Chapter 1 A Brief History

Mineral Rights in Alberta

The provincial Crown owns the mineral rights to approximately 81% of Alberta's 66 million hectares. The Government of Canada through the *Natural Resources Transfer Act* of 1930 granted these rights. They encompass petroleum, natural gas, oil sands*, and other minerals.

Mineral rights to the remaining 19% of Alberta's land are held

• by the federal Crown, within national parks and Indian reserves

or

- by freehold owners, which include
 - successors to the Hudson's Bay Company, which owned the mineral rights in what is now Alberta, Saskatchewan, Manitoba, the Northwest Territories, and Nunavut from 1670 to 1869,
 - Most of these rights were surrendered to the Dominion of Canada in 1869.
 - National railway companies, which received land concessions and mineral rights from the federal government in the 19th century, and descendants of homesteaders who settled in Alberta before 1887 were granted mineral rights by the federal government.

The Alberta Crown owns 97% of oil sands mineral rights; freehold owners hold the remaining 3%. The department, on behalf of the citizens of the province, manages mineral rights owned by the Alberta Crown.

Oil Sands: A Definition

The Mines and Minerals Act, defines oil sands as

- sands and other rock materials containing crude bitumen*
- the crude bitumen contained in those sands and other rock materials
- any other mineral substance (except natural gas) associated with the abovementioned crude bitumen, sands or rock materials

Bitumen*: A Layman's Definition

Bitumen is a thick, sticky form of crude oil, which is so heavy and viscous that it will not flow unless it is heated or diluted with lighter hydrocarbons. At room temperature, bitumen behaves much like cold molasses.

Alberta's Oil Sands

Canada's resources of bitumen* occur entirely within Alberta's oil sands, which hold an estimated 1.7 trillion barrels of crude bitumen. Alberta's oil sands are one of the largest petroleum resources in the world. They are unique because the bitumen they contain is recoverable through surface mining as well as through conventional well operations. It is expected that about 20% of Alberta's oil sands bitumen will be recovered through mining.

Alberta's Oil Sands constitutes about 10–20% of bitumen, 80–85% is mineral matter such as sand and clay, and the remaining 4–6% is water.

Proven Reserves: A Definition

Those reserves recoverable under current technology and present and anticipated economic conditions specifically proved by drilling, testing, or production, plus the portion of reserves that are interpreted to exist from geological, geophysical, or similar information with reasonable certainty. NOTE: This is the same definition used by ERCB for Established reserves.

Oil Sands Areas

The ERCB has classified Alberta's oil sands resources into three areas

• Athabasca Oil Sands Area

Alberta's first commercial oil sands production occurred here in 1967, when the Great Canadian Oil Sands plant (now Suncor Energy Inc.) opened at Fort McMurray. The Syncrude consortium began production in 1978. Alberta's only oil sands surface mines are located in this area.

• Cold Lake Oil Sands Area

Alberta's major in situ* operations are located here. In situ (Latin for "in place") production methods include cold (primary) production as well as steam or solvent injection. In situ methods are used when bitumen deposits are too deep for surface mining to be feasible.

• Peace River Oil Sands Area

This is the least commercially developed of Alberta's oil sands areas. To date, the recovery methods used here are comparable to those used in the Cold Lake Oil Sands Area.

Oil sands tenure legislation refers to these three areas. (See <u>Figure 11 - Oil Sands Escalating</u> <u>Rent Area A and Area B</u> for details.)

Oil Sands Tenure

TENURE: a condition or form of right or title, under which...property is held. —The Canadian Oxford Dictionary, 1998

The term tenure* describes the system through which Crown owned mineral rights including oil sands rights—are leased and administered. By facilitating the leasing of these rights, the tenure system makes it possible for individuals and companies to explore for and develop Alberta's mineral resources for the benefit of the citizens of the province.

The viability of Alberta's economy and its non-renewable resource industries depends on the orderly development of the province's oil, gas, oil sands, and other mineral resources. It is important that both the people of Alberta and producers realize an acceptable return from the development of these resources. At the same time, non-renewable resources must be managed in a manner that considers the environment and promotes sustainable development.

Managing Alberta's Resources

The Department of Energy manages Crown-owned mineral rights on behalf of the citizens of the province. Alberta benefits from a wealth of Crown-owned natural resources, but relies on the private sector to develop these resources. In return the Department of Energy receives revenues in the form of royalties, bonus bids, offset compensation and annual rental fees. It calculates, assesses and collects these revenues and monitors and reviews the effectiveness of Alberta's royalty framework. The Department, in conjunction with other Government of Alberta ministries recommends resource development policy which support government goals.

The ERCB regulates oil, gas, oil sands, and other mineral activities and acts in the best interest of all Albertans in overseeing the efficient and effective development of Alberta's energy resources, while ensuring public safety and balancing the need for protection of the environment, conservation, orderly development, technical innovation, and service.

Other ministries such as; the Ministry of Environment and Sustainable Resource Development work with Energy and the ERCB to manage air, land and water monitoring and planning to support Government of Alberta.

A Look Back

Oil sands tenure legislation has evolved in response to the changing business needs of the oil sands industry and the government.

Alberta's earliest tenure legislation for surface-mineable oil sands was established for the Bituminous Sands Area near Fort McMurray in the 1950s. (This area is now considered part of the Athabasca Oil Sands Area.) Under this legislation, the Alberta Government issued three-year exploration agreements, which could be converted to 21-year leases.

In the early 1960s, the province issued oil sands exploration agreements which conveyed the right to bitumen present in any zone covered by an existing petroleum and natural gas lease.

In 1984, the Alberta Energy Utilities Board established the three oil sands areas and ruled that, with the exception of natural gas and coal, all hydrocarbons produced in these areas were considered to be oil sands.

For details, see the Alberta Energy Utilities Board Informational Letter IL 84-07: Declaration of Oil Sands Areas to Facilitate Orderly Leasing and Stable Regulation, which is available on the Energy Resources Conservation Board website under Industry Zone, Rules, Regulations, Requirements, Information Letters, and Interim Directives.

An external link to the Energy Resources Conservation Board website can be found on the department's website in the lower left menu under Related Links.

Legislative changes introduced in the late 1980s provided for 21-year renewals of oil sands leases*, provided that the leases were producing* a prescribed volume of bitumen.

In the fall of 1997, a joint, industry–government committee—the Industry Oil Sands Tenure Advisory Committee (IOSTAC)—was formed to review the oil sands tenure system. The committee proposed several improvements, which are now part of the *Oil Sands Tenure Regulation*.

For more information about the history of tenure legislation in Alberta, please see the publication Alberta's Oil and Gas Tenure, available from the Oil Sands home page, left menu, Publications & Maps.

Highlights of the Revised Tenure System

- Development plans no longer need to be filed with the department.
- Lease types and terms have been standardized. The old regulation identified nine types of oil sands leases. The current regulation uses only two:
 - primary leases*, which are issued for a standard term of 15 years, and
 - continued leases*, which are classified as producing or non-producing*.

Oil sands leases are discussed in detail in Chapter 3

Oil Sands Tenure Today

Alberta's tenure system is regarded as one of the best in the world.

Alberta's current oil sands tenure regime provides a regulatory framework which supports the major investments needed to develop the province's oil sands resources. The *Mines and Minerals Act*, the *Oil Sands Tenure Regulation*, and the *Mines and Minerals Administration Regulation* define the current regime. The regulations apply to new and existing oil sands agreements*.

The Role of the Department

Responsible tenure and stewardship of Alberta's oil sands resources are important for the long-term prosperity of the province and the people of Alberta. The department

- provides opportunities for oil sands development,
- provides an effective oil sands management framework, and
- allows for a fair economic return, both for the oil sands industry and for the people of Alberta.

Oil Sands Operations

The department

- makes it possible for companies to acquire oil sands rights,
- fosters the development of Alberta's oil sands, and ensures that oil sands agreements (permits* or leases) are in the hands of those who are committed to developing them,
- encourages the Alberta-based upgrading of bitumen,
- allows the oil sands industry to determine an appropriate pace for exploration and development activities (once required minimum levels of evaluation* have been met, and See Chapter 4 for details.
- facilitates the effective evaluation* of oil sands resources.

Oil Sands Management

The department

- establishes and maintains an open, two-way dialogue on existing management processes and proposed alternatives, and
- ensures that tenure rules are clear, fair, predictable, and consistently applied Clear, concise, consistent rules minimize costs and reduce the administrative burden for both industry and government.

Economic Returns

The department ensures that, when oil sands resources are made available for development

- the provincial Crown receives a fair economic return in the form of bonuses*, rent, and royalty* payments, and
- industry has opportunities to receive appropriate rewards and recognition for the risks that it takes.