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# CANADA

# DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS CENSUS OF INDUSTRY

MINING, METALLURGICAL & CHEMICAL ERANCH

# THE

# FELDSPAR & QUARTZ MINING INDUSTRY

IN

CANADA

1935

Pakinhed by Authority of the HON, W.D. EULER, M.P.,
Minister of Trade and Commerce.



DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS MINING, METALLURGICAL AND CHEMICAL BRANCH OTTAY:A - CANADA

R H Coats, LL D., F.R.S.C., F.S.S. (Hon.) Dominion Statistician: Chief - Mining, Metallurgical and Chemical Branch: W. H. Losee, B.Sc.

#### FELDSPAR AND QUARTZ, 1935.

Owing to the very close physical association of these minerals in many Canadian deposits (pegmatites), it has been found difficult for some operators to make a separation of all data pertaining to the mining of each individual mineral and for this reason the general statistics relating to capital, employment, fuel and electricity, etc., have been combined in this bulletin by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa

#### FELDSPAR

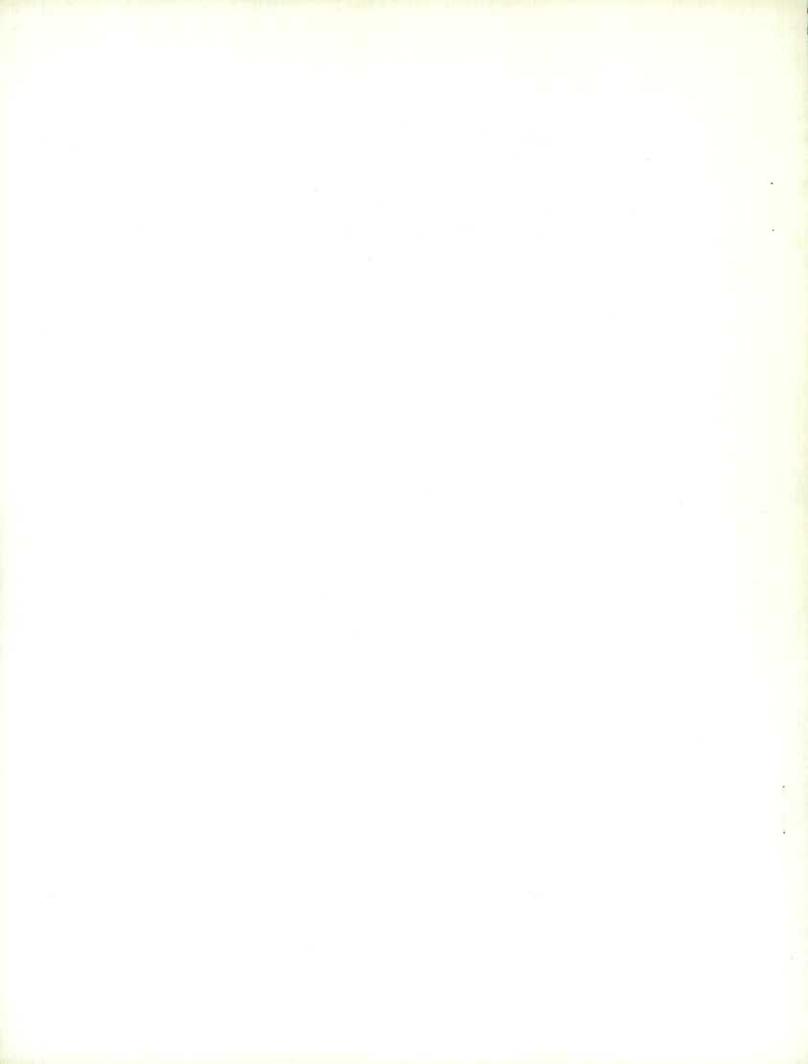
Production of feldspar in Canada during 1935 totalled 17,742 short tons valued at £144,330 as compared with 18,302 tons worth £147,281 in 1934. Of the output in 1935 Quebec contributed 7,002 tons valued at \$63,075; Ontario, 8,656 tons at \$75,003; and Manitoba, 2,084 tons worth \$6,252. Following the decrease recorded in 1935 the industry experienced a distinct improvement during the first half of 1936, production for this period totalling 7,867 tons valued at \$66,768 as against an output for the corresponding period of 1935 of 5,269 tons at \$48,125.

Employment in the industry declined from 312 in 1934 to 260 in 1935 together with a corresponding decrease in salaries and wages paid from \$50,988 to \$44.385.

Exports of feldspar in 1935 amounted to 9,959 tons valued at \$59,893 as compared with 10,532 tons worth \$65,158 in 1934 and of the 1935 exports 9,816 tons valued at \$56,003 were consigned to the United States. Imports of ground feldspar in both 1934 and 1935 came entirely from the United States, the imports in 1935 totalling 608 tons worth \$10,995 as against 917 tons valued at \$14,255 in 1934

"Canada produces feldspar mostly of high-potash type averaging around 13 to 14 per cent K20. Spar of high soda content is relatively uncommon, and very few deposits of this grade have been worked. In 1935 several hundred tons of soda spar were shipped from a property in Sabine township, Banoroft district, Ontario

"A development during the year that may extent the Canadian feldspar market, was the erection by Canadian Nepheline, Ltd of a plant at Lakefield, Peterborough county, Ontario, for the treatment of nepheline syenite rock, extensive bodies of which occur in the nearby township of Methuen. The rock consists of a mixture of albite (soda feldspar). microcline (potash feldspar), and nepheline (a silicate of soda, potash and alumina), and has been shown to possess valuable ceramic properties. The product made will be of 20 mesh, intended for the glass trade " (Commercial shipments commenced in 1936)



"Feldspar prices remained around the 1934 level, ranging from \$6 to \$7 per ton for the best ceramic grade to \$4 for No. 2 quality, all f. o. b. rail. Both domestic grinding mills, that of Frontenac Floor and Wall Tile Company at Kingston, Ontario, and that of Canadian Flint and Spar Company, at Buckingham, Quebec, operated throughout the year." (report 775 - Department of Mines, Ottawa.)

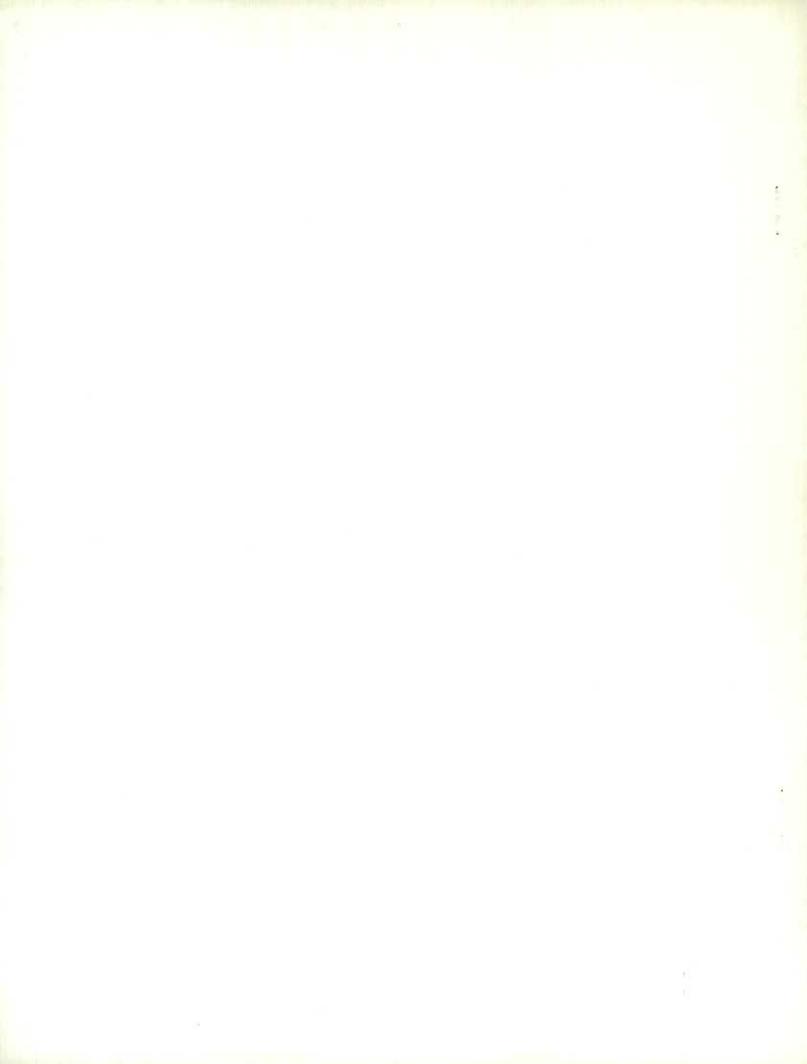
The United States Bureau of Mines reported that all states producing crude spar in 1935 shared an increased output except Arizona and New York; the output of feldspar mined in California and Colorado nearly doubled in volume over that in 1934 and production in South Dakota jumped 140.5 per cent. Glass manufacture in the United States consumes more than half the output of ground feldspar; it is used primarily in this industry as a source of alumina. The United States feldspar industry, according to the United States Bureau of Mines, maintains grinding equipment greatly in excess of that required to supply current demands. The Bureau also remarks that a recent development affecting the feldspar industry is the use of nepheline syenite as a glass-batch constituent to replace feldspar wholly or in part.

PRODUCTION IN CANADA, IMPORTS AND EXPORTS OF FELDSPAR, 1934 and 1935.

RODUCTION IN CANADA, IMPORTS AND	1 9	3 4		5
	Quantity	Value	Quantity	Value
	Tons	\$	Tons	2
Quebec Ontario Manitoba	9,207 7,302 1,793 18,302	78,853 61,665 6,763 147,281	7,002 8,656 2,084 17,742	63,075 75,003 6,252 144,330
IMPORTS OF FELDSPAR - Crude only	122 917	990 14,255	1 cwt. 608	5 10,995
EXPORTS OF FELDSPAR	10,532	65,158	9,959	59,893
(a) all from the United States.				

PRODUCTION OF FELDSPAR IN CANADA, JANUARY 1 to JUNE 30, 1935 and 1936.

PRODUCTION OF FEEDSPAR IN CANADA,	1 9	3 5	1 9 3 6		
	Quantity	Value	Quantity	Value	
and the second s	tons	\$ 72	tons	¢.	
PRODUCTION (SALES) -					
Quebec	1,268	17,301	4,085	35,929	
Ontario	3,111	27,486	3,074	28,361	
Manitoba	890	3,338	708	2,478	
TOTAL	5,269	48,125	7,867	66,768	



PRODUCTION OF FELDSPAR IN CANADA, BY PROVINCES, 1926 - 1935.

	QUEBEC		ONT	ARIO	MANITOBA	
	Tons	\$ 111	Tons	\$ 15	Tons	\$
1926	13,168	111,136	22,783	199,102	Suls the Million	
1927	12,730	104,618	17,119	154,533		238
1928	12,943	104,789	18,954	180,153		15 B B
1929	15,790	133,492	21,737	206,979	503	
1930	17,074	163,802	9,722	104,667		
1931	10,381	86,842	7,962	100,119	218 ( 152	
1932	3,390	39,062	3,657	42,920		
1935	6,183	59,283	4,387	45,350	88	484
1934	9,207	78,853	7,302	61,665	1,793	6,763
1935	7,002	63,075	8,656	75,003	2,084	6,252

CONSUMPTION OF FELDSPAR IN CANADA BY SPECIFIED INDUSTRIES. 1930 - 1935.

Abrasive Year Products Industry		Products products		ucts	Soaps Cleani Prepar Indust	ng ations	ALL N	TOTAL ALL NON-METALLIC INDUSTRIES (x)		
	tons	\$	tons	*	tons	\$	tons	\$		
1930	19	370	2,254	51,211	1,000	29,904	7,406	159,220		
1931	8	190	1,885	34,394	1,001	37,460	6,406	130,635		
1932	6	173	1,406	28,043	956	26,647	6,049	116,465		
1933	6	115	861	16,297	989	13,293	6,859	113,536		
1934	25	688	1,488	30,577	1,091	13,420	7,470	124,648		
1935	34	939	1,135	21,977	1,257	12,817	6,354	97,695		

(x) Includes feldspar consumed in glass manufacture.

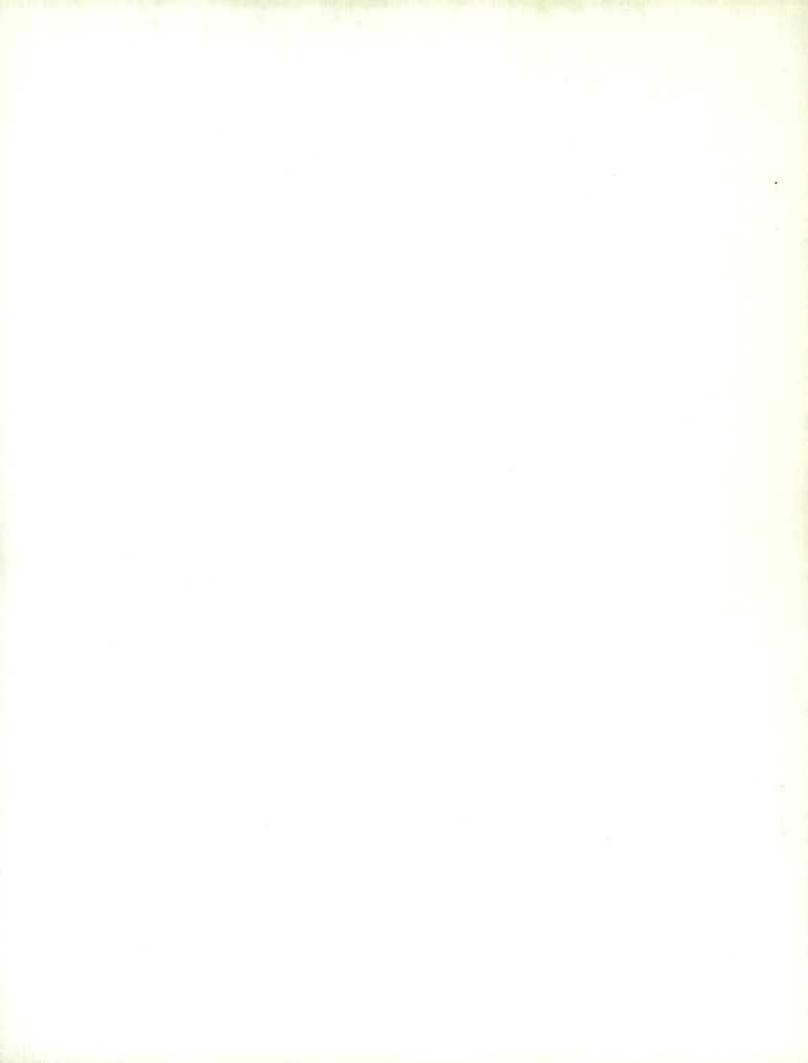
NOTE - In addition the value of feldspar consumed in the manufacture in Canada of iron and steel products in 1931, 1932, 1933 and 1934 totalled \$3,386, \$2,799, \$2,969 and \$5,496, respectively.

"Metal and Mineral Markets" - New York - published feldspar prices - December, 1935 as follows: per ton, f. o. b. North Carolina, potash feldspar, 200 mesh, white, \$17 in bulk; soda feldspar, \$19. F. O. B. Maine, potash feldspar, white 200 mesh, \$17 in bulk. Granular glass spar, white, 20 mesh, f. o. b. North Carolina, \$12.50 in bulk; semigranular, \$11.75; soda feldspar, 200 mesh, white, \$19. Virginia: No. 1, 230 mesh, \$18; 200 mesh, \$17; No. 17 glassmakers, \$11.75; No. 18, \$12.50. Enamelers \$14 to \$16; quotations on spruce pine N. C. basis, New Mexico; Orude Clean No. 1 potash spar, \$4.75; ground, \$9.50,

WORLD PRODUCTION OF FELDSPAR, 1932 - 1934.

(Taken from the Imperial Institute's publication "The Mineral Industry of the British Empire and Foreign Countries.")

(Long tons)				
Producing Country.	1932	1933	1934	
BRITISH EMPIRE United Kingdom - China stone	45,091 6,292 473 1,006	33,462 9,516 677 2,570	47,993 16,341 629 2,885	



WORLD PRODUCTION OF FELDSPAR, 1932 - 1934. (concluded)
(Taken from the Imperial Institute's publication "The Mineral Industry of the British
Empire and Foreign Countries.")

# (Long tons)

Producing Country . 1932	1933	1934
FOREIGN COUNTRIES		de la constantina della consta
Czechoslovakia (estimated) 30,000	30,000	30,000
Findland (exports 1,505	2,663	3,276
Germany (Bavaria only) 3,494	4,419	6,700
Italy 5,137	4,794	7,516
Norway 20,249	18,202	25,194
Roumania (b) 670	1,288	(a)
Sweden	32,053	33,924
Egypt	59	000
United States (sales) 104,715	150,633	154,188
Argentina 363	370	(a)
Brazil 60	4 2 2	(a)
"Manchoukuo"	(a)	(a)

Feldspar is also produced in U. S. S. R. (Russia.)

(a) Information not available.

(b) Converted from cubic metres at the rate of 1 cubic metre = 2 long tons.

WORLD IMPORTS OF FELDSPAR, 1932 - 1934 (LESS RE-EXPORTS)

(Taken from the Imperial Institute's publication "The Mineral Industry of the British

Empire and Foreign Countries.")

(Long tons)

Importing Country	1932	1933	1934
BRITISH EMPIRE	Color I all		
United Kingdom	11,057	18,382	16,884
Canada au on ou go oo oo oo oo oo oo	1,328	501	928
FOREIGN COUNTRIES	Trans.	e francisco	
Austria 00 00 00 00 00 00 00	964	948	734
Belgium-Luxemburg E.U	4,287	5,050	6,562
Czechoslovakia	1,265	1,172	964
Denmark	772	623	981
Finland (total imports)	. 111	51	303
Germany	20,625	25,249	33,573
Latvia , , , o on so en co so ev co	30	108	
Netherlands	2,987	3,381	2,376
D. 1	1,612	3,003	(a)
	. 14	1,295	895
Direction in the property of the second seco	(a)	(a)	416
Mexico	1,897	3,266	9,744

<sup>(</sup>a) Information not available.

## QUARTZ (SILICA)

Production of natural silica, including crushed quartzite, silicious fluxing sand and gravel, lode quartz, crude and ground, and silica sand, totalled 233,002 short tons valued at \$424,882 in 1935 as compared with 272,563 short tons at \$482,265 in 1934. Production in 1935, as in the preceding year, came from the provinces of Nova Scotia, Quebec, Ontario, Manitoba, Saskatchewan and British Columbia. Silica production during the first half of 1936 totalled 105,858 tons valued at \$228,248 as compared with 117,762 tons at \$207,921 for the first six months of 1935.

"The materials produced in this industry are: - quartz for smelter flux and ferro-silicon; quartzite for ferro-silicon and silica brick; silica sand for the manufacture of glass, carborundum, sodium silicate, flux, etc., also for sandblasting and for use in the steel foundries; silex, the finely pulverized silica used in ceramics and the paint industry.

"Quartz and quartzite in sizes from 2 to 6 inches are used in the manufacture of ferro-silicon and as a smelter flux. For silica brick, quartzite is crushed to about 8 mesh. Some quartz is also crushed to make silica sand.

"Silica sand is generally prepared from a friable sandstone by crushing, washing, drying, and screening to recover different grades. For example, for the manufacture of glass the material should range between 20 and 100 mesh. Silica sand is also prepared from a friable quartz and from vein quartz.

"Silex is the washed sand or pure quartz crushed and ground in some sort of ball mill, then either air or water-floated to recover the fine flour. The ceramic industry requires 150 mesh or finer, while the paint trade requires air-floated material 250 mesh or finer.

"Quartz is produced in Quebec, Ontario and Manitoba; and Quartzite is quarried in Nova Scotia, Quebec, Ontario, Manitoba, and British Columbia. Silica sand is obtained from Nova Scotia, Quebec, and Manitoba, and silex is prepared at one plant in the province of Quebec. A sand high in silica for smelting is produced in Saskatchewan and Ontario.

"The Canadian producers of silica sand are steadily improving their position and each year sees an increasing use of their products. Silica sand for use in the manufacture of glass and silicate of soda is at present largely imported; it has to be of a high degree of purity and uniformity, and if Canadian producers hope to supply this market they will have to adhere rigidly to the strict specifications and be able to guarantee regularity of shipments. The use of Canadian sand for sand blasting is increasing and the prospects are promising for a still further use of Canadian material. The price per ton for the several grades of silica varies greatly, depending on the purity and on the purpose for which the material is to be used; silica, on the whole, is a comparatively low-priced commodity "

(report No 773 - Department of Mines - Ottawa)

PRODUCTION	TN	CANADA	AND	TMPORTS	OF	OHARTZ	AND	STLTCA	PRODITOTE	1934	and	1935
THOUGHTON	4774	UMINADA	TATALY.	TWEATTO	Ur	- WUMDIZ	PAINT	OLLILUM	I' I'I I'I I I I I I I I I I I I I I I	1204	MILLIA	17000

	1 9	9 3 4 1 9 3 5		5		
	Tons	Value	Tons	Value		
	R W	\$	males also	\$		
PRODUCTION (x) (SHIPMENTS) -			Ban Ta			
		30 305	0.040	15 050		
Nova Scotia	7,292	12,107	9,640	13,978	- 3	
Quebec	57,208	229,817	51,948	226,839		
Ontario	89,838	134,572	83,034	120,005		
Manitoba	931	3,031	147	220		
Saskatchewan	92,447	88,748	77,177	59,069		
British Columbia	24,847	13,990	11,056	4,771		
CANADA	272,563	482,265	233,002	424,882		
IMPORTS -						
Flint and ground flint stones	2,340	28,427	2,277	24,014		
Silex or crystallized quartz, ground or		20,327	2,271	K4,014		
unground	2,323	53,430	3,359	75,768		
Silica sand for glass, carborundum and				1 1	310	
steel and filtration plants and sand					314	
blasting	96,165	226,188	123,576(a)	282,930		
Silica fire brick, 90% + silica		210,190		215,500		
				100		

<sup>(</sup>x) Includes both crude and crushed quartz and quartzite, silica flux and natural silica sands.

#### PRODUCTION OF QUARTZ (SILICA) IN CANADA, 1926 - 1935.

British Columbia

CANADA .....

Year	Ton	\$	Year	Ton	F
19262	32,082	553,161	1931	195,724	303,158
19272	33,984	496,364		189,132	276,147
19282	-	523,933	1933	185,783	297,820
19292	,	561,527	1934	272,563	482,265
19302		418,127	1935	233,002	424,882

PRODUCTION OF QUARTE IN CANADA, BI PROV.	INCES, JA	JUARU I LO L	UNE 30, 1935	and 195	0.
	1	9 3 5	1.53	1 9 3	6
Province	Tons		Tons		
Nova Scotia	1,286	1,86	35 1,410	1138	2,256
Quebec	21,530	100,44	34,697		153,779
Ontario	46,934	69,81	32,563	19.5	48,432
Manitoba	3 9 2				22
Saskatchewan	39,479	31,74	37,166		23,759

8,533

"Metal and Mineral Markets" - New York published silica prices December, 1935, as follows: per ton, water ground and floated in bags, f.g.b. Illinois - 325 mesh - £21 to £40 for 92 to 995 per cent grades. Dry ground, air floated, 325 mesh, 92 to 995 per cent silica, £20 to £30. Glass sand, f.o.b. producing plant, £1.25 to £5 per ton; moulding sand, 50 cents to £3.50; blast sand, £1.75 to £6. California, £5 for quartz and £2.50 for sand.

4,052

105.858

228,248

207.921

<sup>(</sup>a) 108,820 tons from United States and 14,756 tons from Belgium.

					•
					:4

SILICA	CONSUMED	IN	SPECIFIED	CANADTAN	INDUSTRIES.	1930	mer.	1935.
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Industry and item	1930	1931	1932	1933	1934	1935
Class -		4 3			18	Service Co.
Silica sand ton	73,349	62,868	59,143	52,585	65,306	61,858
	347,553	297,158	290,854	272,689	300,834	307,677
Acids, Alkalies and Salts -	F 745	00.010	0.740	F 000	10 045	10 000
Silica (sand) ton	5,345	6,012	6,342	5,800	12,945	10,229
Ambi Cladel Abusedana	19,672	21,262	20,921	21,714	55,330	53,389
Artificial Abrasives -	AE EQE	19,358	5,207	13,574	29,991	32,626
Silica sand ton	45,595 223,499	98,371	27,588	68,186		165,764
Imported Clay Products -	220,433	30,011	21,000	00,100	100,000	200,104
Flint ton	2,816	1,419	1,136	752	1.266	1,079
\$	28,958	27,853	18,277	10,457	19,709	16,078
Paints, Pigments and Varnishes -		T1 319		in the second	dann g	d 529
Silica (x) ton	823	588	483	410	483	565
\$	22,951	18,244	14,837	12,970	22,613	24,186
Soaps and Cleaning Powders -			B 9.11			
Silica sand ton	3,160	3,170	3,502	3,272	4,831	
\$	80,422	82,278	76,264	67,930	72,371	72,626
Iron and steel -			10.045	120 12001	03 043	
Sands (a) ton	131,924	91,310	48,945	44,853	81,641	not yet
\$	576,815	389,214	245,466	197,514	320,576	avail-
		731- 32				ante

(x) Includes ground quartz.

(a) Includes moulding, blast and other sand used in the manufacture of primary iron and steel, castings and forgings, boilers, agricultural implements, machinery, automobile parts, railway rolling stock, etc.

NOTE - In addition to the consumption recorded, silica sand is employed for sand blasting in the stone industry.

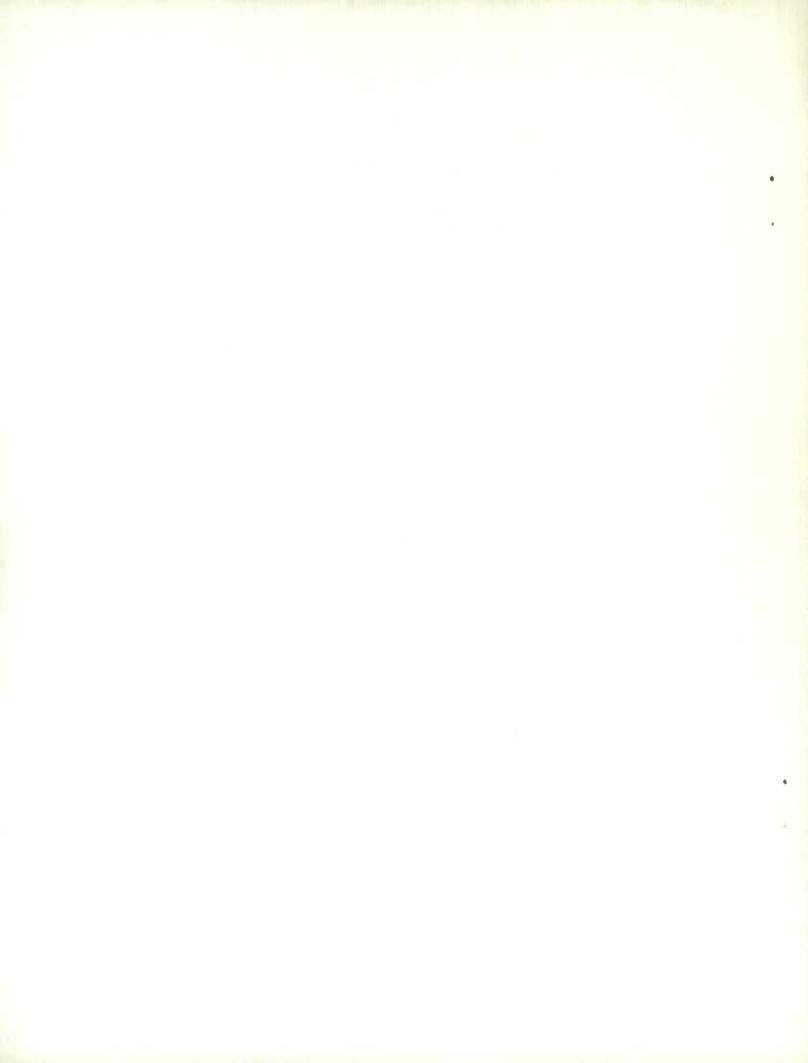
PRINCIPAL STATISTICS OF THE FELDSPAR AND QUARTZ MINING INDUSTRY, 1933, 1934 and 1935.

		1933	1934	1 9 3 5
			50	28
Number of firms (x)	63	28 1,143,792	1,310,182	151,986
Number of employees - On salary		23	44	30
On wages		123	268 312	230
Salaries and wages - Salaries	ď.	146 34,979	50,888	44,385
Wages	40	82,058		138,407
Total	40	117,037	the state of the s	182,792
Cost of fuel and electricity	43	26,327	45,854	41,555
Cost'of process supplies used Selling value of products	£9 £6	(a) 402,937	* /	16,457

(x) Small shippers from whom reports were unobtainable and whose production is recorded from consumers returns are not included in the total.

(a) Information not available.

Of the total employees in the entire industry during 1935, 169 were in Quebec and 70 in Ontario and of the salaries and wages paid, \$115,119 were distributed in Quebec and \$56,552 in Ontario. Firms reporting in Quebec totalled 15 and in Ontario, 9.



NUMBER OF FAGE-EARNERS ON PAY ROLL, BY	MONTHS.	1932.	1933.	1934	and	1935
--	---------	-------	-------	------	-----	------

Month	1932	1933	1934	1935	
•		131/25 DOMES	ADDIO LITERA		U. Land
January	69	39	170	180	STATE OF THE PARTY.
February	81	32	153	168	111
March	106	34	153	161	
April	56	18	145	147	
May	102	123	263	239	
June	111	172	300	266	
July	122	187	356	313	
August	113	193	389	329	
September	84	200	377	254	
October	90	163	355	261	
November	122	139	286	233	
December	105	132	232	195	1

FUEL AND ELECTRICITY USED, 1934 and 1935.

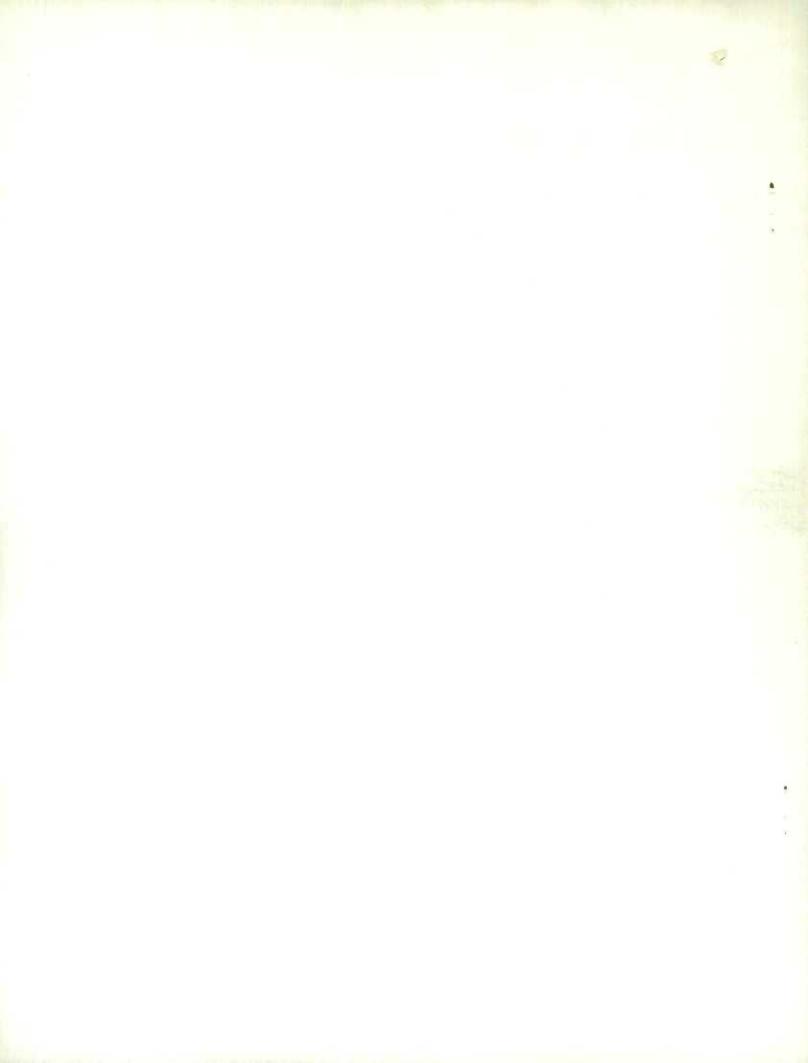
		1 9	9 3 4	1 9	3 5
	Unit of measure	Quantity	Cost at	Quantity	Cost at works
		61	# \$	historia de la companya della compan	
Bituminous coal - Canadian	short ton	1,001	7,208	553	3,596
Foreign	short ton	1,325	9,057	1,207	7,937
Coke		0 0 0	-000	34	383
Gasoline (x)		30,715	7,627	20,456	4,745
Kerosene		356	78	658	160
Fuel oil		104.183	9,355	139,405	12,571
Wood	-	504	1,090	454	1,372
Other fuel	47 -	000		2 0 0	000
Electricity purchased		452,272	11,439	489,780	10,791
TOTAL			45,854	• • <i>b</i>	41,555
Electricity generated for own		900,000	0.60	936,100	0 " 0

<sup>(</sup>x) Exclusive of consumption by motor vehicles.

POWER EQUIPMENT INSTALLATION, 1935.

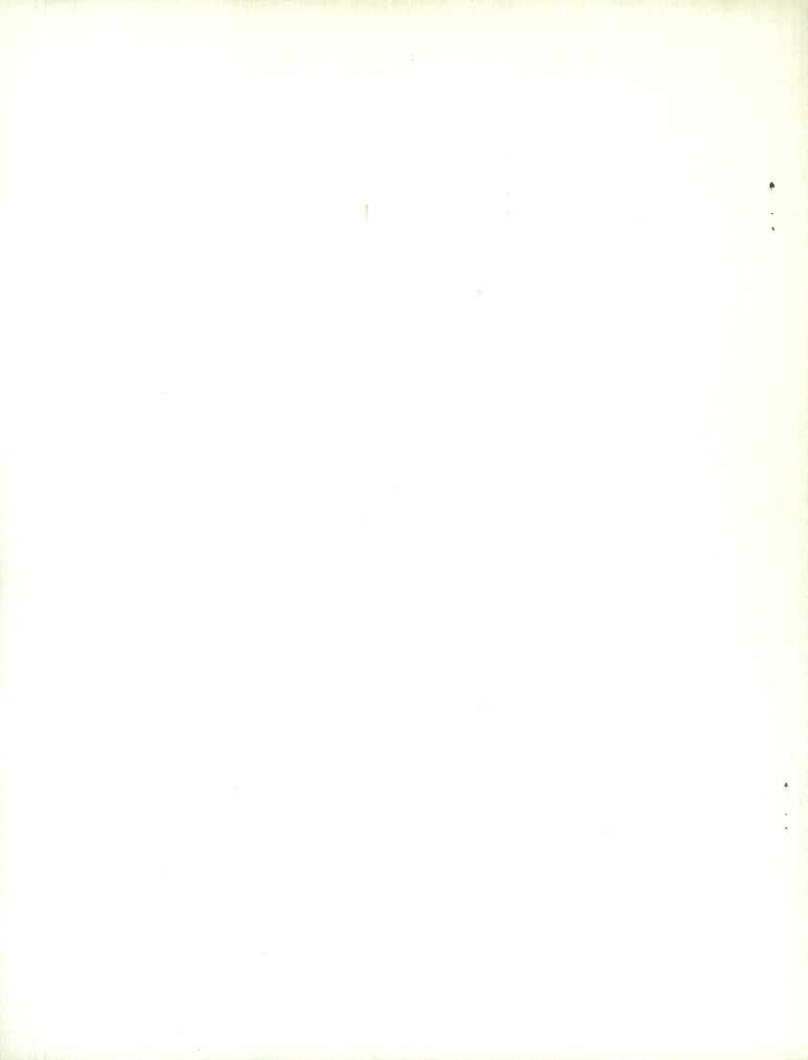
	Description	Number of units	Total horse power (manufacturers' rating)	)	
4	Tebol 1 p d d d				
	Steam engines and steam turbines	6	465		
	Diesel engines	3	415	1	
9	Other internal combustion engines	23	798	H	
į	Electric motors operated on purchased power	25	587		
	Electric motors operated on establishment power	50	382		
	Boilers	12	755		

<sup>(/) 128</sup> cubic feet.



LIST O	F FIRMS	IN	THE	CANADTAN	FELDSPAR	AND	QUARTZ	MINING	INDUSTRY .	1935
TITOT O	T. T. TTMIN	TITA	11111	OWNINDTWI	LEPOTOLUI	MIND	WUARTA	MITIATIAG	THEODER	Tao

	Name of Firm	Head Office Address	Location of mine or mill
•	NOVA SCOTIA - Dominion Steel & Coal Corp. Ltd. (a)	Sydney	Leitches Creek
•	CUEBEC - Bigelow, Robert (a) Cameron, J. J. Canadian Carborundum Co. Ltd.(a)	Buckingham Buckingham Box 65, Niagara Falls,Ont.	Buckingham Dist. Buckingham Dist. St. Canute
	Canadian Flint & Spar Co. Ltd.(x) Canadian Kaolin Silica Products Ltd.(x)(a)	Box 340, Buckingham 660 St. Catherine St. W.,	Buckingham
	Clement, D. Cote, P.M. Madame Derry Mining Co. Donaldson, R.J. (a) Evans, W. H. Hill, Nelson (a)	Montreal Buckingham 140 Wellington St., Ottawa Box 202, Buckingham Glen Almond Box 386, Buckingham Glen Almond	St. Remi d'Amherst Buckingham Dist. Hull Dist. Papineau Co. Buckingham Tp. Portland Tp. Buckingham Tp.
	Lawzon, John Les Produits Silica Canadiens Ltée (a) McClement, Albert (a) McDonnell, B. A. McLean-McNicoll Ltd. (a)	Buckingham 4074 Marlowe Ave., Montreal Buckingham Glen Almond 607 Confederation Bldg.,	Buckingham Dist. Roberval Co. Derry Tp.
	Ottawa Silica and Sandstone Ltd.(x)(a) Parcher, Alfred Parcher, Milson (a) Pedneaud, G. Perkins Mining Co. Sellers, W. Wallingford, A. Wallingford & Cornu Wallingford, J. (a) Warwick, Wm. (a) Whitfield, T. Winning, Bush	Montreal East Templeton Glen Almond Buckingham Buckingham Glen Almond Gatineau Point Glen Almond Gatineau Point Buckingham Perkins Buckingham Buckingham Buckingham Notre Dame de la Salette	Joly Co. East Templeton Derry Tp. Buckingham Dist. Buckingham Dist. Buckingham Dist. Derry Tp. Derry Tp. Derry Tp. Buckingham Dist. Perkins Buckingham Dist. Buckingham Dist. Buckingham Dist. Portland Tp. W.
	Barr. W. J. Bathurst Feldspar Mines Canadian Nepheline Ltd. (c) Charette, S. & Sons Craig, T.H. Dominion Mines & Quarries Ltd. (a) Feldspar Quarries Ltd. (b)  Frontenac Floor & Wall Tile Co. (x) Gunter, J. A. MacDonald, P.	Westmeath 230 King St. E., Toronto 320 Bay St., Toronto Estaire Perth 340 University Ave., Toronto 1403 Trenton Trust Bldg., Trenton, N. J., U. S. A. Kingston Princess Lake Hybla	Renfrew Co. Lanark Co. Peterborough Co. Burwash Tp. Lanark Co. Killarney  Frontenac Co. Kingston Sabine Tp. Hybla



LIST OF FIRMS IN THE CANADIA	N FELDSPAR AND QUARTZ MINING INDUSTRY, 193	5 (concluded)	
Name of Firm	Head Office Address	Location of mine or mill	
ONTARIO -			
Renfrew Minerals Ltd. Western Silica Ltd. (b)	901 Royal Bank Bldg., Toronto 306 Great West Perm. Bldg.,	Quadville	
	W. C.	101	

Western Silica Ltd. (b)

306 Great West Perm. Bldg.,

Winnipeg

Winnipeg

Wright & Co. (a)

960 Queen St., Sault Ste.Marie Deroche Tp.

MANITOBA Feldspar Products Co.

Warrood, Minn., U. S. A.

Pointe Du Bois

- (a) Reported production of silica only.
- (x) Operated dressing plants.
- (b) Inactive
- (c) Produce nepheline syenite.

NOTE - In addition to these operators, metallurgical plants in Ontario, Manitoba, Saskatchewan and British Columbia produced silica flux for their own use.

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