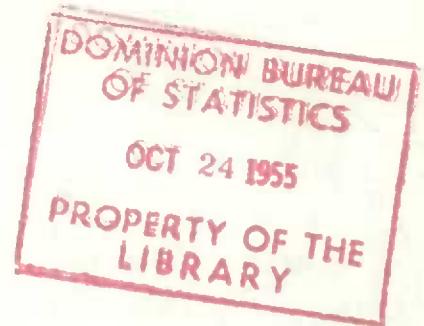


26-208

d.2



# THE FELDSPAR AND QUARTZ MINING INDUSTRY

1954

*Published by Authority of*  
The Right Honourable C. D. Howe, Minister of Trade and Commerce

DOMINION BUREAU OF STATISTICS  
Industry and Merchandising Division  
Mineral Statistics Section

6502-612-124

Price 25 cents

Vol. 1—Part I—J-1

EDMOND CLOUTIER, C.M.G., O.A., D.S.P., Queen's Printer and Controller of Stationery, Ottawa, 1955.

## NOTICE

The annual reports prepared by the Industry and Merchandising Division of the Bureau of Statistics are divided into 3 volumes, as follows: **Volume I** — The Primary Industries, including mining, forestry and fisheries; **Volume II** — Manufacturing; **Volume III** — Merchandising and Services. The volumes are made up of parts, and the parts in turn are subdivided according to the industries which they comprise.

Volume I consists of the following parts:

- Part I — Mineral Statistics
- Part II — Forestry Statistics — Operations in the Woods
- Part III — Fisheries Statistics

Part I includes the following reports which constitute the complete series on Mineral Statistics of Canada. Individual reports are issued as the information becomes available; they are arranged in a form suitable for binding.

- A — General Review of the Mining Industry, 50¢
- B — The Gold Mining Industry, 50¢
- C — The Silver-Lead-Zinc Mining Industry, 25¢
- D — The Nickel-Copper Mining, Smelting and Refining Industry, 25¢
- E — The Miscellaneous Metal Mining Industry, 25¢
- F — The Smelting and Refining Industry, 25¢
- G — The Coal Mining Industry, \$1.00
- H — The Crude Petroleum and Natural Gas Industry, 25¢
- I — The Asbestos Mining Industry, 25¢
- J — The Feldspar and Quartz Mining Industry, 25¢
- K — The Gypsum Industry, 25¢
- L — The Peat Industry, 25¢
- M — The Salt Industry, 25¢
- N — The Talc and Soapstone Industry, 25¢
- O — The Miscellaneous Non-metal Mining Industry, 25¢
- P — The Cement Manufacturing Industry, 25¢
- Q — The Clay and Clay Products Industry, 25¢
- R — The Lime Industry, 25¢
- S — The Sand and Gravel Industry, 25¢
- T — The Stone Industry, 25¢
- U — Contract Drilling in the Mining Industry, 25¢

# THE FELDSPAR AND QUARTZ MINING INDUSTRY

## 1954

Owing to the very close physical association of feldspar and quartz in many Canadian deposits (pegmatites), it is difficult for some operators to make a separation of all data pertaining to the mining of each individual mineral; for this reason, the general statistics relating to employment, fuel and electricity, etc., have been combined in this report. Since 1936 corresponding statistics relating to the production of nepheline syenite have been included with those pertaining to the commercial production of feldspar and quartz.

Ontario and Quebec produced feldspar; nepheline syenite output came from Ontario only; quartz

(silica) in various forms was produced in Nova Scotia, Quebec, Ontario, Saskatchewan and British Columbia.

The industry employed 377 persons to whom \$1,193,766 were paid as salaries and wages. Fuel cost \$94,618 and 11,465,890 kwh. of electricity were purchased for \$110,077. Process supplies, containers and freight amounted to \$349,493.

There were 21 operators producing quartz or silica flux, 15 producing feldspar, of which 8 were also producing both. Nepheline syenite was produced by American Nepheline Ltd.

**TABLE 1. Principal Statistics of the Feldspar and Quartz Mining Industry<sup>1</sup>.**  
Significant Years, 1921-1954

Year	Establishments <sup>2</sup>	Employees	Earnings	Cost of fuel and electricity at works	Cost of process supplies and containers, at works	Gross selling value of products (f.o.b. works)	Net <sup>3</sup> value of production
	No.	No.	\$	\$	\$	\$	\$
1921 .....	31	244	166,253	20,212	N.A.	543,701	N.A.
1929 .....	40	488	353,891	41,462	"	901,993	"
1931 .....	36	166	135,309	20,996	"	490,119	"
1933 .....	28	146	117,037	26,327	"	402,937	"
1937 .....	39	445	384,698	82,611	103,859	1,428,714	1,242,244
1939 .....	43	333	330,170	79,114	99,607	1,352,671	1,173,950
1941 .....	38	506	610,489	91,165	159,818	1,838,054	1,587,071
1944 .....	41	529	772,385	166,501	241,400	2,104,030	1,636,093
1946 .....	30	517	876,034	161,208	180,207	2,163,673	1,727,972
1949 .....	27	442	946,268	146,379	216,206	2,650,035	2,184,732
1950 .....	33	476	1,056,129	179,445	173,123	3,021,555	2,553,587
1951 .....	30	532	1,402,294	263,586	318,493	3,926,523	3,184,952
1952 .....	34	426	1,251,943	266,517	253,174	3,704,425	3,044,081
1953 .....	29	431	1,358,308	245,160	239,602	4,010,191	3,375,154
1954 .....	28	377	1,193,766	204,695	290,080	3,662,181	3,107,993

1. Includes nepheline syenite.

2. Small shippers, whose production is recorded from consumers' returns, are sometimes not included in the total.

3. Gross value less cost of fuel, electricity, process supplies, containers and freight.

TABLE 2. Employees and Their Earnings in the Feldspar and Quartz Mining Industry, 1950-1954

Year	Number of employees					Number of man-hours worked (all employees)	Earnings			
	Office and administrative		Workmen		Total		Office and adminis- trative	Workmen	Total	
	Male	Female	Male	Female			\$	\$	\$	
1950 .....	39	6	425	6	476	...	148,782	907,347	1,056,129	
1951 .....	43	7	481	1	532	1,202,603	182,275	1,220,019	1,402,294	
1952 .....	44	5	377	—	426	1,014,210	201,777	1,050,166	1,251,943	
1953 .....	57	8	365	1	431	936,964	328,208	1,030,100	1,358,308	
1954 .....	49	9	313	6	377	800,373	208,691	985,075	1,193,766	

TABLE 3. Number of Workmen, by Months, 1953 and 1954

Month	1953		1954				Total
	Total	Surface		Underground	Mill		
		Male	Female	Male	Male		
January .....	331	150	6	39	63	258	
February .....	346	151	6	37	77	271	
March .....	349	164	6	40	78	288	
April .....	385	193	6	40	72	311	
May .....	400	243	6	43	69	361	
June .....	406	246	6	44	78	374	
July .....	450	235	6	42	80	363	
August .....	414	240	6	44	80	370	
September .....	395	234	6	44	75	359	
October .....	338	215	6	35	65	321	
November .....	300	165	6	35	65	271	
December .....	258	149	6	36	69	260	
Average .....	366	200	6	40	73	319	

## FELDSPAR

Canadian producers of feldspar shipped 16,096 tons of crude and ground feldspar valued at \$301,049, in 1954, compared with 21,246 tons worth \$347,164 in the preceding year. Production declined in both Ontario and Quebec.

The greater part of the production of feldspar is used in the pottery, glass, enamelware and other ceramic trades, and the remainder mainly in scouring soaps and cleansers and for bonding of fired abrasive wheels and other shapes. Some coarsely-crushed spar, usually made from impure waste or

quarry fines, is sold for stucco dash, artificial stone, chicken grit, etc. Small tonnages of specially selected crude (dental spar) are used in the manufacture of artificial teeth, and such material commands a large premium.

Most of the feldspar used is of the high-potash type, though some high-soda spar is used for blending purposes and in low-fired enamels and glazes. Practically all colours are equally acceptable for ceramic uses, but for cleanser purposes the pale shades of white to buff are demanded.

TABLE 4. Production of Feldspar, Crude and Ground, by Provinces, 1945-1954

	Quebec		Ontario		Canada	
	Tons	Value	Tons	Value	Tons	Value <sup>1</sup>
		\$		\$		\$
1945 .....	26,389	247,242	3,857	35,414	30,246	282,656
1946 .....	29,758	330,981	5,485	53,696	35,243	384,677
1947 .....	29,146	320,964	6,958	60,396	36,104	381,360
1948 .....	42,800	464,926	12,051	99,511	54,851	564,437
1949 .....	31,848	384,892	5,100	43,610	36,948	428,502
1950 .....	29,788	378,782	5,760	49,619	35,548	428,401
1951 .....	28,000	425,370	12,749	125,727	40,749	551,097
1952 .....	16,645	293,007	3,622	37,628	20,267	330,635
1953 .....	18,591	319,146	2,655	28,018	21,246	347,164
1954 .....	14,305	278,997	1,791	22,052	16,096	301,049

1. Excluding the value of containers.

TABLE 5. Consumption of Ground Feldspar, 1949-1953

	1949	1950	1951	1952	1953	Tons
<b>(a) By uses</b>						
Glass .....	2,902	4,286	3,484	4,042	3,892	
Scouring powders, cleansers .....	3,164	2,831	1,701	1,807	1,568	
Abrasives .....	15	9	32	61	23	
Clay products (pottery, tile, insulators, etc.) .....	7,111	6,911	5,828	4,936	4,689	
Enamelling .....	1,966	1,849	1,105	798	930	
Heating and cooking apparatus .....	...	...	137	208	115	
Iron castings .....	...	...	75	90	42	
Electrical apparatus .....	...	...	958	680	650	
<b>Total .....</b>	<b>15,158</b>	<b>15,886</b>	<b>13,320</b>	<b>12,622</b>	<b>11,909</b>	
<b>(b) By provinces</b>						
Nova Scotia .....	—	—	6	6	—	
Quebec .....	7,227	8,921	7,135	6,776	7,349	
Ontario .....	7,503	5,868	5,771	5,405	4,096	
Alberta .....	428	1,097	408	404	464	
British Columbia .....	—	—	—	31	—	
<b>Canada .....</b>	<b>15,158</b>	<b>15,886</b>	<b>13,320</b>	<b>12,622</b>	<b>11,909</b>	

TABLE 6. Imports and Exports of Feldspar, 1952-1954

	1952		1953		1954	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
Imports:						
Crude feldspar .....	72	1,904	4	89	—	—
Ground feldspar .....	83	1,865	332	6,996	398	8,078
Exports:						
Feldspar .....	6,360	54,899	6,848	64,234	1,056	28,206

TABLE 7. World Production of Feldspar, by Countries<sup>1</sup>, 1949-1953  
(Taken from the Minerals Yearbook published by the United States Bureau of Mines)

Country <sup>1</sup>	1949	1950	1951	1952	1953
Metric tons <sup>2</sup>					
North America:					
Canada (sales) .....	33,518	32,248	36,967	18,386	18,655
United States (sold or used) .....	375,307	414,472	406,866	427,585	459,864
South America:					
Argentina .....	3	3	3	3	3
Brazil .....	11,111	12,000	3	3	—
Chile .....	125	871	1,200	1,000 <sup>4</sup>	1,000 <sup>4</sup>
Peru .....	300	—	131	—	—
Uruguay .....	811	710	675	898	792
Europe:					
Austria .....	1,912	3,909	3,751	2,578	1,353
Czechoslovakia .....	3	3	3	3	3
Finland .....	10,074	8,000	8,198	9,790	9,327
France .....	47,514	47,727	66,000	65,000	60,000
Germany, West .....	48,262	76,712	71,531	119,291	116,023
Italy .....	13,522	18,071	29,144	25,476	23,602
Norway .....	27,482	23,695	31,118	29,297	23,000
Portugal .....	1,240	—	470	700	60
Spain (quarry) <sup>5</sup> .....	396	1,650	1,760	—	—
Sweden .....	38,959	36,031	41,072	47,871	3
Asia:					
India .....	863	1,800	3,439	2,052	3
Japan <sup>6</sup> .....	20,055	13,187	26,528	24,194	25,078
Africa:					
Eritrea .....	200	—	—	—	—
Kenya .....	20	—	—	—	—
Southern Rhodesia .....	—	3,520	1,148	—	—
Union of South Africa .....	3,549	6,001	3,343	7,479	5,568
Australia <sup>7</sup> .....	10,902	13,276	15,080	13,807	6,884
Total (estimate) <sup>1</sup> .....	660,000	720,000	770,000	820,000	810,000

1. In addition to countries listed, feldspar is produced in China, Romania and U.S.S.R., but data are not available; estimates are included in the total except for China and U.S.S.R.

2. This table incorporates a number of revisions of data published in previous feldspar chapters.

3. Data not available; included in total.

4. Estimate.

5. In addition, the following quantities of feldspar are reported as ground, but there are no crude production data to support this ground figure: 1949, data not available; 1950, 8,254 tons; 1951, 11,043 tons; 1952, 10,359 tons; 1953, 10,663 tons.

6. In addition, the following quantities of aplite and other feldspathic rock were produced: 1949, 50,943 tons; 1950, 45,679 tons; 1951, 59,919 tons; 1952, 17,124 tons; 1953, not available.

7. Includes some china stone.

## NEPHELINE SYENITE

Nepheline syenite shipments in 1954 were valued at \$1,770,528 compared with \$1,576,271 in the preceding year. Exports of crude and milled nepheline syenite were 83,952 tons valued at \$1,269,098 compared with 76,375 tons worth \$1,120,781 in 1953. The only producer in Canada was the American Nepheline Corporation Limited, who operated a mine and mill in Peterborough County, Ontario. During the year the Canadian Pacific Railway completed a spur line to the mine at Nephton. These new rail facilities will eliminate the former truck haulage to Lakefield, Ontario.

Nepheline syenite is a quartz-free rock consisting essentially of nephelite and albite and of microcline feldspar. It usually contains small

amounts of iron-bearing impurities, chiefly magnetite, hematite and biotite mica, as well as such minor accessory minerals as sodalite, cancrinite, corundum, zircon, muscovite, mica, calcite, etc. In the developed Canadian deposits iron-bearing impurities are of coarse sizes and can be readily removed from the crude rock by magnetic means. Other objectionable minerals, notably corundum and muscovite, can be extracted by flotation methods with the recovery of commercial grades of such products. Nepheline syenite is relatively high in alumina (24 per cent in average Canadian commercial rock) compared with straight feldspar (17 to 20 per cent) and for this reason it is used as a feldspar substitute in a number of ceramic industries, more especially in the glass trade.

TABLE 8. Production of Nepheline Syenite, 1945-1954

Year	Quantity	Selling value, f.o.b. shipping point	Year	Quantity	Selling value, f.o.b. shipping point
	Tons	\$		Tons	\$
1945 .....	61,345	275,766	1950 .....	65,638	842,886
1946 .....	61,261	229,198	1951 .....	81,108	1,114,943
1947 .....	66,995	341,635	1952 .....	82,681	1,111,950
1948 .....	74,386	506,462	1953 .....	113,345	1,576,271
1949 .....	78,783	623,002	1954 .....	123,669	1,770,528

1. Value of containers excluded.

TABLE 9. Consumption of Ground Nepheline Syenite, 1949-1953

—	1949	1950	1951	1952	1953
	Tons				
(a) By uses					
Glass and glass wool .....	12,589	12,523	13,349	11,042	14,545
Pottery .....	1,081	1,289	1,767	1,125	1,273
<b>Total</b> .....	<b>13,670</b>	<b>13,812</b>	<b>15,616</b>	<b>12,167</b>	<b>15,818</b>
(b) By provinces					
Quebec .....	1,925	2,137	2,918	3,031	4,324
Ontario .....	10,150	9,914	10,889	7,132	9,212
Other .....	1,595	1,761	1,809	2,004	2,282
<b>Total</b> .....	<b>13,670</b>	<b>13,812</b>	<b>15,616</b>	<b>12,167</b>	<b>15,818</b>

## QUARTZ (SILICA)

During 1954 the quartz or siliceous material shipped amounted to 1,716,151 tons valued at \$1,574,893 compared with 1,785,574 tons valued at \$2,070,617 in 1953. The production included crude and crushed quartz, quartzite and sandstone, as well as natural silica sands and gravels which were used as fluxes. The quantity of high-grade silica produced in 1954 declined but the quantity of low-grade flux increased, thus the total value decreased disproportionately to the decrease in volume.

In Nova Scotia shipments of silica were made to steel plants chiefly for use in making silica

brick; the quantity and value of this material are not shown in this review but are included in the silica-brick industry. In Quebec substantial tonnages of silica rock were crushed and screened for use in the manufacture of ferrosilicon or further milled to produce sand for silicon carbide. In Ontario most of the shipments were for use in making silica-brick, silicon carbide and ferrosilicon, and for the fluxing of nickel-copper ores. In Saskatchewan the output consisted of low-grade natural silica sands or gravels for use as flux at the Flin Flon smelter of the Hudson Bay Mining and Smelting Co., Ltd.

TABLE 10. Production of Quartz (Silica), 1945-1954

Year	Tons	Value	Year	Tons	Value <sup>1</sup>
		\$			\$
1945 .....	1,513,623	1,535,458	1950 .....	1,730,695	1,740,268
1946 .....	1,413,378	1,554,798	1951 .....	1,904,385	2,253,468
1947 .....	1,836,428	1,796,612	1952 .....	1,783,081	2,253,500
1948 .....	2,017,262	2,082,573	1953 .....	1,785,574	2,070,617
1949 .....	1,722,476	1,588,531	1954 .....	1,716,151	1,574,893

1. Value of containers is excluded.

TABLE 11. Production of Quartz, by Provinces, 1953 and 1954

	1953		1954	
	Tons	Value	Tons	Value
<b>Production (shipments)<sup>1</sup>:</b>				
Quebec .....	165,706	603,524	83,507	234,007
Ontario .....	1,450,770	1,301,048	1,476,745	1,270,731
Saskatchewan and Alberta .....	152,786	76,393	155,899	70,155
British Columbia .....	16,312	89,652	—	—
<b>Canada .....</b>	<b>1,785,574</b>	<b>2,070,617</b>	<b>1,716,151</b>	<b>1,574,893</b>

1. Includes both crude and crushed quartz, crushed sandstone and quartzite and natural silica sands.

TABLE 12. Production<sup>1</sup> of Natural Low-grade Silica Sand and Silica Gravel as Non-ferrous Smelter Flux, 1952-1954

	1952		1953		1954	
	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$
Ontario .....	611,350	119,063	711,293	127,233	752,456	142,342
Saskatchewan .....	143,164	50,107	152,786	76,393	155,899	70,155
<b>Canada .....</b>	<b>755,014</b>	<b>169,170</b>	<b>864,079</b>	<b>203,631</b>	<b>908,355</b>	<b>212,497</b>

1. Included in totals shown in Table 11.

TABLE 13. Imports and Exports of Silica, 1953 and 1954

	1953		1954	
	Tons	Value	Tons	Value
		\$		\$
Imports:				
Ground flint stone .....	1,106	14,358	1,219	30,996
Ganister .....	286	4,303	540	6,350
Silica sand for manufacturing .....	703,221	1,928,438	655,863	1,883,998
Silex or crystallized quartz .....	30,534	1,733,477	28,412	275,205
Silica fire brick .....	...	1,863,068	...	849,110
Quartz, piezo electric .....			17	618,861
Exports:				
Quartzite .....	200,169	674,777	162,374	547,821

TABLE 14. Available Statistics on the Consumption of Silica Sand and Ground Quartz, 1950-1953

	1950	1951	1952	1953	Tons of 2,000 pounds
By industries					
Paints, pigments and varnishes .....	1,630	1,882	1,492	1,352	
Soaps and cleaning compounds .....	5,988	7,464	8,146	9,186	
Clay products .....	7,505	7,911	6,916	6,541	
Asbestos products .....	5,164	7,345	6,770	9,088	
Miscellaneous non-metallic minerals .....	1,031	786	156	1,836	
Roofing paper .....	3,221	3,372	2,835	3,703	
Glass .....	181,976	192,238	196,939	234,176	
Artificial abrasives .....	72,336	114,616	99,349	85,493	
Iron castings .....	4,328	4,363	5,875	7,351	
Cooking and heating apparatus .....	1,332	710	1,050	1,271	
Boilers, tanks and plate work .....	222	113	1,020 <sup>1</sup>	409	
Farm implements .....	818	396	405	794	
Railway rolling stock .....	4,546	6,012	5,010	...	
Steel castings .....	67,358	93,000	135,439	91,578	
Heavy chemicals .....	19,889	24,796	16,565	21,012	
Miscellaneous chemicals .....	1,008	580	751	943	
Stone products .....	908	1,147	1,055	1,304	
Machinery .....	2,794	3,957	5,682	1,176	
Electrical apparatus .....	681	10	—	...	
Cement manufacturing .....	52,509	60,015	57,906	58,548	
Cement products .....	805	—	—	664	
Miscellaneous iron and steel .....	44	450	1,230	458	
Ferro-alloys .....	—	3,828	4,934	4,452	
Brass and copper products .....	—	3,538	4,031	1,896	
Rolled steel products .....	...	...	...	458	
Total .....	436,093	538,530	563,556	543,789	
By provinces					
Nova Scotia .....	2,210	2,691	2,712	1,825	
New Brunswick .....	112	67	126	152	
Quebec .....	200,204	260,506	310,397	283,687	
Ontario .....	174,419	217,310	198,088	200,353	
Manitoba .....	29,037	27,089	19,642	20,567	
Saskatchewan .....	4	6	7	5	
Alberta .....	25,114	24,362	27,340	31,732	
British Columbia .....	4,993	6,499	5,244	5,468	
Canada .....	436,093	538,530	563,556	543,789	

1. Includes other foundry sands.

## List of Firms in the Feldspar and Quartz Mining Industry, 1934

Name of firm	Head office address	Location of mine or mill
<b>Nova Scotia:</b>		
Dominion Steel & Coal Corp. Ltd. <sup>1</sup>	Sydney	Chegoggin Point
<b>Quebec:</b>		
Bigelow, Gordon <sup>2</sup>	Box 759, Buckingham	Derry Twp.
Bigelow, Robt. <sup>2</sup>	Glen Almond	Portland East Twp.
Bon Ami Ltd. <sup>3</sup>	13719 Notre Dame St. E., Montreal	Montreal
Brouillet Sand & Gravel Co. Ltd. <sup>1</sup>	Rawdon	Rawdon
Buckingham Cartage Reg'd. <sup>1,2</sup>	Glen Almond	Glen Almond
Burke Bros. <sup>2</sup>	R.R. No. 1, Thuro	Buckingham Twp.
Canadian Flint & Spar Co. Ltd. <sup>1,2,3</sup>	Room 512, Victoria Bldg., Ottawa, Ontario	Buckingham
Cadieux, Omer <sup>1,2</sup>	59, rue Principale, Buckingham	Papineau
Charette & Desgagnes <sup>1,2</sup>	Glen Almond	Derry
Couture and Hill <sup>1,2</sup>	Glen Almond	Buckingham Twp.
Dominion Silica Corp. Ltd. <sup>1</sup>	25 St. Joseph St., Lachine	Labelle Co.
Electro Metallurgical Co. <sup>1</sup>	2221 Yonge St., Toronto, Ontario	Melocheville
Goyer, E., & Son <sup>1</sup>	St-Bruno	St-Hilaire
Parcher, Earl <sup>1,2</sup>	Glen Almond	Derry Twp.
Quebec North Shore Paper Co.	680 Sherbrooke St. W., Montreal	Eudes
Radius Exploration Ltd.	5188 Hutchison Ave., Outremont	St. Clotilde
St. George, G.E. <sup>1,2</sup>	21 Sunset Blvd., Ottawa, Ontario	Notre Dame de la Salle <sup>4</sup>
Siscoe Vermiculite Mines Ltd. <sup>1</sup>	Box 1234, Cornwall, Ontario	Suzorite
Valley, Percy <sup>2</sup>	Buckingham	Buckingham Twp.
Wallingford, Wm. & A.O. <sup>1,2</sup>	Gatineau Point	Templeton
<b>Ontario:</b>		
American Nepheline Corp. <sup>3,4</sup>	Lakefield	Methuen Twp.
Algoma Steel Corporation Ltd. <sup>1</sup>	Sault Ste. Marie	Deroche Twp.
Canadian Flint & Spar Co. Ltd. <sup>2</sup>	512 Victoria Bldg., Ottawa	Bedford Twp.
Canadian Silica Corp. (Ltd.) <sup>1</sup>	100 Adelaide St. W., Toronto	Little Current
Electro Metallurgical Co.	2221 Yonge St., Toronto	Killarney
Falconbridge Nickel Mines Ltd. <sup>1</sup>	Falconbridge	Falconbridge
International Nickel Co. of Canada Ltd. <sup>1</sup>	Copper Cliff	Lawson Twp.
Quartz Crystals Mining Corp. of Canada <sup>1</sup>	29 Melinda St., Toronto	Lynhurst
Van Meter, Russell <sup>1</sup>	Whitney	Murchison Twp.
<b>Saskatchewan:</b>		
Hudson Bay Mining & Smelting Co. <sup>1</sup>	Flin Flon, Manitoba	Flin Flon
<b>Alberta:</b>		
May, Wallace <sup>5</sup>	Elkwater Lake	Elkwater
<b>British Columbia:</b>		
Consolidated Mining & Smelting Co. Ltd. <sup>1</sup>	Trail	Fairview

1. Produces silica.
2. Produces feldspar.
3. Operates a mill.
4. Produces nepheline syenite.
5. Produces grinding pebbles.

STATISTICS CANADA LIBRARY  
BIBLIOTHÈQUE STATISTIQUE CANADA



1010521973