



Oil Sands in Saskatchewan

A Brief History and the Proposed Tenure Regulations for the Future



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Where are Canada's Oil Sands?

- The oil sands deposit is contained within the Mannville Group of the Western Canadian Sedimentary Basin which has been deposited across B.C., Alberta, Saskatchewan, Manitoba and the U.S.

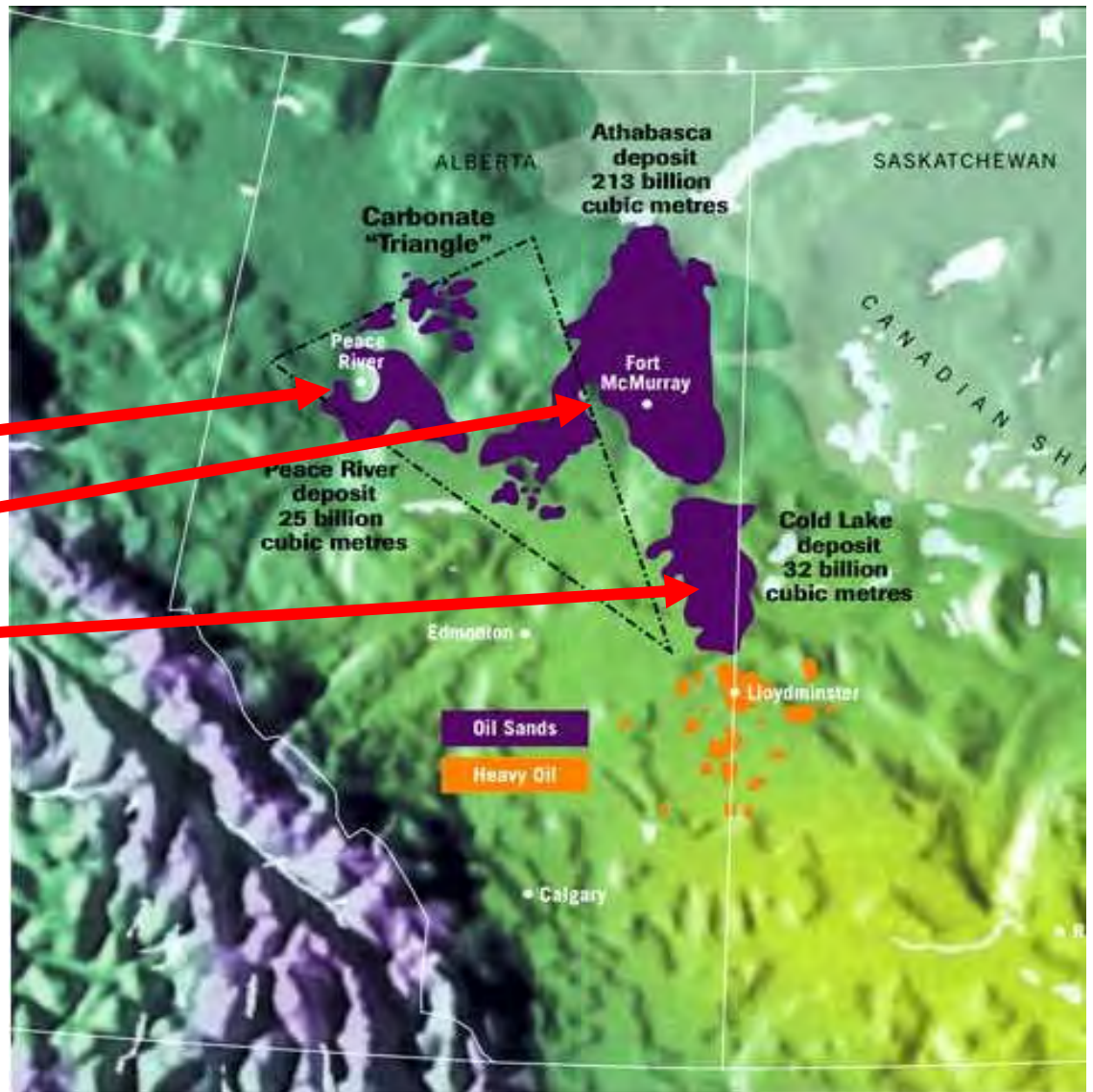


- Currently, Alberta contains the only three major known *economic* oil sand deposits:

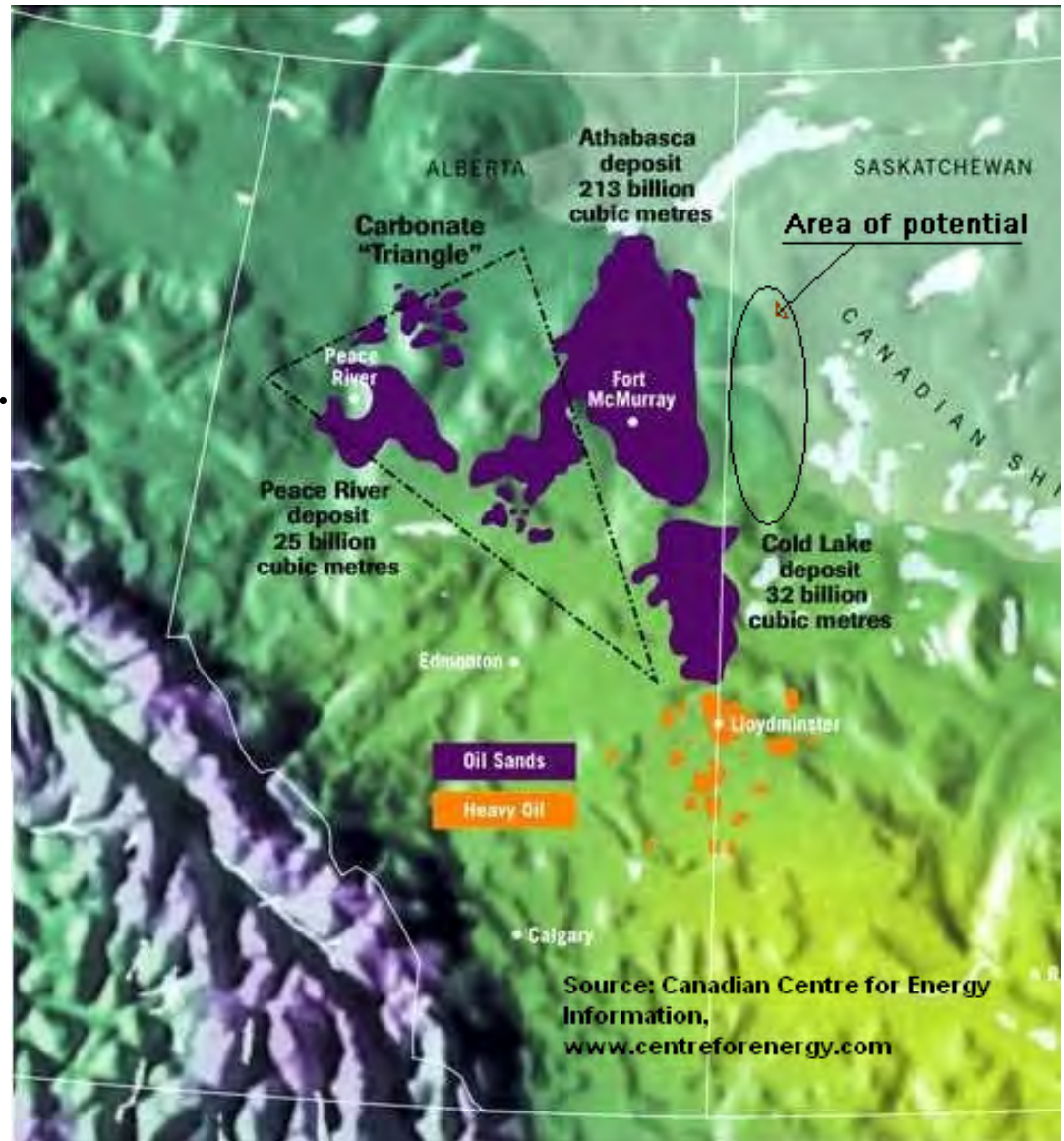
Peace river

Athabasca

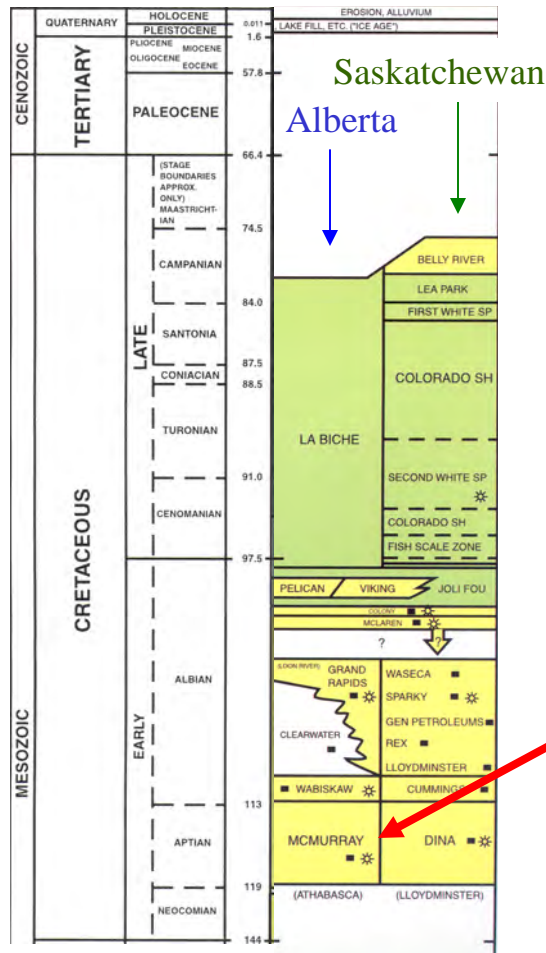
Cold Lake



- There are an estimated 1.6 trillion barrels of oil-in-place associated with Alberta's oil sands over 142,000 square kilometres.
- The estimated area for Saskatchewan's oil sand potential is 27,000 square kilometres.



Oil Sands Stratigraphy



Bitumen bearing formation.

From AGAT Laboratories table of Formations.



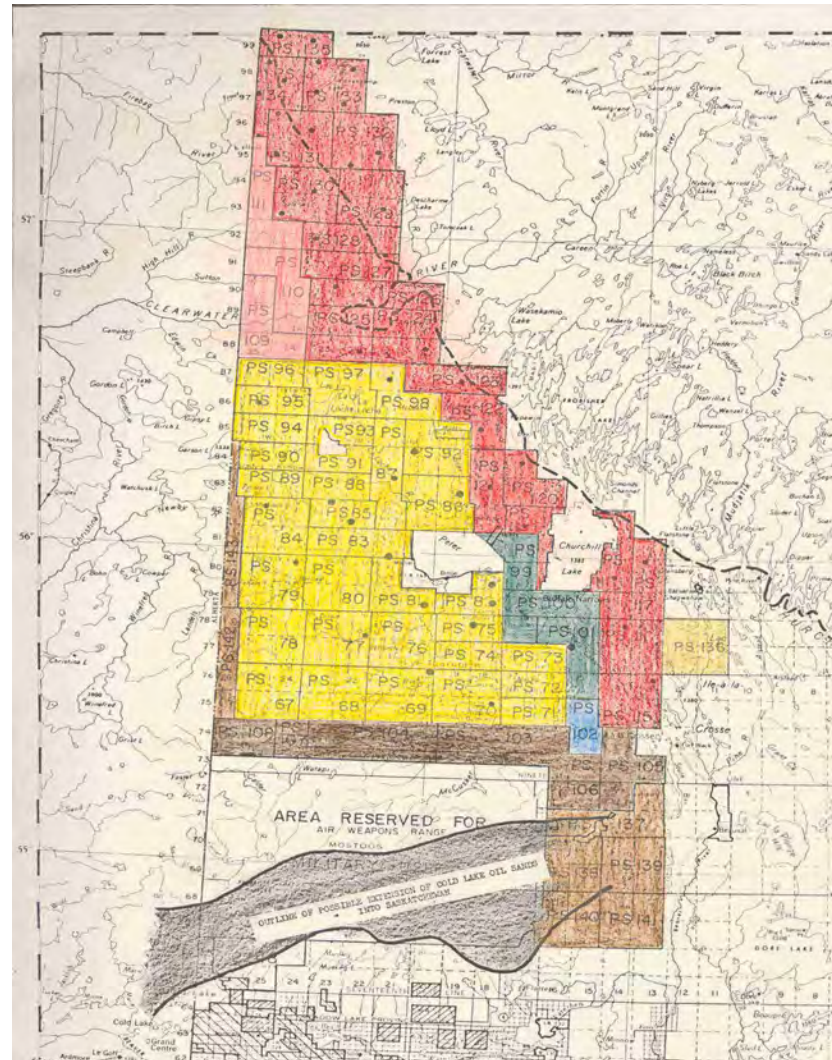
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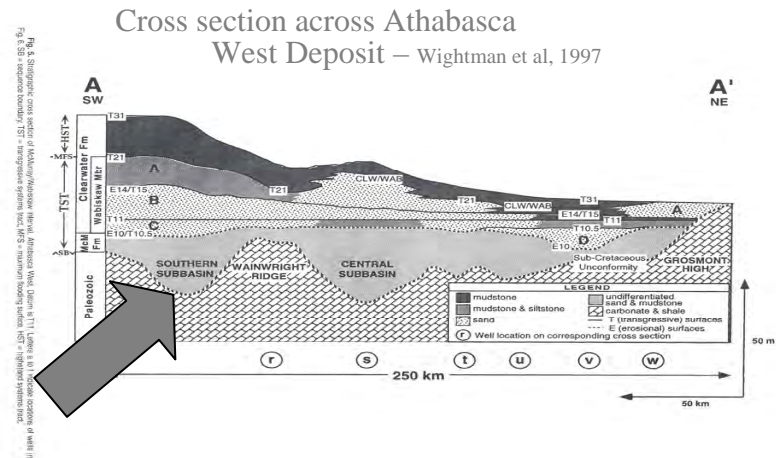
Oil Sands Exploration In Saskatchewan

- Oil sands have been observed in the Clearwater River Valley and in several wells drilled in the 70's.
- Saskatchewan's oil sands were found at a depth of 180 metres and are up to 20 metres thick.
- At that time, Saskatchewan's oil sands resource was deemed uneconomic based on the sparse information gathered and technological limitations.



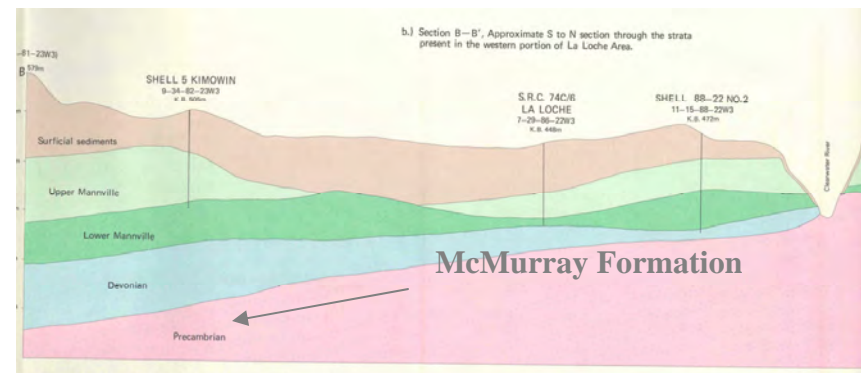
Oil Sands Exploration In Saskatchewan

- Exploration in Saskatchewan is aimed at discovering the pre-Cretaceous low areas on top of the Devonian similar to where Alberta's economic accumulations occur.



Devonian Lows in-filled with Oil Sands

- The bitumen saturated McMurray Formation has been correlated into the Province and been identified in outcrops and several wells when drilled in the 70's.

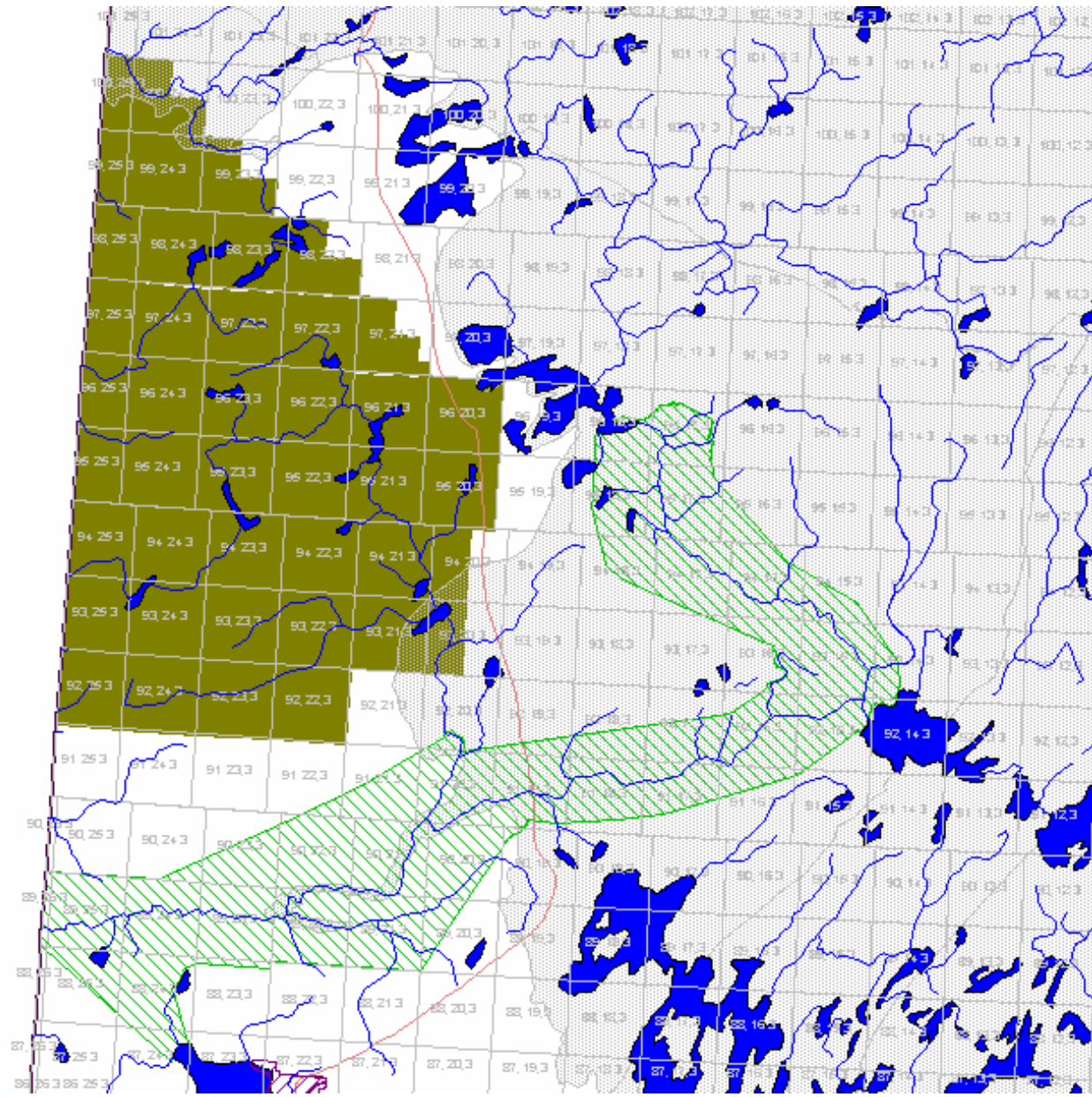


Cross-Section of Strata in Northern Saskatchewan

-Christopher et al, 1978

Current Saskatchewan Oil Sands Interest.

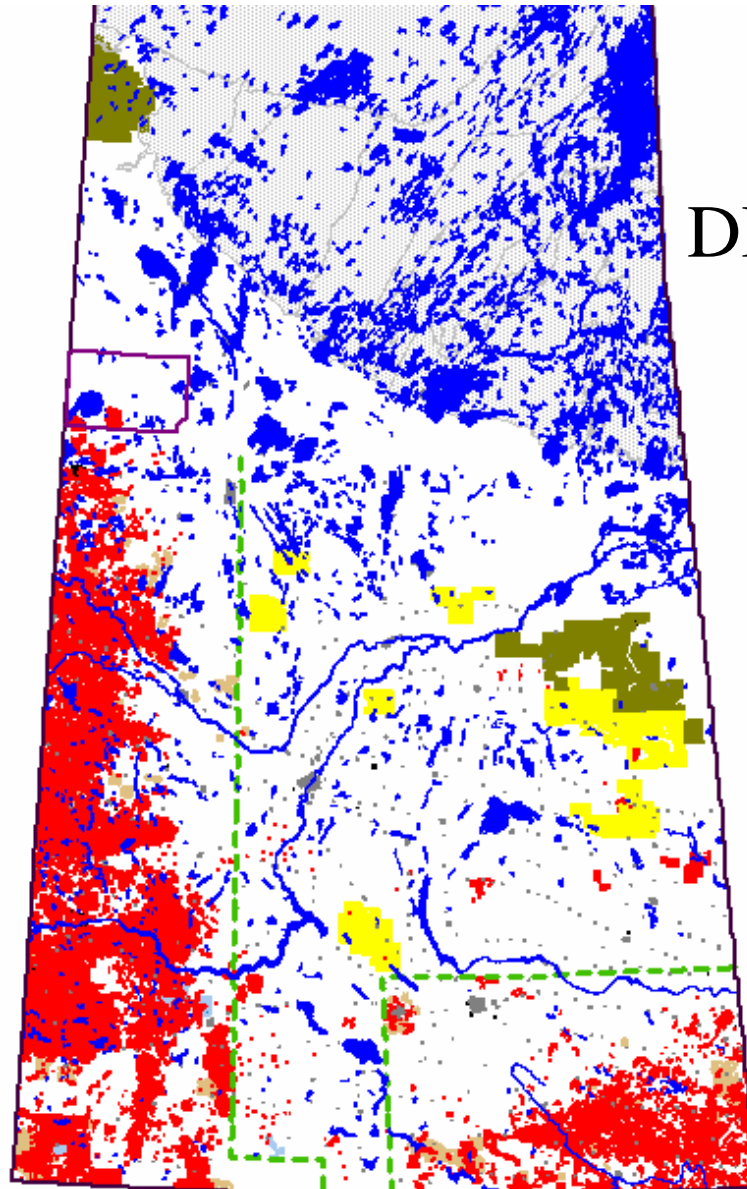
- Oilsands Quest Inc. holds a permit to explore (not produce) approximately 342,000 hectares
- The first phase exploration program was completed last winter with a 25-well drilling program.
- Recently completed the second phase of their program with another 150 wells this winter.



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CROWN DISPOSITIONS



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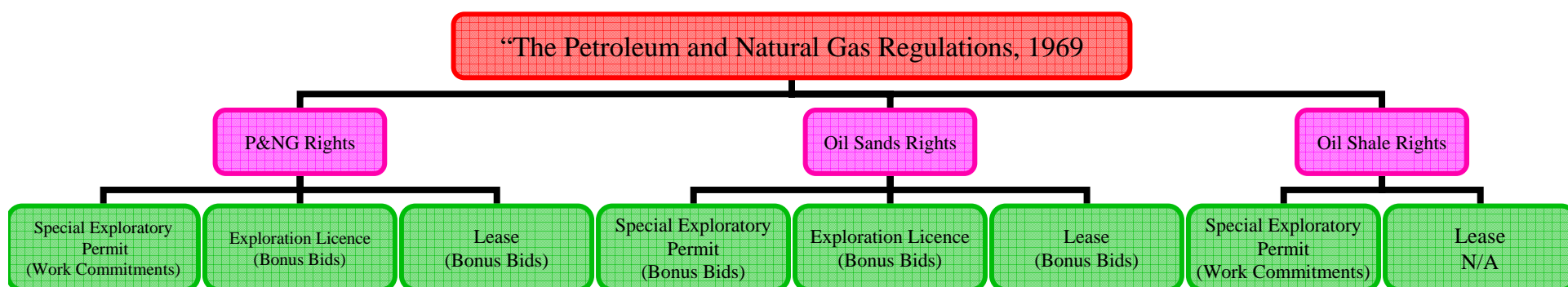
Changes Required

- Oil sands dispositions are currently administered in accordance with “The Oil Shale Regulations, 1964”
- Due to the prolonged lack of interest, these regulations had not been updated
- Industry and Resources is working to bring the regulations in-line with current fiscal, administrative and technical realities.

Main Concepts

- Future oil sands and oil shale dispositions will be administered through *The Petroleum and Natural Gas Regulations, 1969*
- Acquisition of new dispositions will be through the competitive land sale process
- Existing oil shale and oil sands dispositions are grandfathered under *The Oil Shale Regulations, 1964*

Proposed Structure



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Special Exploratory Permits

- Size: 100,000 hectares (over 10 townships)
- Rent: 25 cents per hectare/year
- Term: 5 years (plus 3 – one year extensions)

*Additional extensions due to environmental/consultation considerations have been introduced.

Work Expenditures

(Oil Shale Permits)

Expenditure Grouping Available

- Years 1 & 2 – competitive bid *no deposits required*
(min. bid \$1.00/ha/yr)
- Years 3, 4 & 5 - \$2.00/ha/yr
- Extension years - \$3.00/ha/yr
 - Extension granted with approved exploration program
 - No deficiency payments allowed
 - If work not conducted – permit **expires**



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Conversion to Lease

- Oil Shale Permits – 25% maximum
- Oil Sands Permits – 50% maximum
- Removal of the 250,000 acre maximum holding by any one lessee

Exploration Licences

- Size: 1 to 36 sections
- Rent: \$1.75 per hectare/year
- Term: 5 years
 - *90-day extension for well licence being issued
 - *Additional extensions due to environmental/consultation considerations

Conversion to Lease

Grouping Available

- One section earned for every well drilled deep enough to intersect oil sands zone.
- No restrictions on drilling pattern!
- Can group with one other Exploration Licence for lease selections.

Leases

- Size: Up to 36 sections
 - Rent: \$3.50 per hectare/year
 - Term: 15 years plus two-5 year extensions
- *Designated Heavy Oil Areas*

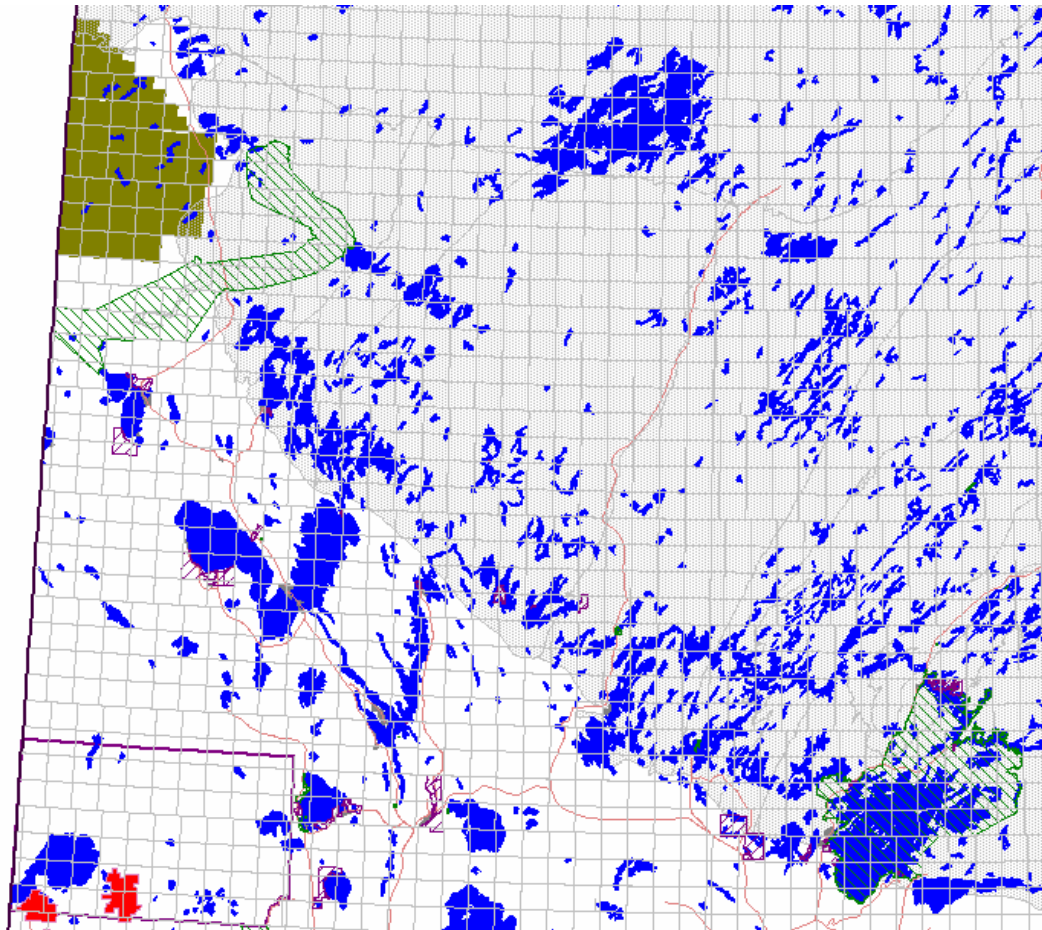
Designated Heavy Oil Areas

- In place since 1991
- Will now apply to new oil sands leases
- Escalating rentals plus work commitments
- EOR-related work
- Form of lease continuance
- Can continue up to two townships of leases

Crown Oil Sands Rights Availability

Olive = Existing oil sands dispositions

Red = Existing P&NG dispositions



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