Wbsk C Sand	IMPERIAL	PRB, RMA
		00/09-14-099-15W4/0	474.5	478.0	Wbsk C Sand	ENCANA	PRB, RMA
	WABISKAW U/D-022	00/14-35-100-13W4/0	499.0	503.0	Wbsk D Sand	ENCANA	PRB, RMA
	WABISKAW U/D-033	00/15-17-099-13W4/0	536.0	538.4	Wbsk C Sand	ENCANA	PRB, RMA
THORNBURY	MCMURRAY E5E	00/15-22-079-10W4/0	423.5	425.0	McM A1 Seq	PET	PRB, RMA
		00/15-22-079-10W4/0	430.0	430.5	McM Channel	PET	PRB, RMA
		00/06-23-079-10W4/0	420.5	421.0	McM Channel	PET	PRB, RMA
		00/13-27-079-10W4/0	410.0	412.5	McM A1 Seq	PET	PRB, RMA
		00/13-27-079-10W4/0	412.5	419.0	McM Channel	PET	PRB, RMA
		00/10-28-079-10W4/0	402.5	406.0	McM A1 Seq	PET	PRB, RMA
	MCMURRAY M5M	00/11-27-079-11W4/0	434.0	436.0	McM B1 Seq	CNRL	PRB, RMA
	MCMURRAY R5R	00/10-12-080-12W4/0	441.0	443.0	McM Channel	CNRL	ACC
	MCMURRAY U/D-240	00/10-05-080-12W4/0	444.0	466.0	McM Channel	SUPERMAN	ACC
	MCMURRAY U/D-270	00/10-29-079-10W4/0	407.5	409.0	McM A1 Seq	CNRL	PRB, RMA
	MCMURRAY W4W	00/11-22-079-11W4/0	434.5	437.0	McM Channel	CNRL	PRB, RMA
	MCMURRAY X4X	00/11-08-079-11W4/0	461.0	463.5	McM Channel	CNRL	PRB, RMA
		00/11-09-079-11W4/0	446.2	447.4	McM Channel	CNRL	PRB, RMA
		00/12-14-079-11W4/0	438.0	439.0	McM Channel	CNRL	PRB, RMA
		00/13-15-079-11W4/0	436.4	441.0	McM Channel	CNRL	PRB, RMA
		00/15-16-079-11W4/0	437.6	442.0	McM Channel	CNRL	PRB, RMA
		00/10-17-079-11W4/0	434.0	435.5	McM Channel	CNRL	PRB, RMA
		00/09-20-079-11W4/0	432.0	435.2	McM Channel	CNRL	PRB, RMA

**Table 1A. Wabiskaw-McMurray Intervals Denied Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
THORNBURY (cont.)	MCMURRAY X4X (cont.)	00/07-29-079-12W4/0	443.0	447.0	McM B1 Seq	SUPERMAN	PRB, RMA, PSD
		00/07-29-079-12W4/0	447.5	448.5	McM B2 Seq	SUPERMAN	PRB, RMA, PSD
		00/11-32-079-12W4/0	464.5	465.3	McM Channel	FIRST	PRB, RMA, PSD
		00/15-32-079-12W4/0	441.0	452.0	McM Channel	SUPERMAN	PRB, RMA, PSD
		00/08-04-080-12W4/0	442.0	449.0	McM Channel	SUPERMAN	PRB, RMA, PSD
		00/06-06-080-12W4/0	439.0	445.3	McM Channel	SUPERMAN	PRB, RMA, PSD
		00/12-10-080-12W4/0	443.0	448.0	McM Channel	CNRL	PRB, RMA, PSD
		00/12-11-080-12W4/0	438.7	444.0	McM Channel	CNRL	PRB, RMA, PSD
		00/05-14-080-12W4/0	445.3	450.0	McM Channel	CNRL	PRB, RMA, PSD

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CHARD	MCMURRAY HHH	AA/09-14-078-06W4/0	336.0	342.0	McM A2 Seq	MEG	RMP
	MCMURRAY LLL	00/11-34-080-06W4/0	242.2	246.5	McM A2 Seq	CNRL	PC, RMP
	MCMURRAY U/D-119	00/10-07-080-06W4/0	295.0	302.7	McM A2 Seq	CNRL	RMP
	MCMURRAY VV	00/10-11-080-07W4/0	315.2	318.0	McM A1 Seq	CNRL	PC, RMP
		00/10-11-080-07W4/0	318.0	318.5	McM A2 Seq	CNRL	PC, RMP
		00/07-14-080-07W4/0	320.0	323.0	McM A Channel	CNRL	PC, RMP
		00/10-23-080-07W4/0	315.5	319.0	McM A Channel	CNRL	PC, RMP
	WABISKAW K	00/11-28-080-06W4/0	280.2	283.0	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-034	00/06-20-080-06W4/0	282.0	284.0	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-037	00/07-13-080-07W4/0	307.0	307.6	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-038	00/07-14-080-07W4/0	317.0	319.0	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-039	00/10-23-080-07W4/0	312.5	314.0	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-040	00/09-24-080-07W4/0	283.1	284.5	Wbsk C Sand	CALPINE	RMP
	WABISKAW U/D-041	02/09-24-080-07W4/0	280.8	281.3	Wbsk C Sand	PETRO-CANADA	RMP
	WABISKAW-MCMURRAY A	00/13-27-078-06W4/0	286.0	287.0	Wbsk C Sand	SUPERMAN	RMP
		00/07-33-078-06W4/0	290.5	291.2	Wbsk C Sand	PET	RMP
		00/07-33-078-06W4/0	295.4	302.0	McM Channel	PET	RMP
		00/11-35-078-06W4/0	298.0	301.2	McM A Channel	SUPERMAN	RMP
		00/14-35-078-06W4/0	283.0	286.6	McM A Channel	SUPERMAN	RMP
		00/11-36-078-06W4/0	281.0	283.3	McM A1 Seq	NEXEN	RMP
		00/06-05-079-05W4/0	273.2	279.0	McM A2 Seq	CNRL	RMP
		00/06-06-079-05W4/0	279.2	279.9	Wbsk C Sand	CNRL	RMP
		00/06-06-079-05W4/0	280.4	285.1	McM A2 Seq	CNRL	RMP
		00/07-07-079-05W4/0	243.8	244.6	Wbsk C Sand	CNRL	RMP
		00/07-07-079-05W4/0	245.1	252.4	McM A2 Seq	CNRL	RMP
		00/03-08-079-05W4/2	374.5	785.7	McM A2 Seq	CNRL	RMP
		00/05-08-079-05W4/0	236.2	237.1	Wbsk C Sand	CNRL	RMP
		00/05-08-079-05W4/0	237.5	243.9	McM A2 Seq	CNRL	RMP
		00/05-17-079-05W4/0	212.5	214.0	Wbsk C Sand	CNRL	RMP
		00/05-17-079-05W4/0	214.0	221.8	McM A2 Seq	CNRL	RMP
		00/06-18-079-05W4/0	211.4	212.8	Wbsk C Sand	CNRL	RMP
		00/06-18-079-05W4/0	213.0	220.5	McM A2 Seq	CNRL	RMP
		00/12-19-079-05W4/0	217.0	217.7	Wbsk C Sand	CNRL	RMP
		00/12-19-079-05W4/0	218.5	224.5	McM A2 Seq	CNRL	RMP
		00/12-20-079-05W4/0	225.2	227.0	McM A1 Seq	CNRL	RMP
		00/12-20-079-05W4/0	227.0	230.0	McM A2 Seq	CNRL	RMP
		00/05-29-079-05W4/0	218.9	220.4	Wbsk C Sand	CNRL	RMP
		00/05-29-079-05W4/0	222.0	226.0	McM A2 Seq	CNRL	RMP
		00/05-30-079-05W4/0	215.0	216.0	Wbsk C Sand	CNRL	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CHARD (cont.)	WABISKAW-MCMURRAY A (cont.)	00/05-30-079-05W4/0	217.0	220.0	Wbsk D Valley Fill	CNRL	RMP
		00/10-31-079-05W4/0	201.0	202.1	Wbsk C Sand	PET	RMP
		00/10-31-079-05W4/0	202.9	209.4	McM A2 Seq	PET	RMP
		00/13-32-079-05W4/0	214.6	215.3	Wbsk C Sand	PET	RMP
		00/13-32-079-05W4/0	216.1	222.8	McM A2 Seq	PET	RMP
		00/11-01-079-06W4/0	265.8	266.1	Wbsk C Sand	SUPERMAN	RMP
		00/11-01-079-06W4/0	266.7	269.0	Wbsk D Valley Fill	SUPERMAN	RMP
		00/11-01-079-06W4/0	269.0	271.2	McM A2 Seq	SUPERMAN	RMP
		00/14-01-079-06W4/0	257.0	257.8	Wbsk C Sand	SUPERMAN	RMP
		00/14-01-079-06W4/0	258.0	265.5	McM A2 Seq	SUPERMAN	RMP
		00/13-02-079-06W4/0	232.8	233.3	Wbsk C Sand	SUPERMAN	RMP
		00/13-02-079-06W4/0	234.0	237.0	Wbsk D Valley Fill	SUPERMAN	RMP
		00/13-02-079-06W4/0	237.0	239.3	McM A2 Seq	SUPERMAN	RMP
		00/12-03-079-06W4/0	237.3	238.2	Wbsk C Sand	SUPERMAN	RMP
		00/12-03-079-06W4/0	238.5	241.0	Wbsk D Valley Fill	SUPERMAN	RMP
		00/12-03-079-06W4/0	241.0	246.6	McM A2 Seq	SUPERMAN	RMP
		00/12-03-079-06W4/0	247.5	255.5	McM Channel	SUPERMAN	RMP
		00/08-04-079-06W4/0	249.9	250.4	Wbsk C Sand	CNRL	RMP
		00/08-04-079-06W4/0	251.4	258.5	McM A2 Seq	CNRL	RMP
		00/11-08-079-06W4/0	244.0	251.5	McM A2 Seq	CNRL	PC, PSD, RMP
		00/07-10-079-06W4/0	214.4	215.0	Wbsk C Sand	CNRL	RMP
		00/07-10-079-06W4/0	215.6	223.7	McM A2 Seq	CNRL	RMP
		00/10-11-079-06W4/0	233.5	233.9	Wbsk C Sand	CNRL	RMP
		00/12-11-079-06W4/0	216.0	217.0	Wbsk C Sand	CNRL	RMP
		00/12-11-079-06W4/0	217.0	227.0	McM A2 Seq	CNRL	RMP
		00/06-12-079-06W4/0	217.5	218.0	Wbsk C Sand	CNRL	RMP
		00/06-12-079-06W4/0	218.8	223.0	Wbsk D Valley Fill	CNRL	RMP
		00/06-12-079-06W4/0	223.0	227.5	McM A2 Seq	CNRL	RMP
		00/08-13-079-06W4/0	218.0	222.8	McM A2 Seq	CNRL	RMP
		00/04-14-079-06W4/0	210.6	212.5	Wbsk C Sand	CNRL	RMP
		00/04-14-079-06W4/0	212.5	216.0	Wbsk D Valley Fill	CNRL	RMP
		00/04-14-079-06W4/0	216.0	219.8	McM A2 Seq	CNRL	RMP
		00/08-14-079-06W4/0	211.0	213.0	Wbsk C Sand	CNRL	RMP
		00/08-14-079-06W4/0	216.0	217.6	McM A2 Seq	CNRL	RMP
		00/07-15-079-06W4/0	204.6	205.5	Wbsk C Sand	CNRL	RMP
		00/07-15-079-06W4/0	206.5	208.0	Wbsk D Valley Fill	CNRL	RMP
		00/07-15-079-06W4/0	208.0	213.2	McM A2 Seq	CNRL	RMP
		00/10-16-079-06W4/0	228.8	230.0	Wbsk C Sand	CNRL	RMP
		00/10-16-079-06W4/0	230.5	234.0	Wbsk D Valley Fill	CNRL	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CHARD (cont.)	WABISKAW-MCMURRAY A (cont.)	00/10-16-079-06W4/0	234.0	238.5	McM A2 Seq	CNRL	RMP
		00/11-20-079-06W4/0	274.9	279.2	McM A2 Seq	CNRL	RMP
		02/11-20-079-06W4/0	271.3	274.4	McM A2 Seq	CNRL	RMP
		00/10-21-079-06W4/0	215.3	216.2	Wbsk C Sand	CNRL	RMP
		00/10-21-079-06W4/0	217.0	218.0	Wbsk D Valley Fill	CNRL	RMP
		00/10-21-079-06W4/0	218.0	225.0	McM A2 Seq	CNRL	RMP
		00/11-22-079-06W4/0	216.1	217.1	Wbsk C Sand	PET	RMP
		00/11-22-079-06W4/0	221.9	223.0	McM A2 Seq	PET	RMP
		00/09-23-079-06W4/0	202.4	203.2	Wbsk C Sand	PET	RMP
		00/09-23-079-06W4/0	205.7	206.9	Wbsk D Valley Fill	PET	RMP
		00/06-24-079-06W4/0	207.5	208.6	Wbsk C Sand	PET	RMP
		00/06-24-079-06W4/0	210.0	216.0	McM A2 Seq	PET	RMP
		00/10-25-079-06W4/0	205.8	206.8	Wbsk C Sand	PET	RMP
		00/10-25-079-06W4/0	207.5	214.2	McM A2 Seq	PET	RMP
		00/09-26-079-06W4/0	189.9	190.7	Wbsk C Sand	PET	RMP
		00/09-26-079-06W4/0	191.8	194.5	Wbsk D Valley Fill	PET	RMP
		00/09-26-079-06W4/0	194.5	198.5	McM A2 Seq	PET	RMP
		00/11-27-079-06W4/0	230.0	231.0	Wbsk C Sand	PARAMOUNT	RMP
		00/11-28-079-06W4/0	248.4	249.7	Wbsk C Sand	CNRL	RMP
		00/11-28-079-06W4/0	250.6	252.5	Wbsk D Valley Fill	CNRL	RMP
		00/11-28-079-06W4/0	252.5	257.8	McM A2 Seq	CNRL	RMP
		AA/10-30-079-06W4/0	259.0	260.0	Wbsk C Sand	PETRO-CANADA	RMP
		AA/10-30-079-06W4/0	261.0	267.0	McM A2 Seq	PETRO-CANADA	RMP
		00/07-32-079-06W4/0	286.0	289.0	Wbsk D Valley Fill	CNRL	RMP
		00/07-32-079-06W4/0	289.0	293.0	McM A2 Seq	CNRL	RMP
		00/06-34-079-06W4/0	237.1	237.9	Wbsk C Sand	PET	RMP
		02/06-34-079-06W4/0	236.0	237.0	Wbsk C Sand	PET	RMP
		00/13-34-079-06W4/0	243.0	243.5	Wbsk C Sand	PET	RMP
		00/13-34-079-06W4/0	245.0	247.2	Wbsk D Valley Fill	PET	RMP
		00/13-35-079-06W4/0	234.5	235.2	Wbsk C Sand	PET	RMP
		00/13-35-079-06W4/0	236.0	243.0	McM A2 Seq	PET	RMP
		00/08-36-079-06W4/0	188.2	189.0	Wbsk C Sand	PET	RMP
		00/08-36-079-06W4/0	189.8	193.0	Wbsk D Valley Fill	PET	RMP
		00/08-36-079-06W4/0	193.0	197.0	McM A2 Seq	PET	RMP
		00/05-05-080-05W4/0	211.7	213.0	Wbsk C Sand	PET	RMP
		00/05-05-080-05W4/0	213.5	219.7	McM A2 Seq	PET	RMP
		00/02-06-080-05W4/0	187.5	188.5	Wbsk C Sand	PET	RMP
		00/02-06-080-05W4/0	189.5	196.0	McM A2 Seq	PET	RMP
		00/06-07-080-05W4/0	191.3	192.8	Wbsk C Sand	PET	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
CHARD (cont.)	WABISKAW-MCMURRAY A (cont.)	00/06-07-080-05W4/0	194.5	200.0	McM A2 Seq	PET	RMP
		00/03-08-080-05W4/0	188.7	190.0	Wbsk C Sand	PET	RMP
		00/07-01-080-06W4/0	202.8	203.9	Wbsk C Sand	PET	RMP
		00/07-01-080-06W4/0	205.0	211.1	McM A2 Seq	PET	RMP
		00/03-02-080-06W4/0	234.5	236.0	Wbsk C Sand	CNRL	RMP
		00/03-02-080-06W4/0	237.0	243.3	McM A2 Seq	CNRL	RMP
		00/10-02-080-06W4/0	231.5	232.0	Wbsk C Sand	CNRL	RMP
		00/03-03-080-06W4/0	246.3	248.0	Wbsk C Sand	CNRL	RMP
		00/03-03-080-06W4/0	249.0	251.0	Wbsk D Valley Fill	CNRL	RMP
		00/03-03-080-06W4/0	251.0	254.2	McM A2 Seq	CNRL	RMP
		00/07-04-080-06W4/0	290.8	292.0	Wbsk C Sand	CNRL	RMP
		00/07-04-080-06W4/0	293.0	295.0	Wbsk D Valley Fill	CNRL	RMP
		00/07-04-080-06W4/0	295.0	299.0	McM A2 Seq	CNRL	RMP
		00/07-06-080-06W4/0	291.0	294.0	McM A1 Seq	CNRL	RMP
		00/11-09-080-06W4/0	303.0	304.5	Wbsk C Sand	CNRL	RMP
		00/11-09-080-06W4/0	305.0	307.0	Wbsk D Valley Fill	CNRL	RMP
		00/11-09-080-06W4/0	307.0	311.0	McM A2 Seq	CNRL	RMP
		00/09-11-080-06W4/0	221.8	223.5	Wbsk C Sand	CNRL	RMP
		00/09-11-080-06W4/0	226.0	229.6	McM A2 Seq	CNRL	RMP
		00/15-11-080-06W4/0	225.0	226.0	Wbsk C Sand	CNRL	RMP
		00/15-11-080-06W4/0	230.0	233.5	McM A2 Seq	CNRL	RMP
		00/05-12-080-06W4/0	208.6	210.2	Wbsk C Sand	PET	RMP
		00/05-12-080-06W4/0	215.0	217.0	McM A2 Seq	PET	RMP
		00/04-13-080-06W4/0	215.6	222.0	McM A2 Seq	PET	RMP
		00/07-14-080-06W4/0	237.3	239.0	Wbsk C Sand	CNRL	RMP
		00/07-14-080-06W4/0	240.0	245.5	McM A2 Seq	CNRL	RMP
		00/06-22-080-06W4/0	309.3	313.6	McM A2 Seq	CNRL	RMP
		00/07-23-080-06W4/0	250.0	256.0	McM A2 Seq	CNRL	RMP
CLYDEN	MCMURRAY AA	00/07-19-076-12W4/0	511.5	513.4	McM A2 Seq	CNRL	RMP
		00/11-30-076-12W4/0	490.0	492.0	McM A2 Seq	CNRL	RMP
		00/03-25-076-13W4/0	492.0	494.7	McM A2 Seq	CNRL	RMP
CORNER	MCMURRAY QQ	00/12-16-081-09W4/0	419.8	420.8	McM A1 Seq	PET	PC,RMP,PSD
		02/12-16-081-09W4/0	419.2	420.7	McM A1 Seq	PET	PC,RMP,PSD
DIVIDE	MCMURRAY A	00/16-08-082-12W4/0	447.2	449.0	McM B1 Seq	HUSKY	RMP
		00/05-16-082-12W4/0	447.1	448.9	McM B1 Seq	PET	RMP
		00/10-17-082-12W4/0	432.4	433.3	McM B1 Seq	PET	RMP
		00/05-21-082-12W4/0	415.6	416.6	McM B1 Seq	STYLUS	RMP
		02/05-21-082-12W4/0	422.2	423.0	McM B1 Seq	STYLUS	RMP
	MCMURRAY R	00/07-28-082-12W4/0	412.0	415.0	McM B2 Seq	STYLUS	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
DIVIDE (cont.)	MCMURRAY V	00/02-19-082-12W4/0	396.0	397.3	McM B1 Seq	CNRL	RMP
	MCMURRAY W	00/06-27-082-12W4/0	446.2	448.0	McM B1 Seq	STYLUS	RMP
		00/07-28-082-12W4/0	405.0	408.0	McM B1 Seq	STYLUS	RMP
GLOVER	MCMURRAY B	00/09-05-076-10W4/0	447.0	448.0	McM A1 Seq	PET	RMP
		00/06-07-076-10W4/0	436.5	438.0	McM A1 Seq	PET	RMP
HANGINGSTONE	MCMURRAY I3I	00/08-30-082-09W4/0	438.0	439.0	McM A1 Seq	NORTHSTAR	PC, RMP, PSD
		00/08-30-082-09W4/0	439.0	441.0	McM A2 Seq	NORTHSTAR	PC, RMP, PSD
	MCMURRAY J3J	00/03-34-080-07W4/0	340.4	347.0	McM B1 Channel	Calpine	PC, RMP
		00/04-35-080-07W4/0	325.0	330.0	McM B1 Seq	Calpine	PC, RMP
		00/14-03-081-07W4/0	352.8	358.0	McM B1 Channel	Calpine	PC, RMP
	MCMURRAY K3K	00/08-07-081-07W4/0	381.0	382.8	McM A2 Seq	Calpine	PC, RMP
		00/06-17-081-07W4/0	378.5	381.5	McM A2 Seq	Calpine	PC, RMP
		00/14-01-081-08W4/0	399.0	402.0	McM A1 Seq	NORTHSTAR	PC, RMP
		00/11-13-081-08W4/0	439.8	441.5	McM A2 Seq	NORTHSTAR	PC, RMP
		00/10-14-081-08W4/0	453.2	456.2	McM A2 Seq	NORTHSTAR	PC, RMP
	MCMURRAY LL	00/07-05-083-08W4/0	435.0	436.0	McM A1 Seq	NORTHSTAR	RMP
	MCMURRAY RR	00/09-32-081-11W4/0	464.0	469.6	McM B1 Seq	STYLUS	RMP
		00/08-34-081-11W4/0	444.0	445.0	McM B1 Seq	STYLUS	RMP
		00/12-34-081-11W4/0	452.0	453.0	McM B1 Seq	STYLUS	RMP
		00/06-04-082-11W4/0	453.3	454.3	McM B1 Seq	STYLUS	RMP
	MCMURRAY S2S	00/03-34-080-07W4/0	334.7	338.5	McM A2 Seq	Calpine	RMP
		00/04-35-080-07W4/0	318.7	322.5	McM A Channel	Calpine	RMP
		00/14-03-081-07W4/0	347.5	350.5	McM A2 Seq	Calpine	RMP
	MCMURRAY U/D-026	AA/03-33-082-08W4/0	456.2	457.0	Wbsk C Sand	PETRO-CANADA	RMP
	MCMURRAY U/D-137	AA/10-22-084-08W4/0	425.5	428.0	McM A1 Seq	PETRO-CANADA	RMP
	MCMURRAY U/D-184	00/12-26-080-08W4/0	395.5	397.8	McM A2 Seq	Northstar	PC, RMP
	MCMURRAY U/D-185	00/14-25-080-08W4/0	386.4	388.5	McM A2 Seq	Northstar	PC, RMP
	MCMURRAY U/D-186	00/11-25-082-11W4/0	433.0	437.0	McM Channel	PET	RMP
	MCMURRAY U/D-189	00/09-27-081-11W4/0	434.5	441.0	McM A Channel	STYLUS	RMP
	MCMURRAY UUU	00/12-01-084-08W4/0	443.4	444.5	McM A1 Seq	NORTHSTAR	RMP
		00/11-08-084-08W4/0	437.6	440.0	McM A1 Seq	NORTHSTAR	RMP
		AA/12-08-084-08W4/0	434.6	438.0	McM A1 Seq	PETRO-CANADA	RMP
		00/07-09-084-08W4/0	437.2	440.0	McM A1 Seq	NORTHSTAR	RMP
		00/02-10-084-08W4/0	442.0	443.0	McM A1 Seq	NORTHSTAR	RMP
		00/05-11-084-08W4/0	444.0	445.0	McM A1 Seq	NORTHSTAR	RMP
		AA/05-17-084-08W4/0	428.0	429.0	McM A1 Seq	PETRO-CANADA	RMP
	MCMURRAY V2V	00/04-35-080-07W4/0	331.2	333.1	McM B2 Seq	Calpine	PC, RMP
	MCMURRAY X2X	00/16-31-080-07W4/0	363.0	365.4	McM A2 Seq	Northstar	PC, RMP
	WABISKAW U/D-026	AA/05-28-082-08W4/0	448.5	449.0	Wbsk C Sand	PETRO-CANADA	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
HARDY	WABISKAW A	00/03-15-077-04W4/0	331.2	335.0	Wbsk C Sand	PET	RMP
	WABISKAW D	00/04-18-076-03W4/0	369.8	372.5	Wbsk C Sand	TALISMAN	RMP
		00/08-13-076-04W4/0	357.5	361.0	Wbsk C Sand	TALISMAN	RMP
	WABISKAW F	00/03-11-076-04W4/0	366.5	368.5	Wbsk C Sand	TALISMAN	RMP
KIRBY	UPPER MANNVILLE J4J	00/11-29-074-07W4/0	428.0	429.0	Wbsk B Valley Fill	ISH	PC, RMP
		00/12-32-074-07W4/0	424.0	426.0	Wbsk B Valley Fill	BP	PC, RMP
		00/11-33-074-07W4/0	408.0	411.0	Wbsk B Valley Fill	BP	PC, RMP
		00/10-34-074-07W4/0	405.5	406.5	Wbsk B Valley Fill	BP	PC, RMP
		00/09-04-075-07W4/0	409.7	413.7	Wbsk B Valley Fill	BP	PC, RMP
	UPPER MANNVILLE O3O	00/06-32-073-09W4/0	426.8	427.8	Wbsk B Valley Fill	CNRL	RMP
		00/16-33-073-09W4/0	424.3	426.5	Wbsk B Valley Fill	CNRL	RMP
		00/15-04-074-09W4/0	424.5	428.0	Wbsk B Valley Fill	CNRL	RMP
LEISMER		00/16-05-074-09W4/0	429.5	431.0	Wbsk B Valley Fill	CNRL	RMP
		00/12-07-074-09W4/0	446.0	447.0	Wbsk B Valley Fill	CNRL	RMP
		00/11-08-074-09W4/0	435.3	437.6	Wbsk B Valley Fill	CNRL	RMP
		00/12-09-074-09W4/0	424.5	428.5	Wbsk B Valley Fill	CNRL	RMP
		00/06-17-074-09W4/0	431.3	435.0	Wbsk B Valley Fill	CNRL	RMP
		00/06-18-074-09W4/0	440.5	442.0	Wbsk B Valley Fill	CNRL	RMP
		00/07-20-074-09W4/0	420.5	425.0	Wbsk B Valley Fill	CNRL	RMP
		00/16-12-074-10W4/0	450.0	451.0	Wbsk B Valley Fill	CNRL	RMP
		00/02-13-074-10W4/0	446.0	447.5	Wbsk B Valley Fill	CNRL	RMP
		00/02-24-074-10W4/0	453.0	456.0	Wbsk B Valley Fill	CNRL	RMP
	MCMURRAY Z3Z	00/12-36-079-07W4/0	299.2	305.5	McM B1 Seq	CNRL	RMP
	WABISKAW AA	00/10-26-079-09W4/0	409.0	411.0	Wbsk C Sand	ENCANA	PC, RMP
		00/10-35-079-09W4/0	404.9	406.0	Wbsk C Sand	ENCANA C.	PC, RMP
	WABISKAW U/D-117	AA/03-04-076-06W4/0	355.0	356.0	Wbsk C Sand	DEVON	RMP
LEISMER	WABISKAW U/D-118	AB/02-04-076-06W4/0	357.5	358.0	Wbsk C Sand	DEVON	RMP
	WABISKAW U/D-119	AA/14-09-076-06W4/0	331.0	331.5	Wbsk C Sand	ENCANA	RMP
	WABISKAW-MCMURRAY G	00/04-04-076-06W4/0	349.0	351.0	Wbsk C Sand	DEVON ARL	RMP
		00/04-04-076-06W4/0	351.0	358.0	McM A2 Seq	DEVON ARL	RMP
		AA/12-04-076-06W4/0	353.2	354.2	Wbsk C Sand	DEVON	RMP
		AA/12-04-076-06W4/0	354.2	357.0	McM A2 Seq	DEVON	RMP
		AA/13-04-076-06W4/0	353.0	354.0	McM A2 Seq	DEVON ARL	RMP
		00/03-05-076-06W4/0	352.0	355.0	Wbsk C Sand	DEVON ARL	RMP
		AA/08-05-076-06W4/0	348.0	349.4	Wbsk C Sand	DEVON ARL	RMP
		00/16-05-076-06W4/0	347.0	349.0	Wbsk C Sand	DEVON ARL	RMP
		AA/07-09-076-06W4/0	339.5	340.2	McM A2 Seq	ENCANA C.	RMP
		AA/13-09-076-06W4/0	328.0	329.9	McM A2 Seq	ENCANA C.	RMP
		AA/14-09-076-06W4/0	333.0	333.5	McM A2 Seq	ENCANA	RMP

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
NEWBY	WABISKAW AA	00/14-20-083-05W4/0	233.3	234.0	Wbsk C Sand	CNRL	RMP
		00/06-30-083-05W4/0	258.0	259.0	Wbsk C Sand	CNRL	RMP
	WABISKAW U/D-066	00/13-27-084-06W4/0	220.5	221.5	Wbsk C Sand	CNRL	RMP
	WABISKAW-MCMURRAY G	00/13-26-084-06W4/0	209.0	210.0	Wbsk D Valley Fill	CNRL	NPRB
		00/13-26-084-06W4/0	210.7	211.3	McM A1 Seq	CNRL	NPRB
		00/13-26-084-06W4/0	214.0	227.0	McM Channel	CNRL	NPRB
		00/13-27-084-06W4/0	223.2	225.0	McM A1 Seq	CNRL	NPRB
		00/13-27-084-06W4/0	225.5	226.2	McM Channel	CNRL	NPRB
		00/10-34-084-06W4/0	216.2	218.7	McM A1 Seq	CNRL	NPRB
		00/10-34-084-06W4/0	220.0	231.3	McM Channel	CNRL	NPRB
		00/10-35-084-06W4/0	195.6	198.2	McM A1 Seq	CNRL	NPRB
		00/10-35-084-06W4/0	200.0	214.4	McM Channel	CNRL	NPRB
		00/07-01-085-06W4/0	191.4	195.0	McM A1 Seq	CNRL	NPRB
		00/10-02-085-06W4/0	188.0	191.0	McM A1 Seq	CNRL	NPRB
		00/10-02-085-06W4/0	193.0	204.3	McM Channel	CNRL	NPRB
		00/09-04-085-06W4/0	202.5	204.3	McM A1 Seq	CNRL	NPRB
		00/06-10-085-06W4/0	157.0	160.0	McM A1 Seq	CNRL	NPRB
		00/06-10-085-06W4/0	161.0	174.3	McM Channel	CNRL	NPRB
		00/07-14-085-06W4/0	147.0	148.0	McM A1 Seq	CNRL	NPRB
		00/07-14-085-06W4/0	149.0	160.3	McM Channel	CNRL	NPRB
	WABISKAW-MCMURRAY H	00/12-07-083-04W4/0	201.0	204.5	Wbsk D Valley Fill	CNRL	NPRB
		00/15-18-083-04W4/0	193.0	195.5	Wbsk D Valley Fill	CNRL	NPRB
		00/15-18-083-04W4/0	197.5	209.8	McM Channel	CNRL	NPRB
		00/02-19-083-04W4/0	188.0	190.5	Wbsk D Valley Fill	CNRL	NPRB
		00/02-19-083-04W4/0	191.5	207.8	McM Channel	CNRL	NPRB
		00/13-19-083-04W4/0	192.3	194.9	Wbsk C Sand	CNRL	NPRB
		00/13-19-083-04W4/0	195.0	197.5	Wbsk D Valley Fill	CNRL	NPRB
		00/08-09-083-05W4/0	226.8	232.0	Wbsk D Valley Fill	PET	NPRB
		00/11-11-083-05W4/0	196.3	197.3	Wbsk C Sand	PET	NPRB
		00/11-11-083-05W4/0	197.5	201.3	Wbsk D Valley Fill	PET	NPRB
		00/12-12-083-05W4/0	196.0	197.2	Wbsk C Sand	PET	NPRB
		00/12-12-083-05W4/0	197.2	201.0	Wbsk D Valley Fill	PET	NPRB
		00/12-12-083-05W4/0	206.5	208.0	McM Channel	PET	NPRB
		00/15-13-083-05W4/0	184.0	187.0	Wbsk C Sand	CNRL	NPRB
		00/15-13-083-05W4/0	187.0	190.0	Wbsk D Valley Fill	CNRL	NPRB
		00/15-13-083-05W4/0	190.2	208.0	McM Channel	CNRL	NPRB
		00/15-14-083-05W4/0	203.7	206.4	Wbsk D Valley Fill	CNRL	NPRB
		00/15-14-083-05W4/0	208.7	220.0	McM Channel	CNRL	NPRB
		02/15-14-083-05W4/0	204.0	206.0	Wbsk D Valley Fill	CNRL	NPRB

**Table 2A. Wabiskaw McMurray Intervals Approved Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee	Reason for Decision
NEWBY (cont.)	WABISKAW-MCMURRAY H (cont.)	00/15-15-083-05W4/0	246.0	248.2	Wbsk D Valley Fill	CNRL	NPRB
		00/14-20-083-05W4/0	234.5	238.0	Wbsk D Valley Fill	CNRL	NPRB
		00/08-21-083-05W4/0	232.0	235.0	Wbsk D Valley Fill	CNRL	NPRB
		00/07-22-083-05W4/0	220.0	223.0	Wbsk D Valley Fill	CONOCO	NPRB
		00/14-22-083-05W4/0	212.0	215.0	Wbsk D Valley Fill	CNRL	NPRB
		00/05-24-083-05W4/0	206.0	208.1	Wbsk D Valley Fill	CNRL	NPRB
		00/05-24-083-05W4/0	214.0	215.8	McM Channel	CNRL	NPRB
		00/12-25-083-05W4/0	199.6	202.0	Wbsk D Valley Fill	CNRL	NPRB
		00/05-28-083-05W4/0	208.0	211.0	Wbsk D Valley Fill	CNRL	NPRB
		00/05-28-083-05W4/0	212.0	226.0	McM Channel	CNRL	NPRB
		00/11-32-083-05W4/0	210.0	212.7	Wbsk D Valley Fill	CNRL	NPRB
		00/11-32-083-05W4/0	214.0	225.0	McM Channel	CNRL	NPRB
		00/13-33-083-05W4/0	205.0	207.0	Wbsk D Valley Fill	CNRL	NPRB
		00/13-33-083-05W4/0	208.5	223.0	McM Channel	CNRL	NPRB
		00/09-35-083-05W4/0	187.5	189.5	Wbsk D Valley Fill	CNRL	NPRB
		00/09-35-083-05W4/0	190.5	207.0	McM Channel	CNRL	NPRB
		00/12-05-084-05W4/0	225.5	227.0	McM Channel	CNRL	NPRB
TAR	MCMURRAY U/D-005	00/02-02-100-14W4/0	523.5	524.0	Wbsk D Sand	ENCANA	RMP
	MCMURRAY U/D-037	00/02-02-100-14W4/0	537.0	539.0	McM Channel	ENCANA	NPRB
	WABISKAW Q	00/12-28-099-14W4/0	509.8	511.2	Wbsk C Sand	ENCANA	RMP
	WABISKAW U/D-021	00/15-16-100-13W4/0	473.5	475.0	Wbsk D Sand	ENCANA	RMP
	WABISKAW U/D-035	AA/11-24-099-14W4/0	531.6	534.0	Wbsk C Sand	IMPERIAL	RMP
	WABISKAW U/D-036	00/12-24-099-14W4/0	531.0	534.2	Wbsk C Sand	ENCANA	RMP
	WABISKAW U/D-037	00/02-30-099-14W4/0	498.0	499.0	Wbsk C Sand	ENCANA	RMP
	WABISKAW U/D-038	00/05-35-099-14W4/0	533.0	534.7	Wbsk C Sand	ENCANA	RMP
		00/02-02-100-14W4/0	517.0	522.5	Wbsk C Sand	ENCANA	RMP
	WABISKAW U/D-039	AA/12-12-099-15W4/0	449.5	451.5	Wbsk C Sand	IMPERIAL	RMP
		00/09-14-099-15W4/0	470.0	471.0	Wbsk C Sand	ENCANA	RMP
	WABISKAW V	00/06-13-099-14W4/0	525.0	526.0	Wbsk C Sand	ENCANA	RMP, PC
		00/03-14-099-14W4/0	513.5	517.8	Wbsk C Sand	ENCANA	RMP, PC
		00/04-22-099-14W4/0	521.0	526.5	Wbsk C Sand	ENCANA	RMP, PC
THORNBURY	MCMURRAY C6C	00/02-31-079-10W4/0	414.0	415.0	McM A1 Seq	CNRL	PC, RMP, PSD
		00/02-31-079-10W4/0	416.0	417.0	McM A2 Seq	CNRL	PC, RMP, PSD
	MCMURRAY G2G	00/04-19-079-10W4/0	431.0	433.0	McM A2 Seq	CNRL	RMP
		00/01-25-079-11W4/0	424.0	425.0	McM A2 Seq	CNRL	RMP
	MCMURRAY S5S	00/07-29-079-12W4/0	458.2	465.5	McM C Channel	SUPERMAN	RMP

**Table 3. Corrections to Tables 1 and 2**

Field Name	Pool Name	Well ID	Pay Top Depth (TVD)	Pay Base Depth (TVD)	Stratigraphic Interval	Licensee
<b>Intervals missing from Table 1</b>						
DIVIDE	MCMURRAY KK	00/01-07-082-12W4/0	469	471.4	McM Channel	CNRL
HANGINGSTONE	WABISKAW-MCMURRAY D	00/06-29-081-07W4/0	411	412.5	McM A1 Seq	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/06-29-081-07W4/0	413.1	414.3	McM A2 Seq	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/06-30-081-07W4/0	428	429.7	McM A1 Seq	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/06-30-081-07W4/0	430.3	431	McM A2 Seq	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/07-02-082-08W4/0	446	447.8	Wbsk D Valley Fill	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/07-02-082-08W4/0	450	451.4	McM Channel	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/08-07-082-07W4/0	448.9	453.5	McM A Channel	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/08-12-082-08W4/0	444.3	446.5	Wbsk D Valley Fill	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/08-12-082-08W4/0	448.8	451	McM A Channel	NORTHSTAR
HANGINGSTONE	WABISKAW-MCMURRAY D	00/11-20-081-07W4/0	406.7	407.5	McM A2 Seq	CALPINE
HANGINGSTONE	WABISKAW-MCMURRAY D	00/15-01-082-08W4/0	444	452.8	McM Channel	NORTHSTAR
KIRBY	UPPER MANNVILLE B4B	02/06-35-073-08W4/0	458	461	Wbsk B Valley Fill	CNRL
KIRBY	UPPER MANNVILLE C4C	00/10-04-074-08W4/0	456.9	457.5	Wbsk B Valley Fill	CNRL
KIRBY	UPPER MANNVILLE U2U	00/05-26-073-08W4/0	476.4	477.6	Wbsk B Valley Fill	ISH
KIRBY	UPPER MANNVILLE U2U	00/09-35-073-09W4/0	429	431.5	Wbsk B Valley Fill	PET
KIRBY	UPPER MANNVILLE U2U	00/10-25-073-09W4/0	494	592	Wbsk B Valley Fill	PET
KIRBY	UPPER MANNVILLE U2U	00/10-29-073-08W4/0	500	943	Wbsk B Valley Fill	ISH
KIRBY	UPPER MANNVILLE U2U	00/10-30-073-08W4/0	438	440	Wbsk B Valley Fill	CNRL
KIRBY	UPPER MANNVILLE U2U	00/10-33-073-08W4/0	462	463	Wbsk B Valley Fill	PETRO-CANADA
KIRBY	UPPER MANNVILLE U2U	00/14-31-073-08W4/0	514.9	916	Wbsk B Valley Fill	CNRL
LEISMER	MCMURRAY K2K	00/08-16-078-10W4/0	393.5	394.0	McM A2 Seq	PET
<b>Interval missing from Table 2</b>						
CHARD	WABISKAW-MCMURRAY A	00/11-20-079-06W4/0	274.9	279.2	McM A2 Seq	CNRL
CHARD	WABISKAW-MCMURRAY A	02/11-20-079-06W4/0	271.3	274.4	McM A2 Seq	CNRL
LEISMER	MCMURRAY Z3Z	00/12-36-079-07W4/0	299.2	305.5	McM B1 Seq	CNRL
<b>Interval included on Table 1 that should have been on Table 2</b>						
HANGINGSTONE	MCMURRAY KK	00/11-25-082-11W4/0	433	437	McM Channel	PEOC
<b>Intervals Removed Table 1 - No Gas Pay</b>						
HANGINGSTONE	WABISKAW E	00/10-07-081-10W4/0	426.4	427.8	McM A Channel	PET
HARDY	WABISKAW-MCMURRAY A	00/04-13-077-05W4/0	332.8	334.0	Wbsk C Sand	PET
<b>Intervals with corrected well IDs</b>						
CHARD	WABISKAW-MCMURRAY A	00/12-11-079-06W4/0	216.0	217.0	Wbsk C Sand	CNRL
CHARD	WABISKAW-MCMURRAY A	00/12-11-079-06W4/0	217.0	227.0	McM A2 Seq	CNRL
HANGINGSTONE	MCMURRAY V2V	00/04-35-080-07W4/0	331.2	333.1	McM B2 Seq	Calpine
LEISMER	WABISKAW-MCMURRAY A	00/02-31-077-07W4/0	289.8	291.0	Wbsk C Sand	NEXEN
LEISMER	WABISKAW-MCMURRAY E	00/10-28-079-09W4/0	410.0	410.8	McM A1 Seq	EnCana



# Phase 3 Final Proceeding Under Bitumen Conservation Requirements in the Athabasca Wabiskaw-McMurray

November 10, 2005

## **ALBERTA ENERGY AND UTILITIES BOARD**

Decision 2005-122: Phase 3 Final Proceeding Under Bitumen Conservation Requirements  
in the Athabasca Wabiskaw-McMurray

November 10, 2005

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**CONTENTS**

1 Proceeding and Hearing.....	1
2 Decision .....	1
Table 1 Wabiskaw-McMurray Intervals Denied for Gas Production	3
Table 2 Wabiskaw-McMurray Intervals Approved for Gas Production.....	25
Appendix 1 Those Who Appeared at the Hearing .....	31



## **ALBERTA ENERGY AND UTILITIES BOARD**

**Calgary Alberta**

### **PHASE 3 FINAL PROCEEDING UNDER BITUMEN CONSERVATION REQUIREMENTS IN THE ATHABASCA WABISKAW-MCMURRAY**

**Decision 2005-122  
Proceeding No. 1347905**

#### **1 PROCEEDING AND HEARING**

*General Bulletin (GB) 2003-28: Bitumen Conservation Requirements, Athabasca Wabiskaw-McMurray*, issued by the Alberta Energy and Utilities Board (EUB/Board) on July 22, 2003, provides background information on the matter dealt with in this hearing. This hearing was the final hearing under Phase 3 of the Bitumen Conservation Requirements. It was preceded by interim hearings in March and June 2004, which resulted in the Board issuing *Decisions 2004-045*<sup>1</sup> and *2004-062*<sup>2</sup> and Interim Shut-in Orders 04-001, 04-002, and 04-003. On September 15, 2004, the Board held a prehearing meeting to consider submissions on the process and timing for the final hearing. The Board's directions resulting from the prehearing meeting were set out in *Decision 2004-088*.<sup>3</sup>

The public hearing was held from June 14 to August 12, 2005, in Calgary, Alberta, before Board Member J. D. Dilay, P.Eng., and Acting Board Members C. A. Langlo, P.Geol., and G. D. Williams, Ph.D., P.Geol. Parties that attended the hearing are listed in Appendix 1.

#### **2 DECISION**

The Board decides that gas production from the intervals listed in Table 1 of this report must remain shut in (for those intervals previously shut in by an interim shut-in order) or must be shut in by January 1, 2006, and that gas is allowed to be produced from the intervals listed in Table 2 of this report, subject to *ID 99-1*<sup>4</sup> applications being required for those intervals that have never produced and/or been completed.

This decision results in the following considerations and requirements:

- 1) The Board recognizes that some unusual circumstances may arise as a result of this decision and, therefore, it may be appropriate for the Board to grant relief from some of its regulatory requirements. For example, there are requirements related to the suspension and abandonment of wells, pipelines, and other field facilities and requirements pertaining to long-term inactive wells that can trigger liability management considerations. Therefore, the Board is prepared to consider requests for relief from such requirements.

<sup>1</sup> *Decision 2004-045: Phase 3 Proceedings Under Bitumen Conservation Requirements and Applications for Approval to Produce Gas in the Athabasca Wabiskaw-McMurray Area*, May 31, 2004.

<sup>2</sup> *Decision 2004-062: Review of Wells with Wabiskaw-McMurray Intervals Previously Allowed to Produce Gas by Decision 2003-023—Chard Area and Leismer Field*, July 27, 2004.

<sup>3</sup> *Decision 2004-088: Phase 3 Final Proceeding Under Bitumen Conservation Requirements, Athabasca Wabiskaw-McMurray—Prehearing Meeting Decision*, October 14, 2004.

<sup>4</sup> *Interim Directive (ID) 99-1: Gas/Bitumen Production in Oil Sands Areas—Application, Notification, and Drilling Requirements*, February 3, 1999, and amendments.

- 2) In overlapping gas pools where one pool is allowed to produce and another is required to be shut in, there must be segregation between the pools in all wellbores or both pools must be shut in. In order to demonstrate segregation in the wellbore, zonal segregation tests must be conducted and submitted to the EUB in accordance with Section 11.150(1) and (2) of the *Oil and Gas Conservation Regulations* to confirm that segregation has been established between a pool that is permitted to produce gas and a pool that is not permitted to produce gas.

In due course the Board will issue a further report providing detailed reasons for its decision. The Board will also issue an order giving effect to its final decision in the Phase 3 Proceedings.

Dated in Calgary, Alberta, on November 10, 2005.

**ALBERTA ENERGY AND UTILITIES BOARD**

*<original signed by>*

J. D. Dilay, P.Eng.  
Board Member

*<original signed by>*

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

*<original signed by>*

G. D. Williams, Ph.D., P.Geol.  
Acting Board Member

## **Legend for Decision 2005-122 Tables 1 and 2**

### **Company Abbreviations**

ANADARKO	ANADARKO CANADA CORPORATION
BAAY LAND	BAAY LAND CONSULTANTS LTD.
BP	BP CANADA ENERGY COMPANY
CALPINE	CALPINE CANADA RESOURCES COMPANY
CANNAT	CANNAT RESOURCES INC.
CNRL	CANADIAN NATURAL RESOURCES LIMITED
CONOCO	CONOCOPHILLIPS CANADA RESOURCES CORP.
DEVON AOG	DEVON AOG CORPORATION
DEVON ARL	DEVON ARL CORPORATION
DEVON	DEVON CANADA CORPORATION
ENCANA	ENCANA OIL & GAS CO. LTD.
ENCANA C.	ENCANA CORPORATION
FIRST	FIRST CHICAGO INVESTMENT CORPORATION
GULF	GULF CANADA LIMITED
HUSKY	HUSKY OIL OPERATIONS LIMITED
ISH	ISH ENERGY LTD.
IMPERIAL	IMPERIAL OIL RESOURCES LIMITED
JCOS	JAPAN CANADA OIL SANDS LTD.
MEG	MEG ENERGY CORP.
NEXEN	NEXEN CANADA LTD.
NORTHSTAR	NORTHSTAR ENERGY CORPORATION
OPTI	OPTI CANADA INC.
PARAMOUNT	PARAMOUNT RESOURCES LTD.
PET	PARAMOUNT ENERGY OPERATING CORP.
PETRO-CANADA	PETRO-CANADA
PRIMEWEST	PRIMEWEST ENERGY INC.
SHELL	SHELL CANADA LIMITED
STYLUS	STYLUS EXPLORATION INC.
SUNCOR	SUNCOR ENERGY INC.
SUPERMAN	SUPERMAN RESOURCES INC.
TALISMAN	TALISMAN ENERGY INC.
VIKING	VIKING ENERGY LTD.



**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
CHARD	MCMURRAY P	00/10-27-080-06W4/0	246.9	256.9	McM Channel	CNRL
		00/11-28-080-06W4/0	284.2	295.8	McM Channel	CNRL
		00/11-34-080-06W4/0	249.5	260.0	McM Channel	CNRL
	MCMURRAY VV	00/07-13-080-07W4/0	310.2	319.5	McM Channel	CNRL
		00/07-14-080-07W4/0	327.8	328.5	McM Channel	CNRL
CLYDEN	MCMURRAY W	00/07-25-075-13W4/0	507.0	513.0	McM Channel	VIKING
	MCMURRAY Y	00/11-30-076-12W4/0	496.8	501.5	McM Channel	CNRL
CORNER	MCMURRAY A	00/05-31-080-09W4/0	416.0	418.5	McM A1 Seq	PET
		00/12-32-080-09W4/0	418.0	421.0	McM A1 Seq	PET
		00/10-36-080-10W4/0	418.0	420.0	McM A1 Seq	PET
		00/11-04-081-09W4/0	529.3	682.0	McM Channel	PET
		00/14-04-081-09W4/0	425.5	427.5	McM A1 Seq	PET
		02/14-04-081-09W4/0	427.0	428.0	McM A1 Seq	PET
		00/09-05-081-09W4/0	426.0	428.0	McM A1 Seq	PET
		00/09-05-081-09W4/0	428.0	430.0	McM A2 Seq	PET
		00/06-07-081-09W4/0	421.3	424.0	McM A1 Seq	PET
		00/06-07-081-09W4/0	425.0	434.0	McM Channel	PET
		00/15-08-081-09W4/0	423.2	424.0	McM A1 Seq	PET
		00/12-09-081-09W4/0	418.0	420.0	McM A1 Seq	PET
		00/13-09-081-09W4/0	418.5	420.5	McM A1 Seq	GULF
		00/13-09-081-09W4/0	420.7	424.0	McM Channel	GULF
		00/12-16-081-09W4/0	425.0	429.0	McM Channel	PET
		02/12-16-081-09W4/0	431.0	434.2	McM Channel	PET
		00/06-01-081-10W4/0	419.0	421.0	McM A1 Seq	PET
		00/10-11-081-10W4/0	424.2	427.0	McM A1 Seq	PET
		00/10-11-081-10W4/0	427.0	438.5	McM Channel	PET
		00/03-12-081-10W4/0	425.0	426.0	McM A1 Seq	PET
		00/03-12-081-10W4/0	427.1	436.0	McM Channel	PET
		00/12-13-081-10W4/0	422.3	424.5	McM A1 Seq	PET
		00/12-13-081-10W4/0	425.1	433.3	McM Channel	PET
	MCMURRAY AA	00/08-16-080-10W4/0	422.0	432.5	McM Channel	PET
	MCMURRAY C	00/14-27-080-10W4/0	415.5	418.0	McM A1 Seq	PET
		00/14-27-080-10W4/0	418.0	432.8	McM Channel	PET
		00/14-28-080-10W4/0	417.2	419.0	McM A1 Seq	PET
		00/14-28-080-10W4/0	419.0	433.0	McM Channel	PET
		00/09-33-080-10W4/0	417.5	421.0	McM A1 Seq	PET
		00/09-33-080-10W4/0	424.0	435.0	McM Channel	PET
		00/11-34-080-10W4/0	420.0	421.0	McM A1 Seq	PET
		00/11-34-080-10W4/0	432.2	436.0	McM Channel	PET
		00/05-35-080-10W4/0	416.0	419.5	McM A1 Seq	PET
		00/05-35-080-10W4/0	426.0	436.0	McM Channel	PET
		00/03-03-081-10W4/0	421.8	423.5	McM A1 Seq	PRIMEWEST
		00/08-04-081-10W4/0	423.0	424.0	McM A1 Seq	PET
		00/08-04-081-10W4/0	427.0	437.0	McM Channel	PET
		00/08-05-081-10W4/0	433.0	436.5	McM Channel	PET
	MCMURRAY CC	00/10-28-081-09W4/0	428.5	436.0	McM Channel	PET
	MCMURRAY D	00/09-31-080-10W4/0	419.5	421.5	McM A1 Seq	PET
		00/09-31-080-10W4/0	425.0	438.0	McM Channel	PET
		00/11-32-080-10W4/0	423.8	425.0	McM A1 Seq	PET
		00/11-32-080-10W4/0	427.0	441.0	McM Channel	PET
	MCMURRAY G	00/09-10-081-09W4/0	430.2	432.4	McM A1 Seq	PET
		00/09-10-081-09W4/0	435.0	435.8	McM A2 Seq	PET
		00/13-11-081-09W4/0	428.0	429.8	McM A1 Seq	PET
		00/13-11-081-09W4/0	429.8	431.8	McM A2 Seq	PET
		00/02-14-081-09W4/0	432.5	433.7	McM A1 Seq	GULF
		00/11-14-081-09W4/0	430.7	433.0	McM A1 Seq	PET
		00/04-15-081-09W4/0	424.5	427.4	McM A1 Seq	GULF
		00/10-23-081-09W4/0	429.4	430.8	McM A1 Seq	PET
		00/10-23-081-09W4/0	431.7	434.0	McM Channel	PET
		00/07-25-081-09W4/0	426.6	427.8	McM A1 Seq	PET
		00/07-25-081-09W4/0	428.0	431.5	McM Channel	PET
		00/07-26-081-09W4/0	425.0	426.3	McM A1 Seq	PET
		00/07-26-081-09W4/0	427.0	430.5	McM Channel	PET
		00/06-27-081-09W4/0	419.0	421.3	McM A1 Seq	PET
		00/06-27-081-09W4/0	421.7	428.8	McM Channel	PET

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
CORNER (cont.)	MCMURRAY J	00/08-23-080-10W4/0	419.0	419.8	McM Channel	PET
	MCMURRAY K	00/06-02-080-10W4/0	436.0	437.0	McM A1 Seq	PET
		00/15-03-080-10W4/0	432.3	433.0	McM A1 Seq	CALPINE
	MCMURRAY MM	00/10-28-081-09W4/0	419.0	421.5	McM A1 Seq	PET
	MCMURRAY P	00/15-03-080-10W4/0	440.8	441.5	McM Channel	CALPINE
	MCMURRAY PP	00/08-23-080-10W4/0	423.0	429.0	McM Channel	PET
	MCMURRAY Q	00/10-13-080-10W4/0	429.0	431.0	McM A1 Seq	PET
		00/07-14-080-10W4/0	419.2	422.0	McM A1 Seq	PET
		00/07-14-080-10W4/0	422.0	424.6	McM Channel	PET
		00/08-15-080-10W4/0	422.0	424.0	McM A1 Seq	PET
		00/08-15-080-10W4/0	425.0	425.8	McM Channel	PET
		00/08-16-080-10W4/0	419.5	420.0	McM A1 Seq	PET
		00/08-23-080-10W4/0	415.4	417.0	McM A1 Seq	PET
		00/16-24-080-10W4/0	418.7	421.0	McM A1 Seq	ENCANA C.
		00/16-24-080-10W4/0	421.0	426.3	McM Channel	ENCANA C.
		00/08-25-080-10W4/0	420.5	423.0	McM A1 Seq	PET
	MCMURRAY U	00/05-31-080-08W4/0	459.5	460.6	McM B1 Seq	NORTHSTAR
		00/11-34-080-09W4/0	448.5	449.5	McM B1 Seq	ENCANA C.
		00/11-35-080-09W4/0	447.0	450.0	McM B1 Seq	ENCANA C.
		00/10-36-080-09W4/0	456.0	456.5	McM B1 Seq	ENCANA
		00/05-01-081-09W4/0	447.1	448.5	McM B1 Seq	PET
	MCMURRAY U/D-061	00/08-15-080-10W4/0	427.5	428.4	McM Channel	PET
DIVIDE	MCMURRAY AA	00/08-02-082-12W4/0	497.0	498.0	McM B2 Seq	STYLUS
	MCMURRAY FF	00/16-08-082-12W4/0	453.5	460.0	McM Channel	HUSKY
	MCMURRAY GG	00/14-05-082-12W4/0	481.7	482.8	McM B2 Seq	PET
		00/07-08-082-12W4/0	473.4	482.8	McM Channel	ANADARKO
	MCMURRAY HH	00/14-31-081-12W4/0	473.5	476.5	McM Channel	HUSKY
	MCMURRAY II	00/08-06-082-12W4/0	475.9	477.0	McM Channel	PET
	MCMURRAY JJ	00/07-09-082-12W4/0	479.4	480.6	McM B2 Seq	PET
	MCMURRAY K	00/07-03-082-12W4/0	478.7	482.4	McM Channel	STYLUS
	MCMURRAY S	00/05-16-082-12W4/0	467.3	474.7	McM Channel	PET
	MCMURRAY U/D-065	00/07-09-082-12W4/0	490.0	496.5	McM C Channel	PET
	MCMURRAY U/D-066	00/10-17-082-12W4/0	454.0	458.8	McM C Channel	PET
	MCMURRAY Y	00/11-01-082-13W4/0	439.8	441.2	McM B2 Seq	HUSKY
DUNCAN	MCMURRAY CCC	00/07-29-077-12W4/0	451.5	452.2	McM B1 Seq	CNRL
	MCMURRAY YY	00/15-22-077-12W4/0	450.5	452.1	McM Channel	CNRL
		00/12-20-077-12W4/0	454.0	455.6	McM Channel	CNRL
		00/06-22-077-12W4/0	456.0	457.0	McM Channel	CNRL
		00/15-18-077-12W4/0	461.7	462.4	McM Channel	CNRL
		00/10-13-077-13W4/0	469.5	471.8	McM Channel	CNRL
EAGLENEST	MCMURRAY U/D-001	00/15-14-101-13W4/0	537.0	538.0	McM Channel	ENCANA
	WABISKAW U/D-002	00/15-14-101-13W4/0	526.5	531.0	Wbsk D Sand	ENCANA
		AA/15-14-101-13W4/0	530.0	530.8	Wbsk D Sand	IMPERIAL
		AA/16-17-101-13W4/0	481.0	488.4	Wbsk D Sand	IMPERIAL
	WABISKAW U/D-007	00/02-20-101-13W4/0	462.0	467.0	Wbsk D Sand	ENCANA
ELLS	WABISKAW C	00/11-19-094-15W4/0	207.9	208.5	Wbsk A Sand	CNRL
		00/13-30-094-15W4/0	216.7	222.5	Wbsk A Sand	ENCANA
		AA/16-30-094-15W4/0	213.3	217.0	Wbsk A Sand	SHELL
		00/12-31-094-15W4/0	219.8	226.0	Wbsk A Sand	ENCANA
		00/14-26-094-16W4/0	224.5	231.0	Wbsk A Sand	ENCANA
		00/11-35-094-16W4/0	232.0	239.0	Wbsk A Sand	ENCANA
		03/06-36-094-16W4/0	225.3	232.2	Wbsk A Sand	ENCANA
		00/05-06-095-15W4/0	235.6	240.8	Wbsk A Sand	ENCANA
		AA/05-06-095-15W4/0	234.0	239.3	Wbsk A Sand	SHELL
		00/08-07-095-15W4/0	262.0	269.5	Wbsk A Sand	ENCANA
		AA/08-07-095-15W4/0	263.0	272.5	Wbsk A Sand	SHELL
		00/05-09-095-15W4/0	238.0	241.5	Wbsk A Sand	ENCANA
		AA/05-10-095-15W4/0	231.9	234.1	Wbsk A Sand	SHELL
		00/05-17-095-15W4/0	275.5	280.0	Wbsk A Sand	ENCANA
		00/02-18-095-15W4/0	276.2	280.0	Wbsk A Sand	ENCANA
		AA/16-18-095-15W4/0	282.5	289.5	Wbsk A Sand	SHELL
		AA/06-21-095-15W4/0	264.6	266.4	Wbsk A Sand	SHELL
		00/05-09-095-16W4/0	232.5	234.1	Wbsk A Sand	ENCANA
		00/06-10-095-16W4/0	236.4	241.0	Wbsk A Sand	ENCANA
		AA/08-11-095-16W4/0	253.6	258.2	Wbsk A Sand	SHELL

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
ELLS (cont.)	WABISKAW C (cont.)	00/03-12-095-16W4/0	254.2	257.8	Wbsk A Sand	ENCANA
		AA/03-16-095-16W4/0	224.9	228.6	Wbsk A Sand	SHELL
		00/12-16-095-16W4/0	235.5	239.5	Wbsk A Sand	ENCANA
		00/06-25-095-16W4/0	268.0	272.7	Wbsk A Sand	ENCANA
		00/15-34-095-16W4/0	252.0	255.0	Wbsk A Sand	ENCANA
		AA/15-34-095-16W4/0	253.3	258.5	Wbsk A Sand	SHELL
		00/06-36-095-16W4/0	264.0	268.0	Wbsk A Sand	ENCANA
		00/03-06-096-15W4/0	275.5	280.0	Wbsk A Sand	ENCANA
		00/02-02-096-16W4/0	253.2	260.0	Wbsk A Sand	ENCANA
		00/02-10-096-16W4/0	308.9	313.3	Wbsk A Sand	ENCANA
		00/09-11-096-16W4/0	301.8	306.5	Wbsk A Sand	ENCANA
		00/09-14-096-16W4/0	337.0	341.5	Wbsk A Sand	ENCANA
		00/07-16-096-16W4/0	355.8	359.3	Wbsk A Sand	ENCANA
		00/16-23-096-16W4/0	359.7	364.2	Wbsk A Sand	ENCANA
		00/03-25-096-16W4/0	349.5	355.5	Wbsk A Sand	ENCANA
		00/03-25-096-16W4/0	356.0	358.0	Wbsk C Sand	ENCANA
		AA/03-25-096-16W4/0	351.0	354.5	Wbsk A Sand	IMPERIAL
		AA/03-25-096-16W4/0	356.5	357.5	Wbsk C Sand	IMPERIAL
		AA/03-25-096-16W4/0	359.5	361.5	Wbsk C Sand	ENCANA
		00/08-26-096-16W4/0	374.0	379.5	Wbsk A Sand	ENCANA
	WABISKAW U/D-011	00/03-06-096-15W4/0	293.0	296.0	Wbsk D Sand	ENCANA
	WABISKAW U/D-017	00/03-06-096-15W4/0	291.0	292.0	Wbsk C Sand	ENCANA
GLOVER	MCMURRAY A	00/10-31-075-10W4/0	449.4	455.0	McM Channel	PET
		00/11-32-075-10W4/0	457.0	458.0	McM Channel	PET
HANGINGSTONE	MCMURRAY BB	00/05-27-082-09W4/0	445.7	447.3	McM A1 Seq	NORTHSTAR
		00/08-29-082-09W4/0	438.2	441.3	McM A1 Seq	NORTHSTAR
		00/02-33-082-09W4/0	439.2	442.7	McM A1 Seq	NORTHSTAR
	MCMURRAY C	00/10-20-081-08W4/0	432.8	438.5	McM Channel	PET
	MCMURRAY DDD	00/02-17-082-09W4/0	437.5	439.0	McM A1 Seq	NORTHSTAR
		00/05-18-082-09W4/0	427.0	428.0	McM A1 Seq	NORTHSTAR
	MCMURRAY E	00/09-10-081-10W4/0	440.0	441.0	McM B1 Seq	PET
	MCMURRAY G	00/12-15-081-10W4/0	447.0	458.5	McM Channel	PET
		00/09-21-081-10W4/0	445.0	449.5	McM Channel	PET
		00/07-22-081-10W4/0	448.3	451.5	McM Channel	PET
	MCMURRAY G2G	00/06-05-081-08W4/0	468.0	471.0	McM Channel	NORTHSTAR
		00/05-06-081-08W4/0	455.2	467.0	McM Channel	NORTHSTAR
		00/13-08-081-08W4/0	463.0	465.0	McM Channel	NORTHSTAR
	MCMURRAY G3G	00/01-22-084-11W4/0	292.2	294.2	McM B1 Seq	NORTHSTAR
		AA/01-22-084-11W4/0	290.5	292.0	McM B1 Seq	PETRO-CANADA
	MCMURRAY H2H	00/08-21-081-08W4/0	449.0	455.0	McM Channel	PET
		00/11-22-081-08W4/0	444.7	451.0	McM Channel	CALPINE
		00/12-23-081-08W4/0	445.1	448.0	McM Channel	CALPINE
		00/13-14-082-10W4/0	431.0	432.0	McM Channel	PET
	MCMURRAY I	00/09-20-081-10W4/0	437.0	439.8	McM Channel	PET
	MCMURRAY III	00/10-09-082-10W4/0	419.0	423.4	McM A1 Seq	PET
		00/07-10-082-10W4/0	420.5	422.0	McM A1 Seq	PET
	MCMURRAY JJ	00/06-31-082-09W4/0	436.5	437.8	McM A Channel	NORTHSTAR
	MCMURRAY K2K	00/16-16-081-08W4/0	461.0	463.0	McM Channel	PET
	MCMURRAY KK	00/03-30-082-10W4/0	423.6	428.4	McM Channel	PET
		00/11-25-082-11W4/0	433.0	437.0	McM Channel	PET
	MCMURRAY KKK	00/12-28-081-10W4/0	427.0	431.2	McM Channel	PET
	MCMURRAY L2L	00/09-19-081-08W4/0	430.2	434.0	McM Channel	PET
	MCMURRAY LLL	00/11-35-082-08W4/0	445.0	450.0	McM Channel	NORTHSTAR
		00/06-03-083-08W4/0	445.0	447.0	McM A Channel	NORTHSTAR
	MCMURRAY NNN	00/11-19-081-09W4/0	431.2	432.8	McM Channel	PET
	MCMURRAY O2O	00/14-11-082-08W4/0	443.4	460.0	McM Channel	NORTHSTAR
	MCMURRAY P2P	AA/06-25-082-08W4/0	451.0	460.0	McM Channel	PETRO-CANADA
	MCMURRAY PP	00/12-12-082-11W4/0	435.3	436.5	McM Channel	PET
	MCMURRAY QQQ	00/10-09-082-10W4/0	423.4	427.0	McM Channel	PET
		00/07-10-082-10W4/0	424.5	431.0	McM A Channel	PET
	MCMURRAY RRR	00/06-19-082-09W4/0	430.6	432.5	McM Channel	NORTHSTAR
	MCMURRAY U	AA/06-14-084-11W4/0	312.5	314.3	McM Channel	PETRO-CANADA
		AA/09-15-084-11W4/0	301.8	302.5	McM Channel	PETRO-CANADA
		00/05-13-084-11W4/2	320.0	322.2	McM Channel	NORTHSTAR
		00/06-14-084-11W4/0	314.5	316.8	McM Channel	NORTHSTAR

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
HANGINGSTONE (cont.)	MCMURRAY U (cont.)	F1/02-23-084-11W4/0	299.0	300.0	McM Channel	JCOS
	MCMURRAY U/D 074	00/10-19-082-10W4/0	425.5	426.8	McM B1 Seq	PET
	MCMURRAY U/D-043	00/07-10-082-10W4/0	446.7	449.0	McM C Channel	PET
	MCMURRAY U/D-051	00/12-27-082-10W4/0	432.3	433.0	McM Channel	PET
	MCMURRAY U/D-096	00/10-25-082-10W4/0	425.5	426.5	McM A1 Seq	PET
	MCMURRAY U/D-108	00/05-16-081-10W4/0	455.0	459.3	McM Channel	PET
	MCMURRAY U/D-118	00/13-13-084-11W4/0	310.2	311.5	McM Channel	PETRO-CANADA
	MCMURRAY UNDEFINED 3	AA/05-24-081-10W4/0	432.5	436.0	McM Channel	JCOS
	MCMURRAY UNDEFINED 5	AB/06-12-083-08W4/0	441.0	442.0	McM Channel	PETRO-CANADA
	MCMURRAY X	00/11-19-081-09W4/0	422.9	426.5	McM A1 Seq	PET
		00/12-30-081-09W4/0	425.5	429.0	McM A1 Seq	PET
		00/10-25-081-10W4/0	430.0	431.0	McM A1 Seq	PET
		00/10-25-081-10W4/0	434.0	435.5	McM Channel	PET
		00/10-26-081-10W4/0	432.2	434.0	McM Channel	PET
	MCMURRAY Y	00/10-09-082-09W4/0	439.5	440.1	McM A1 Seq	NORTHSTAR
		00/07-15-082-09W4/0	454.0	455.0	McM Channel	NORTHSTAR
	MCMURRAY YYY	00/11-05-082-08W4/0	432.7	433.5	McM A1 Seq	NORTHSTAR
		00/11-05-082-08W4/0	434.0	439.5	McM Channel	NORTHSTAR
		00/10-06-082-08W4/0	432.4	434.0	McM A1 Seq	PETRO-CANADA
		00/10-06-082-08W4/0	434.2	437.7	McM A2 Seq	PETRO-CANADA
		02/10-06-082-08W4/0	432.0	434.0	McM A1 Seq	NORTHSTAR
		02/10-06-082-08W4/0	434.0	436.4	McM A2 Seq	NORTHSTAR
		00/08-07-082-08W4/0	431.2	433.0	McM A1 Seq	NORTHSTAR
		00/08-07-082-08W4/0	433.9	439.5	McM Channel	NORTHSTAR
		00/01-01-082-09W4/0	436.2	437.2	McM A2 Seq	NORTHSTAR
		00/10-11-082-09W4/0	447.2	449.5	McM A1 Seq	NORTHSTAR
		00/10-11-082-09W4/0	450.0	457.0	McM Channel	NORTHSTAR
		00/06-12-082-09W4/0	458.5	459.2	McM A2 Seq	NORTHSTAR
		02/06-12-082-09W4/0	452.0	453.3	McM A1 Seq	NORTHSTAR
		02/06-12-082-09W4/0	454.3	457.0	McM A2 Seq	NORTHSTAR
	MCMURRAY Z	00/15-15-082-09W4/0	449.8	452.3	McM A1 Seq	NORTHSTAR
		00/15-15-082-09W4/0	452.8	457.0	McM Channel	NORTHSTAR
		00/15-16-082-09W4/0	443.5	447.8	McM A1 Seq	NORTHSTAR
		00/15-16-082-09W4/0	449.3	451.3	McM Channel	NORTHSTAR
		00/07-22-082-09W4/0	453.5	455.8	McM A1 Seq	NORTHSTAR
		00/11-23-082-09W4/0	451.9	453.0	McM A1 Seq	NORTHSTAR
	MCMURRAY Z2Z	00/06-11-081-08W4/0	440.0	446.0	McM B1 Channel	NORTHSTAR
	MCMURRAY ZZ	00/02-17-082-09W4/0	440.5	443.0	McM A2 Seq	NORTHSTAR
	WABISKAW A	00/11-35-082-08W4/0	443.0	444.0	Wbsk C Sand	NORTHSTAR
		00/16-36-082-08W4/0	434.8	435.5	Wbsk C Sand	NORTHSTAR
		00/06-01-083-08W4/0	440.0	440.5	Wbsk C Sand	NORTHSTAR
		00/07-30-082-07W4/0	443.3	443.8	Wbsk C Sand	NORTHSTAR
		00/07-02-083-08W4/0	448.0	448.5	Wbsk C Sand	NORTHSTAR
	WABISKAW E	00/10-07-081-10W4/0	426.4	427.8	McM A Channel	PET
		00/11-01-081-11W4/0	427.5	428.6	McM Channel	PET
	WABISKAW-MCMURRAY A	00/13-19-082-08W4/0	455.0	456.0	Wbsk D Valley Fill	NORTHSTAR
		00/13-19-082-08W4/0	459.2	460.0	McM Channel	NORTHSTAR
		00/07-30-082-08W4/0	453.2	454.6	Wbsk D Valley Fill	NORTHSTAR
		00/07-30-082-08W4/0	455.8	458.2	McM Channel	NORTHSTAR
		00/01-36-082-09W4/0	432.5	435.1	McM A1 Seq	NORTHSTAR
		00/01-36-082-09W4/0	435.1	441.1	McM Channel	NORTHSTAR
	WABISKAW-MCMURRAY D	00/11-32-081-07W4/0	437.0	438.9	McM A1 Seq	CALPINE
		00/11-32-081-07W4/0	439.5	440.7	McM A2 Seq	CALPINE
		00/11-25-081-08W4/0	443.0	445.0	Wbsk D Valley Fill	NORTHSTAR
		00/11-25-081-08W4/0	445.0	447.5	McM A2 Seq	NORTHSTAR
		00/15-26-081-08W4/0	438.0	439.5	Wbsk D Valley Fill	CALPINE
		00/15-26-081-08W4/0	439.5	441.3	McM A2 Seq	CALPINE
		00/15-26-081-08W4/0	446.0	447.2	McM Channel	CALPINE
		02/15-27-081-08W4/0	442.1	443.2	McM A Channel	CALPINE
		02/15-27-081-08W4/0	448.0	451.5	McM Channel	CALPINE
		00/15-28-081-08W4/0	433.3	435.0	McM A2 Seq	NORTHSTAR
		00/15-28-081-08W4/0	440.0	442.0	McM Channel	NORTHSTAR
		00/11-29-081-08W4/0	430.0	433.5	McM A2 Seq	PET
		00/07-31-081-08W4/0	433.3	435.4	McM A2 Seq	PET
		00/06-33-081-08W4/0	433.5	435.4	McM A2 Seq	NORTHSTAR

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
HANGINGSTONE (cont.)	WABISKAW-MCMURRAY D (cont.)	00/06-33-081-08W4/0	438.4	445.0	McM Channel	NORTHSTAR
		00/09-34-081-08W4/0	437.0	442.0	McM A Channel	NORTHSTAR
		00/09-34-081-08W4/0	445.0	445.8	McM B1 Seq	NORTHSTAR
		02/09-34-081-08W4/0	435.0	438.0	McM A Channel	NORTHSTAR
		00/07-35-081-08W4/0	439.8	441.0	Wbsk D Valley Fill	NORTHSTAR
		00/07-35-081-08W4/0	441.0	446.0	McM A Channel	NORTHSTAR
		00/11-36-081-08W4/0	446.0	447.0	Wbsk D Valley Fill	NORTHSTAR
		00/11-36-081-08W4/0	449.5	453.0	McM A2 Seq	NORTHSTAR
		00/10-24-081-09W4/0	429.5	432.0	McM A2 Seq	PET
	WABISKAW-MCMURRAY E	00/13-03-082-08W4/0	436.1	437.0	Wbsk D Valley Fill	NORTHSTAR
		00/13-03-082-08W4/0	437.6	445.0	McM Channel	NORTHSTAR
		00/12-04-082-08W4/0	432.8	436.0	Wbsk D Valley Fill	NORTHSTAR
		00/12-04-082-08W4/0	437.0	441.0	McM Channel	NORTHSTAR
		00/07-09-082-08W4/0	440.5	441.1	Wbsk D Valley Fill	NORTHSTAR
		00/07-09-082-08W4/0	442.2	443.2	McM A2 Seq	NORTHSTAR
		00/14-11-082-08W4/0	436.0	437.6	Wbsk D Valley Fill	NORTHSTAR
		00/14-11-082-08W4/0	438.5	440.4	McM A2 Seq	NORTHSTAR
		00/07-16-082-08W4/0	450.8	452.5	Wbsk D Valley Fill	NORTHSTAR
		00/10-16-082-08W4/0	453.0	453.7	McM A Channel	PETRO-CANADA
		00/15-17-082-08W4/0	453.4	454.5	McM A1 Seq	NORTHSTAR
		02/15-17-082-08W4/0	454.0	454.8	McM A1 Seq	NORTHSTAR
		00/07-21-082-08W4/0	453.5	454.0	McM A1 Seq	NORTHSTAR
		00/07-21-082-08W4/0	454.9	456.2	McM A2 Seq	NORTHSTAR
		00/15-22-082-08W4/0	457.0	459.3	McM A2 Seq	NORTHSTAR
		AA/10-23-082-08W4/0	455.0	456.0	McM A2 Seq	PETRO-CANADA
		00/06-27-082-08W4/0	450.0	452.0	McM A2 Seq	NORTHSTAR
HARDY	MCMURRAY J	00/08-34-076-04W4/0	349.0	350.0	McM A1 Seq	STYLUS
		00/11-02-077-04W4/0	345.0	348.0	McM A1 Seq	PET
		00/11-03-077-04W4/0	346.5	350.0	McM A1 Seq	PET
		00/07-07-077-04W4/0	339.2	349.6	McM Channel	PET
		00/03-15-077-04W4/0	336.0	338.5	McM A1 Seq	PET
		00/03-15-077-04W4/0	338.5	341.0	McM Channel	PET
		00/02-18-077-04W4/0	343.0	351.0	McM Channel	PET
	MCMURRAY QQ	00/02-18-077-04W4/0	341.0	343.0	McM A1 Seq	PET
	MCMURRAY RR	00/07-11-077-05W4/0	344.5	355.0	McM Channel	PET
		00/05-12-077-05W4/0	340.0	350.0	McM Channel	PET
		00/04-13-077-05W4/0	339.3	347.4	McM Channel	PET
		00/05-24-077-05W4/0	352.5	356.0	McM Channel	PET
	MCMURRAY U/D-074	00/07-30-077-04W4/0	338.5	342.5	McM Channel	SUPERMAN
	MCMURRAY UNDEFINED	AA/11-24-077-06W4/0	326.5	330.0	McM Channel	MEG
	MCMURRAY Z	00/11-30-075-04W4/0	387.5	389.9	McM A1 Seq	STYLUS
		00/02-35-075-05W4/0	389.8	393.2	McM A1 Seq	STYLUS
		00/01-01-076-05W4/0	380.3	382.0	McM A1 Seq	DEVON
	MCMURRAY ZZ	00/09-06-077-04W4/0	329.0	342.5	McM Channel	PET
	WABISKAW G	00/07-06-076-04W4/0	398.0	401.0	Wbsk C Sand	DEVON
		00/01-01-076-05W4/0	376.8	380.0	Wbsk C Sand	DEVON
	WABISKAW M	00/05-19-077-04W4/0	316.0	319.0	Wbsk C Sand	PET
		00/06-20-077-04W4/0	336.5	339.4	Wbsk C Sand	PET
		00/07-30-077-04W4/0	325.8	327.5	Wbsk C Sand	SUPERMAN
		00/02-31-077-04W4/0	318.2	320.0	Wbsk C Sand	PET
		00/04-13-077-05W4/0	332.8	334.0	Wbsk C Sand	PET
		00/11-18-077-05W4/0	317.0	319.0	Wbsk C Sand	PET
		00/11-19-077-05W4/0	316.6	317.3	Wbsk C Sand	PET
		00/08-20-077-05W4/0	325.0	326.2	Wbsk C Sand	PET
		00/11-21-077-05W4/0	322.5	323.5	Wbsk C Sand	CNRL
		00/07-22-077-05W4/0	338.4	339.5	Wbsk C Sand	PET
		00/05-24-077-05W4/0	343.8	346.0	Wbsk C Sand	PET
		00/12-25-077-05W4/0	332.8	333.8	Wbsk C Sand	PET
		00/07-26-077-05W4/0	342.5	343.5	Wbsk C Sand	CNRL
		00/07-27-077-05W4/0	330.2	332.0	Wbsk C Sand	CNRL
		00/11-28-077-05W4/0	324.2	326.0	Wbsk C Sand	PET
		00/05-30-077-05W4/0	319.0	320.4	Wbsk C Sand	CNRL
		00/10-33-077-05W4/0	337.2	338.5	Wbsk C Sand	PET
		00/10-34-077-05W4/0	332.3	334.0	Wbsk C Sand	CNRL
		00/05-35-077-05W4/0	338.5	339.5	Wbsk C Sand	CNRL

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
HARDY (cont.)	WABISKAW M (Cont.)	00/10-36-077-05W4/0	333.0	335.0	Wbsk C Sand	PET
		00/09-36-077-06W4/0	322.3	324.0	Wbsk C Sand	DEVON
		00/08-06-078-04W4/0	323.7	324.7	Wbsk C Sand	PET
		00/15-07-078-04W4/0	335.5	336.5	Wbsk C Sand	PET
		00/08-01-078-05W4/0	329.1	330.4	Wbsk C Sand	PET
		00/07-02-078-05W4/0	332.5	333.0	Wbsk C Sand	CNRL
		00/05-04-078-05W4/0	338.0	338.8	Wbsk C Sand	PET
		00/08-05-078-05W4/0	328.9	330.0	Wbsk C Sand	PET
		00/05-07-078-05W4/0	332.1	332.8	Wbsk C Sand	PET
		00/05-08-078-05W4/0	321.0	321.5	Wbsk C Sand	PET
		00/06-12-078-05W4/0	333.1	334.0	Wbsk C Sand	PET
	WABISKAW U/D-011	00/11-30-075-04W4/0	381.7	387.0	Wbsk C Sand	STYLUS
	WABISKAW-MCMURRAY A	00/11-16-076-04W4/0	369.0	370.0	Wbsk C Sand	TALISMAN
		00/13-17-076-04W4/0	373.7	377.2	Wbsk C Sand	PET
		00/13-17-076-04W4/0	378.0	380.5	McM A1 Seq	PET
		00/13-17-076-04W4/0	385.5	392.7	McM Channel	PET
		00/13-19-076-04W4/0	345.7	348.0	Wbsk C Sand	PET
		00/13-19-076-04W4/0	348.8	352.0	McM A1 Seq	PET
		00/13-20-076-04W4/0	366.0	369.0	Wbsk C Sand	PET
		00/13-20-076-04W4/0	370.0	384.0	McM Channel	PET
		00/10-21-076-04W4/0	363.9	367.2	Wbsk C Sand	PETRO-CANADA
		00/06-22-076-04W4/0	375.0	378.0	Wbsk C Sand	TALISMAN
		00/06-28-076-04W4/0	342.5	346.2	Wbsk C Sand	STYLUS
		00/06-28-076-04W4/0	347.0	352.2	McM Channel	STYLUS
		00/10-30-076-04W4/0	347.2	348.6	Wbsk D Valley Fill	PETRO-CANADA
		00/07-31-076-04W4/0	333.8	336.5	Wbsk C Sand	PET
		00/07-31-076-04W4/0	337.5	338.5	McM A1 Seq	PET
		00/13-32-076-04W4/0	332.0	335.5	Wbsk C Sand	PET
		00/13-32-076-04W4/0	336.5	338.2	McM A1 Seq	PET
		00/13-32-076-04W4/0	341.2	346.8	McM Channel	PET
		00/06-33-076-04W4/0	334.5	337.6	Wbsk C Sand	STYLUS
		00/06-33-076-04W4/0	338.8	351.3	McM Channel	STYLUS
		00/08-34-076-04W4/0	344.4	348.0	Wbsk C Sand	STYLUS
		00/15-35-076-04W4/0	346.0	349.8	Wbsk C Sand	PET
		AA/03-30-076-05W4/0	331.8	333.0	Wbsk D Valley Fill	ENCANA
		AA/03-30-076-05W4/0	336.0	337.7	McM Channel	ENCANA
		00/07-30-076-05W4/0	315.2	316.0	Wbsk C Sand	DEVON ARL
		00/07-30-076-05W4/0	319.0	320.8	McM A1 Seq	DEVON ARL
		00/07-32-076-05W4/0	328.5	329.0	Wbsk C Sand	PET
		00/07-32-076-05W4/0	331.0	331.9	McM A1 Seq	PET
		00/07-32-076-05W4/0	335.0	344.5	McM Channel	PET
		00/08-33-076-05W4/0	322.3	323.0	Wbsk C Sand	PET
		00/08-33-076-05W4/0	324.0	325.7	McM A1 Seq	PET
		00/06-34-076-05W4/0	318.5	321.5	Wbsk C Sand	PET
		00/06-34-076-05W4/0	322.1	324.6	McM A1 Seq	PET
		00/06-34-076-05W4/0	334.1	342.9	McM Channel	PET
		00/06-35-076-05W4/0	329.0	331.5	McM A1 Seq	PET
		00/12-36-076-05W4/0	324.7	327.0	Wbsk C Sand	PET
		00/12-36-076-05W4/0	328.0	329.0	McM A Channel	PET
		00/08-25-076-06W4/0	324.0	326.8	McM Channel	DEVON
		00/11-02-077-04W4/0	340.5	344.0	Wbsk C Sand	PET
		00/11-03-077-04W4/0	341.2	345.0	Wbsk C Sand	PET
		00/09-06-077-04W4/0	325.0	328.2	Wbsk C Sand	PET
		00/07-07-077-04W4/0	336.7	338.5	Wbsk C Sand	PET
		00/02-18-077-04W4/0	337.4	340.0	Wbsk C Sand	PET
		00/05-19-077-04W4/0	323.1	329.0	McM Channel	PET
		00/07-30-077-04W4/0	328.5	331.0	Wbsk D Valley Fill	SUPERMAN
		00/02-31-077-04W4/0	321.0	327.1	McM Channel	PET
		00/03-01-077-05W4/0	323.6	324.5	Wbsk C Sand	PET
		00/03-01-077-05W4/0	327.4	334.5	McM Channel	PET
		00/05-03-077-05W4/0	313.5	318.0	Wbsk C Sand	PET
		00/05-03-077-05W4/0	319.0	336.0	McM Channel	PET
		00/11-04-077-05W4/0	330.0	332.0	Wbsk C Sand	PET
		00/11-04-077-05W4/0	333.0	351.0	McM Channel	PET
		00/06-05-077-05W4/0	334.0	336.0	Wbsk C Sand	PET

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
HARDY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/06-05-077-05W4/0	336.0	338.3	McM A1 Seq	PET
		00/06-05-077-05W4/0	342.0	349.7	McM Channel	PET
		00/01-07-077-05W4/0	331.0	334.0	McM A1 Seq	PET
		00/06-08-077-05W4/0	354.4	359.0	McM Channel	PET
		00/06-09-077-05W4/0	347.0	351.0	McM Channel	PET
		00/05-10-077-05W4/0	341.0	346.0	McM A2 Seq	PET
		00/07-11-077-05W4/0	332.0	333.5	Wbsk C Sand	PET
		00/07-11-077-05W4/0	335.0	337.3	McM A1 Seq	PET
		00/05-12-077-05W4/0	334.0	336.0	Wbsk C Sand	PET
		00/05-12-077-05W4/0	337.0	338.7	McM A1 Seq	PET
		00/04-13-077-05W4/0	336.0	338.0	McM A1 Seq	PET
		00/11-18-077-05W4/0	319.8	336.0	McM Channel	PET
		00/11-19-077-05W4/0	318.2	325.5	McM A1 Seq	PET
		00/08-20-077-05W4/0	327.0	330.5	McM A1 Seq	PET
		00/11-21-077-05W4/0	324.0	330.5	McM Channel	CNRL
		00/07-22-077-05W4/0	341.0	344.7	McM A1 Seq	PET
		00/05-24-077-05W4/0	347.1	348.5	McM A1 Seq	PET
		00/12-25-077-05W4/0	336.0	352.0	McM Channel	PET
		00/07-26-077-05W4/0	344.5	348.0	McM A1 Seq	CNRL
		00/07-27-077-05W4/0	333.0	334.2	McM A1 Seq	CNRL
		00/07-27-077-05W4/0	335.0	343.5	McM Channel	CNRL
		00/11-28-077-05W4/0	326.5	330.5	McM A1 Seq	PET
		00/05-30-077-05W4/0	321.0	325.5	McM Channel	CNRL
		00/11-31-077-05W4/0	331.0	341.5	McM Channel	DEVON
		00/10-33-077-05W4/0	339.2	342.0	McM A1 Seq	PET
		00/10-33-077-05W4/0	343.0	345.6	McM Channel	PET
		00/10-34-077-05W4/0	335.0	337.4	McM A1 Seq	CNRL
		00/10-34-077-05W4/0	340.6	344.0	McM Channel	CNRL
		00/05-35-077-05W4/0	340.5	343.0	McM A1 Seq	CNRL
		00/10-36-077-05W4/0	336.0	337.0	McM A1 Seq	PET
		00/10-36-077-05W4/0	339.5	345.0	McM Channel	PET
		00/10-10-077-06W4/0	324.2	324.8	Wbsk D Valley Fill	DEVON ARL
		00/07-13-077-06W4/0	321.2	323.0	Wbsk D Valley Fill	PRIMEWEST
		AA/11-24-077-06W4/0	320.0	322.0	Wbsk D Valley Fill	MEG
		00/07-25-077-06W4/0	321.0	325.6	Wbsk D Valley Fill	DEVON
		00/02-26-077-06W4/0	323.0	323.5	Wbsk D Valley Fill	SUPERMAN
		00/07-35-077-06W4/0	327.5	338.4	McM Channel	SUPERMAN
		00/09-36-077-06W4/0	325.3	327.3	Wbsk D Valley Fill	DEVON
		00/09-36-077-06W4/0	327.3	337.0	McM Channel	DEVON
		00/08-06-078-04W4/0	326.0	328.0	McM A1 Seq	PET
		00/08-01-078-05W4/0	331.5	333.2	McM A1 Seq	PET
		00/07-02-078-05W4/0	334.0	335.5	McM A1 Seq	CNRL
		00/07-02-078-05W4/0	336.0	338.0	McM A2 Seq	CNRL
		00/05-04-078-05W4/0	339.5	361.2	McM Channel	PET
		00/08-05-078-05W4/0	331.0	333.0	McM A1 Seq	PET
		00/08-05-078-05W4/0	334.0	335.5	McM A2 Seq	PET
		00/11-06-078-05W4/0	329.2	334.5	McM A2 Seq	DEVON
		00/05-07-078-05W4/0	333.7	337.4	McM A2 Seq	PET
		00/05-08-078-05W4/0	322.0	324.0	McM A1 Seq	PET
		00/05-08-078-05W4/0	325.0	328.0	McM A2 Seq	PET
		00/06-12-078-05W4/0	335.0	336.4	McM A1 Seq	PET
		00/13-01-078-06W4/0	348.5	349.2	McM A1 Seq	SUPERMAN
		00/02-02-078-06W4/0	345.2	350.2	McM Channel	SUPERMAN
		00/12-11-078-06W4/0	360.0	364.4	McM A Channel	DEVON
KIRBY	MCMURRAY UNDEFINED 1	AA/01-34-075-06W4/0	359.0	360.0	McM Channel	ENCANA C.
	MCMURRAY UNDEFINED 2	AA/03-35-075-06W4/0	352.0	354.5	McM Channel	ENCANA C.
	UPPER MANNVILLE A4A	00/10-08-074-06W4/0	389.0	396.0	Wbsk B Valley Fill	BP
	UPPER MANNVILLE B4B	00/06-34-073-08W4/0	467.5	469.5	Wbsk B Valley Fill	PETRO-CANADA
		00/09-34-073-08W4/0	463.0	467.0	Wbsk B Valley Fill	CNRL
		00/10-34-073-08W4/0	460.7	464.4	Wbsk B Valley Fill	CNRL
		00/11-34-073-08W4/0	574.0	933.0	Wbsk B Valley Fill	CNRL
		02/07-03-074-08W4/0	448.2	450.0	Wbsk B Valley Fill	CNRL
		00/11-03-074-08W4/0	452.1	454.4	Wbsk B Valley Fill	CNRL
	UPPER MANNVILLE I	00/02-29-072-06W4/0	501.0	502.0	Wbsk B Valley Fill	ENCANA C.
		00/09-30-072-06W4/0	499.0	500.5	Wbsk B Valley Fill	ENCANA C.

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/10-31-072-06W4/0	506.0	507.0	Wbsk B Valley Fill	ENCANA C.
		00/10-25-072-07W4/0	488.5	489.5	Wbsk B Valley Fill	ENCANA C.
		00/10-36-072-07W4/0	502.0	505.5	Wbsk B Valley Fill	ENCANA C.
		00/05-30-073-04W4/0	414.0	427.5	Wbsk B Valley Fill	BP
		02/05-30-073-04W4/0	414.0	425.0	Wbsk B Valley Fill	BP
		00/05-31-073-04W4/0	407.5	417.0	Wbsk B Valley Fill	BP
		00/06-31-073-04W4/0	408.5	417.0	Wbsk B Valley Fill	BP
		00/11-02-073-05W4/0	443.0	444.0	Wbsk B Valley Fill	ENCANA C.
		00/13-09-073-05W4/0	431.0	433.0	Wbsk B Valley Fill	ENCANA
		W0/13-10-073-05W4/0	437.0	440.0	Wbsk B Valley Fill	ENCANA
		00/16-10-073-05W4/0	433.0	436.0	Wbsk B Valley Fill	ENCANA C.
		00/12-11-073-05W4/0	433.0	436.3	Wbsk B Valley Fill	ENCANA C.
		00/15-11-073-05W4/0	430.4	436.0	Wbsk B Valley Fill	ENCANA
		00/07-12-073-05W4/0	448.4	452.0	Wbsk B Valley Fill	ENCANA C.
		00/12-13-073-05W4/0	436.0	443.0	Wbsk B Valley Fill	ENCANA C.
		00/14-13-073-05W4/0	541.3	798.0	Wbsk B Valley Fill	ENCANA C.
		00/15-13-073-05W4/0	428.6	435.8	Wbsk B Valley Fill	ENCANA
		00/10-14-073-05W4/0	432.0	436.5	Wbsk B Valley Fill	ENCANA C.
		00/16-14-073-05W4/0	513.2	743.0	Wbsk B Valley Fill	ENCANA C.
		00/11-15-073-05W4/0	434.0	437.0	Wbsk B Valley Fill	ENCANA C.
		00/16-15-073-05W4/0	437.0	438.0	Wbsk B Valley Fill	ENCANA C.
		00/11-16-073-05W4/0	433.2	436.0	Wbsk B Valley Fill	ENCANA C.
		02/11-16-073-05W4/0	433.0	436.4	Wbsk B Valley Fill	ENCANA C.
		03/11-16-073-05W4/0	507.7	721.0	Wbsk B Valley Fill	ENCANA C.
		00/12-17-073-05W4/0	430.0	433.5	Wbsk B Valley Fill	ENCANA C.
		02/12-17-073-05W4/0	430.0	433.5	Wbsk B Valley Fill	ENCANA C.
		00/13-17-073-05W4/0	517.8	722.0	Wbsk B Valley Fill	ENCANA C.
		00/10-19-073-05W4/0	413.9	417.6	Wbsk B Valley Fill	BP
		00/03-20-073-05W4/0	425.0	428.0	Wbsk B Valley Fill	BP
		00/09-21-073-05W4/0	423.0	428.0	Wbsk B Valley Fill	BP
		00/11-21-073-05W4/0	428.4	429.2	Wbsk B Valley Fill	BP
		00/09-22-073-05W4/0	431.3	437.8	Wbsk B Valley Fill	BP
		00/12-22-073-05W4/0	419.0	425.0	Wbsk B Valley Fill	BP
		00/10-23-073-05W4/0	424.0	433.0	Wbsk B Valley Fill	BP
		03/10-23-073-05W4/0	425.0	434.5	Wbsk B Valley Fill	BP
		00/10-24-073-05W4/0	425.0	434.7	Wbsk B Valley Fill	BP
		02/10-24-073-05W4/0	425.0	435.0	Wbsk B Valley Fill	BP
		00/07-25-073-05W4/0	422.8	437.7	Wbsk B Valley Fill	BAAY LAND
		02/07-25-073-05W4/0	422.8	437.7	Wbsk B Valley Fill	BP
		00/09-25-073-05W4/0	422.5	435.0	Wbsk B Valley Fill	BP
		00/16-26-073-05W4/0	413.0	425.0	Wbsk B Valley Fill	BP
		02/16-26-073-05W4/0	415.0	427.0	Wbsk B Valley Fill	BP
		00/07-27-073-05W4/0	410.9	420.0	Wbsk B Valley Fill	BP
		00/10-29-073-05W4/0	408.0	415.6	Wbsk B Valley Fill	BP
		00/09-32-073-05W4/0	400.0	405.8	Wbsk B Valley Fill	BP
		00/06-33-073-05W4/0	405.0	410.1	Wbsk B Valley Fill	BP
		00/08-34-073-05W4/0	401.0	413.5	Wbsk B Valley Fill	BP
		02/08-34-073-05W4/0	401.2	414.6	Wbsk B Valley Fill	BP
		00/07-35-073-05W4/0	403.4	416.6	Wbsk B Valley Fill	BP
		02/07-35-073-05W4/0	401.5	413.7	Wbsk B Valley Fill	BP
		03/07-35-073-05W4/0	401.0	411.0	Wbsk B Valley Fill	BP
		00/08-36-073-05W4/0	407.5	421.0	Wbsk B Valley Fill	BP
		02/08-36-073-05W4/0	407.0	420.0	Wbsk B Valley Fill	BP
		00/07-04-073-06W4/0	457.0	459.0	Wbsk B Valley Fill	ENCANA C.
		00/06-05-073-06W4/0	472.0	473.0	Wbsk B Valley Fill	ENCANA C.
		00/06-06-073-06W4/0	485.0	485.4	Wbsk B Valley Fill	ENCANA C.
		00/06-07-073-06W4/0	471.6	473.2	Wbsk B Valley Fill	ENCANA C.
		00/06-08-073-06W4/0	458.6	462.3	Wbsk B Valley Fill	ENCANA C.
		00/07-08-073-06W4/0	532.9	814.0	Wbsk B Valley Fill	ENCANA C.
		00/11-09-073-06W4/0	435.5	444.8	Wbsk B Valley Fill	ENCANA C.
		00/14-09-073-06W4/0	554.5	793.5	Wbsk B Valley Fill	ENCANA C.
		00/05-10-073-06W4/0	443.0	447.0	Wbsk B Valley Fill	ENCANA C.
		00/04-15-073-06W4/0	442.0	448.6	Wbsk B Valley Fill	ENCANA
		00/11-15-073-06W4/0	431.0	434.1	Wbsk B Valley Fill	ENCANA C.
		00/02-16-073-06W4/0	429.8	434.2	Wbsk B Valley Fill	ENCANA C.

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/01-17-073-06W4/0	441.8	444.4	Wbsk B Valley Fill	ENCANA
		00/11-17-073-06W4/0	431.2	432.3	Wbsk B Valley Fill	ENCANA C.
		00/06-18-073-06W4/0	438.6	440.5	Wbsk B Valley Fill	ENCANA C.
		00/02-21-073-06W4/0	421.0	424.0	Wbsk B Valley Fill	BP
		00/11-22-073-06W4/0	419.2	422.8	Wbsk B Valley Fill	BP
		00/16-22-073-06W4/0	421.2	426.3	Wbsk B Valley Fill	BP
		00/11-25-073-06W4/0	410.0	413.3	Wbsk B Valley Fill	BP
		00/09-26-073-06W4/0	415.0	416.4	Wbsk B Valley Fill	BP
		00/11-32-073-06W4/0	398.5	402.0	Wbsk B Valley Fill	BP
		00/07-33-073-06W4/0	401.5	406.0	Wbsk B Valley Fill	BP
		00/11-34-073-06W4/0	392.6	397.2	Wbsk B Valley Fill	BP
		00/10-36-073-06W4/0	396.3	400.0	Wbsk B Valley Fill	BP
		00/10-11-073-07W4/0	487.5	492.0	Wbsk B Valley Fill	ENCANA C.
		00/10-12-073-07W4/0	469.9	476.2	Wbsk B Valley Fill	ENCANA C.
		00/05-14-073-07W4/0	481.0	482.9	Wbsk B Valley Fill	ENCANA
		00/06-16-073-07W4/0	497.0	499.0	Wbsk B Valley Fill	ENCANA C.
		00/10-16-073-07W4/0	502.8	504.0	Wbsk B Valley Fill	ENCANA
		AA/09-20-073-07W4/0	485.5	487.4	Wbsk B Valley Fill	CNRL
		00/10-20-073-07W4/0	485.0	486.7	Wbsk B Valley Fill	CNRL
		02/10-20-073-07W4/0	482.0	484.0	Wbsk B Valley Fill	CNRL
		05/11-20-073-07W4/0	480.0	482.0	Wbsk B Valley Fill	CNRL
		AA/14-20-073-07W4/0	479.7	483.0	Wbsk B Valley Fill	CNRL
		00/15-20-073-07W4/0	482.0	485.0	Wbsk B Valley Fill	CNRL
		02/15-20-073-07W4/0	477.0	478.5	Wbsk B Valley Fill	CNRL
		04/15-20-073-07W4/0	482.0	485.0	Wbsk B Valley Fill	CNRL
		AA/16-20-073-07W4/0	482.0	486.0	Wbsk B Valley Fill	CNRL
		AA/02-21-073-07W4/0	495.0	497.0	Wbsk B Valley Fill	CNRL
		AA/04-21-073-07W4/0	483.5	487.3	Wbsk B Valley Fill	CNRL
		AA/08-21-073-07W4/0	489.5	492.2	Wbsk B Valley Fill	CNRL
		00/09-21-073-07W4/0	482.0	484.3	Wbsk B Valley Fill	CNRL
		00/11-21-073-07W4/0	486.0	488.9	Wbsk B Valley Fill	CNRL
		00/14-21-073-07W4/0	486.0	487.6	Wbsk B Valley Fill	CNRL
		00/09-22-073-07W4/0	467.4	469.8	Wbsk B Valley Fill	BP
		00/11-23-073-07W4/0	460.0	463.0	Wbsk B Valley Fill	BP
		02/11-23-073-07W4/0	460.5	464.5	Wbsk B Valley Fill	BP
		00/08-24-073-07W4/0	439.0	439.5	Wbsk B Valley Fill	BP
		00/11-24-073-07W4/0	439.0	440.0	Wbsk B Valley Fill	BP
		AA/08-30-073-07W4/0	481.3	482.0	Wbsk B Valley Fill	CNRL
		00/10-30-073-07W4/0	478.0	478.5	Wbsk B Valley Fill	CNRL
		00/11-05-074-04W4/0	368.0	381.1	Wbsk B Valley Fill	BP
		00/12-06-074-04W4/0	365.0	383.5	Wbsk B Valley Fill	BP
		02/12-06-074-04W4/0	365.0	382.0	Wbsk B Valley Fill	BP
		00/06-07-074-04W4/0	346.0	366.0	Wbsk B Valley Fill	BP
		00/10-08-074-04W4/0	344.0	357.0	Wbsk B Valley Fill	BP
		00/03-09-074-04W4/0	376.3	384.0	Wbsk B Valley Fill	BP
		00/05-17-074-04W4/0	337.0	352.0	Wbsk B Valley Fill	BP
		02/05-17-074-04W4/0	337.5	352.0	Wbsk B Valley Fill	BP
		00/06-17-074-04W4/0	337.0	351.0	Wbsk B Valley Fill	BP
		00/06-18-074-04W4/0	343.3	359.0	Wbsk B Valley Fill	BP
		00/01-01-074-05W4/0	380.0	397.0	Wbsk B Valley Fill	BP
		00/11-01-074-05W4/0	373.0	389.0	Wbsk B Valley Fill	BP
		00/16-01-074-05W4/0	360.0	377.7	Wbsk B Valley Fill	BAAY LAND
		00/10-02-074-05W4/0	372.7	385.0	Wbsk B Valley Fill	BP
		00/09-03-074-05W4/0	371.3	387.0	Wbsk B Valley Fill	BP
		00/10-03-074-05W4/0	372.3	387.3	Wbsk B Valley Fill	BP
		00/07-04-074-05W4/0	387.0	397.0	Wbsk B Valley Fill	BP
		00/07-05-074-05W4/0	385.0	391.4	Wbsk B Valley Fill	BP
		02/07-05-074-05W4/0	387.5	394.0	Wbsk B Valley Fill	BP
		00/05-06-074-05W4/0	371.7	381.0	Wbsk B Valley Fill	BP
		00/07-06-074-05W4/0	375.0	383.2	Wbsk B Valley Fill	BP
		00/15-07-074-05W4/0	365.5	376.0	Wbsk B Valley Fill	BP
		02/15-07-074-05W4/0	365.3	372.0	Wbsk B Valley Fill	BP
		00/12-08-074-05W4/0	377.5	386.0	Wbsk B Valley Fill	BP
		02/12-08-074-05W4/0	378.0	387.4	Wbsk B Valley Fill	BP
		00/06-09-074-05W4/0	364.5	374.3	Wbsk B Valley Fill	BP

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	UPPER MANNVILLE I (cont.)	00/05-11-074-05W4/0	369.0	382.4	Wbsk B Valley Fill	BP
		00/07-12-074-05W4/0	352.7	369.0	Wbsk B Valley Fill	BP
		00/10-13-074-05W4/0	398.7	415.1	Wbsk B Valley Fill	BP
		02/10-13-074-05W4/0	399.0	414.0	Wbsk B Valley Fill	BP
		00/10-14-074-05W4/0	389.9	405.2	Wbsk B Valley Fill	BP
		02/10-14-074-05W4/0	390.0	404.0	Wbsk B Valley Fill	BP
		00/12-16-074-05W4/0	398.7	409.0	Wbsk B Valley Fill	BP
		00/14-16-074-05W4/0	393.0	398.0	Wbsk B Valley Fill	BP
		00/10-17-074-05W4/0	392.0	403.1	Wbsk B Valley Fill	BP
		00/12-18-074-05W4/0	374.6	384.0	Wbsk B Valley Fill	BP
		00/07-19-074-05W4/0	396.2	407.5	Wbsk B Valley Fill	BP
		00/15-20-074-05W4/0	401.0	406.0	Wbsk B Valley Fill	BP
		00/06-21-074-05W4/0	418.0	424.0	Wbsk B Valley Fill	BP
		00/08-21-074-05W4/0	405.7	412.4	Wbsk B Valley Fill	BAAY LAND
		00/06-22-074-05W4/0	392.6	401.2	Wbsk B Valley Fill	BP
		00/11-30-074-05W4/0	431.0	435.0	Wbsk B Valley Fill	BP
		00/12-30-074-05W4/0	432.7	441.0	Wbsk B Valley Fill	BP
		00/13-01-074-06W4/0	381.0	391.5	Wbsk B Valley Fill	BP
		00/11-02-074-06W4/0	397.0	401.0	Wbsk B Valley Fill	BP
		00/09-04-074-06W4/0	398.7	403.0	Wbsk B Valley Fill	BP
		00/11-05-074-06W4/0	388.0	393.5	Wbsk B Valley Fill	BP
		00/10-07-074-06W4/0	403.3	407.2	Wbsk B Valley Fill	BP
		00/10-09-074-06W4/0	379.0	384.5	Wbsk B Valley Fill	BP
		00/10-11-074-06W4/0	386.0	397.0	Wbsk B Valley Fill	BP
		00/12-12-074-06W4/0	377.5	389.5	Wbsk B Valley Fill	BP
		00/10-13-074-06W4/0	373.4	381.9	Wbsk B Valley Fill	BP
		00/10-15-074-06W4/0	371.0	381.0	Wbsk B Valley Fill	BP
		00/14-16-074-06W4/0	377.0	386.0	Wbsk B Valley Fill	BP
		00/14-17-074-06W4/0	390.0	398.0	Wbsk B Valley Fill	BP
		00/06-19-074-06W4/0	402.0	404.0	Wbsk B Valley Fill	BP
		00/06-20-074-06W4/0	386.5	393.0	Wbsk B Valley Fill	BP
		00/07-20-074-06W4/0	386.0	392.7	Wbsk B Valley Fill	BP
		00/08-21-074-06W4/0	374.0	381.0	Wbsk B Valley Fill	BP
		00/08-22-074-06W4/0	370.0	382.0	Wbsk B Valley Fill	BP
		00/08-23-074-06W4/0	377.4	384.0	Wbsk B Valley Fill	BP
		00/08-24-074-06W4/0	391.5	400.0	Wbsk B Valley Fill	BP
		00/10-24-074-06W4/0	386.0	397.0	Wbsk B Valley Fill	BP
		00/04-25-074-06W4/0	410.5	416.5	Wbsk B Valley Fill	BP
		00/11-25-074-06W4/0	428.2	437.0	Wbsk B Valley Fill	BP
		00/03-26-074-06W4/0	400.5	405.0	Wbsk B Valley Fill	BP
		00/10-26-074-06W4/0	412.2	421.1	Wbsk B Valley Fill	BP
		00/03-27-074-06W4/0	386.0	391.0	Wbsk B Valley Fill	BP
		00/09-27-074-06W4/0	417.0	420.0	Wbsk B Valley Fill	BP
		00/09-28-074-06W4/0	382.5	384.5	Wbsk B Valley Fill	BP
		00/10-29-074-06W4/0	382.2	384.7	Wbsk B Valley Fill	BP
		00/09-30-074-06W4/0	400.9	403.0	Wbsk B Valley Fill	BP
		00/11-31-074-06W4/0	386.0	388.2	Wbsk B Valley Fill	BP
		00/08-33-074-06W4/0	390.6	393.5	Wbsk B Valley Fill	BP
		00/12-34-074-06W4/0	411.0	412.0	Wbsk B Valley Fill	BP
		00/11-23-074-07W4/0	415.0	417.2	Wbsk B Valley Fill	CNRL
		00/05-24-074-07W4/0	412.5	415.5	Wbsk B Valley Fill	BP
		00/02-25-074-07W4/0	406.6	408.0	Wbsk B Valley Fill	BP
		00/10-01-075-07W4/0	384.0	386.0	Wbsk B Valley Fill	BP
	UPPER MANNVILLE II	00/10-34-074-09W4/0	435.0	436.0	Wbsk B Valley Fill	CNRL
		00/16-35-074-09W4/0	448.1	449.5	Wbsk B Valley Fill	ISH
		00/10-01-075-09W4/0	439.0	441.0	Wbsk B Valley Fill	ISH
		00/10-02-075-09W4/0	433.0	433.5	Wbsk B Valley Fill	ISH
	UPPER MANNVILLE J	00/10-05-073-07W4/0	450.6	451.2	Wbsk B Valley Fill	ENCANA C.
		00/11-07-073-07W4/0	449.0	450.0	Wbsk B Valley Fill	ENCANA C.
		00/07-19-073-07W4/0	485.0	486.0	Wbsk B Valley Fill	CNRL
		00/10-03-073-08W4/0	475.5	476.5	Wbsk B Valley Fill	PETRO-CANADA
		00/10-08-073-08W4/0	475.0	476.0	Wbsk B Valley Fill	ENCANA C.
		00/06-09-073-08W4/0	472.0	472.5	Wbsk B Valley Fill	ENCANA
		00/06-10-073-08W4/0	474.5	475.5	Wbsk B Valley Fill	ENCANA C.
		00/10-13-073-08W4/0	462.0	463.5	Wbsk B Valley Fill	ENCANA C.

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	UPPER MANNVILLE J (cont.)	00/11-14-073-08W4/0	471.6	475.2	Wbsk B Valley Fill	ENCANA
		00/10-15-073-08W4/0	479.8	482.2	Wbsk B Valley Fill	ENCANA C.
		00/09-17-073-08W4/0	464.0	465.0	Wbsk B Valley Fill	ENCANA
		00/10-17-073-08W4/0	462.3	463.2	Wbsk B Valley Fill	ENCANA C.
		00/15-18-073-08W4/0	454.0	456.3	Wbsk B Valley Fill	ENCANA C.
		00/09-19-073-08W4/0	451.5	453.0	Wbsk B Valley Fill	CNRL
		00/16-20-073-08W4/0	459.0	463.0	Wbsk B Valley Fill	ISH
		00/16-21-073-08W4/0	485.3	486.7	Wbsk B Valley Fill	ISH
		00/16-22-073-08W4/0	483.2	484.2	Wbsk B Valley Fill	ISH
		00/16-23-073-08W4/0	461.2	462.8	Wbsk B Valley Fill	ISH
		00/10-24-073-08W4/0	456.4	460.5	Wbsk B Valley Fill	CNRL
		00/01-25-073-08W4/0	461.5	463.5	Wbsk B Valley Fill	CNRL
		00/11-25-073-08W4/0	459.0	460.2	Wbsk B Valley Fill	CNRL
	UPPER MANNVILLE J4J	00/12-36-074-07W4/0	395.8	398.7	Wbsk B Valley Fill	BP
		00/11-05-075-06W4/0	382.2	383.4	Wbsk B Valley Fill	BP
		00/07-01-075-07W4/0	384.2	386.2	Wbsk B Valley Fill	BP
	UPPER MANNVILLE K4K	00/03-21-074-07W4/0	442.5	444.5	Wbsk B Valley Fill	CNRL
	UPPER MANNVILLE U2U	00/11-27-073-08W4/0	476.8	478.2	Wbsk B Valley Fill	ISH
		00/11-29-073-08W4/0	451.5	454.0	Wbsk B Valley Fill	ISH
		00/05-31-073-08W4/0	439.5	443.0	Wbsk B Valley Fill	CNRL
		00/06-32-073-08W4/0	441.8	443.5	Wbsk B Valley Fill	CNRL
		02/10-33-073-08W4/0	460.2	463.0	Wbsk B Valley Fill	CNRL
		AA/06-35-073-08W4/0	460.7	461.6	Wbsk B Valley Fill	CNRL
		00/02-25-073-09W4/0	431.0	433.0	Wbsk B Valley Fill	PET
		00/16-27-073-09W4/0	427.0	429.0	Wbsk B Valley Fill	PET
		00/10-35-073-09W4/0	536.0	715.0	Wbsk B Valley Fill	PET
		00/07-36-073-09W4/0	436.0	439.0	Wbsk B Valley Fill	PET
		00/10-36-073-09W4/0	534.0	686.0	Wbsk B Valley Fill	PET
		00/03-05-074-08W4/0	449.0	451.7	Wbsk B Valley Fill	CNRL
		00/01-06-074-08W4/0	442.2	444.0	Wbsk B Valley Fill	CNRL
		00/06-06-074-08W4/0	436.0	437.0	Wbsk B Valley Fill	PETRO-CANADA
		00/11-01-074-09W4/0	424.4	426.8	Wbsk B Valley Fill	CNRL
		00/10-02-074-09W4/0	428.5	430.5	Wbsk B Valley Fill	CNRL
		00/09-03-074-09W4/0	423.0	426.0	Wbsk B Valley Fill	ISH
		00/10-11-074-09W4/0	423.5	424.8	Wbsk B Valley Fill	CNRL
		00/10-14-074-09W4/0	420.0	421.0	Wbsk B Valley Fill	CNRL
		02/10-14-074-09W4/0	420.7	423.2	Wbsk B Valley Fill	CNRL
		00/01-23-074-09W4/0	421.0	427.0	Wbsk B Valley Fill	ISH
		00/04-24-074-09W4/0	421.0	422.0	Wbsk B Valley Fill	CNRL
	UPPER MANNVILLE V2V	00/07-36-073-08W4/0	486.7	487.8	Wbsk B Valley Fill	CNRL
		00/12-16-074-07W4/0	443.5	444.5	Wbsk B Valley Fill	ISH
		00/10-18-074-07W4/0	460.0	461.0	Wbsk B Valley Fill	CNRL
		00/14-18-074-07W4/0	459.2	461.2	Wbsk B Valley Fill	ISH
		00/05-19-074-07W4/0	458.0	459.0	Wbsk B Valley Fill	ISH
		00/10-01-074-08W4/0	483.0	483.5	Wbsk B Valley Fill	CNRL
		00/07-07-074-08W4/0	439.5	441.5	Wbsk B Valley Fill	CNRL
		00/06-08-074-08W4/0	456.6	459.0	Wbsk B Valley Fill	CNRL
		00/10-09-074-08W4/0	456.5	458.8	Wbsk B Valley Fill	CNRL
		00/11-10-074-08W4/0	453.7	455.6	Wbsk B Valley Fill	CNRL
		00/02-11-074-08W4/0	467.0	468.0	Wbsk B Valley Fill	ISH
		00/10-11-074-08W4/0	473.2	475.0	Wbsk B Valley Fill	ISH
		00/12-11-074-08W4/0	453.3	455.4	Wbsk B Valley Fill	ISH
		00/09-12-074-08W4/0	472.9	473.9	Wbsk B Valley Fill	ISH
		00/14-12-074-08W4/0	480.3	482.6	Wbsk B Valley Fill	ISH
		00/10-13-074-08W4/0	470.3	474.0	Wbsk B Valley Fill	ISH
		00/11-13-074-08W4/0	477.5	480.0	Wbsk B Valley Fill	ISH
		00/13-13-074-08W4/0	468.0	469.0	Wbsk B Valley Fill	ISH
		00/09-14-074-08W4/0	462.3	463.0	Wbsk B Valley Fill	ISH
		00/10-14-074-08W4/0	458.7	460.2	Wbsk B Valley Fill	ISH
		00/11-14-074-08W4/0	455.0	457.0	Wbsk B Valley Fill	ISH
		00/12-14-074-08W4/0	450.8	453.5	Wbsk B Valley Fill	ISH
		00/15-14-074-08W4/0	456.0	457.0	Wbsk B Valley Fill	ISH
		00/16-14-074-08W4/0	464.5	467.0	Wbsk B Valley Fill	ISH
		00/06-15-074-08W4/0	447.0	448.5	Wbsk B Valley Fill	CNRL
		00/01-16-074-08W4/0	453.3	456.0	Wbsk B Valley Fill	CNRL

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	UPPER MANNVILLE V2V (cont.)	00/01-17-074-08W4/0	454.3	456.5	Wbsk B Valley Fill	CNRL
		00/10-17-074-08W4/0	456.0	457.0	Wbsk B Valley Fill	CNRL
		00/01-18-074-08W4/0	444.1	446.0	Wbsk B Valley Fill	CNRL
		00/02-19-074-08W4/0	427.0	429.0	Wbsk B Valley Fill	CNRL
		00/09-20-074-08W4/0	446.0	447.8	Wbsk B Valley Fill	CNRL
		00/11-22-074-08W4/0	469.0	471.5	Wbsk B Valley Fill	CNRL
		00/12-23-074-08W4/0	462.3	464.0	Wbsk B Valley Fill	CNRL
		00/06-24-074-08W4/0	465.9	466.8	Wbsk B Valley Fill	ISH
		00/10-12-074-09W4/0	429.0	432.0	Wbsk B Valley Fill	CNRL
		00/10-13-074-09W4/0	422.0	423.0	Wbsk B Valley Fill	CNRL
	UPPER MANNVILLE YYY	00/08-13-072-06W4/0	474.1	477.3	Wbsk B Valley Fill	ENCANA
		00/07-14-072-06W4/0	471.0	472.8	Wbsk B Valley Fill	ENCANA C.
		00/08-16-072-06W4/0	477.0	478.0	Wbsk B Valley Fill	ENCANA C.
	WABISKAW UNDEFINED	AA/03-35-075-06W4/0	345.0	345.9	Wbsk C Sand	ENCANA C.
	WABISKAW-MCMURRAY A	00/07-19-074-04W4/0	407.0	408.5	Wbsk C Sand	BP
		02/07-20-074-04W4/0	396.5	398.0	Wbsk C Sand	BP
		02/07-20-074-04W4/0	398.0	401.5	McM A1 Seq	BP
		00/10-29-074-04W4/0	386.0	390.0	Wbsk C Sand	BP
		00/10-29-074-04W4/0	390.0	392.0	McM A1 Seq	BP
		00/11-30-074-04W4/0	371.0	372.0	Wbsk C Sand	BP
		00/11-30-074-04W4/0	373.5	376.0	McM A1 Seq	BP
		02/15-30-074-04W4/0	366.0	369.0	McM A Channel	BP
		00/03-31-074-04W4/0	361.0	362.0	Wbsk C Sand	DEVON AOG
		00/03-31-074-04W4/0	362.0	369.0	McM A Channel	DEVON AOG
		02/03-31-074-04W4/0	364.5	371.0	McM A Channel	DEVON AOG
		00/06-31-074-04W4/0	361.5	362.0	Wbsk C Sand	DEVON AOG
		00/06-31-074-04W4/0	362.0	369.5	McM A Channel	DEVON AOG
		00/10-25-074-05W4/0	375.0	376.0	Wbsk C Sand	BP
		00/10-25-074-05W4/0	377.0	381.0	McM A1 Seq	BP
		02/10-25-074-05W4/0	376.0	377.0	Wbsk C Sand	BP
		02/10-25-074-05W4/0	377.0	379.0	McM A1 Seq	BP
		00/14-35-074-05W4/0	377.0	378.0	Wbsk C Sand	BP
		00/14-35-074-05W4/0	380.5	390.0	McM A Channel	BP
		03/14-35-074-05W4/0	379.0	380.0	Wbsk C Sand	BP
		03/14-35-074-05W4/0	382.0	387.0	McM A Channel	BP
		03/14-35-074-05W4/0	390.0	390.6	McM A Channel	BP
		00/02-36-074-05W4/0	351.5	353.0	Wbsk C Sand	BP
		00/03-36-074-05W4/0	347.5	351.0	Wbsk C Sand	BP
		00/03-36-074-05W4/0	351.0	353.0	McM Channel	BP
		00/11-01-075-05W4/0	356.0	359.0	Wbsk C Sand	BP
		00/13-02-075-05W4/0	390.0	391.1	Wbsk C Sand	BP
		00/08-09-075-05W4/0	372.0	374.0	Wbsk C Sand	DEVON AOG
		02/08-09-075-05W4/0	373.0	374.3	Wbsk C Sand	DEVON AOG
		00/15-10-075-05W4/0	376.5	379.0	McM A1 Seq	BP
		00/13-11-075-05W4/0	364.7	370.0	Wbsk C Sand	BP
		00/05-12-075-05W4/0	362.0	365.8	Wbsk C Sand	BP
		00/04-14-075-05W4/0	371.8	377.0	Wbsk C Sand	DEVON AOG
		00/02-15-075-05W4/0	367.0	370.5	Wbsk C Sand	BP
		00/02-15-075-05W4/0	370.5	379.0	Wbsk D Valley Fill	BP
		00/07-15-075-05W4/0	368.2	370.5	Wbsk C Sand	BP
		00/07-15-075-05W4/0	370.5	378.5	Wbsk D Valley Fill	BP
		02/07-15-075-05W4/0	368.2	370.5	Wbsk C Sand	BP
		02/07-15-075-05W4/0	370.5	378.5	Wbsk D Valley Fill	BP
		00/08-16-075-05W4/0	372.0	374.8	McM A1 Seq	DEVON AOG
		00/01-21-075-05W4/0	370.8	374.6	McM A1 Seq	DEVON AOG
		00/03-22-075-05W4/0	369.6	370.0	Wbsk C Sand	DEVON AOG
		00/03-22-075-05W4/0	371.0	374.0	McM A1 Seq	DEVON AOG
		00/11-22-075-05W4/0	373.8	376.0	McM A1 Seq	DEVON AOG
		00/04-23-075-05W4/0	364.9	370.0	Wbsk C Sand	DEVON ARL
		AA/11-23-075-05W4/0	363.0	364.0	McM A1 Seq	CNRL
		00/06-27-075-05W4/0	377.5	380.0	McM A1 Seq	DEVON AOG
		00/06-28-075-05W4/0	376.0	380.0	McM A1 Seq	DEVON AOG
		00/12-30-075-05W4/0	372.5	377.0	Wbsk D Valley Fill	DEVON
		00/11-32-075-05W4/0	368.5	369.5	Wbsk C Sand	PET
		00/11-32-075-05W4/0	370.0	374.8	Wbsk D Valley Fill	PET

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
KIRBY (cont.)	WABISKAW-MCMURRAY A (cont.)	00/01-33-075-05W4/0	367.9	369.0	Wbsk C Sand	TALISMAN
		00/01-33-075-05W4/0	370.6	374.3	McM A1 Seq	TALISMAN
		00/11-33-075-05W4/0	363.5	366.0	Wbsk C Sand	TALISMAN
		00/11-33-075-05W4/0	366.0	369.5	Wbsk D Valley Fill	TALISMAN
		02/11-33-075-05W4/0	363.5	366.0	Wbsk C Sand	TALISMAN
		02/11-33-075-05W4/0	366.0	369.5	Wbsk D Valley Fill	TALISMAN
		00/04-34-075-05W4/0	370.2	371.3	McM A1 Seq	TALISMAN
		02/04-34-075-05W4/0	370.2	371.3	Wbsk D Valley Fill	TALISMAN
		00/12-26-075-06W4/0	350.8	353.0	Wbsk D Valley Fill	DEVON
		AA/01-35-075-06W4/0	353.0	355.1	Wbsk D Valley Fill	ENCANA C.
		AA/03-35-075-06W4/0	346.1	349.0	Wbsk D Valley Fill	ENCANA C.
		00/06-36-075-06W4/0	356.5	357.0	Wbsk C Sand	DEVON
		00/06-36-075-06W4/0	357.0	359.5	Wbsk D Valley Fill	DEVON
		00/11-04-076-05W4/0	359.5	360.5	Wbsk C Sand	PET
		00/11-04-076-05W4/0	361.3	366.7	McM Channel	PET
		00/10-05-076-05W4/0	363.6	366.0	Wbsk C Sand	PET
		00/10-05-076-05W4/0	366.4	371.3	McM Channel	PET
		00/04-01-076-06W4/0	358.3	359.5	Wbsk C Sand	DEVON
		00/04-01-076-06W4/0	359.5	367.0	Wbsk D Valley Fill	DEVON
		AA/02-02-076-06W4/0	360.0	361.0	Wbsk C Sand	ENCANA C.
		AA/02-02-076-06W4/0	362.0	362.7	Wbsk D Valley Fill	ENCANA C.
		AA/04-02-076-06W4/0	356.0	357.0	Wbsk C Sand	ENCANA C.
		00/15-02-076-06W4/0	337.0	339.8	Wbsk D Valley Fill	CNRL
		00/04-03-076-06W4/0	351.5	353.0	Wbsk C Sand	DEVON
		AA/06-03-076-06W4/0	350.5	351.5	Wbsk C Sand	ENCANA C.
LEISMER	MCMURRAY A3A	00/02-17-078-08W4/0	320.0	323.0	McM Channel	PET
	MCMURRAY AA	00/11-04-080-09W4/0	434.3	440.0	McM B1 Seq	EnCana
		00/11-04-080-09W4/0	440.0	447.0	McM B2 Seq	EnCana
		00/07-05-080-09W4/0	440.0	448.0	McM B1 Seq	ENCANA
		00/06-06-080-09W4/0	439.0	449.0	McM Channel	ENCANA C.
		00/11-07-080-09W4/0	437.0	446.2	McM Channel	ENCANA
	MCMURRAY B3B	00/10-06-077-10W4/0	449.0	452.6	McM Channel	PET
	MCMURRAY EEE	00/10-22-077-11W4/0	470.0	472.4	McM Channel	PET
	MCMURRAY I4I	00/09-18-079-07W4/0	310.5	315.2	McM B1 Channel	CNRL
		00/09-19-079-07W4/0	312.0	317.0	McM B1 Channel	CNRL
		00/04-30-079-07W4/0	323.5	329.0	McM Channel	ENCANA C.
		00/11-24-079-08W4/0	320.8	325.5	McM B1 Seq	CNRL
	MCMURRAY J4J	00/05-20-079-07W4/0	310.8	316.5	McM B1 Channel	CNRL
	MCMURRAY K2K	00/08-16-078-10W4/0	392.5	393.0	McM A1 Seq	PET
		00/05-20-078-10W4/0	414.0	416.0	McM A1 Seq	PET
		00/06-21-078-10W4/0	402.0	402.7	McM A1 Seq	PET
	MCMURRAY NN	00/11-15-077-11W4/0	448.5	458.2	McM Channel	PET
	MCMURRAY OO	00/09-07-077-10W4/0	460.8	464.5	McM Channel	PET
		00/09-12-077-11W4/0	450.5	457.0	McM Channel	PET
		00/09-13-077-11W4/0	467.4	468.0	McM Channel	PET
	MCMURRAY P	00/07-29-078-09W4/0	419.0	421.0	McM C Channel	ENCANA C.
	MCMURRAY P2P	00/09-13-077-11W4/0	461.7	462.6	McM B1 Seq	PET
	MCMURRAY Q	00/03-20-079-08W4/0	375.0	378.5	McM C Channel	ENCANA C.
		00/08-13-079-09W4/0	383.0	384.5	McM C Channel	ENCANA C.
	MCMURRAY QQ	00/06-14-079-10W4/0	391.8	401.0	McM Channel	PET
		00/07-14-079-10W4/0	392.3	400.0	McM Channel	PET
		00/08-15-079-10W4/0	421.0	421.8	McM Channel	PET
	MCMURRAY SS	00/05-27-077-11W4/0	460.0	465.0	McM B1 Seq	PET
	MCMURRAY TT	00/06-35-077-11W4/0	461.3	464.3	McM Channel	PET
	MCMURRAY U/D-325	00/12-09-079-10W4/0	423.0	424.0	McM Channel	PET
	MCMURRAY U/D-386	00/16-03-080-08W4/0	385.0	387.0	McM C Channel	NORTHSTAR
	MCMURRAY UNDEFINED 1	AA/03-04-076-06W4/0	363.0	364.0	McM B1 Seq	DEVON ARL
	MCMURRAY UNDEFINED 2	AA/11-23-077-06W4/0	326.0	328.0	McM Channel	MEG
	MCMURRAY V3V	00/05-33-078-10W4/0	404.0	408.6	McM B1 Seq	PET
		00/12-03-079-10W4/0	417.3	418.0	McM B1 Seq	PET
		00/12-09-079-10W4/0	417.0	418.3	McM B1 Seq	PET
		00/02-16-079-10W4/0	428.5	429.0	McM B1 Seq	PET
	MCMURRAY X	00/09-32-079-09W4/0	452.0	453.0	McM C Channel	ENCANA C.
	MCMURRAY Y3Y	00/06-07-079-09W4/0	397.0	402.5	McM Channel	ENCANA
		00/06-18-079-09W4/0	412.2	413.8	McM Channel	ENCANA

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
LEISMER (cont.)	MCMURRAY Y3Y (cont.)	00/03-24-079-10W4/0	425.0	425.5	McM B1 Seq	ENCANA C.
		00/03-24-079-10W4/0	430.0	431.0	McM B1 Seq	ENCANA C.
	MCMURRAY Z2Z	00/03-09-078-08W4/0	315.1	318.2	McM Channel	PET
		00/03-14-078-08W4/0	302.9	305.0	McM A2 Seq	PET
		00/05-15-078-08W4/0	299.0	302.0	McM Channel	PET
		00/12-22-078-08W4/0	312.0	313.0	McM Channel	PET
		00/11-23-078-08W4/0	296.4	299.0	McM A2 Seq	PET
		00/06-28-078-08W4/0	312.6	313.0	McM Channel	PET
	WABISKAW K	00/10-27-078-09W4/0	367.6	368.8	Wbsk C Sand	PARAMOUNT
		00/16-28-078-09W4/0	377.0	378.0	Wbsk C Sand	PET
		00/07-29-078-09W4/0	392.0	393.0	Wbsk C Sand	ENCANA C.
		00/07-32-078-09W4/0	400.6	401.0	Wbsk C Sand	ENCANA
	WABISKAW U/D-086	00/06-08-078-10W4/0	411.0	412.0	Wbsk C Sand	PET
	WABISKAW-MCMURRAY A	00/11-17-077-07W4/0	299.6	302.2	Wbsk C Sand	DEVON
		00/06-20-077-07W4/0	301.8	305.5	Wbsk C Sand	DEVON
		AA/14-27-077-07W4/0	290.3	291.0	Wbsk C Sand	NEXEN
		00/10-29-077-07W4/0	292.0	293.5	Wbsk C Sand	DEVON
		00/06-30-077-07W4/0	290.8	292.5	Wbsk C Sand	DEVON ARL
		AA/02-31-077-07W4/0	289.8	291.0	Wbsk C Sand	NEXEN
		00/07-32-077-07W4/0	286.7	289.2	Wbsk C Sand	DEVON ARL
		AA/15-32-077-07W4/0	291.0	292.0	Wbsk C Sand	NEXEN
		00/16-32-077-07W4/0	292.8	295.4	Wbsk C Sand	DEVON ARL
		AA/06-34-077-07W4/0	296.2	297.2	Wbsk C Sand	NEXEN
		00/08-34-077-07W4/0	294.6	295.8	Wbsk C Sand	BP
		00/09-34-077-08W4/0	300.0	302.4	Wbsk C Sand	BP
		00/11-36-077-08W4/0	296.2	297.5	Wbsk C Sand	BP
		00/11-02-078-07W4/0	298.9	300.0	Wbsk C Sand	DEVON
		00/06-03-078-07W4/0	287.0	288.5	Wbsk C Sand	DEVON
		00/07-04-078-07W4/0	289.0	291.0	Wbsk C Sand	BP
		00/06-05-078-07W4/0	276.4	280.0	Wbsk C Sand	BP
		00/08-05-078-07W4/0	286.8	289.5	Wbsk C Sand	BP
		00/09-07-078-07W4/0	291.0	293.0	Wbsk C Sand	BP
		00/11-07-078-07W4/0	294.2	295.0	Wbsk C Sand	BP
		00/16-09-078-07W4/0	282.2	283.5	Wbsk C Sand	BP
		00/08-10-078-07W4/0	272.0	273.8	Wbsk C Sand	DEVON
		00/05-15-078-07W4/0	268.2	269.5	Wbsk C Sand	DEVON
		00/06-16-078-07W4/0	280.1	281.6	Wbsk C Sand	BP
		00/11-17-078-07W4/0	277.4	278.1	Wbsk C Sand	BP
		00/10-19-078-07W4/0	283.0	284.0	Wbsk C Sand	DEVON
		00/10-20-078-07W4/0	280.0	281.0	Wbsk C Sand	DEVON
		00/12-21-078-07W4/0	260.0	260.4	Wbsk C Sand	DEVON ARL
		00/05-22-078-07W4/0	242.8	244.1	Wbsk C Sand	CNRL
		00/11-23-078-07W4/0	269.0	270.0	Wbsk C Sand	DEVON ARL
		00/15-26-078-07W4/0	272.1	273.0	Wbsk C Sand	CNRL
		00/15-26-078-07W4/0	274.0	278.8	McM A2 Seq	CNRL
		00/10-27-078-07W4/0	284.0	285.5	Wbsk C Sand	CNRL
		00/13-27-078-07W4/0	283.0	284.5	Wbsk C Sand	CNRL
		00/07-28-078-07W4/0	289.3	290.2	Wbsk C Sand	DEVON
		00/07-29-078-07W4/0	281.5	282.5	Wbsk C Sand	DEVON
		00/06-30-078-07W4/0	286.5	289.5	Wbsk C Sand	DEVON
		00/12-31-078-07W4/0	288.6	289.2	Wbsk C Sand	DEVON ARL
		00/05-34-078-07W4/0	282.0	283.5	Wbsk C Sand	CNRL
		00/05-34-078-07W4/0	284.0	285.5	Wbsk D Valley Fill	CNRL
		00/11-34-078-07W4/0	282.0	282.8	Wbsk C Sand	CNRL
		00/16-34-078-07W4/0	281.0	282.8	Wbsk C Sand	CNRL
		00/16-34-078-07W4/0	283.0	286.5	McM A2 Seq	CNRL
		00/07-35-078-07W4/0	277.0	277.7	Wbsk C Sand	CNRL
		00/07-35-078-07W4/0	279.2	281.9	McM A2 Seq	CNRL
		00/06-36-078-07W4/0	266.7	267.5	Wbsk C Sand	CNRL
		00/06-36-078-07W4/0	268.0	277.0	McM A2 Seq	CNRL
		00/13-36-078-07W4/0	287.5	288.3	Wbsk C Sand	CNRL
		00/13-36-078-07W4/0	289.0	290.5	McM A2 Seq	CNRL
		00/03-03-078-08W4/0	295.5	298.5	Wbsk C Sand	BP
		00/03-09-078-08W4/0	310.8	312.7	Wbsk C Sand	PET
		00/10-12-078-08W4/0	292.3	294.5	Wbsk C Sand	PET

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/03-14-078-08W4/0	299.0	302.0	Wbsk C Sand	PET
		00/05-15-078-08W4/0	296.1	298.0	Wbsk C Sand	PET
		00/02-16-078-08W4/0	295.0	298.0	Wbsk C Sand	PET
		00/02-17-078-08W4/0	316.2	318.5	Wbsk C Sand	PET
		00/15-20-078-08W4/0	307.8	309.0	Wbsk C Sand	PET
		00/10-21-078-08W4/0	306.2	307.3	Wbsk C Sand	PET
		00/12-22-078-08W4/0	309.0	311.0	Wbsk C Sand	PET
		00/11-23-078-08W4/0	293.8	295.5	Wbsk C Sand	PET
		00/11-26-078-08W4/0	293.0	294.4	Wbsk C Sand	PET
		00/09-27-078-08W4/0	289.5	291.2	Wbsk C Sand	PET
		00/06-28-078-08W4/0	306.0	309.0	Wbsk C Sand	PET
		00/08-29-078-08W4/0	310.3	313.0	Wbsk C Sand	PET
		00/09-34-078-08W4/0	296.1	297.6	Wbsk C Sand	PET
		00/11-36-078-08W4/0	295.4	297.0	Wbsk C Sand	PET
		00/11-06-079-06W4/0	290.0	291.0	Wbsk C Sand	CNRL
		00/11-06-079-06W4/0	292.0	296.8	McM A2 Seq	CNRL
		00/12-31-079-06W4/0	288.2	289.2	Wbsk C Sand	CNRL
		00/13-01-079-07W4/0	287.0	288.0	Wbsk C Sand	CNRL
		00/13-01-079-07W4/0	289.0	293.5	McM A2 Seq	CNRL
		00/13-01-079-07W4/0	289.0	293.5	McM A2 Seq	CNRL
		02/13-01-079-07W4/0	288.0	289.0	Wbsk C Sand	CNRL
		02/13-01-079-07W4/0	290.0	296.0	McM A2 Seq	CNRL
		00/11-03-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL
		00/11-03-079-07W4/0	289.0	290.5	McM A Channel	CNRL
		00/01-04-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL
		00/05-04-079-07W4/0	290.0	291.2	Wbsk C Sand	CNRL
		00/10-05-079-07W4/0	294.4	295.0	Wbsk C Sand	CNRL
		00/12-05-079-07W4/0	297.0	298.2	Wbsk C Sand	CNRL
		02/09-06-079-07W4/0	291.8	293.2	Wbsk C Sand	CNRL
		02/09-06-079-07W4/0	294.5	296.0	McM A Channel	CNRL
		00/10-06-079-07W4/0	287.2	289.2	Wbsk C Sand	PET
		00/09-07-079-07W4/0	291.8	293.0	Wbsk C Sand	CNRL
		00/09-07-079-07W4/0	294.0	296.0	McM A1 Seq	CNRL
		00/11-08-079-07W4/0	296.0	297.0	Wbsk C Sand	CNRL
		00/11-08-079-07W4/0	298.5	300.2	McM A1 Seq	CNRL
		00/03-09-079-07W4/0	301.0	302.7	Wbsk C Sand	CNRL
		00/03-09-079-07W4/0	303.5	306.0	McM A Channel	CNRL
		00/02-10-079-07W4/0	286.8	288.0	Wbsk C Sand	CNRL
		00/02-10-079-07W4/0	289.0	290.0	McM A1 Seq	CNRL
		00/02-10-079-07W4/0	290.0	293.0	McM A2 Seq	CNRL
		00/10-10-079-07W4/0	291.0	293.0	Wbsk C Sand	CNRL
		00/10-11-079-07W4/0	282.7	283.5	Wbsk C Sand	CNRL
		00/10-11-079-07W4/0	285.0	288.8	McM A2 Seq	CNRL
		00/09-12-079-07W4/0	282.7	283.7	Wbsk C Sand	CNRL
		00/09-12-079-07W4/0	284.3	289.0	McM A Channel	CNRL
		00/10-12-079-07W4/0	281.3	281.9	Wbsk C Sand	CNRL
		00/10-12-079-07W4/0	283.0	287.2	McM A Channel	CNRL
		00/04-13-079-07W4/0	283.0	284.0	Wbsk C Sand	CNRL
		00/04-13-079-07W4/0	284.8	287.0	McM A1 Seq	CNRL
		00/04-13-079-07W4/0	287.0	289.0	McM A2 Seq	CNRL
		00/11-13-079-07W4/0	269.0	270.0	Wbsk C Sand	CNRL
		00/11-13-079-07W4/0	271.0	275.5	McM A Channel	CNRL
		AA/10-14-079-07W4/0	295.4	296.0	Wbsk C Sand	PETRO-CANADA
		AA/10-14-079-07W4/0	297.7	299.5	McM A2 Seq	PETRO-CANADA
		00/01-15-079-07W4/0	292.8	294.5	Wbsk C Sand	CNRL
		00/01-15-079-07W4/0	295.5	299.0	McM A Channel	CNRL
		00/06-15-079-07W4/0	305.0	309.0	McM A Channel	CNRL
		00/13-16-079-07W4/0	307.0	310.5	McM A Channel	CNRL
		00/12-17-079-07W4/0	301.0	303.0	McM A1 Seq	CNRL
		00/03-18-079-07W4/0	301.0	301.2	Wbsk C Sand	CNRL
		00/09-18-079-07W4/0	299.0	300.2	Wbsk C Sand	CNRL
		00/09-18-079-07W4/0	301.3	304.5	McM A Channel	CNRL
		00/09-19-079-07W4/0	301.2	302.5	Wbsk C Sand	CNRL
		00/09-19-079-07W4/0	304.7	306.5	McM A1 Seq	CNRL
		00/05-20-079-07W4/0	300.0	301.0	Wbsk C Sand	CNRL

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
LEISMER (cont.)	WABISKAW-MCMURRAY A (cont.)	00/05-20-079-07W4/0	302.2	304.5	McM A1 Seq	CNRL
		00/04-21-079-07W4/0	308.2	309.0	Wbsk C Sand	CNRL
		00/04-21-079-07W4/0	310.3	314.0	McM A Channel	CNRL
		00/07-21-079-07W4/0	313.2	315.0	McM A1 Seq	CNRL
		00/12-22-079-07W4/0	312.0	312.6	Wbsk C Sand	CNRL
		00/12-22-079-07W4/0	314.0	316.7	McM A1 Seq	CNRL
		00/10-25-079-07W4/0	295.3	296.2	Wbsk C Sand	CNRL
		00/04-27-079-07W4/0	304.2	305.2	Wbsk C Sand	CNRL
		00/04-27-079-07W4/0	306.5	308.0	McM A1 Seq	CNRL
		02/04-28-079-07W4/0	307.0	308.0	Wbsk C Sand	CNRL
		00/04-30-079-07W4/0	313.0	314.5	Wbsk C Sand	ENCANA C.
		00/04-30-079-07W4/0	316.0	317.8	McM A1 Seq	ENCANA C.
		00/11-33-079-07W4/0	318.0	319.8	Wbsk C Sand	CNRL
		00/11-33-079-07W4/0	320.5	321.8	McM A1 Seq	CNRL
		00/12-35-079-07W4/0	304.7	305.2	Wbsk C Sand	CNRL
		00/12-36-079-07W4/0	288.2	289.0	Wbsk C Sand	CNRL
		00/10-01-079-08W4/0	295.0	296.0	Wbsk C Sand	CNRL
		00/10-01-079-08W4/0	298.0	299.6	McM A2 Seq	CNRL
		00/10-02-079-08W4/0	299.8	301.0	Wbsk C Sand	CNRL
		00/10-02-079-08W4/0	302.2	303.8	McM A2 Seq	CNRL
		00/07-03-079-08W4/0	307.0	309.0	Wbsk C Sand	PET
		00/04-10-079-08W4/0	320.0	321.5	Wbsk C Sand	CNRL
		00/11-11-079-08W4/0	306.0	308.0	Wbsk C Sand	PET
		00/10-12-079-08W4/0	297.5	298.4	Wbsk C Sand	PET
		00/09-13-079-08W4/0	299.0	300.0	Wbsk C Sand	CNRL
		00/13-13-079-08W4/0	307.5	308.5	Wbsk C Sand	CNRL
		00/01-14-079-08W4/0	305.0	306.2	Wbsk C Sand	CNRL
		00/12-14-079-08W4/0	321.0	322.0	Wbsk C Sand	PRIMEWEST
		00/11-15-079-08W4/0	335.0	336.5	Wbsk C Sand	CNRL
		00/13-15-079-08W4/0	336.3	338.0	Wbsk C Sand	CNRL
		00/11-16-079-08W4/0	341.3	342.0	Wbsk C Sand	CNRL
		00/03-20-079-08W4/0	346.0	346.8	Wbsk C Sand	ENCANA C.
		00/01-21-079-08W4/0	334.0	335.0	Wbsk C Sand	CNRL
		00/03-22-079-08W4/0	331.5	333.0	Wbsk C Sand	CNRL
		00/16-22-079-08W4/2	346.2	348.0	Wbsk C Sand	CNRL
		00/12-23-079-08W4/2	332.6	333.3	Wbsk C Sand	CNRL
		00/11-24-079-08W4/2	309.8	312.7	Wbsk C Sand	CNRL
		00/01-26-079-08W4/0	338.0	339.5	Wbsk C Sand	EnCana C.
		00/03-28-079-08W4/0	352.0	353.0	Wbsk C Sand	ENCANA C.
		00/04-29-079-08W4/0	372.5	374.0	Wbsk C Sand	EnCana
		00/10-36-079-08W4/0	332.6	334.6	Wbsk C Sand	EnCana C.
		00/07-06-080-06W4/0	288.3	290.0	Wbsk C Sand	CNRL
		00/06-02-080-07W4/0	306.3	308.5	Wbsk C Sand	PETRO-CANADA
		00/11-06-080-07W4/0	337.0	339.0	Wbsk C Sand	NORTHSTAR
		00/14-12-080-08W4/0	356.5	358.5	Wbsk C Sand	PET
	WABISKAW-MCMURRAY B	00/11-16-076-06W4/0	319.0	323.0	Wbsk D Valley Fill	Devon
	WABISKAW-MCMURRAY C	00/06-07-079-09W4/0	392.0	393.8	Wbsk C Sand	ENCANA
		00/06-07-079-09W4/0	393.8	395.5	McM A1 Seq	ENCANA
		00/08-08-079-09W4/0	398.5	400.5	McM A1 Seq	ENCANA C.
		00/08-08-079-09W4/0	400.5	406.0	McM Channel	ENCANA C.
		00/11-16-079-09W4/0	413.5	415.0	Wbsk C Sand	ENCANA C.
		00/11-16-079-09W4/0	415.3	417.4	McM A1 Seq	ENCANA C.
		02/11-16-079-09W4/0	414.0	415.0	Wbsk C Sand	PET
		02/11-16-079-09W4/0	415.3	417.0	McM A1 Seq	PET
		00/12-16-079-09W4/0	418.3	421.0	McM A1 Seq	PET
		00/05-17-079-09W4/0	397.7	401.0	McM A1 Seq	ENCANA C.
		00/05-17-079-09W4/0	401.0	406.2	McM Channel	ENCANA C.
		00/06-18-079-09W4/0	401.0	401.7	Wbsk C Sand	ENCANA
		00/06-18-079-09W4/0	401.7	403.1	McM A1 Seq	ENCANA
		00/08-19-079-09W4/0	410.5	413.5	McM A1 Seq	ENCANA C.
		00/08-19-079-09W4/0	417.0	420.0	McM Channel	ENCANA C.
		00/09-21-079-09W4/0	411.3	412.5	Wbsk C Sand	EnCana
		00/09-21-079-09W4/0	412.5	413.3	McM A1 Seq	EnCana
		00/07-10-079-10W4/0	407.6	408.5	McM A1 Seq	PET
		00/10-12-079-10W4/0	393.0	394.0	McM A1 Seq	ENCANA

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
LEISMER (cont.)	WABISKAW-MCMURRAY C (cont.)	00/07-13-079-10W4/0	409.0	410.2	McM A1 Seq	ENCANA C.
		00/06-14-079-10W4/0	384.0	387.5	McM A1 Seq	PET
		00/07-14-079-10W4/0	384.0	388.0	McM A1 Seq	PET
		00/08-15-079-10W4/0	409.8	410.8	McM A1 Seq	PET
		00/02-16-079-10W4/0	421.6	424.0	McM A1 Seq	PET
		00/06-23-079-10W4/0	409.0	412.0	McM A1 Seq	PET
		00/03-24-079-10W4/0	416.0	419.0	McM A1 Seq	ENCANA C.
		00/12-25-079-10W4/0	432.0	435.0	McM A1 Seq	ENCANA C.
		00/15-26-079-10W4/0	432.5	434.0	McM A1 Seq	PET
		00/06-35-079-10W4/0	433.5	435.0	McM A1 Seq	PET
	WABISKAW-MCMURRAY D	AA/12-13-077-08W4/0	301.5	303.0	Wbsk C Sand	NEXEN
		00/14-13-077-08W4/0	301.2	302.4	Wbsk C Sand	BP
		00/07-14-077-08W4/0	312.0	313.0	Wbsk C Sand	BP
		00/07-14-077-08W4/0	314.3	315.3	McM A Channel	BP
		00/09-15-077-08W4/0	308.0	310.0	Wbsk C Sand	BP
		00/10-16-077-08W4/0	302.7	303.8	Wbsk C Sand	BP
		00/12-21-077-08W4/0	310.4	311.5	Wbsk C Sand	BP
		00/06-22-077-08W4/0	300.0	301.2	Wbsk C Sand	BP
		00/02-23-077-08W4/0	313.2	314.5	Wbsk C Sand	BP
		00/02-23-077-08W4/0	315.5	316.2	McM A1 Seq	BP
		00/04-23-077-08W4/0	308.0	309.0	Wbsk C Sand	BP
		AA/06-23-077-08W4/0	300.0	301.1	Wbsk C Sand	NEXEN
		00/06-24-077-08W4/0	300.0	301.2	Wbsk C Sand	BP
		AA/14-24-077-08W4/0	300.0	301.0	Wbsk C Sand	NEXEN
		00/07-26-077-08W4/0	293.5	295.0	Wbsk C Sand	BP
		AA/07-26-077-08W4/0	294.2	295.6	Wbsk C Sand	PETRO-CANADA
	WABISKAW-MCMURRAY E	00/10-26-079-09W4/0	413.0	414.5	McM A1 Seq	ENCANA
		00/11-27-079-09W4/0	410.0	411.8	McM A1 Seq	ENCANA C.
		00/10-28-079-09W4/0	409.0	410.0	Wbsk C Sand	EnCana
		00/10-28-079-09W4/0	412.2	413.0	McM A2 Seq	EnCana
		00/10-28-079-09W4/1	410.0	410.8	McM A1 Seq	EnCana
		00/01-29-079-09W4/0	415.0	417.0	McM A1 Seq	ENCANA
		00/09-32-079-09W4/0	428.0	430.0	McM A1 Seq	ENCANA C.
		00/06-34-079-09W4/0	410.0	411.5	McM A1 Seq	ENCANA C.
		00/06-34-079-09W4/0	412.2	412.5	McM A2 Seq	ENCANA C.
		00/10-35-079-09W4/0	407.1	408.5	McM A1 Seq	ENCANA C.
		00/11-04-080-09W4/0	426.5	428.0	McM A1 Seq	EnCana
		00/11-04-080-09W4/0	428.0	429.5	McM A2 Seq	EnCana
		00/11-07-080-09W4/0	434.0	436.0	McM A1 Seq	ENCANA
		00/06-08-080-09W4/0	437.1	438.0	McM A1 Seq	CNRL
		00/12-16-080-09W4/0	432.0	433.5	McM A1 Seq	EnCana
		00/12-16-080-09W4/0	433.5	434.0	McM A2 Seq	EnCana
		00/12-17-080-09W4/0	430.0	431.5	McM A1 Seq	ENCANA
		00/12-17-080-09W4/0	436.5	437.0	McM Channel	ENCANA
		00/08-20-080-09W4/0	429.3	431.2	McM A1 Seq	ENCANA C.
		00/08-20-080-09W4/0	431.2	433.0	McM Channel	ENCANA C.
		00/08-29-080-09W4/0	425.0	427.0	McM A1 Seq	ENCANA C.
		00/08-29-080-09W4/0	427.0	429.0	McM Channel	ENCANA C.
LIEGE	WABISKAW U/D-051	00/11-09-096-17W4/0	455.0	456.0	Wbsk C Sand	PET
NEWBY	MCMURRAY C2C	00/15-07-082-05W4/0	209.5	219.0	McM Channel	PET
		00/02-18-082-05W4/0	207.0	221.0	McM Channel	PET
	MCMURRAY ZZZ	00/11-03-082-05W4/0	200.0	208.0	McM Channel	CNRL
		00/10-04-082-05W4/0	203.0	213.5	McM Channel	PET
		00/07-05-082-05W4/0	216.0	221.0	McM Channel	PET
		00/02-08-082-05W4/0	208.0	220.0	McM Channel	PET
		00/07-09-082-05W4/0	187.0	208.5	McM Channel	PET
		00/02-10-082-05W4/0	205.0	209.0	McM Channel	CNRL
	WABISKAW N	00/14-11-084-06W4/0	244.0	244.8	Wbsk D Valley Fill	PET
	WABISKAW S	00/01-02-084-06W4/0	266.5	268.0	Wbsk C Sand	PET
		00/05-07-084-05W4/0	190.5	192.1	Wbsk C Sand	CNRL
		00/08-12-084-06W4/0	212.0	213.0	Wbsk C Sand	CNRL
		00/02-01-084-06W4/0	228.3	229.0	Wbsk C Sand	CNRL
		00/10-01-084-06W4/0	230.0	231.7	Wbsk C Sand	CNRL
		00/15-02-084-06W4/0	267.2	268.2	Wbsk C Sand	PARAMOUNT
	WABISKAW T	00/06-09-084-06W4/0	236.3	237.5	Wbsk C Sand	CNRL

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
NEWBY (cont.)	WABISKAW T (cont.)	00/05-10-084-06W4/0	219.3	221.0	Wbsk C Sand	CNRL
		00/07-16-084-06W4/0	206.0	207.0	Wbsk C Sand	CNRL
		00/09-17-084-06W4/0	210.2	211.0	Wbsk C Sand	CNRL
		00/10-20-084-06W4/0	214.2	214.8	Wbsk C Sand	CNRL
		00/10-21-084-06W4/0	194.5	196.0	Wbsk C Sand	CNRL
	WABISKAW U/D-050	AA/02-11-086-07W4/0	183.0	184.8	Wbsk C Sand	NEXEN
	WABISKAW U/D-052	AA/06-23-086-07W4/0	173.8	176.0	Wbsk C Sand	OPTI
		AA/11-23-086-07W4/0	171.0	172.5	Wbsk C Sand	OPTI
		AA/07-26-086-07W4/0	162.0	163.9	Wbsk C Sand	OPTI
	WABISKAW U/D-053	AA/06-28-086-07W4/0	185.3	186.7	Wbsk C Sand	CANNAT
	WABISKAW U/D-055	AA/07-33-086-07W4/0	169.0	170.5	Wbsk C Sand	CANNAT
	WABISKAW U/D-060	00/15-31-083-05W4/0	223.0	223.7	Wbsk C Sand	CNRL
		00/12-05-084-05W4/0	223.4	224.5	Wbsk C Sand	CNRL
	WABISKAW U/D-063	00/14-11-084-06W4/0	241.6	243.0	Wbsk C Sand	PET
	WABISKAW U/D-075	00/15-17-085-06W4/0	170.5	171.5	Wbsk C Sand	CNRL
	WABISKAW U/D-081	AA/11-01-086-07W4/0	174.6	177.0	Wbsk C Sand	SUNCOR
	WABISKAW V	00/10-25-085-06W4/0	163.2	164.5	Wbsk C Sand	CNRL
		00/10-26-085-06W4/0	154.2	155.0	Wbsk C Sand	CNRL
		00/10-27-085-06W4/0	168.0	169.6	Wbsk C Sand	CNRL
	WABISKAW Y	00/12-14-084-06W4/0	203.0	204.0	Wbsk C Sand	PET
	WABISKAW-MCMURRAY J	00/06-09-084-06W4/0	239.7	240.0	Wbsk D Valley Fill	CNRL
		00/06-09-084-06W4/0	240.4	241.5	McM A1 Seq	CNRL
		00/06-09-084-06W4/0	243.0	250.0	McM Channel	CNRL
		00/05-10-084-06W4/0	222.0	222.7	Wbsk D Valley Fill	CNRL
		00/05-10-084-06W4/0	223.8	224.8	McM A1 Seq	CNRL
		00/05-10-084-06W4/0	225.0	231.0	McM Channel	CNRL
		00/12-14-084-06W4/0	207.0	209.0	McM Channel	PET
		00/12-14-084-06W4/0	205.5	206.1	Wbsk D Valley Fill	PET
		00/07-16-084-06W4/0	211.0	211.9	McM A1 Seq	CNRL
		00/07-16-084-06W4/0	213.7	222.7	McM Channel	CNRL
		00/09-17-084-06W4/0	213.0	213.7	Wbsk D Valley Fill	CNRL
		00/09-17-084-06W4/0	214.3	215.8	McM A1 Seq	CNRL
		00/09-17-084-06W4/0	217.3	225.0	McM Channel	CNRL
		00/10-20-084-06W4/0	217.8	219.2	McM A1 Seq	CNRL
		00/10-21-084-06W4/0	197.4	198.1	Wbsk D Valley Fill	CNRL
		00/10-21-084-06W4/0	198.5	209.0	McM Channel	CNRL
RESDELN	MCMURRAY JJ	00/06-12-084-07W4/0	297.5	304.0	McM B1 Seq	PET
	MCMURRAY PP	00/03-18-084-06W4/0	303.0	310.0	McM Channel	PET
	MCMURRAY RR	00/03-13-084-07W4/0	273.0	274.8	McM A1 Seq	PET
		00/10-24-084-07W4/0	253.5	255.5	McM A1 Seq	PET
	MCMURRAY U/D-060	00/03-18-084-06W4/0	318.5	319.3	McM Channel	PET
	MCMURRAY U/D-061	00/03-13-084-07W4/0	290.5	291.2	McM Channel	PET
	MCMURRAY U/D-073	00/06-12-084-07W4/0	308.3	314.7	McM Channel	PET
	WABISKAW U/D-012	00/05-07-084-06W4/0	305.0	306.0	Wbsk C Sand	PARAMOUNT
	WABISKAW U/D-013	00/03-18-084-06W4/0	292.4	293.5	Wbsk C Sand	PET
	WABISKAW-MCMURRAY A	00/05-07-084-06W4/0	307.8	308.5	Wbsk D Valley Fill	PARAMOUNT
		00/05-07-084-06W4/0	309.0	310.7	McM A1 Seq	PARAMOUNT
		00/05-07-084-06W4/0	311.8	322.0	McM Channel	PARAMOUNT
		00/03-18-084-06W4/0	296.2	298.0	McM A1 Seq	PET
		00/03-13-084-07W4/0	272.0	272.5	Wbsk D Valley Fill	PET
		00/03-13-084-07W4/0	275.9	284.0	McM Channel	PET
TAR	MCMURRAY U/D-035	00/12-28-099-14W4/0	521.0	523.2	McM Channel	ENCANA
	MCMURRAY U/D-036	00/03-14-099-14W4/0	524.5	525.5	McM Channel	ENCANA
	WABISKAW K	00/12-28-099-14W4/0	512.0	517.0	Wbsk C Sand	ENCANA
	WABISKAW O	00/11-23-098-14W4/0	551.0	553.0	Wbsk C Sand	ENCANA
		00/03-35-098-14W4/0	537.3	539.6	Wbsk C Sand	ENCANA
		00/01-01-099-14W4/0	532.0	535.0	Wbsk C Sand	ENCANA
		AA/07-01-099-14W4/0	538.8	540.7	Wbsk C Sand	IMPERIAL
	WABISKAW P	00/05-33-098-14W4/0	528.0	529.7	Wbsk C Sand	ENCANA
		00/09-03-099-14W4/0	522.7	525.8	Wbsk C Sand	ENCANA
		00/11-07-099-14W4/0	472.0	472.6	Wbsk C Sand	ENCANA
		00/02-08-099-14W4/0	501.0	505.6	Wbsk C Sand	ENCANA
		AA/07-09-099-14W4/0	511.3	512.0	Wbsk C Sand	IMPERIAL
		00/09-17-099-14W4/0	511.6	515.0	Wbsk C Sand	ENCANA
	WABISKAW S	00/11-07-099-14W4/0	474.5	478.1	Wbsk C Sand	ENCANA

**Table 1. Wabiskaw-McMurray Intervals Denied For Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
TAR (cont.)	WABISKAW S (cont.)	AA/12-12-099-15W4/0	457.8	459.3	Wbsk C Sand	IMPERIAL
	WABISKAW U/D-018	00/09-14-099-15W4/0	474.5	478.0	Wbsk C Sand	ENCANA
	WABISKAW U/D-022	00/14-35-100-13W4/0	499.0	503.0	Wbsk D Sand	ENCANA
	WABISKAW U/D-033	00/15-17-099-13W4/0	536.0	538.4	Wbsk C Sand	ENCANA
THORNBURY	MCMURRAY E5E	00/15-22-079-10W4/0	423.5	425.0	McM A1 Seq	PET
		00/15-22-079-10W4/0	430.0	430.5	McM Channel	PET
		00/06-23-079-10W4/0	420.5	421.0	McM Channel	PET
		00/13-27-079-10W4/0	410.0	412.5	McM A1 Seq	PET
		00/13-27-079-10W4/0	412.5	419.0	McM Channel	PET
		00/10-28-079-10W4/0	402.5	406.0	McM A1 Seq	PET
		00/10-29-079-10W4/0	407.5	409.0	McM A1 Seq	CNRL
	MCMURRAY M5M	00/11-27-079-11W4/0	434.0	436.0	McM B1 Seq	CNRL
	MCMURRAY R5R	00/10-12-080-12W4/0	441.0	443.0	McM Channel	CNRL
	MCMURRAY U/D-240	00/10-05-080-12W4/0	444.0	466.0	McM Channel	SUPERMAN
	MCMURRAY W4W	00/11-22-079-11W4/0	434.5	437.0	McM Channel	CNRL
	MCMURRAY X4X	00/09-20-079-11W4/0	432.0	435.2	McM Channel	CNRL
		00/10-17-079-11W4/0	434.0	435.5	McM Channel	CNRL
		00/13-15-079-11W4/0	436.4	441.0	McM Channel	CNRL
		00/15-16-079-11W4/0	437.6	442.0	McM Channel	CNRL
		00/12-14-079-11W4/0	438.0	439.0	McM Channel	CNRL
		00/11-09-079-11W4/0	446.2	447.4	McM Channel	CNRL
		00/11-08-079-11W4/0	461.0	463.5	McM Channel	CNRL
	MCMURRAY XX	00/07-29-079-12W4/0	443.0	447.0	McM B1 Seq	SUPERMAN
		00/07-29-079-12W4/0	447.5	448.5	McM B2 Seq	SUPERMAN
		00/11-32-079-12W4/0	464.5	465.3	McM Channel	FIRST
		00/15-32-079-12W4/0	441.0	452.0	McM Channel	SUPERMAN
		00/08-04-080-12W4/0	442.0	449.0	McM Channel	SUPERMAN
		00/06-06-080-12W4/0	439.0	445.3	McM Channel	SUPERMAN
		00/12-10-080-12W4/0	443.0	448.0	McM Channel	CNRL
		00/12-11-080-12W4/0	438.7	444.0	McM Channel	CNRL
		00/05-14-080-12W4/0	445.3	450.0	McM Channel	CNRL



**Table 2. Wabiskaw McMurray Intervals Approved for Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
CHARD	MCMURRAY HHH	AA/09-14-078-06W4/0	336.0	342.0	McM A2 Seq	MEG
	MCMURRAY P	00/11-34-080-06W4/0	242.2	246.5	McM A2 Seq	CNRL
	MCMURRAY U/D-119	00/10-07-080-06W4/0	295.0	302.7	McM A2 Seq	CNRL
	MCMURRAY VV	00/10-11-080-07W4/0	315.2	318.0	McM A1 Seq	CNRL
		00/10-11-080-07W4/0	318.0	318.5	McM A2 Seq	CNRL
		00/07-14-080-07W4/0	320.0	323.0	McM A Channel	CNRL
		00/10-23-080-07W4/0	315.5	319.0	McM A Channel	CNRL
	WABISKAW K	00/11-28-080-06W4/0	280.2	283.0	Wbsk C Sand	CNRL
	WABISKAW U/D-034	00/06-20-080-06W4/0	282.0	284.0	Wbsk C Sand	CNRL
	WABISKAW U/D-037	00/07-13-080-07W4/0	307.0	307.6	Wbsk C Sand	CNRL
		00/07-14-080-07W4/0	317.0	319.0	Wbsk C Sand	CNRL
		00/10-23-080-07W4/0	312.5	314.0	Wbsk C Sand	CNRL
		00/09-24-080-07W4/0	283.1	284.5	Wbsk C Sand	CALPINE
		02/09-24-080-07W4/0	280.8	281.3	Wbsk C Sand	PETRO-CANADA
	WABISKAW-MCMURRAY A	00/13-27-078-06W4/0	286.0	287.0	Wbsk C Sand	SUPERMAN
		00/07-33-078-06W4/0	290.5	291.2	Wbsk C Sand	PET
		00/07-33-078-06W4/0	295.4	302.0	McM Channel	PET
		00/11-35-078-06W4/0	298.0	301.2	McM A Channel	SUPERMAN
		00/14-35-078-06W4/0	283.0	286.6	McM A Channel	SUPERMAN
		00/11-36-078-06W4/0	281.0	283.3	McM A1 Seq	NEXEN
		00/06-05-079-05W4/0	273.2	279.0	McM A2 Seq	CNRL
		00/06-06-079-05W4/0	279.2	279.9	Wbsk C Sand	CNRL
		00/06-06-079-05W4/0	280.4	285.1	McM A2 Seq	CNRL
		00/07-07-079-05W4/0	243.8	244.6	Wbsk C Sand	CNRL
		00/07-07-079-05W4/0	245.1	252.4	McM A2 Seq	CNRL
		00/03-08-079-05W4/2	374.5	785.7	McM A2 Seq	CNRL
		00/05-08-079-05W4/0	236.2	237.1	Wbsk C Sand	CNRL
		00/05-08-079-05W4/0	237.5	243.9	McM A2 Seq	CNRL
		00/05-17-079-05W4/0	212.5	214.0	Wbsk C Sand	CNRL
		00/05-17-079-05W4/0	214.0	221.8	McM A2 Seq	CNRL
		00/06-18-079-05W4/0	211.4	212.8	Wbsk C Sand	CNRL
		00/06-18-079-05W4/0	213.0	220.5	McM A2 Seq	CNRL
		00/12-19-079-05W4/0	217.0	217.7	Wbsk C Sand	CNRL
		00/12-19-079-05W4/0	218.5	224.5	McM A2 Seq	CNRL
		00/12-20-079-05W4/0	225.2	227.0	McM A1 Seq	CNRL
		00/12-20-079-05W4/0	227.0	230.0	McM A2 Seq	CNRL
		00/05-29-079-05W4/0	218.9	220.4	Wbsk C Sand	CNRL
		00/05-29-079-05W4/0	222.0	226.0	McM A2 Seq	CNRL
		00/05-30-079-05W4/0	215.0	216.0	Wbsk C Sand	CNRL
		00/05-30-079-05W4/0	217.0	220.0	Wbsk D Valley Fill	CNRL
		00/10-31-079-05W4/0	201.0	202.1	Wbsk C Sand	PET
		00/10-31-079-05W4/0	202.9	209.4	McM A2 Seq	PET
		00/13-32-079-05W4/0	214.6	215.3	Wbsk C Sand	PET
		00/13-32-079-05W4/0	216.1	222.8	McM A2 Seq	PET
		00/11-01-079-06W4/0	265.8	266.1	Wbsk C Sand	SUPERMAN
		00/11-01-079-06W4/0	266.7	269.0	Wbsk D Valley Fill	SUPERMAN
		00/11-01-079-06W4/0	269.0	271.2	McM A2 Seq	SUPERMAN
		00/14-01-079-06W4/0	257.0	257.8	Wbsk C Sand	SUPERMAN
		00/14-01-079-06W4/0	258.0	265.5	McM A2 Seq	SUPERMAN
		00/13-02-079-06W4/0	232.8	233.3	Wbsk C Sand	SUPERMAN
		00/13-02-079-06W4/0	234.0	237.0	Wbsk D Valley Fill	SUPERMAN
		00/13-02-079-06W4/0	237.0	239.3	McM A2 Seq	SUPERMAN
		00/12-03-079-06W4/0	237.3	238.2	Wbsk C Sand	SUPERMAN
		00/12-03-079-06W4/0	238.5	241.0	Wbsk D Valley Fill	SUPERMAN
		00/12-03-079-06W4/0	241.0	246.6	McM A2 Seq	SUPERMAN
		00/12-03-079-06W4/0	247.5	255.5	McM Channel	SUPERMAN
		00/08-04-079-06W4/0	249.9	250.4	Wbsk C Sand	CNRL
		00/08-04-079-06W4/0	251.4	258.5	McM A2 Seq	CNRL
		00/07-10-079-06W4/0	214.4	215.0	Wbsk C Sand	CNRL
		00/07-10-079-06W4/0	215.6	223.7	McM A2 Seq	CNRL
		00/10-11-079-06W4/0	233.5	233.9	Wbsk C Sand	CNRL
		00/12-11-079-06W4/2	216.0	217.0	Wbsk C Sand	CNRL
		00/12-11-079-06W4/2	217.0	227.0	McM A2 Seq	CNRL

**Table 2. Wabiskaw McMurray Intervals Approved for Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
CHARD (cont.)	WABISKAW-MCMURRAY A (cont.)	00/06-12-079-06W4/0	217.5	218.0	Wbsk C Sand	CNRL
		00/06-12-079-06W4/0	218.8	223.0	Wbsk D Valley Fill	CNRL
		00/06-12-079-06W4/0	223.0	227.5	McM A2 Seq	CNRL
		00/08-13-079-06W4/0	218.0	222.8	McM A2 Seq	CNRL
		00/04-14-079-06W4/0	210.6	212.5	Wbsk C Sand	CNRL
		00/04-14-079-06W4/0	212.5	216.0	Wbsk D Valley Fill	CNRL
		00/04-14-079-06W4/0	216.0	219.8	McM A2 Seq	CNRL
		00/08-14-079-06W4/0	211.0	213.0	Wbsk C Sand	CNRL
		00/08-14-079-06W4/0	216.0	217.6	McM A2 Seq	CNRL
		00/07-15-079-06W4/0	204.6	205.5	Wbsk C Sand	CNRL
		00/07-15-079-06W4/0	206.5	208.0	Wbsk D Valley Fill	CNRL
		00/07-15-079-06W4/0	208.0	213.2	McM A2 Seq	CNRL
		00/10-16-079-06W4/0	228.8	230.0	Wbsk C Sand	CNRL
		00/10-16-079-06W4/0	230.5	234.0	Wbsk D Valley Fill	CNRL
		00/10-16-079-06W4/0	234.0	238.5	McM A2 Seq	CNRL
		00/10-21-079-06W4/0	215.3	216.2	Wbsk C Sand	CNRL
		00/10-21-079-06W4/0	217.0	218.0	Wbsk D Valley Fill	CNRL
		00/10-21-079-06W4/0	218.0	225.0	McM A2 Seq	CNRL
		00/11-22-079-06W4/0	216.1	217.1	Wbsk C Sand	PET
		00/11-22-079-06W4/0	221.9	223.0	McM A2 Seq	PET
		00/09-23-079-06W4/0	202.4	203.2	Wbsk C Sand	PET
		00/09-23-079-06W4/0	205.7	206.9	Wbsk D Valley Fill	PET
		00/06-24-079-06W4/0	207.5	208.6	Wbsk C Sand	PET
		00/06-24-079-06W4/0	210.0	216.0	McM A2 Seq	PET
		00/10-25-079-06W4/0	205.8	206.8	Wbsk C Sand	PET
		00/10-25-079-06W4/0	207.5	214.2	McM A2 Seq	PET
		00/09-26-079-06W4/0	189.9	190.7	Wbsk C Sand	PET
		00/09-26-079-06W4/0	191.8	194.5	Wbsk D Valley Fill	PET
		00/09-26-079-06W4/0	194.5	198.5	McM A2 Seq	PET
		00/11-27-079-06W4/0	230.0	231.0	Wbsk C Sand	PARAMOUNT
		00/11-28-079-06W4/0	248.4	249.7	Wbsk C Sand	CNRL
		00/11-28-079-06W4/0	250.6	252.5	Wbsk D Valley Fill	CNRL
		00/11-28-079-06W4/0	252.5	257.8	McM A2 Seq	CNRL
		AA/10-30-079-06W4/0	259.0	260.0	Wbsk C Sand	PETRO-CANADA
		AA/10-30-079-06W4/0	261.0	267.0	McM A2 Seq	PETRO-CANADA
		00/07-32-079-06W4/0	286.0	289.0	Wbsk D Valley Fill	CNRL
		00/07-32-079-06W4/0	289.0	293.0	McM A2 Seq	CNRL
		00/06-34-079-06W4/0	237.1	237.9	Wbsk C Sand	PET
		02/06-34-079-06W4/0	236.0	237.0	Wbsk C Sand	PET
		00/13-34-079-06W4/0	243.0	243.5	Wbsk C Sand	PET
		00/13-34-079-06W4/0	245.0	247.2	Wbsk D Valley Fill	PET
		00/13-35-079-06W4/0	234.5	235.2	Wbsk C Sand	PET
		00/13-35-079-06W4/0	236.0	243.0	McM A2 Seq	PET
		00/08-36-079-06W4/0	188.2	189.0	Wbsk C Sand	PET
		00/08-36-079-06W4/0	189.8	193.0	Wbsk D Valley Fill	PET
		00/08-36-079-06W4/0	193.0	197.0	McM A2 Seq	PET
		00/05-05-080-05W4/0	211.7	213.0	Wbsk C Sand	PET
		00/05-05-080-05W4/0	213.5	219.7	McM A2 Seq	PET
		00/02-06-080-05W4/0	187.5	188.5	Wbsk C Sand	PET
		00/02-06-080-05W4/0	189.5	196.0	McM A2 Seq	PET
		00/06-07-080-05W4/0	191.3	192.8	Wbsk C Sand	PET
		00/06-07-080-05W4/0	194.5	200.0	McM A2 Seq	PET
		00/03-08-080-05W4/0	188.7	190.0	Wbsk C Sand	PET
		00/07-01-080-06W4/0	202.8	203.9	Wbsk C Sand	PET
		00/07-01-080-06W4/0	205.0	211.1	McM A2 Seq	PET
		00/03-02-080-06W4/0	234.5	236.0	Wbsk C Sand	CNRL
		00/03-02-080-06W4/0	237.0	243.3	McM A2 Seq	CNRL
		00/10-02-080-06W4/0	231.5	232.0	Wbsk C Sand	CNRL
		00/03-03-080-06W4/0	246.3	248.0	Wbsk C Sand	CNRL
		00/03-03-080-06W4/0	249.0	251.0	Wbsk D Valley Fill	CNRL
		00/03-03-080-06W4/0	251.0	254.2	McM A2 Seq	CNRL
		00/07-04-080-06W4/0	290.8	292.0	Wbsk C Sand	CNRL
		00/07-04-080-06W4/0	293.0	295.0	Wbsk D Valley Fill	CNRL

**Table 2. Wabiskaw McMurray Intervals Approved for Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
CHARD (cont.)	WABISKAW-MCMURRAY A (cont.)	00/07-04-080-06W4/0	295.0	299.0	McM A2 Seq	CNRL
		00/07-06-080-06W4/0	291.0	294.0	McM A1 Seq	CNRL
		00/11-09-080-06W4/0	303.0	304.5	Wbsk C Sand	CNRL
		00/11-09-080-06W4/0	305.0	307.0	Wbsk D Valley Fill	CNRL
		00/11-09-080-06W4/0	307.0	311.0	McM A2 Seq	CNRL
		00/09-11-080-06W4/0	221.8	223.5	Wbsk C Sand	CNRL
		00/09-11-080-06W4/0	226.0	229.6	McM A2 Seq	CNRL
		00/15-11-080-06W4/0	225.0	226.0	Wbsk C Sand	CNRL
		00/15-11-080-06W4/0	230.0	233.5	McM A2 Seq	CNRL
		00/05-12-080-06W4/0	208.6	210.2	Wbsk C Sand	PET
		00/05-12-080-06W4/0	215.0	217.0	McM A2 Seq	PET
		00/04-13-080-06W4/0	215.6	222.0	McM A2 Seq	PET
		00/07-14-080-06W4/0	237.3	239.0	Wbsk C Sand	CNRL
		00/07-14-080-06W4/0	240.0	245.5	McM A2 Seq	CNRL
		00/06-22-080-06W4/0	309.3	313.6	McM A2 Seq	CNRL
		00/07-23-080-06W4/0	250.0	256.0	McM A2 Seq	CNRL
CLYDEN	MCMURRAY AA	00/07-19-076-12W4/0	511.5	513.4	McM A2 Seq	CNRL
		00/11-30-076-12W4/0	490.0	492.0	McM A2 Seq	CNRL
		00/03-25-076-13W4/0	492.0	494.7	McM A2 Seq	CNRL
CORNER	MCMURRAY A	00/12-16-081-09W4/0	419.8	420.8	McM A1 Seq	PET
	MCMURRAY A	02/12-16-081-09W4/0	419.2	420.7	McM A1 Seq	PET
DIVIDE	MCMURRAY A	00/16-08-082-12W4/0	447.2	449.0	McM B1 Seq	HUSKY
	MCMURRAY A	00/05-16-082-12W4/0	447.1	448.9	McM B1 Seq	PET
		00/10-17-082-12W4/0	432.4	433.3	McM B1 Seq	PET
		00/05-21-082-12W4/0	415.6	416.6	McM B1 Seq	STYLUS
		02/05-21-082-12W4/0	422.2	423.0	McM B1 Seq	STYLUS
	MCMURRAY R	00/07-28-082-12W4/0	412.0	415.0	McM B2 Seq	STYLUS
	MCMURRAY V	00/02-19-082-12W4/0	396.0	397.3	McM B1 Seq	CNRL
	MCMURRAY W	00/06-27-082-12W4/0	446.2	448.0	McM B1 Seq	STYLUS
		00/07-28-082-12W4/0	405.0	408.0	McM B1 Seq	STYLUS
GLOVER	MCMURRAY B	00/09-05-076-10W4/0	447.0	448.0	McM A1 Seq	PET
		00/06-07-076-10W4/0	436.5	438.0	McM A1 Seq	PET
HANGINGSTONE	MCMURRAY B2B	00/14-01-081-08W4/0	399.0	402.0	McM A1 Seq	NORTHSTAR
	MCMURRAY BB	00/08-30-082-09W4/0	438.0	439.0	McM A1 Seq	NORTHSTAR
		00/08-30-082-09W4/0	439.0	441.0	McM A2 Seq	NORTHSTAR
	MCMURRAY K3K	00/08-07-081-07W4/0	381.0	382.8	McM A2 Seq	Calpine
		00/06-17-081-07W4/0	378.5	381.5	McM A2 Seq	Calpine
		00/11-13-081-08W4/0	439.8	441.5	McM A2 Seq	NORTHSTAR
		00/10-14-081-08W4/0	453.2	456.2	McM A2 Seq	NORTHSTAR
	MCMURRAY LL	00/07-05-083-08W4/0	435.0	436.0	McM A1 Seq	NORTHSTAR
	MCMURRAY RR	00/09-32-081-11W4/0	464.0	469.6	McM B1 Seq	STYLUS
		00/08-34-081-11W4/0	444.0	445.0	McM B1 Seq	STYLUS
		00/12-34-081-11W4/0	452.0	453.0	McM B1 Seq	STYLUS
		00/06-04-082-11W4/0	453.3	454.3	McM B1 Seq	STYLUS
	MCMURRAY S2S	00/03-34-080-07W4/0	334.7	338.5	McM A2 Seq	Calpine
		00/04-35-080-07W4/0	318.7	322.5	McM A Channel	Calpine
		00/14-03-081-07W4/0	347.5	350.5	McM A2 Seq	Calpine
	MCMURRAY U/D-137	AA/10-22-084-08W4/0	425.5	428.0	McM A1 Seq	PETRO-CANADA
	MCMURRAY UNDEFINED 1	00/09-27-081-11W4/0	434.5	441.0	McM A Channel	STYLUS
	MCMURRAY UNDEFINED 4	AA/03-33-082-08W4/0	456.2	457.0	McM A2 Seq	PETRO-CANADA
	MCMURRAY UUU	00/12-01-084-08W4/0	443.4	444.5	McM A1 Seq	NORTHSTAR
		00/11-08-084-08W4/0	437.6	440.0	McM A1 Seq	NORTHSTAR
		AA/12-08-084-08W4/0	434.6	438.0	McM A1 Seq	PETRO-CANADA
		00/07-09-084-08W4/0	437.2	440.0	McM A1 Seq	NORTHSTAR
		00/02-10-084-08W4/0	442.0	443.0	McM A1 Seq	NORTHSTAR
		00/05-11-084-08W4/0	444.0	445.0	McM A1 Seq	NORTHSTAR
		AA/05-17-084-08W4/0	428.0	429.0	McM A1 Seq	PETRO-CANADA
	MCMURRAY V2V	00/03-34-080-07W4/0	340.4	347.0	McM B1 Channel	Calpine
		00/04-35-080-07W4/0	325.0	330.0	McM B1 Seq	Calpine
		00/04-35-080-07W4/2	331.2	333.1	McM B2 Seq	Calpine
		00/14-03-081-07W4/0	352.8	358.0	McM B1 Channel	Calpine
	WABISKAW-MCMURRAY D	00/16-31-080-07W4/0	363.0	365.4	McM A2 Seq	Northstar
		00/14-25-080-08W4/0	386.4	388.5	McM A2 Seq	Northstar

**Table 2. Wabiskaw McMurray Intervals Approved for Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
HANGINGSTONE	WABISKAW-MCMURRAY D (cont.)	00/12-26-080-08W4/0	395.5	397.8	McM A2 Seq	Northstar
HARDY	WABISKAW A	00/03-15-077-04W4/0	331.2	335.0	Wbsk C Sand	PET
	WABISKAW D	00/04-18-076-03W4/0	369.8	372.5	Wbsk C Sand	TALISMAN
		00/08-13-076-04W4/0	357.5	361.0	Wbsk C Sand	TALISMAN
	WABISKAW F	00/03-11-076-04W4/0	366.5	368.5	Wbsk C Sand	TALISMAN
KIRBY	UPPER MANNVILLE J4J	00/11-29-074-07W4/0	428.0	429.0	Wbsk B Valley Fill	ISH
		00/12-32-074-07W4/0	424.0	426.0	Wbsk B Valley Fill	BP
		00/11-33-074-07W4/0	408.0	411.0	Wbsk B Valley Fill	BP
		00/10-34-074-07W4/0	405.5	406.5	Wbsk B Valley Fill	BP
		00/09-04-075-07W4/0	409.7	413.7	Wbsk B Valley Fill	BP
	UPPER MANNVILLE O3O	00/06-32-073-09W4/0	426.8	427.8	Wbsk B Valley Fill	CNRL
		00/16-33-073-09W4/0	424.3	426.5	Wbsk B Valley Fill	CNRL
		00/15-04-074-09W4/0	424.5	428.0	Wbsk B Valley Fill	CNRL
		00/16-05-074-09W4/0	429.5	431.0	Wbsk B Valley Fill	CNRL
		00/12-07-074-09W4/0	446.0	447.0	Wbsk B Valley Fill	CNRL
		00/11-08-074-09W4/0	435.3	437.6	Wbsk B Valley Fill	CNRL
		00/12-09-074-09W4/0	424.5	428.5	Wbsk B Valley Fill	CNRL
		00/06-17-074-09W4/0	431.3	435.0	Wbsk B Valley Fill	CNRL
		00/06-18-074-09W4/0	440.5	442.0	Wbsk B Valley Fill	CNRL
		00/07-20-074-09W4/0	420.5	425.0	Wbsk B Valley Fill	CNRL
		00/16-12-074-10W4/0	450.0	451.0	Wbsk B Valley Fill	CNRL
		00/02-13-074-10W4/0	446.0	447.5	Wbsk B Valley Fill	CNRL
		00/02-24-074-10W4/0	453.0	456.0	Wbsk B Valley Fill	CNRL
LEISMER	WABISKAW UNDEFINED 1	AB/02-04-076-06W4/0	357.5	358.0	Wbsk C Sand	DEVON
	WABISKAW UNDEFINED 2	AA/03-04-076-06W4/0	355.0	356.0	Wbsk C Sand	DEVON
	WABISKAW UNDEFINED 3	AA/14-09-076-06W4/0	331.0	331.5	Wbsk C Sand	ENCANA
	WABISKAW MCMURRAY A	00/11-08-079-06W4/0	244.0	251.5	McM A2 Seq	CNRL
	WABISKAW MCMURRAY E	00/10-26-079-09W4/0	409.0	411.0	Wbsk C Sand	ENCANA
		00/10-35-079-09W4/0	404.9	406.0	Wbsk C Sand	ENCANA C.
		00/04-04-076-06W4/0	349.0	351.0	Wbsk C Sand	DEVON ARL
		00/04-04-076-06W4/0	351.0	358.0	McM A2 Seq	DEVON ARL
	WABISKAW MCMURRAY G	AA/12-04-076-06W4/0	353.2	354.2	Wbsk C Sand	DEVON
		AA/12-04-076-06W4/0	354.2	357.0	McM A2 Seq	DEVON
		AA/13-04-076-06W4/0	353.0	354.0	McM A2 Seq	DEVON ARL
		00/03-05-076-06W4/0	352.0	355.0	Wbsk C Sand	DEVON ARL
		AA/08-05-076-06W4/0	348.0	349.4	Wbsk C Sand	DEVON ARL
		00/16-05-076-06W4/0	347.0	349.0	Wbsk C Sand	DEVON ARL
		AA/07-09-076-06W4/0	339.5	340.2	McM A2 Seq	ENCANA C.
		AA/13-09-076-06W4/0	328.0	329.9	McM A2 Seq	ENCANA C.
		AA/14-09-076-06W4/0	333.0	333.5	McM A2 Seq	ENCANA
NEWBY	MCMURRAY X	00/08-09-083-05W4/0	226.8	232.0	Wbsk D Valley Fill	PET
	WABISKAW AA	00/14-20-083-05W4/0	233.3	234.0	Wbsk C Sand	CNRL
		00/06-30-083-05W4/0	258.0	259.0	Wbsk C Sand	CNRL
	WABISKAW U/D-066	00/13-27-084-06W4/0	220.5	221.5	Wbsk C Sand	CNRL
	WABISKAW-MCMURRAY G	00/13-26-084-06W4/0	209.0	210.0	Wbsk D Valley Fill	CNRL
		00/13-26-084-06W4/0	210.7	211.3	McM A1 Seq	CNRL
		00/13-26-084-06W4/0	214.0	227.0	McM Channel	CNRL
		00/13-27-084-06W4/0	223.2	225.0	McM A1 Seq	CNRL
		00/13-27-084-06W4/0	225.5	226.2	McM Channel	CNRL
		00/10-34-084-06W4/0	216.2	218.7	McM A1 Seq	CNRL
		00/10-34-084-06W4/0	220.0	231.3	McM Channel	CNRL
		00/10-35-084-06W4/0	195.6	198.2	McM A1 Seq	CNRL
		00/10-35-084-06W4/0	200.0	214.4	McM Channel	CNRL
		00/07-01-085-06W4/0	191.4	195.0	McM A1 Seq	CNRL
		00/10-02-085-06W4/0	188.0	191.0	McM A1 Seq	CNRL
		00/10-02-085-06W4/0	193.0	204.3	McM Channel	CNRL
		00/09-04-085-06W4/0	202.5	204.3	McM A1 Seq	CNRL
		00/06-10-085-06W4/0	157.0	160.0	McM A1 Seq	CNRL
		00/06-10-085-06W4/0	161.0	174.3	McM Channel	CNRL
		00/07-14-085-06W4/0	147.0	148.0	McM A1 Seq	CNRL
		00/07-14-085-06W4/0	149.0	160.3	McM Channel	CNRL
	WABISKAW-MCMURRAY H	00/12-07-083-04W4/0	201.0	204.5	Wbsk D Valley Fill	CNRL
		00/15-18-083-04W4/0	193.0	195.5	Wbsk D Valley Fill	CNRL

**Table 2. Wabiskaw McMurray Intervals Approved for Gas Production**

Field Name	Pool Name	Well ID	Pay Top Depth	Pay Base Depth	Stratigraphic Interval	Licensee
Newby (cont.)	WABISKAW-MCMURRAY H (cont.)	00/15-18-083-04W4/0	197.5	209.8	McM Channel	CNRL
		00/02-19-083-04W4/0	188.0	190.5	Wbsk D Valley Fill	CNRL
		00/02-19-083-04W4/0	191.5	207.8	McM Channel	CNRL
		00/13-19-083-04W4/0	192.3	194.9	Wbsk C Sand	CNRL
		00/13-19-083-04W4/0	195.0	197.5	Wbsk D Valley Fill	CNRL
		00/11-11-083-05W4/0	196.3	197.3	Wbsk C Sand	PET
		00/11-11-083-05W4/0	197.5	201.3	Wbsk D Valley Fill	PET
		00/12-12-083-05W4/0	196.0	197.2	Wbsk C Sand	PET
		00/12-12-083-05W4/0	197.2	201.0	Wbsk D Valley Fill	PET
		00/12-12-083-05W4/0	206.5	208.0	McM Channel	PET
		00/15-13-083-05W4/0	184.0	187.0	Wbsk C Sand	CNRL
		00/15-13-083-05W4/0	187.0	190.0	Wbsk D Valley Fill	CNRL
		00/15-13-083-05W4/0	190.2	208.0	McM Channel	CNRL
		00/15-14-083-05W4/0	203.7	206.4	Wbsk D Valley Fill	CNRL
		00/15-14-083-05W4/0	208.7	220.0	McM Channel	CNRL
		02/15-14-083-05W4/0	204.0	206.0	Wbsk D Valley Fill	CNRL
		00/15-15-083-05W4/0	246.0	248.2	Wbsk D Valley Fill	CNRL
		00/14-20-083-05W4/0	234.5	238.0	Wbsk D Valley Fill	CNRL
		00/08-21-083-05W4/0	232.0	235.0	Wbsk D Valley Fill	CNRL
		00/07-22-083-05W4/0	220.0	223.0	Wbsk D Valley Fill	CONOCO
		00/14-22-083-05W4/0	212.0	215.0	Wbsk D Valley Fill	CNRL
		00/05-24-083-05W4/0	206.0	208.1	Wbsk D Valley Fill	CNRL
		00/05-24-083-05W4/0	214.0	215.8	McM Channel	CNRL
		00/12-25-083-05W4/0	199.6	202.0	Wbsk D Valley Fill	CNRL
		00/05-28-083-05W4/0	208.0	211.0	Wbsk D Valley Fill	CNRL
		00/05-28-083-05W4/0	212.0	226.0	McM Channel	CNRL
		00/11-32-083-05W4/0	210.0	212.7	Wbsk D Valley Fill	CNRL
		00/11-32-083-05W4/0	214.0	225.0	McM Channel	CNRL
		00/13-33-083-05W4/0	205.0	207.0	Wbsk D Valley Fill	CNRL
		00/13-33-083-05W4/0	208.5	223.0	McM Channel	CNRL
		00/09-35-083-05W4/0	187.5	189.5	Wbsk D Valley Fill	CNRL
		00/09-35-083-05W4/0	190.5	207.0	McM Channel	CNRL
		00/12-05-084-05W4/0	225.5	227.0	McM Channel	CNRL
TAR	MCMURRAY U/D-005	00/02-02-100-14W4/0	523.5	524.0	Wbsk D Sand	ENCANA
	MCMURRAY U/D-037	00/02-02-100-14W4/0	537.0	539.0	McM Channel	ENCANA
	WABISKAW P	00/06-13-099-14W4/0	525.0	526.0	Wbsk C Sand	ENCANA
		00/03-14-099-14W4/0	513.5	517.8	Wbsk C Sand	ENCANA
		00/04-22-099-14W4/0	521.0	526.5	Wbsk C Sand	ENCANA
	WABISKAW Q	00/12-28-099-14W4/0	509.8	511.2	Wbsk C Sand	ENCANA
	WABISKAW U/D-021	00/15-16-100-13W4/0	473.5	475.0	Wbsk D Sand	ENCANA
	WABISKAW U/D-035	AA/11-24-099-14W4/0	531.6	534.0	Wbsk C Sand	IMPERIAL
		00/12-24-099-14W4/0	531.0	534.2	Wbsk C Sand	ENCANA
	WABISKAW U/D-037	00/02-30-099-14W4/0	498.0	499.0	Wbsk C Sand	ENCANA
	WABISKAW U/D-038	00/05-35-099-14W4/0	533.0	534.7	Wbsk C Sand	ENCANA
		00/02-02-100-14W4/0	517.0	522.5	Wbsk C Sand	ENCANA
	WABISKAW U/D-039	AA/12-12-099-15W4/0	449.5	451.5	Wbsk C Sand	IMPERIAL
		00/09-14-099-15W4/0	470.0	471.0	Wbsk C Sand	ENCANA
THORNBURY	MCMURRAY E5E	00/02-31-079-10W4/0	414.0	415.0	McM A1 Seq	CNRL
		00/02-31-079-10W4/0	416.0	417.0	McM A2 Seq	CNRL
	MCMURRAY G2G	00/04-19-079-10W4/0	431.0	433.0	McM A2 Seq	CNRL
		00/01-25-079-11W4/0	424.0	425.0	McM A2 Seq	CNRL
	MCMURRAY S5S	00/07-29-079-12W4/0	458.2	465.5	McM C Channel	SUPERMAN
UNDEFINED	WABISKAW UNDEFINED	AA/05-28-082-08W4/0	448.5	449.0	Wbsk C Sand	PETRO-CANADA



**APPENDIX 1    THOSE WHO APPEARED AT THE HEARING**

Principals and Representatives  
 (Abbreviations used in report)

Witnesses

BP Canada Energy Company  
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 R. L. Mooney

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 Q. Jiang, Ph.D., P.Eng.  
 J. J. Waterfield, P.Geol.

Devon Canada Corporation  
 S. M. Munro

EnCana Corporation  
 A. Reid  
 D. Castellino  
 D. G. Davies

EUB Staff Submission Group (SSG)  
 J.P. Mousseau

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 W. A. Warren, P.Eng.

ISH Energy Ltd.  
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 R. L. Mooney

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 J. K. Wilhelm, P.Eng.,  
 of Fekete

Nexen Canada Ltd.  
 R. Block  
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**APPENDIX 1    THOSE WHO APPEARED AT THE HEARING (concluded)**

Principals and Representatives  
 (Abbreviations used in report)

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 K. N. Wilde

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