

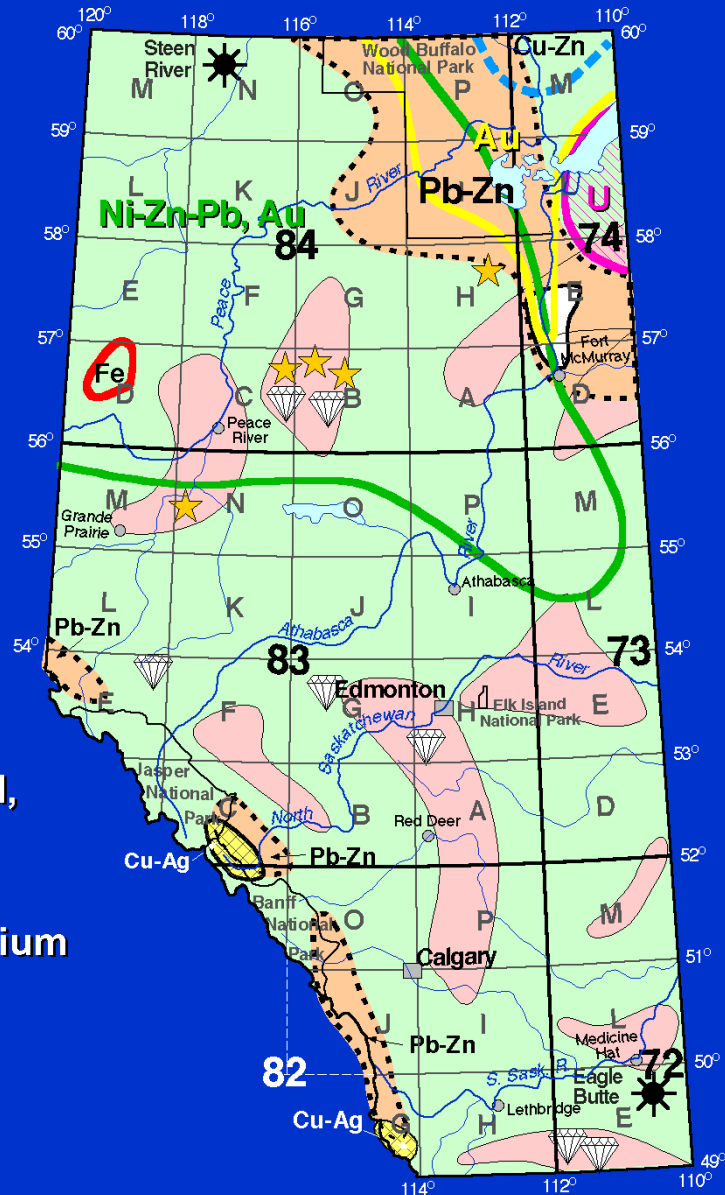
Introduction to Metallic and Industrial Mineral Rights in Alberta

Coal & Mineral Development Unit, Alberta Energy



Alberta's Potential for Gem and Metallic Mineral Wealth

-  Kimberlite Occurrence
-  Diamond Occurrence
-  Diamond Indicator Trend
-  Gold (Au)
-  Lead-Zinc (Pb-Zn)
-  Copper-Zinc (Cu-Zn)
-  Copper-Silver (Cu-Ag)
-  Nickel-Zinc-Lead, Gold (Ni-Zn-Pb, Au)
-  Titanium-Zirconium
-  Iron (Fe)
-  Uranium (U)
-  Astrobleme



Courtesy of AGS
Alberta Energy 2006

Mining Locations

in Alberta

Excludes sand, gravel
and sulphur

Legend

City

Coal

Oil sands (surface mineable)

Limestone & Other Stone

Salt

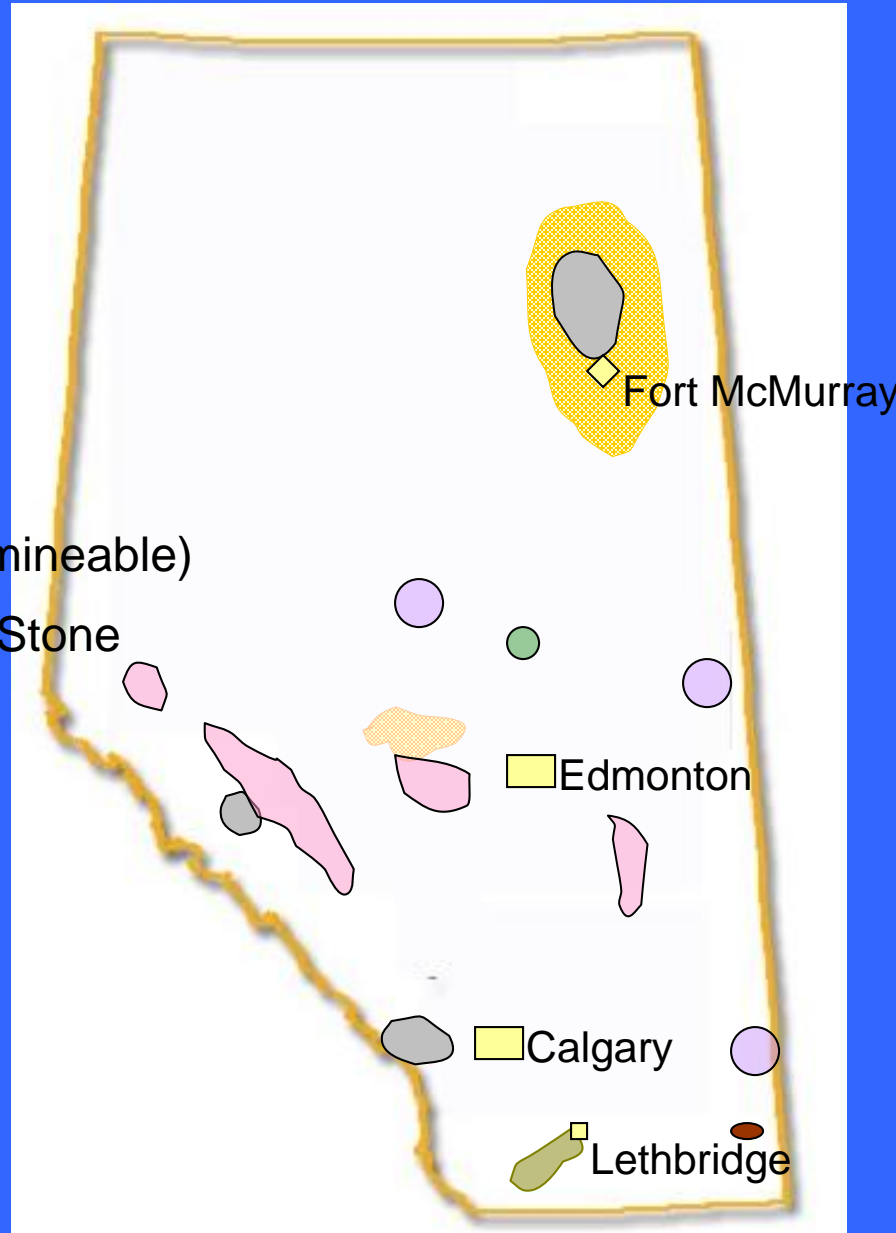
Placer Gold

Brick Clay & Shale

Iron & Magnetite

Ammonite Shell

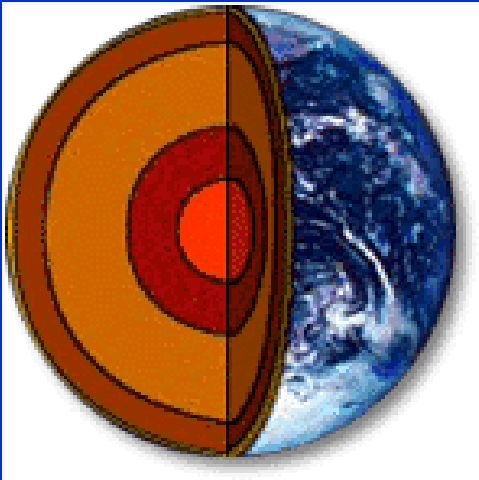
Alberta Energy 2006



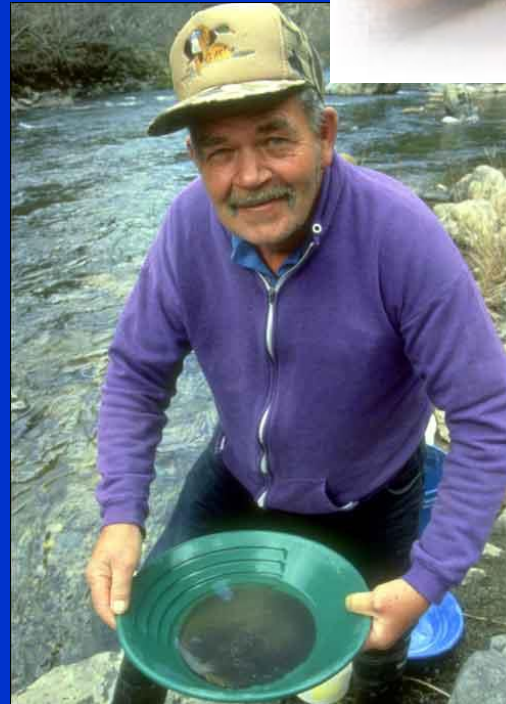
Mines in Alberta

	Million Tonnes per year
Syncrude Oil Sands Mine (plus 175.4 million tonnes of overburden)	155.0
Coal: Highvale Mine	12.5
Limestone: Proposed Muskeg Valley quarry	7.0
Limestone: Other major operations combined	5.6
Coal: Genesee Mine	4.5
Coal: Sheerness Mine	3.4
Coal Valley Mine	2.3
Coal: Paintearth, Vesta, Whitewood, Grande Cache Mines	Over 2.0 per mine
Small Mines: Coal; Iron; Ammonite	Less than 0.05 per mine

MINERAL RIGHTS



Metallic and Industrial Minerals



Province as Owner of Minerals

- Mines and minerals transferred from federal government to Alberta in 1930
- Province owns mines and minerals in 81% of land in Alberta

Role of Alberta Energy

- **Minerals tenure**
 - Grants mineral rights to private developers for development
- **Collection of mineral revenues**
 - Royalties; Rent; Bonus Bid
- **Advocates reasonable surface access**
 - Surface access is handled through Sustainable Resource Development, the Surface Rights Board and private contract with landowner

Metallic and Industrial Mineral Agreements

- A permit (“claim”) grants the right to explore for Alberta-owned metallic and industrial minerals
- A lease grants rights to Alberta-owned metallic and industrial minerals for the purpose of development and mining

Goals of Alberta Minerals Tenure

- To give industry the opportunity to explore and develop minerals for the greatest benefit of Albertans
- To place mineral rights in the hands of those with the interest and means to explore and develop Alberta's mineral resources
- To make mineral rights available to others as soon as possible upon termination or expiry of an agreement

The Right to Conduct Exploration and Mining Activities

- The right to the minerals is separate from the right to conduct mining and exploration

Mineral Rights for Exploration in Alberta

- A permit (“claim”) grants the right to explore for Alberta-owned metallic and industrial minerals

Application fee: \$625 per agreement

Size: 16 to 9,216 hectares

Term: 14 years, not renewable

Annual rent: None

Work requirement: Yes, exploration work

Map Staking

- **Alberta adopted map staking in 1967**
- Lands are selected from a map
- Ground staking not required to stake claim
- Other provinces using this method today:
 - British Columbia
 - Newfoundland
 - Nova Scotia
 - Quebec
 - Saskatchewan and Manitoba in the surveyed areas of those provinces

Work Requirement

- **To maintain a a permit, exploration expenditures and results must be reported to Alberta Energy.**
- **Type of work accepted on a permit:**
 - Prospecting
 - Trenching and drilling
 - Geological, geophysical, geochemical surveys
 - Laboratory work, assay and analysis

Exploration Work Requirements in Alberta

- **Every 2 years must file work on permit**
 - Report cost of work done
 - Report on geological data and results
- **Report released to public after 1 year**
- **Work required goes up over time:**

Period 1 (Year 1-2)	\$ 5 / hectare
Periods 2 and 3 (Year 3-4, 5-6)	\$10 / hectare
Periods 4 thru 7 (Years 7-14)	\$15 / hectare

Drill Core and Samples

- **On behalf of the Minister of Energy, Alberta Energy may direct an exploring company to provide drill core or mineral samples**
- Material is selected by an Alberta Geological Survey (AGS) geologist in negotiation with the company
- Material is delivered to the Provincial Mineral Core Research Facility in Edmonton, operated by AGS
- Alberta Government makes drill core and samples public after 1 year

Metallic and Industrial Mineral Lease

- **A lease grants Alberta-owned mineral rights for the purpose of development and mining**
- Company can request a permit go to a lease if deposit is found and mining is being considered
- If a deposit is already known, a company can apply for a lease without holding a permit
- Lease usually grants right to all metallic and industrial minerals in that location, not just those of immediate interest to the company

Terms of A Lease

Term:	15 years, renewable
Size:	Maximum 2,034 hectares
Annual Rent:	\$3.50 per hectare
Work Requirement:	None, but can only renew if a mine is operating or planned