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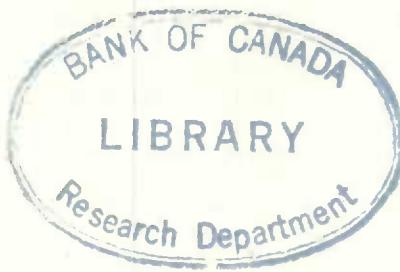
Mr. Dietz
(steamer)

JUL 29 1955



THE ASBESTOS MINING INDUSTRY

1954



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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 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 Non-ferrous 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 ASBESTOS MINING INDUSTRY

1954

Canadian producers of asbestos shipped 924,116 tons valued at \$86,409,212 in 1954 compared with 911,226 tons valued at \$86,052,895 in 1953. The quantity increased by 1.4 per cent and the total value was up 0.4 per cent.

The industry distributed \$24,850,100 in salaries and wages to 6,563 employees at the mines or plants. Fuel and electricity cost \$4,130,806 which included 269,410,263 kwh. of purchased electricity valued at \$2,100,282. Process supplies and containers cost \$9,924,166.

The largest producing area continued to be in the eastern townships of Quebec in the vicinities of Thetford Mines, Black Lake, East Broughton and Danville. Ontario's production came from Munro township. In northern British Columbia the Cassiar Asbestos Corporation milled asbestos ore.

Asbestos has a variety of industrial uses. The longer-fibred spinning material is formed into textiles, packing and certain insulating and heat-resisting friction materials. Other fibres are used in the asbestos cement industry for the production of pipe, shingle, tile, millboard, siding, roofing, etc., and for the production of asbestos paper. The short-fibred material is used in protective coatings, plastics, in the manufacture of lubricating greases and in a number of specialized applications where it has characteristics desired as an industrial filler.

Price quotations per ton in December, 1954, were: Crude No. 1, \$960-\$1500; crude No. 2, \$595-\$900; spinning fibres, \$321-\$514; shingle fibres, \$150-\$200; paper stock, \$109-\$137; waste, \$77; shorts, \$35-\$70.

TABLE 1. Principal Statistics for the Asbestos Mining Industry, Significant Years, 1921-1954

Year	Establishments	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 value of production
	No.	No.	\$	\$	\$	\$	\$
1921	15	2,694	2,657,425	737,689	N.A.	4,906,230	N.A.
1929	8	3,391	4,410,535	1,335,610	"	13,179,884	"
1931	8	1,675	1,836,115	849,047	"	4,818,838	"
1933	8	1,629	1,279,093	771,327	"	5,211,177	"
1937	11	3,842	4,232,507	1,346,434	2,729,801	14,509,092	10,432,857
1939	9	3,784	4,347,064	1,376,568	2,086,945	15,862,142	12,398,629
1941	10	3,760	4,996,101	1,524,450	2,721,796	21,475,645	17,229,399
1944	10	4,050	6,401,185	1,635,829	2,380,230	21,836,376	17,820,317
1946	12	4,547	7,771,921	1,759,462	3,216,430	25,245,579	20,269,687
1949	17	4,053	10,569,071	1,499,439	4,668,869	39,784,651	33,616,343
1951	24	5,923	20,024,208	2,988,149	10,085,645	81,624,009	68,550,215
1952	23	6,318	23,625,431	3,092,959	10,044,266	89,295,913	76,158,201
1953	24	6,482	24,567,463	3,783,653	10,305,046	86,078,924	71,990,225
1954	25	6,563	24,850,100	4,130,806	9,924,166	86,441,436	72,386,464

TABLE 2. Production and Shipments of Asbestos by Canadian Mines, 1953 and 1954

Grade	1953			1954		
	Production	Shipments		Production	Shipments	
		Quantity	Selling value f.o.b. shipping point		Quantity	Selling value f.o.b. shipping point
	tons	tons	\$	tons	tons	\$
Crude—No. 1, No. 2, and other.....	633	781	837,623	766	725	645,608
Milled—Group 3 (Spinning).....	35,591	35,970	13,248,520	41,189	35,208	13,408,238
Group 4 (Shingle)	185,322	187,466	31,247,728	195,257	192,285	31,995,977
Group 5 (Paper).....	107,956	102,904	11,729,835	105,420	99,160	11,320,370
Group 6 (Stucco)	181,001	175,171	13,188,314	163,284	168,960	12,626,426
Group 7 (Refuse).....	380,032	379,218	15,233,828	399,694	396,639	15,824,079
Group 8 (Sand).....	29,656	29,716	567,047	31,257	31,139	588,514
Total, all grades	920,191	911,226	86,052,895	936,867	924,116	86,409,212
Gravel and stone (waste rock only) ²	21,118	21,118	26,029	26,429	26,429	32,224

1. Includes value of containers amounting to \$3,450,920 in 1953 and \$3,251,868 in 1954.

2. This production is included in the Sand and Gravel Industry.

TABLE 3. Tonnage of Asbestos Rock Mined and Milled, 1950-1954

	1950	1951	1952	1953	1954
Rock mined	12,210,780	12,623,529	12,989,320	13,912,839	14,793,760
Rock milled	8,635,036	10,219,658	10,915,938	11,189,027	11,394,571

TABLE 4. Shipments of Asbestos by Canadian Mines, 1945-1954

Year	Tons	Selling value at works	Year	Tons	Selling value at works
		\$			\$
1945.....	466,896	22,805,157	1950	875,344	65,854,568
1946.....	558,181	25,240,562	1951	973,198	81,524,345
1947.....	661,821	33,005,748	1952	929,339	89,254,913
1948.....	716,769	42,231,475	1953	911,226	86,052,895
1949.....	574,906	39,746,072	1954	924,116	86,409,212

TABLE 5. Shipments of Asbestos by Canadian Mines, by Months, 1953 and 1954

Month	1953	1954	Month	1953	1954
	tons	tons		tons	tons
January	69,820	56,800	August.....	72,752	80,783
February	65,337	61,629	September	77,844	90,834
March	75,233	74,775	October	80,713	88,610
April	82,540	82,950	November	84,238	87,443
May	82,474	79,709	December	64,394	71,240
June	82,805	78,960	Total	911,226	924,116
July	73,076	70,383			

TABLE 6. Imports and Exports of Asbestos and Asbestos Products, 1953 and 1954

Item	1953		1954	
	Tons	\$	Tons	\$
Imports				
Asbestos clutch facings for automobiles, motor vehicles and chassis..	...	270,123	...	259,560
Asbestos brake linings for automobiles, motor vehicles and chassis...	...	297,460	...	271,723
Asbestos brake linings and clutch facings, n.o.p. ....	...	89,263	...	127,818
Asbestos in any other form than crude, and all manufactures of, n.o.p.	...	2,347,874	...	2,636,262
Asbestos packing	147	305,455	136	243,769
Total.....	...	3,310,175	...	3,539,132
Exports				
Asbestos (crude).....	638	719,583	641	578,380
Asbestos milled fibres	316,588	55,182,886	312,844	53,875,653
Asbestos waste, refuse and shorts	561,304	28,069,694	574,243	28,112,456
Asbestos brake lining facings .....	...	251,287	...	365,475
Asbestos packing .....	...	5,291	...	5,008
Asbestos manufactures, n.o.p. ....	...	328,663	...	931,891
Total.....	...	84,557,404	...	83,868,863

TABLE 7. Taxes Paid by the Asbestos Mining Industry, 1953 and 1954

	1953	1954
	\$	\$
Dominion income tax, including tax on non-operating revenue	11,633,991	6,185,683
Provincial taxes:		
Mining taxes paid on net profits from production, including portion paid to municipality	2,607,272	2,146,164
Corporation income tax where levied in addition to mining tax	—	—
Taxes paid on capital and places of business	50,804	53,123
Acreage taxes	3,831	2,220
Royalties	250,000	—
Total provincial	2,911,907	2,201,507
Municipal taxes:		
Based on property evaluation	280,399	787,315
Based on non-operating revenue	7,792	10,492
Total municipal	288,191	797,807
Grand total taxes paid	14,834,089	9,184,997

TABLE 8. Specified Miscellaneous Expenditures by the Asbestos Mining Industry, 1952-1954

—	1952	1953	1954
	\$	\$	\$
Workmen's compensation	347,131	376,568	406,147
Silicosis assessment	16,379	20,732	21,154
Unemployment insurance	160,347	164,191	163,161
Aggregate cost of all supplies purchased	12,296,745	11,886,894	14,160,955
Aggregate cost of plant and equipment purchased	6,508,133	13,213,582	16,888,261
Cost of buildings, machinery and equipment erected or installed during the year	9,590,263	17,529,859	19,808,345

TABLE 9. Employees and Their Earnings in the Asbestos Mining Industry, 1950-1954

Year	Number of employees				Total	Number of man-hours worked (all employees)	Earnings				
	Office and administrative		Workmen				Office and administrative	Workmen	Total		
	Male	Female	Male	Female							
							\$	\$	\$		
1950.....	575	88	4,858	31	5,552	...	2,203,603	13,645,226	15,848,829		
1951.....	649	96	5,151	27	5,923	14,337,061	2,824,100	17,200,108	20,024,208		
1952.....	714	96	5,481	27	6,318	14,012,175	3,570,040	20,055,391	23,625,431		
1953.....	761	109	5,582	30	6,482	13,934,305	3,766,891	20,800,572	24,567,463		
1954.....	799	104	5,626	34	6,563	13,846,938	4,022,507	20,827,593	24,850,100		

TABLE 10. Number of Workmen, by Months, 1953 and 1954 (Administration and office employees not included)

Month	Total	1953		1954				Total	
		Mine		Mill					
		Surface		Underground	Male	Female			
		Male	Female	Male					
January	5,337	2,284	21	1,059	2,164	10	5,538		
February	5,296	2,289	22	1,024	2,185	10	5,530		
March	5,451	2,267	22	1,031	2,187	10	5,517		
April	5,462	2,281	22	1,030	2,148	10	5,491		
May	5,556	2,362	21	1,062	2,165	10	5,620		
June	5,829	2,492	22	1,038	2,233	12	5,797		
July	5,796	2,497	20	1,047	2,241	14	5,819		
August	5,857	2,462	20	1,054	2,298	14	5,848		
September	5,830	2,417	20	1,017	2,252	15	5,721		
October	5,762	2,426	19	1,013	2,269	15	5,742		
November	5,629	2,324	20	1,002	2,277	15	5,638		
December	5,626	2,353	20	945	2,274	4	5,596		
Average.....	5,612	2,372	22	1,026	2,228	12	5,660		

TABLE 11. World Production of Asbestos by Countries¹, 1949-1953
 (Taken from the "Minerals Year Book" by the United States Bureau of Mines)

Country ¹	1949	1950	1951	1952	1953
metric tons ²					
Australia.....	1,671	1,643	2,599	4,124	5,049
Bolivia (exports)	182	166	316	465	735
Brazil	1,415	844	1,321	720	720
Canada (sales) ³	521,543	794,095	882,866	843,078	826,303
Chile	291	172	4	4	4
Cyprus	12,556	14,989	17,180	16,556	14,484
Egypt.....	117	260	1,247	60	4
Finland ⁵	10,486	10,949	11,850	6,100	10,929
France.....	1,090	6,080	6,940	6,300	9,300
French Morocco	402	511	604	576	544
Greece.....	9	30	34	25	---
India	148	211	526	694	4
Iran	---	---	---	---	50
Italy.....	15,877	21,433	22,612	23,938	20,397
Japan.....	5,456	5,664	6,139	3,060	4,078
Kenya	716	229	379	354	151
Madagascar	2	1	17	3	4
New Zealand	-	42	826	693	4
Portugal	101	257	312	168	4
Southern Rhodesia.....	72,246	64,888	70,454	76,960	79,595
Spain	40	41	41	30	4
Swaziland	30,814	29,635	31,719	31,542	27,309
Taiwan (Formosa)	410	216	35	24	---
Turkey	250	245	80	---	---
Union of South Africa	64,334	79,300	97,402	121,416	86,016
United States	39,360	38,495	46,851	48,864	49,401
U.S.S.R. (estimate)	191,000	220,000	220,000	220,000	220,000
Venezuela.....	192	190	260	394	40
Yugoslavia	1,138	958	1,523	2,506	3,748
Total (estimate).....	975,000	1,300,000	1,425,000	1,425,000	1,375,000

1. In addition to countries listed, asbestos is produced in Argentina, China, Czechoslovakia and Korea. Estimates are included in the total.

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

3. Exclusive of sand, gravel and stone (waste rock only), production of which is reported as follows: 1949, 32,015 tons; 1950, 43,551 tons; 1951, 30,628 tons; 1952, 35,982 tons; 1953, 19,158 tons.

4. Data not available; estimate included in total.

5. Includes asbestos flour.

Canadian Chrysotile Asbestos Classification —
 (List of Standard Grades set up by the Committee on Uniform Classification and Grading of Asbestos Mines Products. This committee was formed in 1931 at the instigation of the Minister of Mines of the Province of Quebec, and the list of grades has been revised from time to time.)

The asbestos mines products are divided into two classes: "Crude Asbestos" and "Milled Asbestos", respectively, defined as follows:

"Crude Asbestos" consists of the hand-selected cross-vein material essentially in its native or un-fiberized form.

"Milled Asbestos" consists of all grades produced by mechanical treatment of asbestos ore.

"Crude Asbestos" and "Milled Asbestos" are sub-divided into groups designated and defined below.

Classification of the "Milled Asbestos" grades, in groups Nos. 3 to 7, inclusive, unless otherwise specified, is based on the Quebec Standard Testing Machine.

"Shipping Test" is the average for each carload or smaller shipment of tests representative samples taken at the time of shipping.

"Guaranteed Minimum Shipping Test" is that below which the actual shipping test shall not fall.

Crudes:

Group No. 1 Crude No. 1	Consists basically of crude $\frac{3}{4}$ inch staple and longer
Group No. 2 Crude No. 2	Consists basically of crude $\frac{3}{8}$ inch staple up to $\frac{3}{4}$ inch
Crude run-of-mine	Consists basically of unsorted crudes
Crudes, sundry	Consists of crudes other than above specified

Fibres:

Standard designation of grades	Guaranteed Minimum shipping test			
	$\frac{1}{2}$ -inch screen	4-mesh screen	10-mesh screen	Pan
Group No. 3	3F	7	7	1.5
	3K	4	7	4
	3R	2	8	4
	3T	1	9	4
	3Z	0	8	6
Group No. 4	4H	0	5	8
	4K	0	4	9
	4M	0	4	8
	4R	0	3	9
	4T	0	2	10
	4Z	0	1.5	9.5
Group No. 5	5D	0	0.5	10.5
	5K	0	0	12
	5M	0	0	11
	5R	0	0	10
Group No. 6	6D	0	0	7
Group No. 7*	7D	0	0	5
	7F	0	0	4
	7H	0	0	3
	7K	0	0	2
	7M	0	0	1
	7R	0	0	0
	7T	0	0	0
Group No. 8	8S	Under 75 pounds per cubic foot loose measure.		
Group No. 9	9T	Over 75 pounds per cubic foot loose measure.		

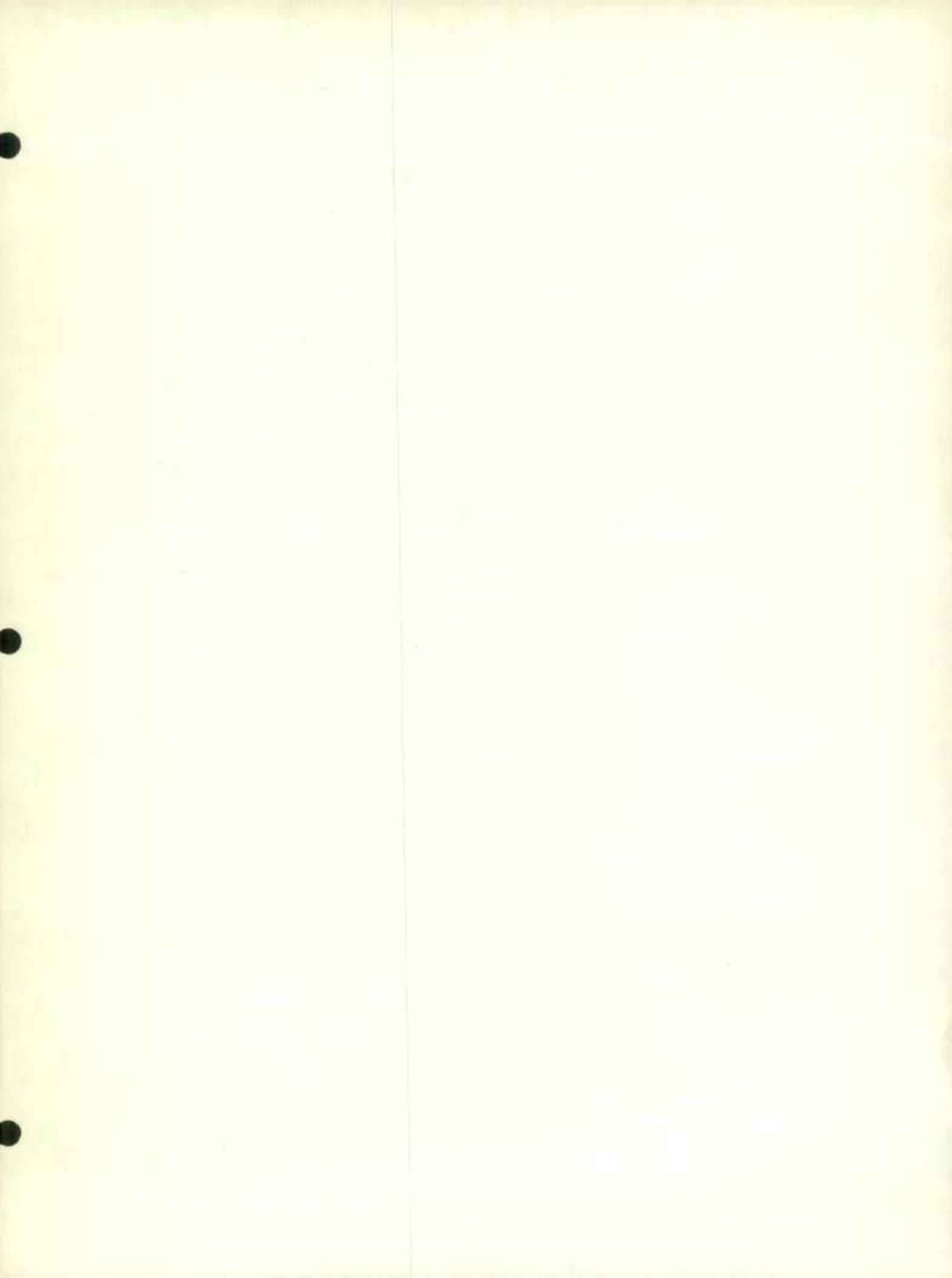
* The affix "F" designates "Floats" in all subsections of Group No. 7.

Directory of Firms in the Asbestos Mining Industry, 1954

Name of firm	Head office or general office	Location of mine
Quebec:		
Asbestos Corporation Ltd.	Thetford Mines	Thetford Mines, Black Lake, Coleraine
Asbestos Producers Corp. ¹	1410 Stanley St., Montreal	Coleraine
Bell Asbestos Mines Ltd.	Thetford Mines	Thetford Township
Canadian Johns-Manville Co. Ltd.	Sun Life Building, Montreal	Asbestos
Central Asbestos Mines Ltd. ¹	1200 Alexander St., Montreal	Coleraine
Continental Asbestos Co. Ltd. ¹	Coleraine	Coleraine
Derogan Asbestos Corp. ¹	1200 Alexander St., Montreal	Melbourne
Dominion Asbestos Mines Ltd.	660 Ste. Catherine St. W., Montreal	St. Adrien de Ham
Eastern Asbestos Co. Ltd. ¹	619, rue St-Jacques, Montreal	Coleraine
Empire Asbestos Ltd. ¹	934 - 12th Ave., Thetford Mines	Thetford
Flintkote Mines Ltd.	Thetford Mines	Thetford Mines
Giroux, Douglas, Mineral Exploration ¹	630 Dorchester St. W., Montreal	Roy Township
Golden Age Mines Ltd. ¹	85 Richmond St. W., Toronto, Ontario ..	Beauceville
Johnson's Asbestos Company	Thetford Mines	Coleraine
Johnson's Company Ltd.	Thetford Mines	Thetford Mines
Lake Asbestos of Quebec Ltd.	Box 88, Black Lake	Black Lake
Nicolet Asbestos Mines Ltd.	Norbestos, Warwick	Norbestos
Pentagon Mining Corp. ¹	1410 Stanley St., Montreal	Coleraine
Quebec Asbestos Corp. Ltd.	East Broughton Station	East Broughton Station
Red Lake Mines Ltd. ¹	3539 Park Ave., Montreal	Rigaud
Ontario:		
Canadian Johns-Manville (Ontario) Ltd.	Matheson	Munro Township
Van Packer Mines of Canada Ltd.	Box 1000, South Porcupine	Deloro Township
British Columbia:		
Asbestos Corporation (Explorations) Ltd. ¹	Thetford Mines, Quebec	Ainsworth, Slocan
Cassiar Asbestos Corp. Ltd.	85 Richmond St. W., Toronto, Ontario ..	McDame

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