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Fact Sheet

Mining... GREAT for Saskatchewan

MINERAL PRODUCTION

- Saskatchewan is a leader in the Canadian and global mining scene. In 2013, it continued to be the world's largest producer and exporter of potash, supplying almost 30% of the world's supply and the second leading uranium producer, providing almost 16% of the world's supply.
- High-quality, economically mineable deposits of both potash and uranium are currently produced in relatively few jurisdictions in the world. Canada, Russia and Belarus together account for just over two-thirds of global potash production, and Kazakhstan, Canada and Australia produce two-thirds of the world's uranium.
- Saskatchewan has the largest high grade reserves in the world for both potash and uranium.
- Saskatchewan hosts almost half of world potash reserves and 8% of the world's known recoverable uranium reserves.
- Canada's mineral production was valued at a robust \$44 Billion in 2013. Potash, coal and iron ore were the leading commodities by value of production.
- Saskatchewan was Canada's third leading mining jurisdiction in 2013, with mineral production valued at \$7.2 billion.
- Mining companies operating in Saskatchewan produced 16.4% of Canada's total mineral production value in 2013.
- Potash was Canada's leading mineral by value of mineral production in 2013 at \$6.1 billion.
- Uranium was one of Canada's leading minerals by value of production in 2013 at \$0.77 billion.
- Saskatchewan produces over 90% of Canadian potash production with one additional potash mine in New Brunswick.
- In 2013, 15.8 M tonnes potash (KCl) was produced from 10 potash mines in Saskatchewan, including 8 conventional underground mines and 2 solution mines. PotashCorp owns and operates 5 mines (Rocanville, Allan, Lanigan, Cory and Patience Lake). The Mosaic Company owns and operates 4 mines (Esterhazy K1 & K2, Colonsay and Belle Plaine) and Agrium owns and operates 1 mine (Vanscoy).
- All brownfield potash mines have invested in expansion projects totalling over \$13 billion in the past 5 years. New production headframes at PotashCorp Rocanville – Scissors Creek and Mosaic Esterhazy K3 are in progress.
- The Mosaic Esterhazy mine complex is the world's largest potash mine.
- K+S Potash Canada GP is developing the first new greenfield potash mine built in Saskatchewan in nearly forty years. Production from this solution mine is targeted for 2016. BHP Billiton continues to advance the underground Jansen Potash project with potential initial production by 2020.
- In 2013 Saskatchewan produced 100% of Canada's primary uranium, representing 16% of the world's production, from 2 operating mines – McArthur River and Eagle Point. This is a decrease from 2005 when Saskatchewan production represented 28% of global production.
- In 1Q 2014, the Cigar Lake Uranium Mine commenced production, with the first shipment of ore being delivered to the McClean Lake Mill.



Fact sheet

MINERAL PRODUCTION (continued)

- The McArthur River, Eagle Point and Cigar Lake uranium mines are all operated by Cameco Corporation, however they all have a separate ownership structure. The Eagle Point Mine is 100% owned by Cameco; the McArthur River Mine is owned by Cameco (69.805%) and AREVA Resources Canada Inc. (30.195%) and the Cigar Lake Mine is owned by Cameco (50.025%), AREVA (37.1%), Idemitsu Uranium Exploration Canada (7.875%) and TEPCO Resources Inc (5%).
- The McArthur River mine is the world's largest and highest grade uranium mine. In 2013 it produced 20.2 M lbs U3O8 accounted for approximately 14% of global uranium production. The Cigar Lake mine is the world's second largest uranium mine and when it is in full production, will produce 18 M lbs U3O8 per year.
- Saskatchewan coal, mined in Estevan, Bienfait and Coronach by Westmoreland Coal Company, represents the primary source of energy in Saskatchewan, accounting for over 40% of the province's available power capacity and the majority of its base load capacity.
- Saskatchewan had gold production from 5 sites in 2013. The Seabee and Santoy mines operated by Claude Resources cumulatively produced just under 44,000 oz gold. The Seabee gold mine reached milestone production of 1,000,000 oz in August 2012. Golden Band Resources had intermittent production from Roy Lloyd, Komis and Golden Heart Mines in 2013 until operations were suspended in Feb 2014.
- Saskatchewan has over 25 operating mines that produce potash, uranium, coal, gold, salt, meta-kaolin, silica sand, sodium sulphate, clay and bentonite.
- In addition to potash, uranium, gold and coal, Saskatchewan has a wealth of developing mineral resources including diamonds, platinum & palladium, rare earth elements, copper, zinc, nickel, sodium and potassium sulphates and mineralized brines.
- The provincial mining industry is recognized as one of the most technologically advanced in the world.
- The Saskatchewan mining industry 17.1 million hours worked in 2013, an increase from 15.7 million hours in 2012.

MINERAL EXPLORATION

- Exploration, considered as a key R & D (Research and Development) component of our industry, is the key to sustainability in the mining industry, ensuring that we identify new resources to replace those that have been mined out.
- The mining industry supports government investment in geoscience to ensure that we continue to attract new investment capital to the province.
- Exploration expenditures in 2013 are anticipated to total just over \$297M. Potash continues to be focus of mineral exploration in Saskatchewan, comprising almost 52% of expenditures. Uranium exploration is estimated at \$122 M (42%), followed by base metals (\$9.9M), gold (\$7.5 M) and diamonds (\$4.1M).
- In the past 5 years, over \$1.25 billion has been invested in mineral exploration in Saskatchewan, primarily for potash and uranium.
- The exploration cycle from the time of initial discovery until all the regulatory permits are in place and the property goes into production has increased to 15 to 20 years.

MINING AND SASKATCHEWAN'S ECONOMY

- Mining is a major contributor to Saskatchewan's economy, directly contributing, on average over \$1.5 billion in revenue to the provincial government. These revenues support government programs and services such as health care, education and infrastructure development.
- Overall in 2008, mining (direct, indirect, and induced) accounted for \$7.7 billion in GDP or 12% of the total provincial economy.
- Direct, indirect and induced mining employment accounted for 30,500 jobs or 6% of total employment, almost 1 in every 16 jobs with a payroll of \$1.5 billion.
- In 2012, the mineral industry in Saskatchewan contributed \$860.4 M to the provincial and federal governments directly in royalties and taxes. This does not include the personal income taxes of employees or taxes collected by municipalities.
- In 2013, the mineral industry in Saskatchewan directly contributed over \$1 billion to the provincial government in royalties and taxes.
- From 2008 – 2028,
 - » the Saskatchewan mineral industry will invest over \$50 billion in expansions and new mines. This translates to new investments of more than \$6 M a day.
 - » Mining employment (direct, indirect and induced) will see its contribution rise to 17% of total employment or almost 1 in 5 jobs.
 - » Mining will generate over 286,000 person years of direct employment in construction in operational activity.
 - » Mining will contribute an additional \$9.5 billion per year to provincial GDP.
 - » Mining will generate a further \$28 billion in provincial revenues or \$1.4 billion per year, for a total of over \$50 billion.

SAFETY

- Saskatchewan's mining industry has a strong commitment to safety and consequently is one of the safest industries in the province. For the past 17 years the industry has averaged about one lost time accident (LTA) for every 200,000 hours worked [this would be equivalent to an individual working for 100 years before he has a LTA].
- The Saskatchewan mining industry is a safe industry. WCB statistics illustrate that the mining sector has a lower time lost injury rate than the provincial average, including lower than either the health or government worker sectors. This is reflected in the higher 2014 "all industry rate code" payroll premiums of \$1.51 compared to \$0.67 for open pit, \$1.10 for underground softrock and \$1.23 for underground hardrock mine operations. Similarly, time loss claims for "all classes" are higher, at 2.5% compared to 1.27% for open pit, 1.05% for underground, 0.80% for underground potash and 0.68% for solution mines.
- There are over 130 Safety professionals employed by the mining companies in Saskatchewan and an additional 1000 emergency responders trained at the mine sites.
- Cameco's McArthur River mine was awarded the CIM's prestigious John T. Ryan National Safety Trophy for the best safety performance in the metal mine category in 2013. Last year, the McArthur River mine recorded zero reportable injuries for 860,818 working hours. The McArthur River mine also received this award in 2009 and 2000.
- In 2006 the Mosaic Esterhazy K1 Mine won the John T. Ryan National Award in the Select Mine category.

CAREERS

- Saskatchewan's mining industry creates direct and indirect employment for approximately 30,500 people.
- It is estimated that with retirements and expansions, the mining and related industries in Saskatchewan will require an additional 15,000 workers from 2008-2021. This includes 4000 tradespeople, over 500 engineers as well as 1000 technologists.
- The average weekly salary of an employee in the mining industry is almost twice that of the average weekly salary of employees in other sectors.
- There are over 120 different occupations in the mining industry.
- Saskatchewan's mining sector is a leading industry employer of aboriginal people. In 2013, the combined company and contract workforce at the northern mine sites totaled 1630 northerners of the total 3146 workers at sites for 51.8% northern representation.
- One of the fastest growing career areas in the mining industry is information technology. 85% of the mining work force presently uses advanced technology.

ENVIRONMENT

- Environmental stewardship and sustainability are important to the mining industry.
- Environmental practioners are an important part of the workforce at all mine sites. The Saskatchewan mining industry directly employs dozens of dedicated environmental professionals at mine sites throughout the province whose responsibility is to ensure that all operations meet or exceed federal and provincial environmental standards and regulatory limits.
- The Saskatchewan mining industry invests considerable human resources and millions of dollars every year in environmental stewardship activities, including the monitoring of environment stations at sites, prevention and mitigation of environmental impacts, and in decommissioning and reclamation efforts.
- The industry actively participates in research, development and implementation of new technologies to improve combustion efficiency, reduce greenhouse gas emissions, increase resource conservation and further reduce environmental impact.
- Mining and exploration are temporary uses of the land. Saskatchewan's mining industry has a very small footprint utilizing only 0.1% of available land in the province (less than the size of the city of Saskatoon).
- All new mining projects are required to incorporate reclamation and decommissioning plans as part of the Environmental Impact Assessment Statement that is submitted to Saskatchewan Environment when applying for a Mine Operating License. Financial surety for decommissioning and reclamation costs is required from industry as part of the Mine Operating License.
- Leading edge technology not only contributes to the cost efficiency and productivity of mines but also to their safety. Advanced technology is also applied by mines in areas of environmental responsibility.
- The SMA and member companies are major funders of a 5 year \$ 2.1 M research project in northern Saskatchewan that is examining woodland caribou population dynamics and their critical habit.

CONCLUSION:

Saskatchewan mining has a strong future in providing food and energy security for the world.

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