

Interim Directive 99-01: Gas/Bitumen Production in Oil Sands Areas – Application, Notification, and Drilling Requirements

February 3, 1999

On June 17, 2013, the Alberta Energy Regulator (AER) became the province's energy regulator. As part of this succession, the title page of this interim directive was changed to carry the AER logo. However, no changes were made to the main body of this interim directive.

Application Requirements for Activities Within the Boundary of a Regional Plan

The AER is legally obligated to act in compliance with any approved regional plans under the *Alberta Land Stewardship Act*. To ensure this compliance, the AER is requiring any applicant seeking approval for an activity that would be located within the boundary of an approved regional plan to meet the requirements below. These requirements will be formally incorporated into the directive at a later date.

- A) For an activity to be located within the boundary of an approved regional plan, the applicant must assess
 - I) whether the activity would also be located within the boundaries of a designated conservation area, a provincial park, a provincial recreation area, or public land area for recreation and tourism and, if so, whether the mineral rights associated with the activity are subject to cancellation;
 - II) whether the activity is consistent with the land uses established in the applicable regional plan or with any of the outcomes, objectives, and strategies in that same plan; and
 - III) how the activity is consistent and complies with any regional trigger or limit established under the management frameworks detailed under the applicable regional plan or with any notice issued in response to the exceedance of a regional trigger or limit.
- B) The applicant must retain the information for requirement A at all times and provide it on request unless otherwise indicated below. The information must be sufficient to allow the AER to assess an application under the applicable regional plan.

- C) The applicant must submit the information from requirement A if the proposed activity to be located within the boundary of an approved regional plan
- I) is also within the boundaries of a designated conservation area, a provincial park, a provincial recreation area, or a public land area for recreation and tourism;
 - II) is inconsistent with the land uses established in the applicable regional plan or any of the outcomes, objectives, and strategies in that same plan; or
 - III) may result in the exceedance of a trigger or limit or contravene a notice issued in response to an exceedance of a trigger or limit.
- D) The applicant must submit the information from requirement A if it believes that its proposed activity is permitted under the applicable regional plan because it is “incidental” to previously approved and existing activities. The applicant must also provide information to support its position.

The AER has no authority to waive compliance with or vary any restriction, limitation, or requirement regarding a land area or land use under a regional plan. Applicants that wish to seek this type of relief must apply directly to Alberta’s Land Use Secretariat established under the *Alberta Land Stewardship Act*. The stewardship minister may, on application and by order, vary the requirements of a regional plan. For more information, contact Alberta’s Land Use Secretariat by phone at 780-644-7972 or by e-mail to LUF@gov.ab.ca.

For more information on the requirements above, refer to *Bulletin 2014-28: Application Requirements for Activities within the Boundary of a Regional Plan* or e-mail regional.plans@aer.ca. This bulletin rescinds and replaces *Bulletin 2012-22: Application Procedures for Approval of Activities Located In or Near the Boundaries of the Lower Athabasca Regional Plan*, which is an earlier bulletin that was issued regarding the AER’s compliance with approved regional plans under the *Alberta Land Stewardship Act*.

Interim Directive ID 99-1

Note: This PDF file includes the original ID 99-1 plus the 4 amendments that have been released.

-- ID 99-1 (dated Feb 3, 1999)

-- ID 99-1 Amendment (dated Mar 31, 1999)

-- ID 99-1 Amendment (dated Nov 30, 1999)

-- ID 99-1 Third Amendment (dated Nov 29, 2000)

-- ID 99-1 Fourth Amendment (dated July 22, 2003)

The document has been consolidated so that all superseded maps have been removed.

3 February 1999

To: All Oil, Gas, and Oil Sands Operators

GAS/BITUMEN PRODUCTION IN OIL SANDS AREAS APPLICATION, NOTIFICATION, AND DRILLING REQUIREMENTS

The purpose of this interim directive is to outline the new Alberta Energy and Utilities Board (EUB) requirements regarding gas/bitumen production in Oil Sands Areas¹. These requirements are largely based on the conclusions of the March 1998 EUB Inquiry Report on Gas/Bitumen Production in Oil Sands Areas², the July 1998 Gas/Bitumen Committee's recommendations on Gas/Bitumen Issues³, and the November 1998 Industry/EUB Committee's recommendations on Gas Production Application Areas⁴.

For wells completed in the defined oil sands strata prior to 1 July 1998, an application for approval to produce gas will not be required. These wells will be allowed to continue to produce, subject to the resolution of any concerns that may be raised by oil sands leaseholders or by the Board on its own initiative.

For all wells drilled and/or completed in the defined oil sands strata after 1 July 1998, an operator must submit an application and obtain approval from the Board before any gas, other than solution gas, can be produced. Also, all wells drilled in the oil sands strata after 1 July 1998 must be drilled deep enough to be able to log over the base of the oil sands deposit containing the zone from which gas and/or bitumen is to be produced. These requirements do not apply to wells that are drilled for mining projects or for wells that are exempt by the Board.

The requirement for an application for approval to produce gas and the drilling requirement are being incorporated into the Oil and Gas Conservation Regulation and/or the Oil Sands Conservation Regulation, and compliance with the regulations is being made a condition of all well licenses. These requirements are discussed in more detail in the following sections.

Notification of applications for approval to produce gas and for in situ oil sands schemes is to be given by the applicants to potentially affected parties, as detailed in the following sections.

¹ The EUB has issued Oil Sands Area Orders for three oil sands areas: Athabasca, Cold Lake and Peace River.

² **EUB Inquiry, Gas/Bitumen Production in Oil Sands Areas, 25 March 1998.** Available at the EUB's Information Services, 640-5 Avenue SW, Calgary, Alberta.

³ **Recommendations on Gas/Bitumen Issues, 10 July 1998.** Available at the EUB's Information Services.

⁴ **Report of the Industry/EUB Committee, Gas Production Application — Oil Sands Areas, 24 November 1998.** Available at the EUB's Information Services.

The Board will periodically review these requirements, as new information becomes available, and make revisions as necessary.

1 GAS PRODUCTION IN OIL SANDS AREAS

1.1 Application Process

An application for approval to produce gas from the oil sands strata shall show:

- that the gas is not associated with bitumen within the region of influence; or
- if the gas is associated with bitumen within the region of influence, why gas production should be allowed considering the potential effect on future bitumen recovery.

Associated gas refers to gas that is in pressure communication with bitumen within the region of influence either directly or through a connecting water zone. The region of influence is taken to be the extent of the gas pool in the case of gas directly overlying bitumen or the combined extent of the gas pool and water zone in the case of gas overlying water overlying bitumen.

In cases where an application is made for approval to produce gas from a well drilled into a pool with existing gas production, the Board will evaluate the application on a pool basis. Depending on the assessment of the impact of gas production on potential bitumen recovery, this could result in outcomes ranging from shut in of the entire pool to approval of the application and future applications being approved routinely once it is confirmed that the applied-for wells are in the same pool.

With respect to bitumen wells, an assessment must be made by the operator on a site specific basis to determine whether the wells are producing gas other than solution gas, in which case an application for approval to produce gas is required. The assessment should consider such factors as the magnitude of the producing gas-bitumen ratio compared to the solution gas-bitumen ratio, the presence of any associated gas zones as indicated by well logs, drill stem tests or other data, and the proximity of the well perforations to any associated gas zones. Applications for in situ oil sands schemes (including commercial, primary recovery, and experimental schemes) should address the potential for gas other than solution gas to be produced. Furthermore, operators should be aware that approvals for in situ oil sands schemes may include a requirement to monitor gas production and apply for approval to produce gas when there is evidence that gas other than solution gas is being produced.

Applications for approval to produce gas are not required to conduct short tests (e.g. 3-days) to obtain information on new wells. However, any tests must be conducted in accordance with section 11.135 of the Oil and Gas Conservation Regulation.

A separate application is not required for each well within a region of influence; however, each well must be individually addressed in the application.

1.2 Application Areas

Based on an assessment of bitumen resources, the Board has identified areas where applications for approval to produce gas are required. In addition, applications are also required for:

- Wells drilled outside the application areas that discover bitumen pay in excess of a specified thickness.
- Wells drilled outside the application areas but within existing or extensions to EUB G Orders⁵ that overlap the application areas. Notwithstanding the above requirement, applications are not required for wells drilled outside the oil sands areas (unless the wells discover gas that is associated with a conventional oil pool, in which case an application is required for concurrent production in accordance with section 26(e) of the Oil and Gas Conservation Act). However, gas production from these wells is subject to the resolution of any concerns that may be raised by oil sands leaseholders or by the Board on its own initiative.

Athabasca Oil Sands Area

The application areas and bitumen thickness criteria for the Athabasca Oil Sands Area, by deposit, are provided in the attached Appendix.

Cold Lake & Peace River Oil Sands Areas

The Board intends to specify application areas and bitumen thickness criteria for the Cold Lake and Peace River oil sands areas once it has received and reviewed recommendations from the Industry/EUB Committee. In the interim, applications for approval to produce gas, other than solution gas, are required for all wells drilled and/or completed in the oil sands strata in these oil sands areas after 1 July 1998.

1.3 Information Requirements

In accordance with section 28 of the EUB's Rules of Practice, the Board believes its decision on an application should be based on publicly available information and accordingly is not prepared to treat any information submitted in support of an application as confidential. An applicant must decide on the importance of the information and whether or not to include it in an application. Where information is considered too sensitive to be included, an applicant takes the risk that other submitted information will be sufficient to support the application. If the Board finds the information inadequate, the Board's decision may be delayed until substantive information is available.

The application shall include the following.

1. A description of the scope of the gas project, including:
 - a) the number and location of new wells to be produced;

⁵ Maps which define EUB recognized gas pools, portrayed on a section basis.

- b) the location, current status and production plots (gas, bitumen, and water) for existing wells in the region of influence; and
 - c) the interval to be produced.
1. A discussion of the presence, size, and lateral extent of the gas zone to be produced and of any associated bitumen and top water zones, including:
 - a) all well logs, core data, drill stem tests, and other relevant data used to support the geological interpretation;
 - b) net gas and bitumen pay maps (including the cutoffs used and their derivation), top water zone thickness maps, and structure maps;
 - c) estimates of the initial gas and bitumen volumes in place for the mapped zones;
 - d) cross-sections of the zones showing porosity tops and bases, fluid interfaces, test intervals and results, and perforated intervals;
 - e) pressure information (the atmospheric pressure used to convert gauge to absolute pressure should be specified);
 - f) hydrogeological data (such as pressure versus depth plots and potentiometric maps); and
 - g) other relevant information (such as reservoir fluid characterization and decline curve analysis).
 1. A discussion of whether the gas zone is associated or not associated with a bitumen zone within the region of influence, based on the geological, hydrogeological, pressure, and production evidence.
 2. If the gas zone is associated with a bitumen zone:
 - a) a discussion of whether the bitumen within the region of influence is exploitable with reasonably foreseeable technology and economic conditions;
 - b) a discussion of the state of depletion of the gas zone, including a comparison of the current pressure with the initial pressure and the cumulative gas production as a fraction of the initial volume in place;
 - c) an evaluation of the potential effect of gas production on bitumen recovery;
 - d) details of the applied-for wells and the reasonably foreseeable field development (such as plans for horizontal wells, open-hole completions, compression facilities, future drilling, etc.);

- e) the projected gas production profile for individual wells and/or the expected aggregate production profiles for wells within common regions of influence (rate-time forecast)⁶; and
 - f) the proposed reservoir abandonment pressure (absolute).
1. Maps showing the Petroleum and Natural Gas (P&NG) and oil sands lessors and lessees in the region of influence and the adjoining sections.
 2. Confirmation that the notification requirements have been satisfied, and that there has been an adequate exchange of information with potentially affected parties and an attempt to resolve any differences of opinion on the potential effect of gas production on future bitumen recovery.

1.4 Notification Requirements

The notification requirements for applications for approval to produce gas are the following.

1. Notice is to be given to the oil sands leaseholders and the freehold mineral owners of any unleased lands within the region of influence and the off-setting sections.
2. To expedite the application process, notice is to be provided by the applicant; failure to do so could result in subsequent delays in processing the application. If no objections or concerns are received by the applicant or the Board within 15 working days of the date of notification, the Board may process the application without further notice being given. The Board encourages applicants to carry out the notification and any resulting discussions prior to the submission of the application. The Board would prefer that a copy of the application be provided as part of the notice.

It should be noted that the Board may require and provide additional notice, as it considers necessary, in accordance with section 29 of the Energy Resources Conservation Act.

2 ADDITIONAL NOTIFICATION REQUIREMENTS FOR IN SITU OIL SANDS APPLICATIONS

The notification requirements are the following.

1. Notice of applications for in situ oil sands schemes (including commercial, primary recovery, and experimental schemes) is to be given to the P&NG leaseholders and the freehold mineral owners of any unleased lands in the area of application and the off-setting sections. This is in addition to the current requirement to provide notice to oil sands leaseholders in the off-setting quarter sections.

⁶ Although the Board recognizes the uncertainty involved in predicting these profiles, it believes that they would provide some insight into the depletion rate from within a region of influence, and that this may be useful in determining the impact on reservoir pressure over time. The Board does not intend to tie approval requirements directly to the projected rates, although some rate restrictions may be applied if they are deemed to be necessary.

2. To expedite the application process, notice is to be provided by the applicant; failure to do so could result in subsequent delays in processing the application. If no objections or concerns are received by the applicant or the Board within 15 working days of the date of notification, the Board may process the application without further notice being given. This requirement supercedes the 10-day notice period specified in EUB Informational Letter 97-2⁷. The Board encourages applicants to carry out the notification and any resulting discussions prior to the submission of the application. The Board would prefer that a copy of the application be provided as part of the notice.

3 DRILLING REQUIREMENT

The Board requires all wells to be drilled deep enough to be able to log over the base of the oil sands deposit containing the zone from which gas and/or bitumen is to be produced unless this would result in trespass. In the event of trespass, the wells must be drilled deep enough to be able to log over the base of the oil sands zone from which gas and/or bitumen is to be produced. The log information is needed to assess the potential impact of gas production on bitumen recovery. This includes information on the thickness and quality of any gas, bitumen, and water zones and how they are inter-related. Logging over the base of the deposit is needed because of the difficulty in identifying the base of the zone when overlying zones channel into underlying zones.

Logging requirements remain in accordance with section 11.140 of the Oil and Gas Conservation Regulation.

The Board believes it is necessary to clarify the terminology that it uses in describing oil sands intervals. As illustrated in Attachment 1, the Board uses three terms in this regard: oil sands **strata**, oil sands **deposits**, and oil sands **zones**. Oil sands strata, which refer to the entire oil sands interval, are defined in the EUB's Oil Sands Area Orders for the three oil sands areas. Oil sands deposits, which are subdivisions of oil sands strata, and oil sands zones, which are subdivisions of oil sands deposits, are defined in the type logs for reference wells contained in the EUB's Crude Bitumen Reserves Atlas (Statistical Series 96-38). An example is provided in Attachment 2.

The drilling requirement does not apply to wells that do not penetrate the defined oil sands strata. Furthermore, the Board will consider exemptions from the drilling requirement in certain circumstances, such as:

- where drilling into a carbonate formation is problematic (e.g. due to lost circulation);
- where horizontal wells are drilled (in these situations, the Board expects operators to drill a suitable number of vertical evaluation wells logged over the base of the oil sands deposit or zone, as appropriate); and
- where high density drilling is part of an in situ oil sands scheme and a suitable number of wells have been logged over the base of the oil sands deposit or zone, as appropriate.

⁷ Informational Letter 97-2, Well Spacing/Lease Boundary Setback — Oil Sands Area Development, 2 October 1997.

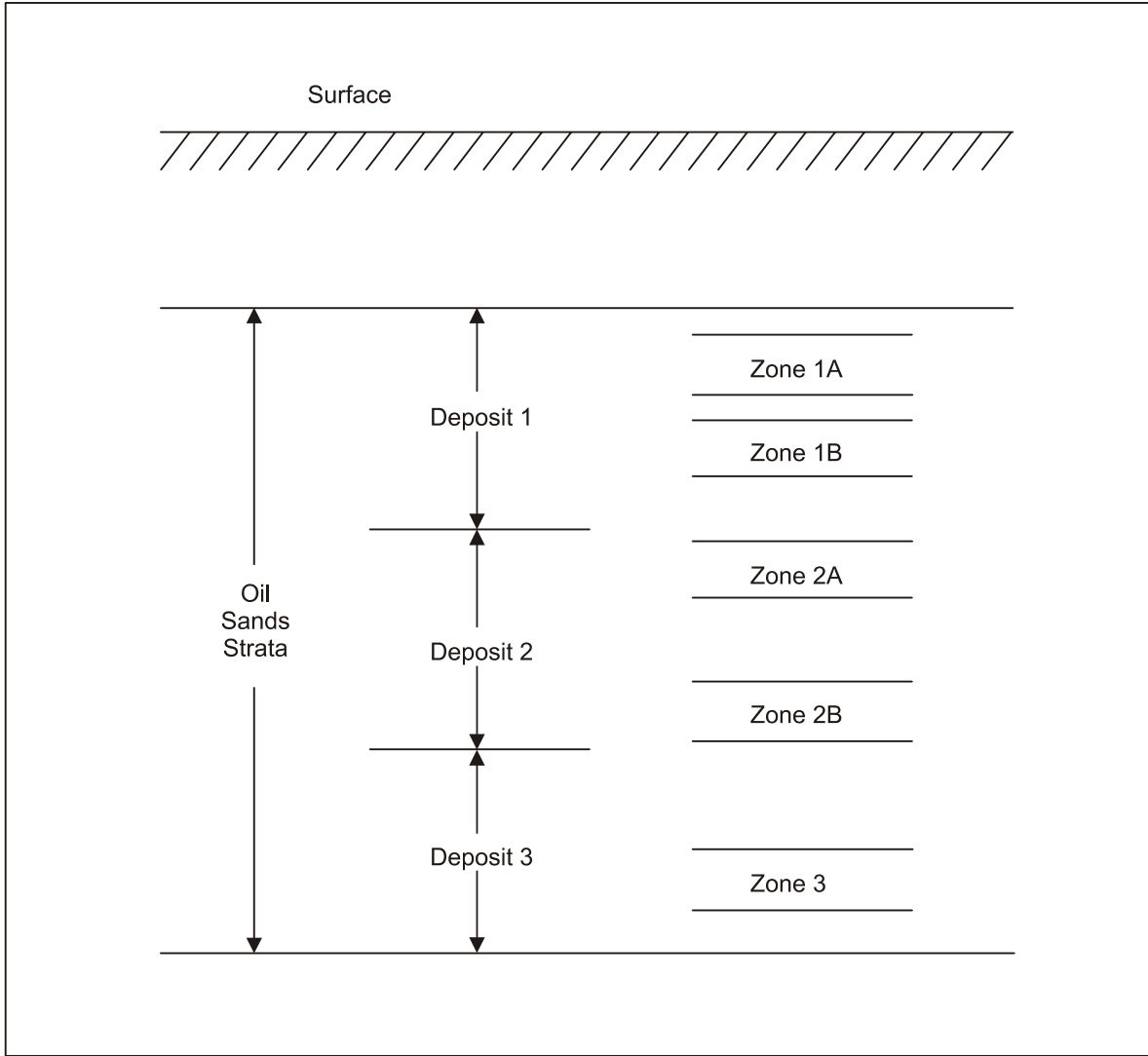
Exemptions must be obtained from the Board prior to drilling the wells by submitting a written request to the Board's Reservoir Development Group. The request should include a discussion, with supporting data, of the reasons why an exemption is required and the adequacy of the existing well information to characterize the zone to be produced. Where well control is adequate to provide clear definition of the zone to be produced, the Board will likely provide an exemption.

Questions regarding this interim directive should be directed to the Reservoir Development Group at (403) 297-3561.

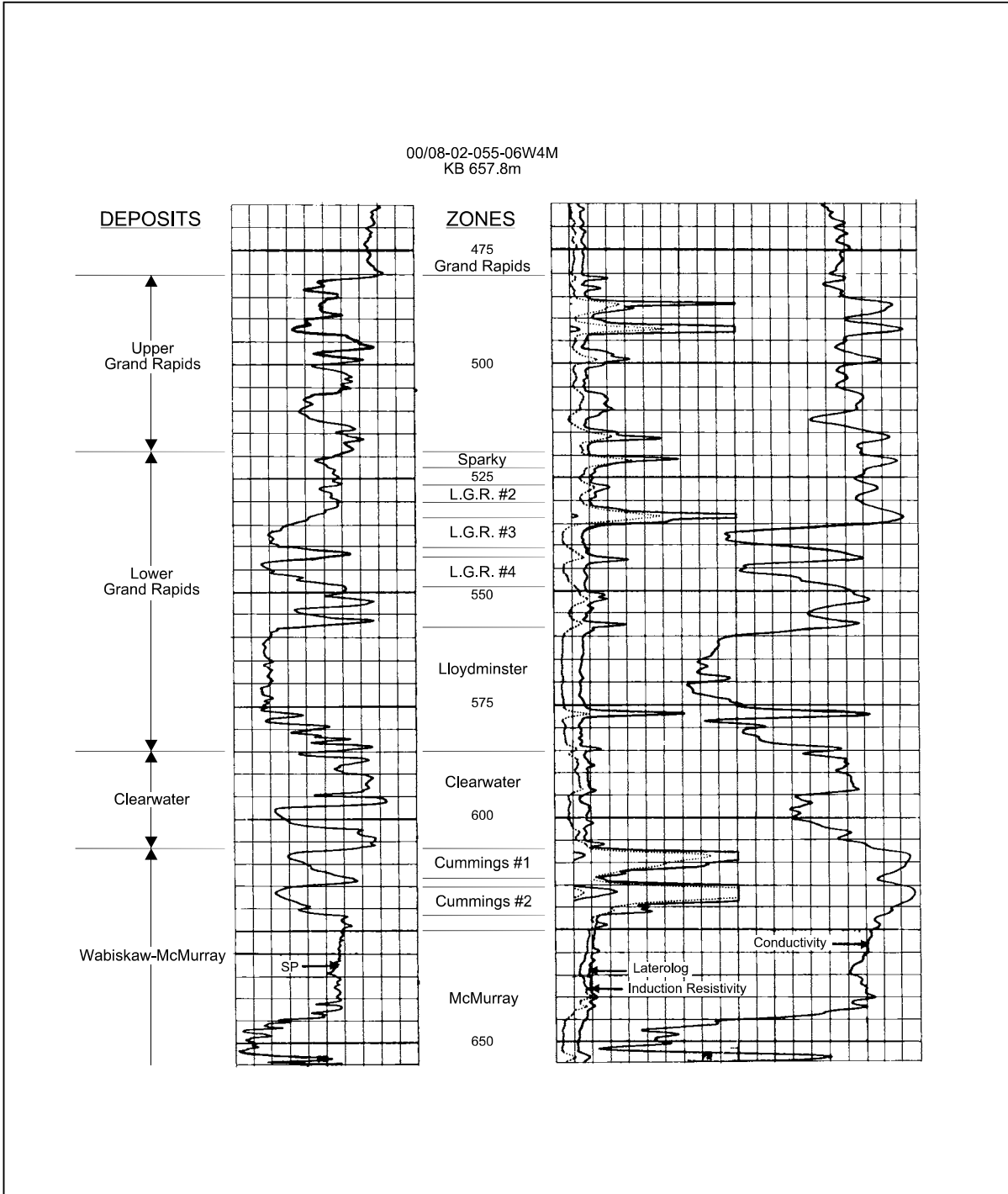
[Original signed by]

Frank J. Mink, P.Eng
Board Member

Attachments



Attachment 1. Terminology



Attachment 2. Cold Lake oil sands area reference well
Lindbergh / St. Paul sectors
Dome et al Lindbergh 8A-2-55-6W4M

APPENDIX

APPLICATION AREAS & BITUMEN THICKNESS CRITERIA ATHABASCA OIL SANDS AREA

This appendix specifies the application areas and bitumen thickness criteria, by deposit, for which applications for approval to produce gas are required in the Athabasca Oil Sands Area.

Viking Deposit

Applications for approval to produce gas are required for wells that discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume.

Grand Rapids Deposit

Applications for approval to produce gas are required for wells drilled within the Upper Grand Rapids, Middle Grand Rapids, and Lower Grand Rapids application areas shown on Maps 1, 2, and 3, and for wells drilled outside these areas that:

- discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume; or
- are within or extend a Grand Rapids G Order¹ that overlaps with the corresponding Grand Rapids application area.

Clearwater Deposit

Applications for approval to produce gas are required for wells drilled in Township 70 and south, and for wells drilled outside this area that:

- discover 3 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume; or
- are within or extend a Clearwater G Order that overlaps with Township 70 and south.

Wabiskaw Deposit

Applications for approval to produce gas are required for wells drilled within the Wabiskaw application area shown on Map 4, and for wells drilled outside this area that:

¹ G Orders for the Grand Rapids are not identified as Upper, Middle, and Lower. A type log is included in each G Order. Comparison of this log to the type log in the EUB's Crude Bitumen Reserves Atlas will allow an operator to determine the specific Grand Rapids deposit applicable to that G Order.

- discover 3 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume, in Township 86 and south;
- discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume, in Township 87 and north; or
- are within or extend a Wabiskaw G Order that overlaps with the Wabiskaw application area.

McMurray Deposit

Applications for approval to produce gas are required for wells drilled within the McMurray application area shown on Map 5, and for wells drilled outside this area that:

- discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume; or
- are within or extend a McMurray G Order that overlaps with the McMurray application area.

Wabamun Deposit

Applications for approval to produce gas are required for wells that discover 24 metres or more of Wabamun deposit with bitumen saturation equal to or greater than 50 per cent pore volume.

Nisku Deposit

Applications for approval to produce gas are required for wells that discover 24 metres or more of Nisku deposit with bitumen saturation equal to or greater than 50 per cent pore volume, and for wells that are drilled within or extend the G Order for the Liege Nisku-Upper Ireton-Grosmont A Pool.

Grosmont Deposit

Applications for approval to produce gas are required for wells drilled within the Grosmont application area shown on Map 6, and for wells drilled outside this area that:

- discover 24 metres or more of Grosmont deposit with bitumen saturation equal to or greater than 50 per cent pore volume; or
- are within or extend a Grosmont G Order that overlaps with the Grosmont application area.

Note: This amendment was to correct Map 4 - Wabiskaw that was released with the original ID in February 1999. The Third Amendment dated November 2000 replaced the 6 maps released with the original and the correction released here.

Interim Directive ID 99-1 AMENDMENT

31 March 1999

To: All Oil, Gas, and Oil Sands Operators

AMENDMENT TO ID 99-1

On 3 February 1999, the Board issued Interim Directive (ID) 99-1 regarding Gas/Bitumen Production in Oil Sands Areas. ID 99-1 included six Application Area maps for the Athabasca Oil Sands Area. The purpose of this amendment is to make a correction to the Application Area Map for the Wabiskaw Deposit. The correction involves the addition of an application area covering Townships 94-97, West half of Range 5 and Range 6, West of the 5th Meridian. The amended Application Area Map is attached.

Questions regarding this amendment should be directed to the Board's Reservoir Development Group at (403) 297-3561.

[Original signed by]

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

Attachment

Interim Directive ID 99-1 AMENDMENT

30 November 1999

To: All Oil, Gas, and Oil Sands Operators

AMENDMENT TO ID 99-1

On 3 February 1999, the Board issued Interim Directive (ID) 99-1 regarding Gas/Bitumen Production in Oil Sands Areas. The ID included application areas and bitumen thickness criteria for the Athabasca Oil Sands Area. It also stated that the Board intends to specify application areas and bitumen thickness criteria for the Peace River and Cold Lake Oil Sands Areas once it has received and reviewed recommendations from the Industry/EUB Committee.

The Board has received and reviewed the recommendations from the Industry/EUB Committee for the Peace River Oil Sands Area and, by letter dated 4 October 1999, sent the committee report to a broader spectrum of industry for comments. No concerns were submitted to the Board regarding the committee report.

The Board has amended ID 99-1 by adding the attached Appendix A.

Questions regarding this amendment should be directed to the Board's Resources Applications Group at (403) 297-3561.

[Original signed by]

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

Attachment

APPENDIX A

APPLICATION AREAS & BITUMEN THICKNESS CRITERIA PEACE RIVER OIL SANDS AREA

This appendix specifies the application areas and bitumen thickness criteria, by deposit, for which applications for approval to produce gas are required in the Peace River Oil Sands Area.

Bluesky-Gething Deposit

Applications for approval to produce gas are required for wells drilled and/or completed within the Bluesky-Gething application areas shown on Map 1A, and for wells drilled and/or completed outside these areas that:

- discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume; or
- are within or extend a Bluesky or Gething G Order that overlaps with the Bluesky-Gething application area.

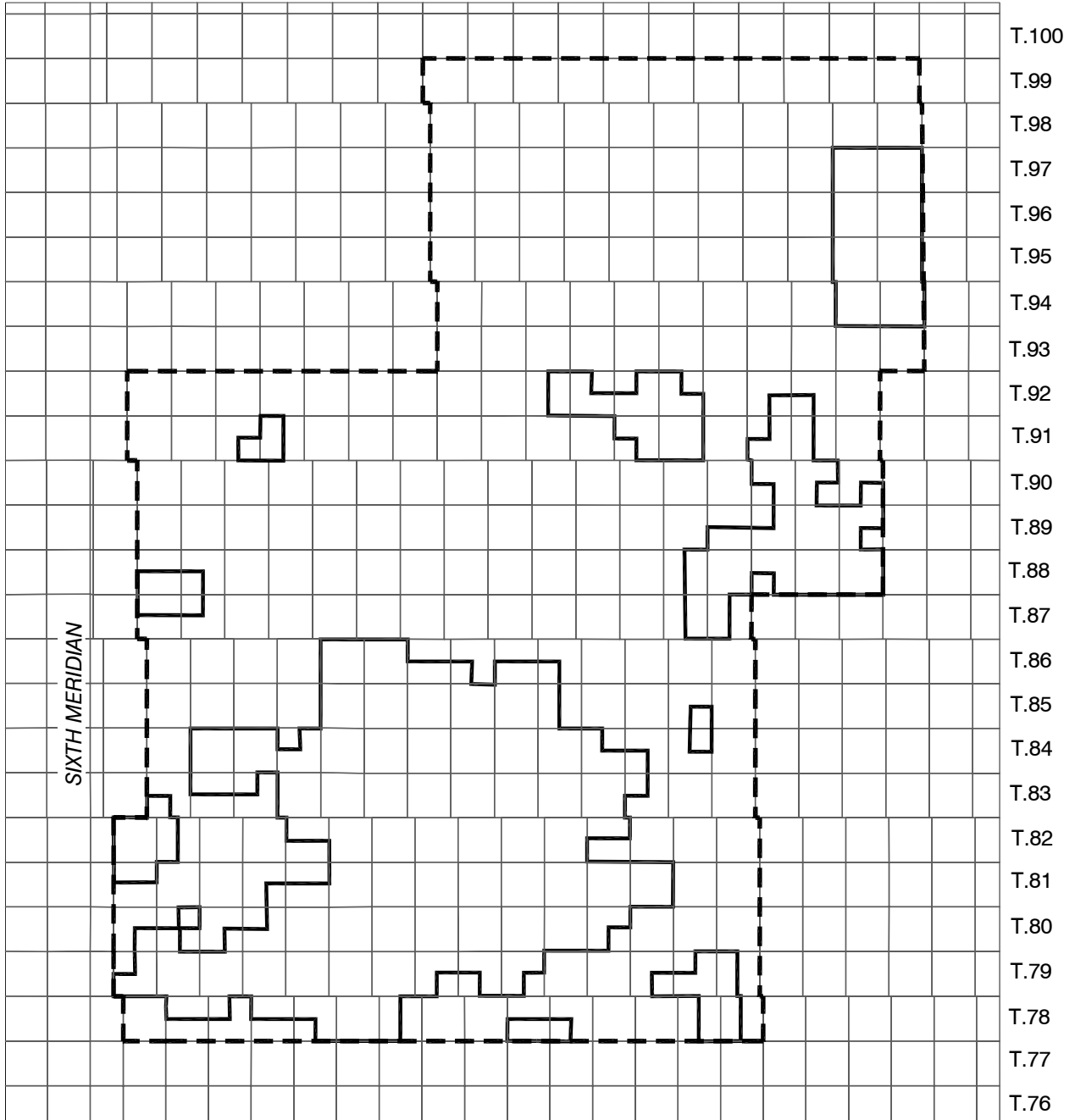
Belloy Deposit

Applications for approval to produce gas are required for new or recompleted wells that discover 10 metres or more of sand with bitumen saturation equal to or greater than 50 per cent pore volume.

Debolt and Shunda Deposits

Applications for approval to produce gas are required for new or recompleted wells that discover 24 metres or more of Debolt or Shunda deposit with bitumen saturation equal to or greater than 50 per cent pore volume.

R.1 W.6M. R.24 R.22 R.20 R.18 R.16 R.14 R.12 R.10 R.8 R.6 W.5M.



Legend

- Peace River Oil Sands Area
- Bluesky-Gething Gas Production Application Areas

Peace River Oil Sands Area - Map 1A



Interim Directive ID 99-1 AMENDMENT

November 29, 2000

To: All Oil, Gas, and Oil Sands Operators

THIRD AMENDMENT TO INTERIM DIRECTIVE 99-1

On February 3, 1999, the Alberta Energy and Utilities Board (EUB) issued *Interim Directive (ID) 99-1: Gas/Bitumen Production in Oil Sands Areas—Application, Notification, and Drilling Requirements*. ID 99-1 included six application area maps for the Athabasca oil sands area. The purpose of this amendment is to incorporate changes to the Athabasca oil sands area and the Wabiskaw and McMurray gas production application areas.

The EUB issued *General Bulletin 2000-20* on September 18, 2000, regarding the above changes and requested that operators advise it of any concerns about the revisions to the application areas. No concerns were submitted to the EUB.

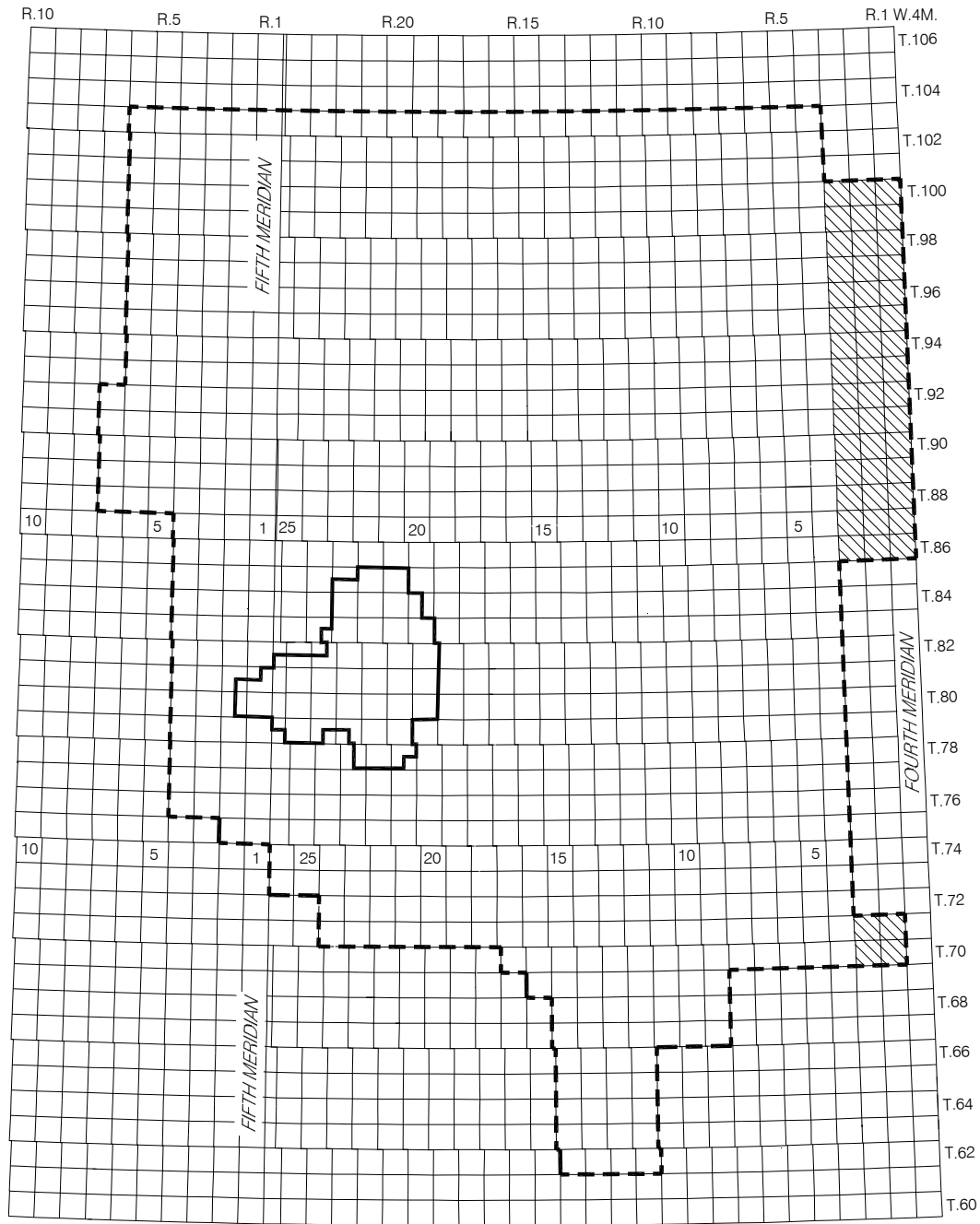
The amended application area maps are attached.

Questions regarding this amendment should be directed to the EUB's Resources Applications Group at (403) 297-3561.




[Original signed by]

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

Attachments



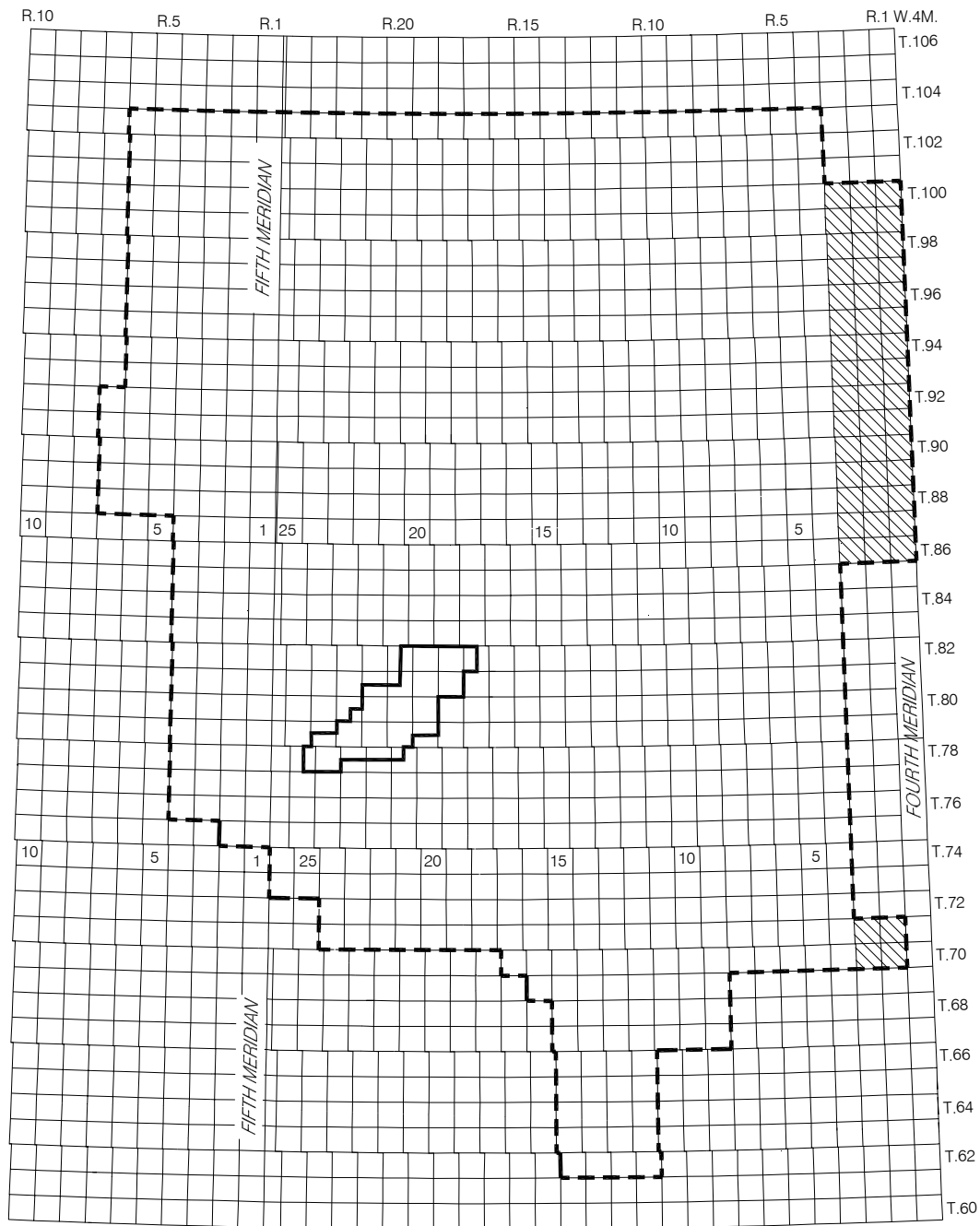
LEGEND

-  Athabasca Oil Sands Area
-  Upper Grand Rapids Gas Production Application Area
-  Revised oil sands area




Athabasca Oil Sands Area - Map 1 (Revised November 2000)

Attachment 1 to ID 99-1 Amendment





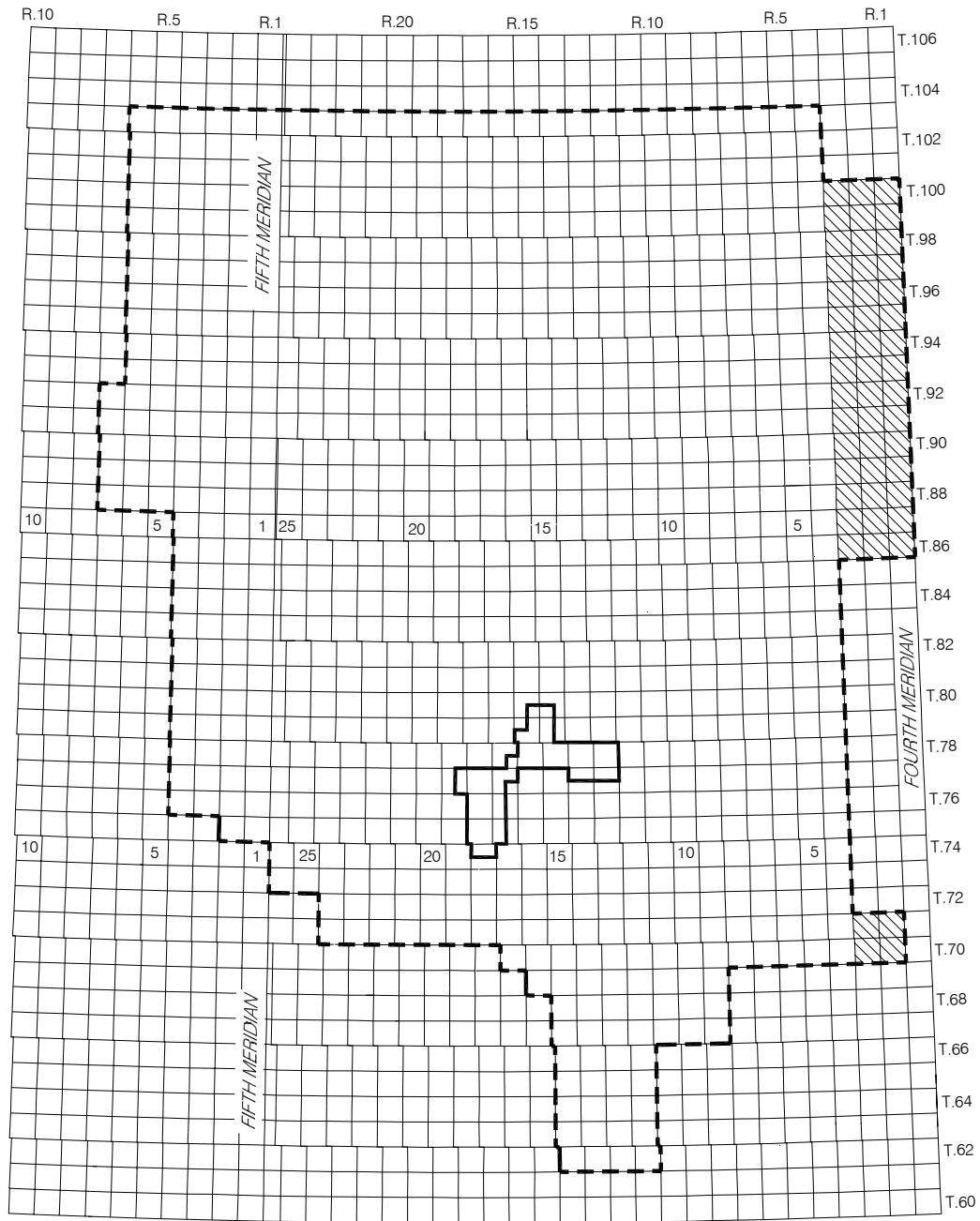
LEGEND

-  Athabasca Oil Sands Area
-  Middle Grand Rapids Gas Production Application Area
-  Revised oil sands area




Athabasca Oil Sands Area - Map 2 (Revised November 2000)

Attachment 2 to ID 99-1 Amendment





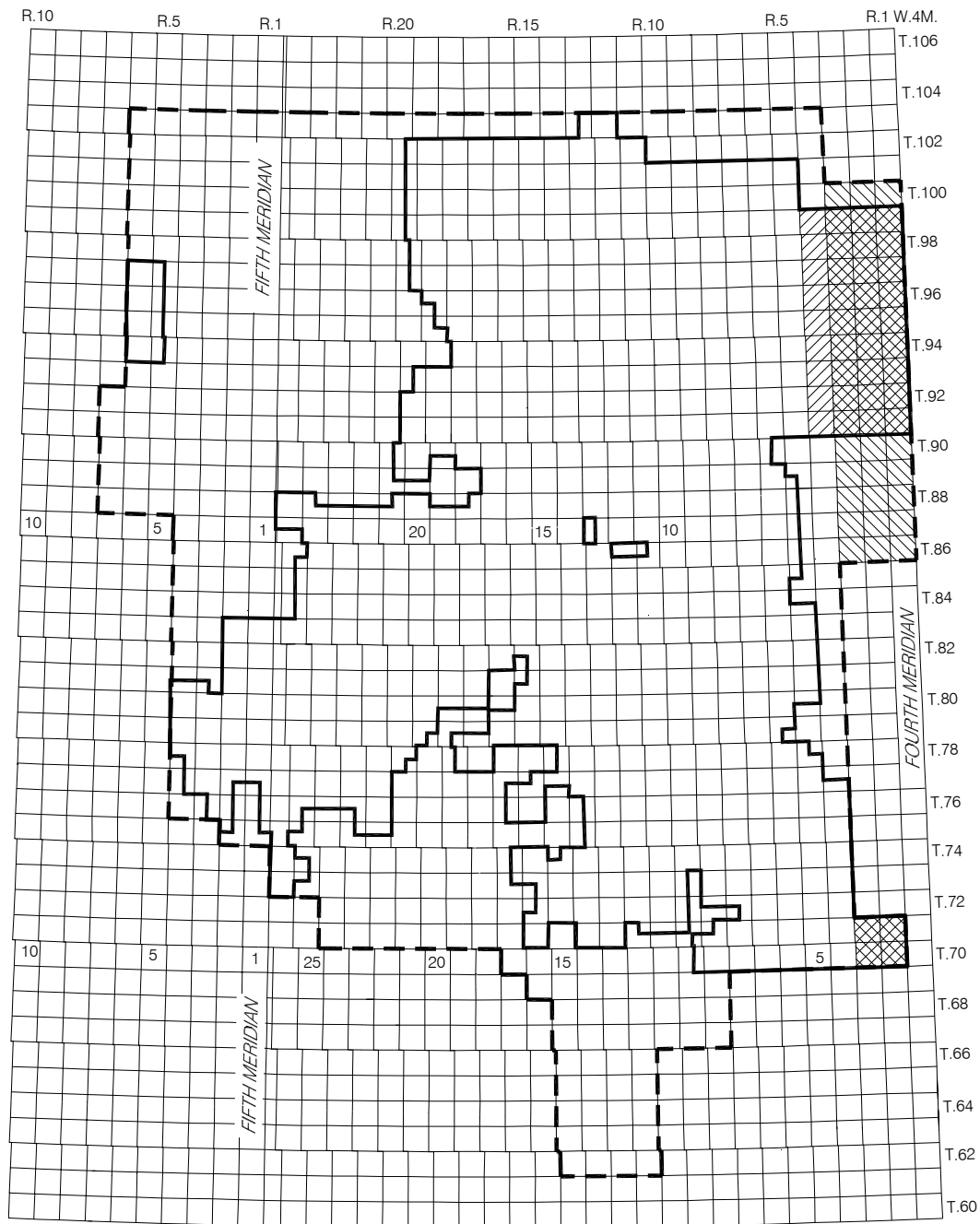
LEGEND

-  Athabasca Oil Sands Area
-  Lower Grand Rapids Gas Production Application Area
-  Revised oil sands area


Athabasca Oil Sands Area - Map 3 (Revised November 2000)

Attachment 3 to ID 99-1 Amendment



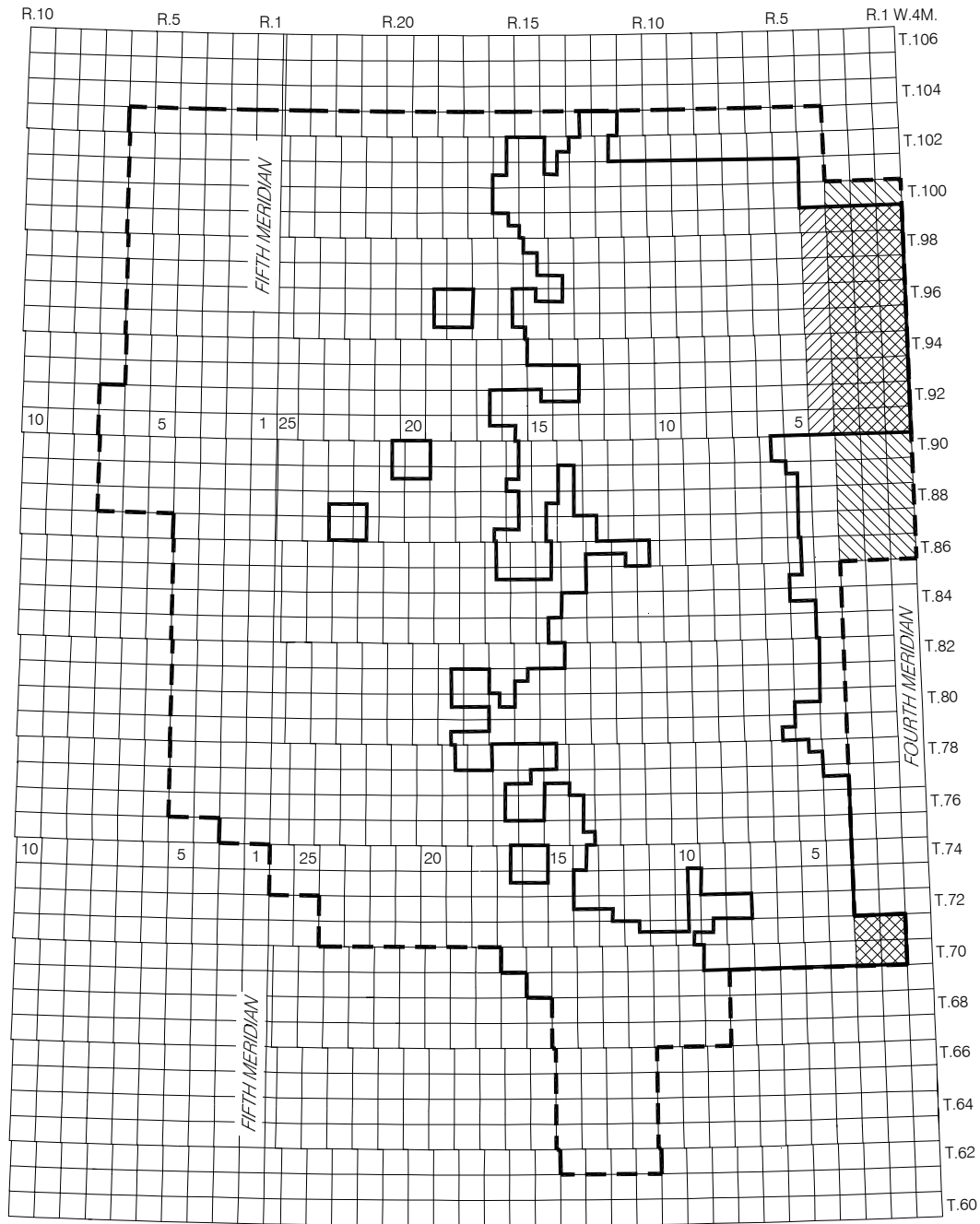


LEGEND

-  Athabasca Oil Sands Area
-  Wabiskaw Gas Production Application Area
-  Revised application area
-  Revised oil sands area

Athabasca Oil Sands Area - Map 4 (Revised November 2000)
 Attachment 4 to ID 99-1 Amendment



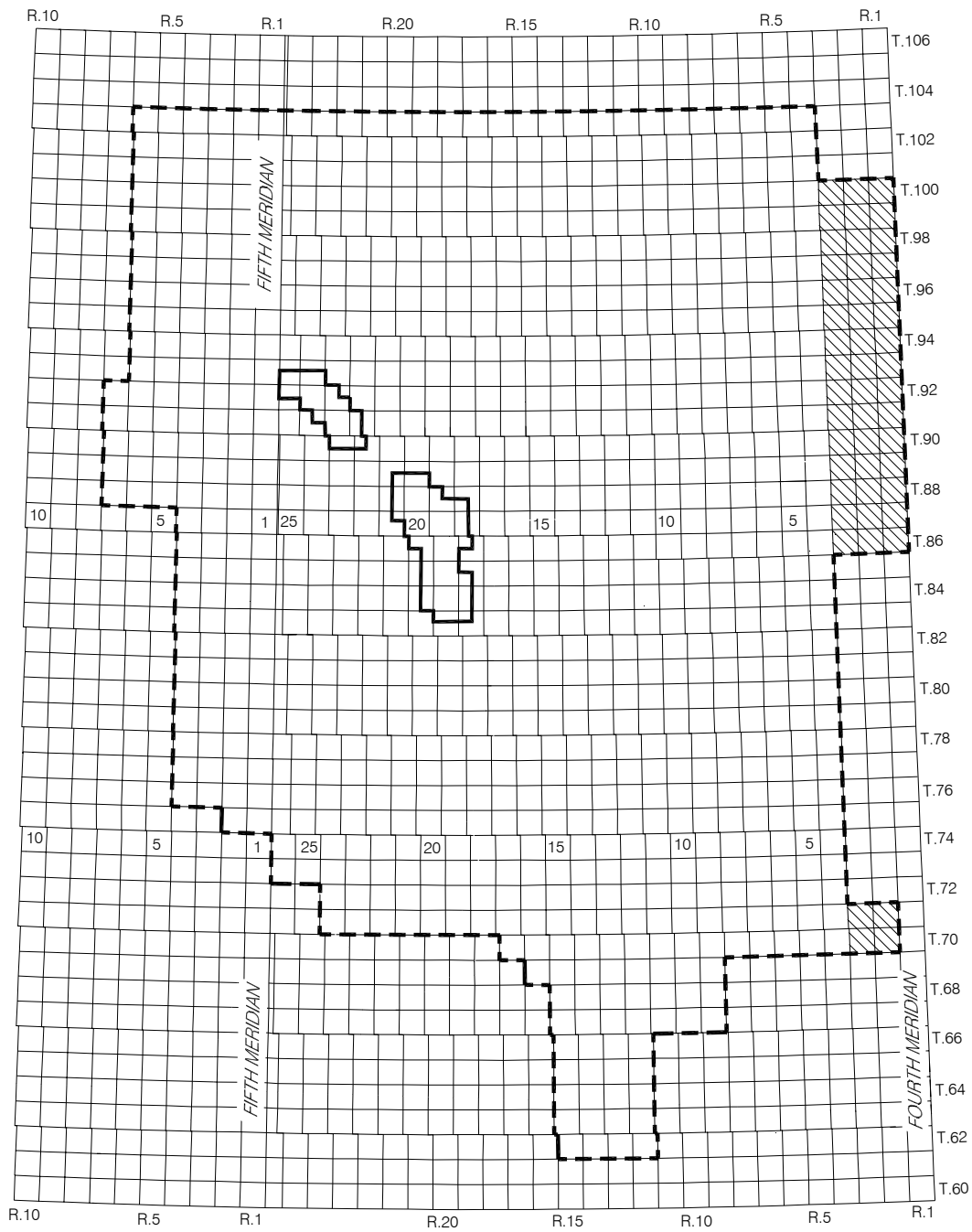


LEGEND




-  Athabasca Oil Sands Area
-  McMurray Gas Production Application Area
-  Revised application area
-  Revised oil sands area

Athabasca Oil Sands Area - Map 5 (Revised November 2000)
 Attachment 5 to ID 99-1 Amendment





LEGEND

-  Athabasca Oil Sands Area
-  Grosmont Gas Production Application Area
-  Revised oil sands area

Athabasca Oil Sands Area - Map 6 (Revised November 2000)
 Attachment 6 to ID 99-1 Amendment



Interim Directive ID 99-1 AMENDMENT

July 22, 2003

To: All Oil, Gas, and Oil Sands Operators

FOURTH AMENDMENT TO INTERIM DIRECTIVE 99-1

On February 3, 1999, the Alberta Energy and Utilities Board (EUB) issued *Interim Directive (ID) 99-1: Gas/Bitumen Production in Oil Sands Areas—Application, Notification, and Drilling Requirements*. This amendment incorporates revisions to the EUB's requirements respecting gas production from the Wabiskaw-McMurray in the Athabasca Oil Sands Area, as announced in *General Bulletin (GB) 2003-16* and *GB 2003-28*.

1 Application Area

The gas production application areas for the Wabiskaw and McMurray are rescinded (Maps 4 and 5 of *ID 99-1*) and replaced by a single Wabiskaw-McMurray application area, as shown on Attachment 1. The description of the application criteria for the Wabiskaw and McMurray contained within the appendix of *ID 99-1* is replaced with the following:

Wabiskaw-McMurray Deposit

Applications for approval to produce gas are required for wells drilled within the Wabiskaw-McMurray application area and for wells drilled outside this area that are within or extend a Wabiskaw or McMurray Pool Order that overlaps the application area.

Previously, when a Wabiskaw-McMurray gas well drilled outside the application area discovered bitumen meeting the criteria outlined in *ID 99-1*, an application was required. With these changes, applications are no longer required outside of the new application area unless drilled into a Pool Order that overlaps the application area. Notwithstanding, oil sands leaseholders that have a local concern may request a gas shut-in review or the Board may conduct such a review on its own initiative. Drilling requirements specified in *ID 99-1* continue to apply outside the new application area.

2 Application Information Requirements

The application information requirements specified in *ID 99-1* are applicable to the Wabiskaw-McMurray application area. However, this information needs to be addressed within the context of a regional geological setting. Applicants must provide a regional geological study encompassing a minimum 15 kilometre (km) radius centered around the application well.

3 Interim Shut-in Order and Exemptions

Effective September 1, 2003, all Wabiskaw-McMurray gas production from wells within the new application area and within overlapping Pool Orders must be shut in on an interim basis unless exempted. Schedule A of Interim Shut-in Order 03-001 lists the wells subject to the interim shut-in order. In the event that Wabiskaw-McMurray gas production is occurring within the application area or within overlapping Pool Orders from wells not listed in Schedule A of the interim shut-in order, the licensee must immediately advise the EUB Resources Applications Group in writing.

Wabiskaw-McMurray gas production is exempt on an interim basis provided that

- 1) a licensee states it has evidence to show that grandfathered gas (i.e., zones completed prior to July 1, 1998) is not associated with potentially recoverable bitumen¹; or
- 2) gas production was approved after July 1, 1998, pursuant to an application under *ID 99-1*.

A licensee must notify the EUB of the wells and perforated intervals that it states are exempt. Notification of exemption must include a covering letter signed by an authorized company representative along with a list of the unique well ID, perforated interval(s), and the basis for exemption in the format shown in Attachment 2. Licensees intending to file an exemption should send a paper copy, along with an electronic version of the list (Excel format), to

Attention: Resources Applications Group
Alberta Energy and Utilities Board
640 - 5 Avenue SW
Calgary, Alberta T2P 3G4
E-mail: EUB.ExemptNotifications@gov.ab.ca

Temporary exemptions from the interim shut-in order are effective on the date of filing. Gas production for which temporary exemption notification has not been filed by September 1, 2003, must be shut in until such time as an exemption is filed. The EUB will publish a list of the exempt wells and perforated intervals on its Web site for access by all interested parties.

A licensee must have in its possession the supporting evidence it used to exempt gas production. The licensee must produce this supporting evidence within two working days, or as directed by the Board, if an exemption is contested or when audited by the EUB. If a licensee fails to produce the evidence as directed by the Board, the producing zone will be subject to immediate interim shut-in and the EUB may audit that licensee's remaining exempted gas production. Evidence of further noncompliance will result in the immediate shut in of those wells and will invoke the EUB's general enforcement process.

Decisions made respecting Wabiskaw-McMurray gas production from wells that were considered at the Surmont hearing (*Decision 2000-022*) and the Chard-Leismer hearing (*Decision 2003-023*) are unaffected by this interim shut-in order.

¹ This is bitumen in oil sands that has a minimum thickness of 10 metres with a minimum bitumen saturation of 50 per cent. Consideration must be given to the volume of the bitumen encountered, the geological depositional environment, the presence of associated water zones, and the available well control.

The interim shut-in order will supersede any existing commingling orders.

4 Pressure Data Requirements

Effective immediately, waivers previously granted regarding the collection of pressure data from EUB designated Wabiskaw-McMurray gas pools within or overlapping the application area are rescinded. For these pools the EUB requires that pressure surveys be conducted and submitted by November 1, 2003, from the greater of one well or 25 per cent of the wells in each pool. These must be bottomhole pressure surveys using the methodology described in *Guide 40: Pressure and Deliverability Testing—Oil and Gas Wells* for obtaining stabilized pressures. Variations from these requirements must be approved by the EUB.

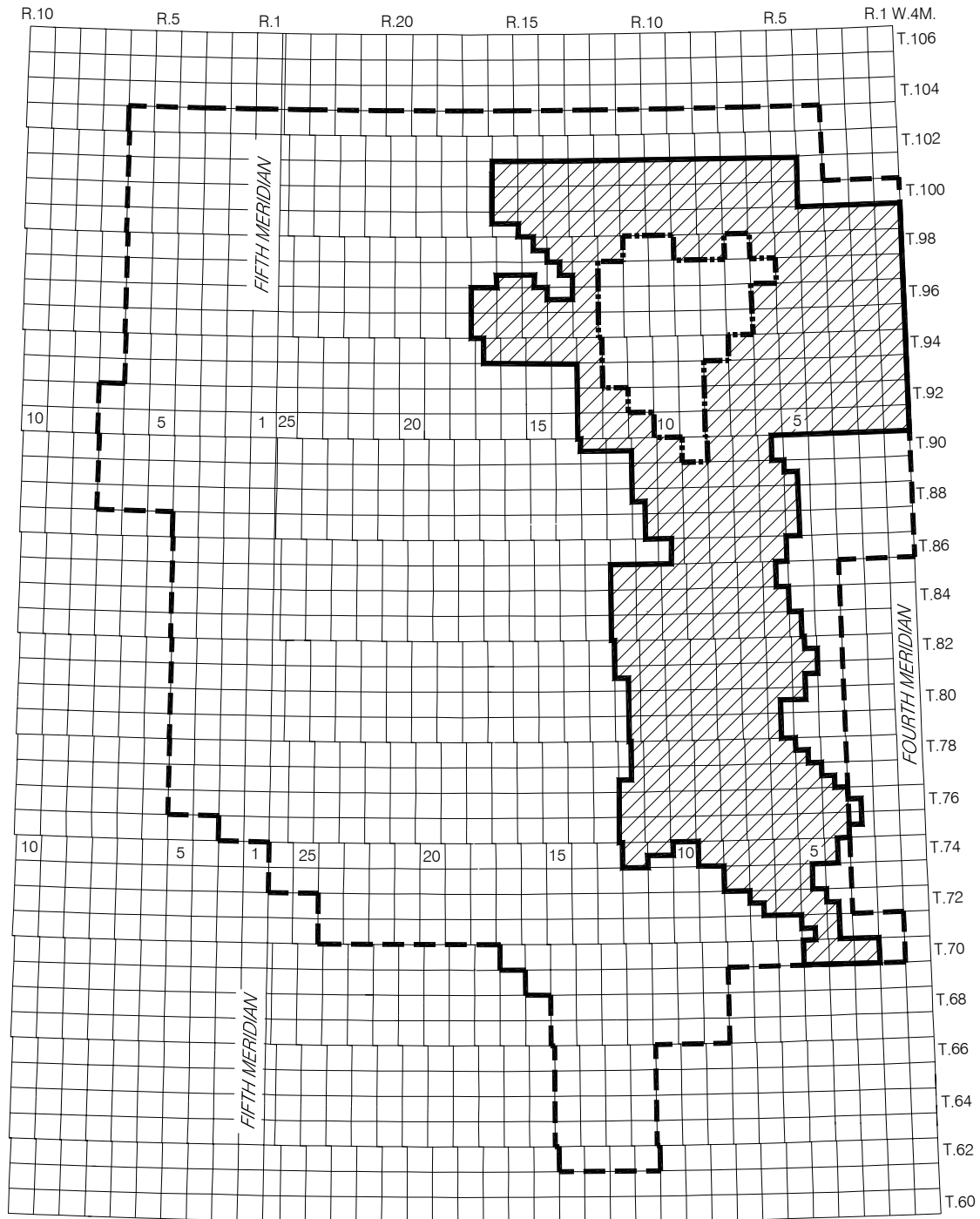
After November 1, 2003, requirements revert back to *Guide 40* or such other requirements as may be determined through consultation with industry.

Questions regarding this amendment should be directed to the EUB's Resources Applications Group at (403) 297-3561.




[Original signed by]

Neil McCrank, Q.C.
Chairman

Attachments



LEGEND

-  Athabasca Oil Sands Area
-  Wabiskaw - McMurray Gas Production Application Area
-  Excluded mineable oil sands area

Attachment 1. Wabiskaw - McMurray Gas Production Application Area



ATTACHMENT 2 – EXEMPTION NOTIFICATION FORMAT

Licensee _____

Unique Well ID	Perforated Interval(s) (mKB)	Please indicate the applicable exemption(s)	
		You have evidence to show that the gas in the perforated interval(s) is not associated with potentially recoverable bitumen.	The perforated interval(s) has been previously approved for gas production under ID 99-1.