

# **History of Mining In Saskatchewan**

# **Early Mining in Saskatchewan**

The earliest mining occurred when earth's inhabitants started using various stones for tools or certain clays for cooking vessels. The earliest recorded occupation in Saskatchewan was around 9000 B.C. at the Niska site in the southern part of the province.

Ample evidence of the use of stone tools, arrow heads, and spear heads, etc. has been found in the area. Much of the material used by these early inhabitants was imported or traded from other regions of North America.

The study of the stone tools provides us with information about the people's work, their history, their religion, their travels and their relationships with other groups or nations.

Stone is readily available throughout most of Saskatchewan. This was especially important for Saskatchewan's First Nations people who moved their camps frequently in search for food.

The stones available were not all suitable for tools and they needed a constant supply of stone material that broke cleanly or was hard enough for pounding. Consequently, they made regular trips to the source areas or traded with people who lived near the sources. For these early residents of our province, the exchange of goods was more than just a means of acquiring things. Bartering and gift exchange was a means of creating and reinforcing relationships between individuals, families and nations.

For thousands of years, goods have been exchanged through networks that extended across North America. Although perishable goods were also traded, our records are in the form of shell or stone artefacts.

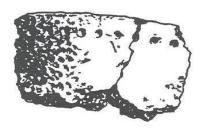
# **Early Stone Materials**

Stone suitable for tools were widely distributed in the river beds, quarries and glacial deposits of Saskatchewan.

Chithos was used for scraping caribou hides



Pottery in the Amisk Lake area ~550 – 450 year old, made of local clay.

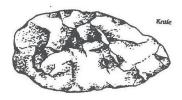


Heavy coarse scrapers were used to tan hides; smaller scrapers were used to smooth arrow shafts.

Stone scrapers found in the Reindeer Lake and Haultain River areas (age unknown)



Early Talthielei points from the Lake Athabasca and Key Lake areas (2600 ~2100 years old)



These tools were used for many purposes, including cutting meat.

Stone knives came from the Reindeer Lake and Cree Lake areas. The age is unknown.



Pre-Dorset end blade from the Lake
Athabasca area (3500 ~3600 years old)

RAW MATERIALS	LOCATION	TIME TRADED
Pebble chert	West central Saskatchewan	500 years
Gronlid siltstone	Nipawin area	5,000 years
Ochre, hematite	Southern Saskatchewan	1,000's of years
Swan River chert	Eastern Saskatchewan, Western Manitoba	10,000 years
Knife River flint	Southern North Dakota	10,000 years
Cypress Hills quartzite	South-west Saskatchewan	2,000 years
Fused shale	South-east Saskatchewan	1,000 years
Obsidian	Yellowstone Wyoming	3,000 years
Pipestone	Minnesota, Wisconsin, South Datoka	1,200 years
Shells	Gulf of Mexico	2,000 years
Copper	Lake Superior	4,000 years
Basalt	Oregon, Washington, British Columbia	1,000 years

With exploration, migration and settling of the west, the search for usable metals and minerals increased.

### 1780 A.D.

The first written reports of mineral occurrences in Saskatchewan were made by explorers like Kelsey, La Verendry, Hearne, Mackenzie and the fur traders at Fort Carlton and Cumberland House.

**BASE AND PRECIOUS METALS** (Copper, lead, zinc, nickel, gold, platinum, palladium, silver)

#### 1858

Gold was discovered in Saskatchewan in the North Saskatchewan River. Dr. Hector of the Palliser expedition reported finding "flour gold" near Prince Albert.

### 1895

T.B. Tyrell wrote that gold could be found at the east end of Lake Athabasca. This site opened as the "Box Mine" in 1939 and closed in 1942 because of the low grade of ore found.

### 1896

Tyrell returned to Saskatchewan and reported quartz veins on Amisk Lake. These became significant in 1916.

#### 1909

Copper deposits on the north shore of La Ronge were reported by a prospector. From 1966 - 1972, the Anglo-Rouyn mine produced copper along with gold and silver.

# 1913

Gold discovered at Amisk Lake

### 1915

A copper-zinc deposit was discovered north and east of Amisk Lake. The Flin Flon mine opened at this site and operated from 1932 until 1989.

### 1916

Thomas Creighton, Jack Mosher and Leon Dion, who had found the copper-zinc deposit found gold in quartz veins near the present town of Creighton on the shore of Amisk Lake. The Prince Albert Monarch mine removed gold in 1937 then again from 1940 – 1942.

The Rottenstone deposit at the south-west end of Reindeer Lake yielded nickel, copper, platinum, palladium, silver and gold. Ore from this deposit was hauled to and refined in Flin Flon from 1965 - 1968.

# 1930's and 40's

Deposits of gold in combination with small deposits of copper, nickel, platinum and other metals were found in the Creighton, Flin Flon and Lac La Ronge areas.

#### 1930

Copper production began at Flin Flon.

#### 1937

The Prince Albert (Monarch) gold mine begins production but closes in 1942.

Box gold mine near Goldfields starts.

### 1941

Copper was found near Flin Flon. The Flexor Mine worked this deposit from 1969 – 1972.

### 1942

Box gold mine closes.

### 1947

The Jolu gold deposit north of La Ronge was mined by the Mallard Lake Mine (1947-1976), the Jolu Mine (1988-1991) and the Jasper Mine (1990-1992).

### 1949

More copper was discovered near Flin Flon. The Birch Lake Mine operated from 1951-1957.

#### 1987

Star Lake gold mine begins production.

### 1988

A copper-zinc deposit was discovered west of Flin Flon at McILvena Bay.

Jolu gold mine begins production.

### 1989

Star Lake gold mine closes.

### 1991

Seabee gold mine starts.

Jolu gold mine closes.

### 1995

Contact Lake gold mine opens.

### 1997

Konuto Lake copper-zinc mine starts.

### 1998

Contact Lake gold mine closes.

#### 2011

Golden Band Resources announced commercial production at the Roy Lloyd Gold Mine (Bingo gold deposit)

Claude Resources poured the 1,000,000 gold from their Seabee operation in August 2012.

### 2014

Golden Band Resources suspended operation at the Roy Lloyd Gold Mine

# **CLAY**

### 1000 B.C.

Big Muddy Clay was used by First Nations people for earthenware and stoneware.

#### 1886

Commercial clay production of various kinds of construction bricks began in the Estevan, Bruno and Claybank areas.

### 1913

Claybank: Saskatchewan Clay Products official opening June 16, 1913.

### 1940

Saskatchewan clay was used in Medicine Hat for tableware for troops during World War II.

### 1978

Bentonite clay was mined at Truax and processed at Wilcox.

### 1984

Kaolin mined in the Eastend and Wood Mountain area.

### 1989

The Brick Plant at Claybank closed.

#### 2008

The Gollier Creek kaolin deposit started production.

# **COAL** (lignite)

### 1857

Captain Palliser reported coal in the Souris Valley.

## 1870

Coal mining began in the Willow Bunch, Wood Mountain and Cypress Hills areas. Early mines were open pit but later underground mines became operational.

The first commercial coal mine was opened near Roche Percee. Coal was sent to Winnipeg by barges on the Assiniboine and Souris Rivers.

### 1907

Eagle Lake coal mine opens.

### 1927

Sunlight Coal Company initiates large-scale open-pit mining.

### 1930's, 40's, and 50's

Coal was used both in homes and industrially as a source of heat. Some coal was made into briquettes.

### 1930

Truax-Traer Coal Company starts strip mining. The first successful large scale strip mine.

#### 1955

The last underground coal mine in Saskatchewan was closed. Strip or surface mining in the Souris area expanded.

### 1959

The first boundary Dam thermoelectric unit went into production using local lignite as fuel. Further units were opened between 1960 – 1977.

### 1960

Costello coal mine opens.

### 1961

Klimax coal mine opens.

### 1973

Boundary Dam coal mine opens.

### 1980

Poplar River coal mine opens.

The first Coronach Power Plant went into operation followed by a second unit in 1982.

#### 1991

The Shand Power Plant began operating near Estevan.

#### 1992

Shand coal mine opens.

### **DIAMONDS**

### 1948

A Flin Flon prospector, John Johnson claimed to have found five diamonds in the area where kimberlite bodies containing diamonds have been located.

# 1961

Diamond claims were made near Prince Albert by prospectors.

### 1988-1989

Kimberlites containing diamonds were found in the Sturgeon Lake area as well as the Fort a la Corne region.

### 1990's

Prospecting for diamonds continues in Saskatchewan.

#### 2003

A test shaft was sunk on the Star Kimberlite to facilitate collection of a bulk sample to help evaluate the deposit.

#### 2007

A test shaft was sunk on the neighboring Orion South kimberlite.

### **POTASH**

### 1918

Canadian Salt and Potash Co. of Canada Ltd. attempts alkali recovery at Muskiki Lake.

#### 1941

Potash is accidentally discovered near Radville when an oil company was drilling.

### 1951

The first attempt to mine potash by Western Potash Corporation Limited, using the solution method was unsuccessful. This was near Unity.

### 1958

The first underground potash mine at Patience Lake near Saskatoon opened. It was closed because of flooding in 1985 and reopened as a solution mine in 1989.

#### 1961

First commercial potash production near Esterhazy.

### 1962

Esterhazy K-1 potash mine opens.

Solution mine opened at Belle Plaine. Other mines soon opened Esterhazy K-2 (1967), Saskatoon (1968), Allan (168), Lanigan (1968), Vanscoy (1969), Colonsay (1969), and Rocanville (1970).

#### 2009

Cconstruction initiated for the first potash shaft in almost 40 years at the PotashCorp Rocanville (Scissor Creek) operation.

#### 2012

K + S Potash Canada GP broke ground on the first new greenfield potash mine built in Saskatchewan in nearly 40 years.

### **URANIUM**

#### 1935

Uranium discovered in the Beaverlodge District.

### 1945

Uranium was discovered north of Goldfields and Uranium City became the mining center from 1953 until 1982 when the mines closed.

### 1953

Mining begins at Uranium City.

### 1968

Gulf Oil discovered the Rabbit Lake uranium deposit at Wollaston Lake. The mine opened in 1975. Mining is continuing in this region.

### 1969 and 1971

Mokta (Canada) Ltd. found extremely high grade uranium at Cluff Lake. The Cluff Lake mine opened in 1980.

### 1975 and 1976

Uranerz Exploration and Mining Ltd. and the Saskatchewan Mining Development Corporation discovered uranium ore deposits at Key Lake.

### 1976

Uranium was discovered at McClean Lake. The mining operation began in 1979.

### 1981

Rich uranium deposits were discovered at Cigar Lake.

Mining ends at Uranium City.

### 1983

The Key Lake Mine was opened in 1983 and was at that time the world's largest uranium producer.

### 1988

McArthur River the world's largest and richest uranium mine was discovered.

### 1998

McClean Lake uranium mine begins production.

#### 1999

McArthur River uranium mine opens.

#### 2002

Cluff Lake uranium mine closes.

#### 2010

The McClean Lake mine operation ceased

#### 2014

The Cigar Lake uranium mine commenced production in February 2014 with ore shipped to the McClean lake mine for processing.

# **OTHER MINERAL RESOURCES**

### 1942

Alsask sodium sulphate plant opens.

#### 1949

Prairie Salt Company starts salt production at Unity.

#### 1991

Alsask, Cabri, and Metsikow sodium sulphate plants close.

### 1996

Exploration for Rare Earth Elements started in the Hoidas Lake area North East of Uranium City.