



INFORMATIONAL LETTER IL 84-7

TO: All Oil, Gas, and Oil Sands Operators

DECLARATION OF OIL SANDS AREAS TO FACILITATE ORDERLY LEASING AND STABLE REGULATION

As in situ operations in oil sands and heavy oil areas has continued to expand, especially in the past two years, the problem of distinguishing extra-heavy oil from bitumen has loomed ever-larger. Developments in the Lindbergh, Elk Point, and Bonnyville areas - a sort of transition region between clearly identified bitumen as at Cold Lake and clearly identified extra-heavy oil as at Lloydminster - have lead to potential ambiguities in lease ownership rights. To resolve this difficulty and to foster sustained orderly development, the Energy Resources Conservation Board (ERCB) and Alberta Energy and Natural Resources (AE&NR) concluded that classifying the occurrences as either crude bitumen or conventional heavy oil, but not both, within a specified gross geological zone, would be propitious.

The recently issued Oil Sands Conservation Act provides the Board the authority to deem heavy hydrocarbon occurrences to be crude bitumen even if the substances do not completely match the general definition "in its naturally occurring viscous state, will not flow to a well".

On the above basis and with the objectives of facilitating orderly leasing and stable regulations, the ERCB has deemed the hydrocarbon substance, with the exception of natural gas and coal, found in certain (*1) geological zones from the top of the Mannville formation through to the base of the Woodbend formation in the Athabasca, Cold Lake, and Peace River areas, as shown in the attached Figure 1 to be oil sands. The accompanying Oil Sands Area Orders (OSA) have been issued for this purpose. It is our expectation that these area outlines will only occasionally require adjustments because the oil sands have already been extensively outlined by drilling.

In addition to the province-wide OSA declarations, the ERCB believes there would be advantages for administrative convenience to identify sub-areas or sectors of the very large oil sands occurrences using local geographic names. Adoption of the many local field names now used for gas fields in portions of the OSA areas was considered but found to be too irregular and detailed to be convenient. Thus, for example, the Cold Lake OSA has been classified into the sectors as shown on Figure 2, the objective being a more ready understanding of the location of a particular development project. The sector outlines can be adjusted in future as developments evolve.

As a matter of related information, Oil Sands Deposit Orders (OSD), which are prepared by the ERCB Oil Sands staff, reflect crude bitumen occurrences as confirmed by geological data from drilled wells. OSDs include the geological zones and show area extent of the crude bitumen occurrences on a fairly detailed basis. The ERCB staff will continue to map and update these interpretations based on drilling data. Conventional heavy crude oil accumulations which adjoin and are in the same geological zones as the crude bitumen such as in the Lindbergh area will now be

removed from existing oil pool G order designations and included within the appropriate OSD orders. As mentioned previously, in accordance with the Oil Sands Conservation Act (*2), these extra-heavy crude oil accumulations will now be combined with and called crude bitumen reserves. The rules for exploitation of these resources will then be as in other oil sands areas except that a matter such as well spacing density and pattern probably will be by SU Order designation recognizing in part the previously established conventional heavy oil rules for development.

Inquiries should be directed to the Board's Oil Sands Department, Mr. W. A. Mayer (297-8576), telex 03-821717.

signed by

N. A. Strom
Board Member

(*1) The specified zones are set out in Orders No. OSA 1, 2, and 3 which will be issued simultaneous with this IL.

(*2) The Oil Sands Conservation Act, recently enacted as chapter O-5.5 of the Statutes of Alberta, 1983, enables the ERCB by order, with respect to a zone within a specified area set out in the order, to declare any hydrocarbon substance, except natural gas and coal, to be oil sands if the ERCB is satisfied:

- a. (a) that the zone adjoins or is in reasonable proximity to an oil sands deposit, and
 - b. (b) that to do so would be in the interest of the orderly, efficient, or economic development of:
 - i. the hydrocarbon substance, or
 - ii. the bitumen in the oil sands deposit referred to in clause (a).
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[FIGURE 1](#) - Map - Oil Sands Areas

[FIGURE 2](#) - Map - Cold Lake Oil Sands Area - Sectors

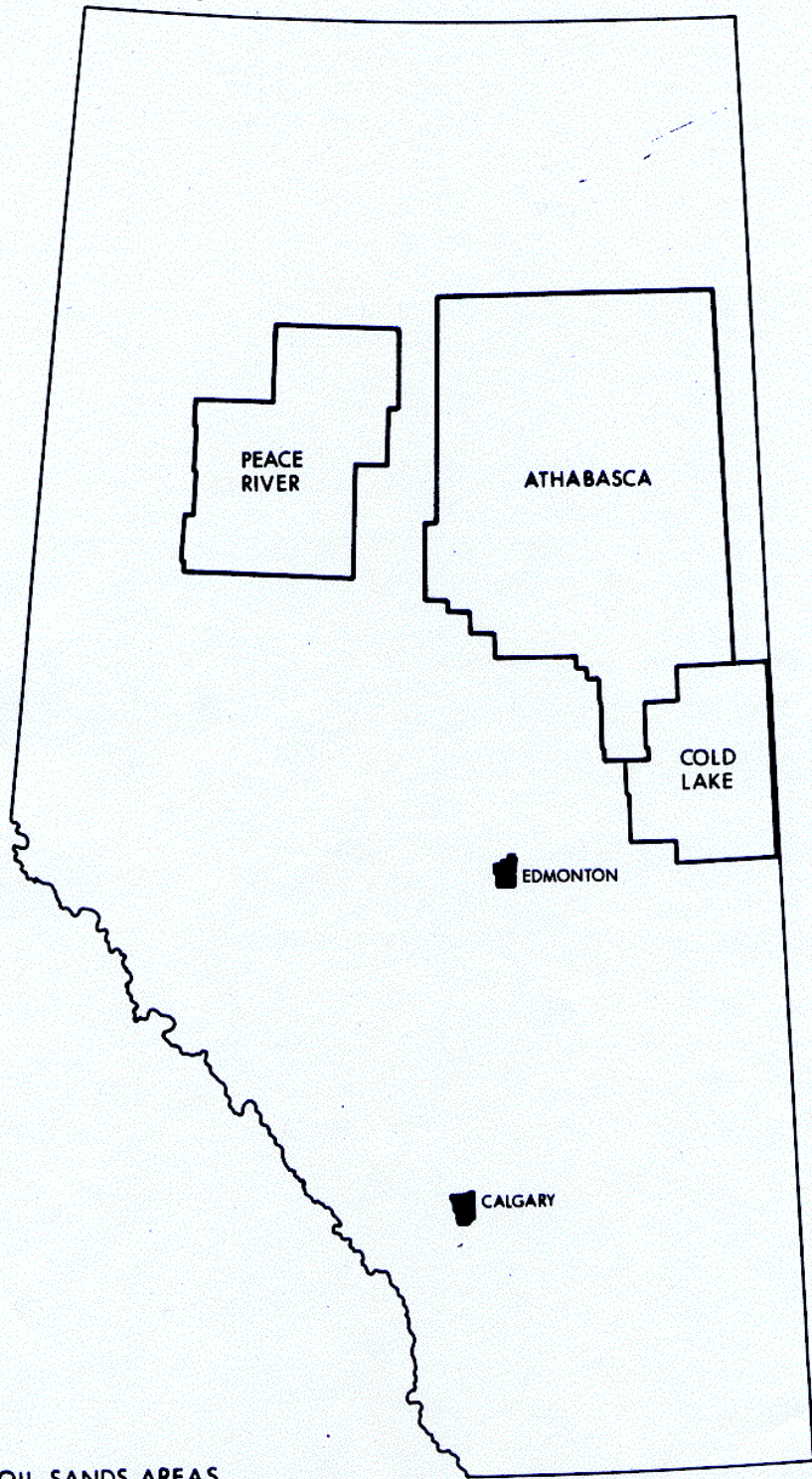


FIGURE 1 OIL SANDS AREAS

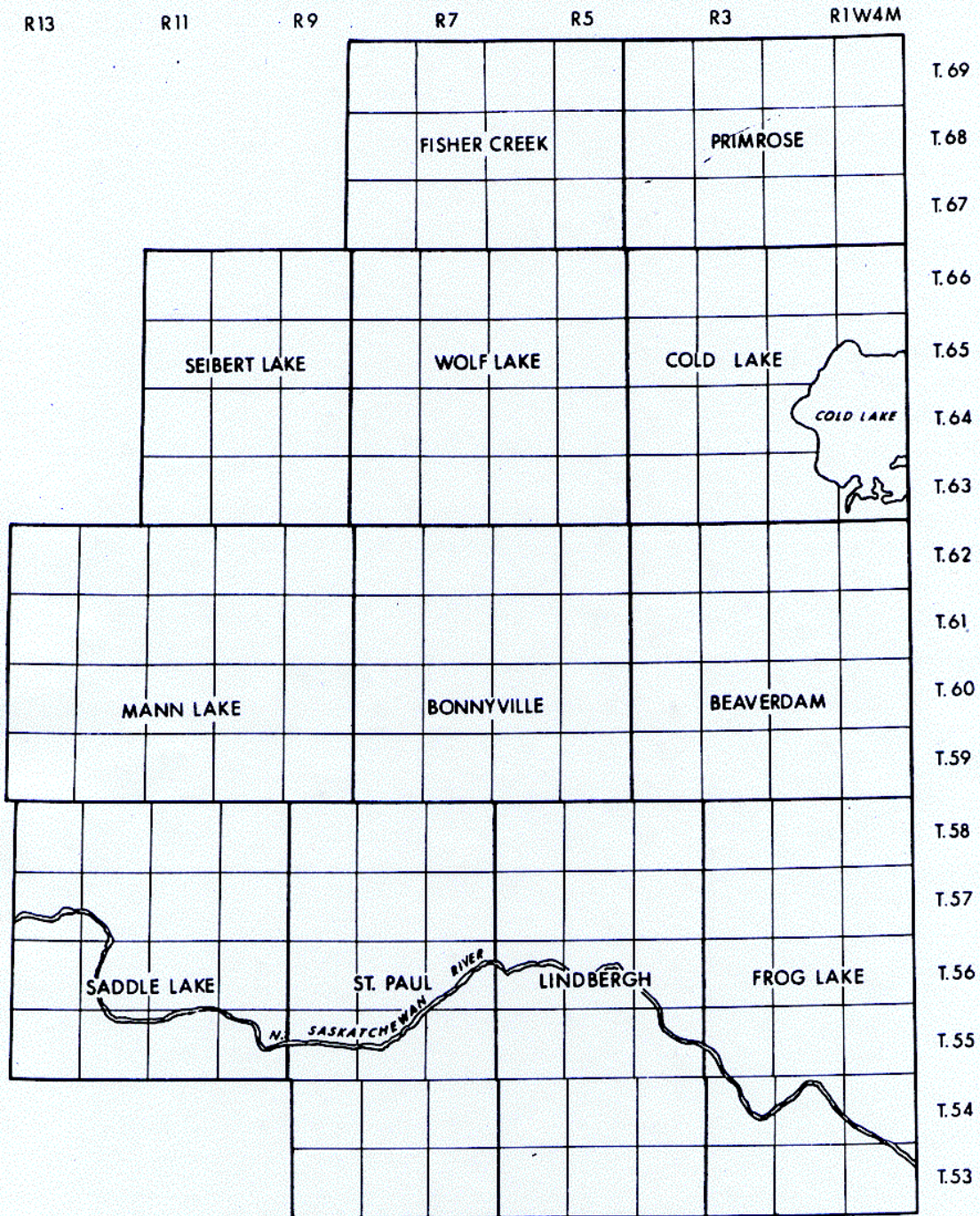


FIGURE 2 COLD LAKE OIL SANDS AREA - SECTORS