

1963
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GYPSUM MINES

1963

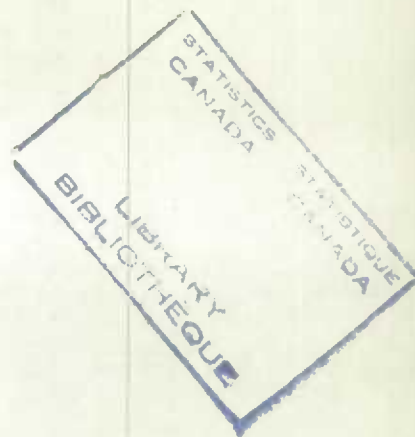
Formerly The Gypsum Mining Industry

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EXPLANATORY NOTES

Establishment

The reporting unit in the Census of Mines, Quarries and Oil Wells is the **establishment**. Beginning with the 1961 Census, the establishment is defined as follows:

The smallest unit which is a separate operating entity capable of reporting all the following:

- Materials and supplies used,
- Goods purchased for resale as such,
- Fuel and power consumed,
- Number of employees and their pay,
- Inventories,
- Shipments or sales.

The establishment is to be distinguished from smaller subdivisions or departments which do not have records which permit them to report all items required of an establishment. Prior to 1961, some establishments were required to submit two or more separate reports when they were engaged in operations which were classifiable to different industries. Beginning with 1961, separate reports for such operations will be required only in cases where accounting records can provide all the elements of principal statistics enumerated above. Special reporting arrangements were made with respondents when the acceptance of combined reports would

have seriously affected the statistics for particular industries or areas. Where continuity of industry statistics was affected by this change in reporting procedures, adjustments to the data were made back to 1957 in order to maintain comparability of the series for recent years.

A mining establishment is typically a mine, mine/mill, quarry, pit or bog principally engaged in mining operations. Prior to 1961, the Census of Mines, Quarries and Oil Wells attempted to cover the mining activities of all establishments, whether or not they were principally engaged in mining operations. Beginning with the 1961 Census, establishments (accounting entities) which are not primarily engaged in mining are no longer included as mining establishments in the basic industry statistics. Again adjustments to the industry statistics were made to reflect the removal of such reporting units for the period 1957-1960. These reporting units are now listed as establishments in other Bureau industry surveys, such as Wholesale Trade, Construction, etc. In order, however, to maintain complete coverage of certain commodity items produced mainly in mining establishments, many non-mining establishments are now surveyed for commodity information only and the latter are included in the appropriate tables of industry reports.

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SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- amount too small to be expressed.
- ▮ preliminary figures.
- * revised figures.

GYPSUM MINES

1963

Formerly The Gypsum Mining Industry

This report includes statistics for industry 073—Gypsum Mines of the Standard Industrial Classification Manual (Catalogue No. 12-501).

The Canadian producers of crude gypsum and anhydrite shipped 5,955,266 tons valued at \$11,237,952 in 1963 compared with 5,332,809 tons valued at \$9,349,775 in 1962. A large portion of the shipments are inter-plant transactions, thus are assigned nominal values.

Nova Scotian mines and quarries shipped 4,910,536 tons in 1963 compared with 4,451,072 tons in 1962. Shipments increased in Newfoundland, Ontario, Manitoba and British Columbia while New Brunswick showed a modest decline.

There have been some changes in the methods of compilation of statistics on gypsum. Some firms operate a manufacturing plant (plaster or wallboard) at or near the quarry. Data on the quarry at such a plant have been included in the manufacturing statistics and are classified to gypsum products industry. Thus the principal statistics of the gypsum mines are directly affected by this reclassification. Gypsum was produced by firms classified in the gypsum products industry, thus the commodity figures are larger than the gross value of products shown in the table of principal statistics.

The average number of employees in the gypsum mines was 680 to whom \$2,876,245 were paid as salaries and wages. Fuel and electricity cost

\$448,527 which included 10,608,924 kwh. of purchased electricity valued at \$193,320. Process supplies cost \$2,267,523.

Additional information on gypsum is shown in Review 38 published by the Department of Mines & Technical Surveys, Ottawa.

Calcined gypsum or plaster of paris, is the main constituent of gypsum board and lath, gypsum tile, roof tile, and all types of industrial plasters. Gypsum plaster is mixed with water and aggregate (sand, vermiculite or expanded perlite) and applied over wood, metal or gypsum lath to form an interior-wall finish. Gypsum board, lath and sheathing are formed by introducing a slurry consisting of plaster of paris, water, foam, accelerator, etc. between two sheets of absorbent paper, where it sets, producing a firm strong wallboard. Gypsum board and sheathing are used in the building construction industry.

Crude uncalcined gypsum is used in the manufacture of portland cement. The gypsum, acting as a retarder, controls the set of the cement. Crude gypsum, reduced to 40-mesh or finer, is used as a filler in paint and paper. Ground gypsum is used to a limited extent as a substitute for salt cake in glass manufacture. Powdered gypsum is used as a soil conditioner to offset the effect of black alkali, as a means of restoring imperious, dispersed soil, and as a fertilizer of peanuts and other leguminous crops.

TABLE 1 A. Principal Statistics for Gypsum Mines, Significant Years, 1921 - 59
Basis: Standard Industrial Classification in use prior to 1960

Year	Firms	Mines or quarries	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies and containers	Gross value of production (including containers)	Net production ¹
		number				dollars		
1921	11	11	700	774,551	140,430	428,905	...	1,785,538
1929	17	22	987	1,054,213	281,019	...	...	3,345,696
1931	15	19	676	656,590	188,524	...	...	2,111,517
1933	10	10	415	263,279	91,518	...	...	675,822
1937	8	13	602	595,396	156,115	106,962	1,540,483	1,277,406
1939	10	17	714	692,158	193,488	105,831	1,935,127	1,635,808
1941	8	15	648	745,008	222,564	229,444	2,248,428	1,796,420
1944	8	12	328	490,872	148,743	239,198	1,511,978	1,124,037
1946	8	14	753	1,246,673	260,479	546,092	3,696,727	2,890,156
1949	9	14	925	2,226,703	411,417	1,070,457	5,425,045	3,943,171
1951	8	13	1,018	2,648,803	455,915	1,704,669	5,881,546	3,720,962
1954	9	14	932	2,929,829	355,302	1,811,188	7,095,779	4,929,289
1956	9	15	1,030	3,317,673	454,428	1,903,098	7,260,236	4,902,710
1957	8	13	816	2,653,320	468,366	1,440,177	7,745,105	5,836,562
1958	7	13	627	2,300,288	424,164	841,785	5,189,159	3,923,210
1959	7	15	874	3,228,713	488,175	710,686	8,393,703	7,194,842

¹ Gross production less cost of process supplies, etc., fuel and electricity.

TABLE 1 B. Principal Statistics for Gypsum Mines, 1959 - 63
Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab- lish- ments	Em- ployees	Salaries and wages	Cost of fuel and electricity	Cost of process supplies and containers	Gross value of production (including containers)	Net production ¹
		number			dollars		
1959	11	755	2,691,420	313,342	529,297	7,245,486	6,402,847
1960	9	685	2,431,729	300,623	446,594	8,340,568	7,593,351
1961	9	613	2,272,477	312,798	1,450,653	6,597,398	4,833,947
1962	10	608	2,407,662	353,821	1,883,670	8,151,601	5,914,110
1963	9	680	2,876,245	448,527	2,267,523	9,845,729	7,129,679

¹ Gross production less cost of process supplies, etc., fuel and electricity.

Note: See footnote page L-7, and text.

TABLE 2. Producers' Shipments of Gypsum, by Provinces, 1962 and 1963

Province	1962		1963	
	Tons	Value f.o.b. shipping point	Tons	Value f.o.b. shipping point
		\$		\$
Newfoundland	83,992	284,564	232,259	766,098
Nova Scotia	4,451,072	7,113,517	4,910,536	8,228,893
New Brunswick	91,835	161,649	80,544	139,497
Ontario	435,140	1,007,818	439,206	1,225,301
Manitoba	122,870	338,527	131,767	395,301
British Columbia	147,900	443,700	160,954	482,862
Totals	5,332,809	9,349,775	5,955,266	11,237,952
Total crude gypsum and anhydrite mined and quarried	5,398,527	...	6,082,297	...

TABLE 3. Producers' Shipments of Gypsum, 1954 - 63

Year	Tons	Value f.o.b. shipping point	Year	Tons	Value f.o.b. shipping point
		\$			\$
1954	3,950,422	7,094,671	1959	5,878,630	8,393,703
1955	4,667,901	8,037,153	1960	5,205,731	9,498,711
1956	4,895,811	7,260,236	1961	4,940,037	7,750,748
1957	4,577,492	7,745,105	1962	5,332,809	9,349,775
1958	3,964,129	5,189,159	1963	5,955,266	11,237,952

TABLE 4. Producers' Shipments of Gypsum, by Months, 1961 - 63

Month	1961	1962	1963	Month	1961	1962	1963
	tons				tons		
January	286,484	276,461	317,280	August	511,966	511,657	651,037
February	146,543	160,154	267,557	September	500,019	570,578	533,625
March	266,809	310,310	364,925	October	535,848	543,860	664,939
April	372,180	430,365	352,042	November	392,276	589,385	558,229
May	460,206	428,620	590,170	December	372,970	374,556	427,293
June	525,118	554,679	629,112				
July	569,618	582,184	599,057	Totals	4,940,037	5,332,809	5,955,266

Note: The totals in the above tables include gypsum recovered by all producers including operators classified as establishments in the Gypsum Mines Industry as well as other operators which have been reclassified to the Gypsum Products Industry as a result of combinations in line with the New Establishment Concept. On this account, also, value figures in the above tables are higher than the value figures shown in Table 1 B. The latter refer only to operators classified as establishments to the Gypsum Mines Industry in accordance with the new S.I.C.

TABLE 5. Imports and Exports of Gypsum, 1962 and 1963

	1962		1963	
	Tons	Value	Tons	Value
		\$		\$
Imports:				
Gypsum, crude, and gypsum, ground, not calcined	69,947	300,976	74,628	244,531
Plaster of Paris and wall plaster	7,051	309,963	8,382	360,871
Total accounted for .....	...	610,939	...	605,402
Exports:				
Gypsum, crude	4,162,997	5,630,206	4,703,118	7,674,340
Plaster of Paris, wall plaster .....	...	...	...	...
Total accounted for .....	...	...	...	...

TABLE 6. Consumption of Gypsum in the Portland Cement Industry, 1954 - 63

Year	Tons	Year	Tons
1954	210,373	1959	278,208
1955	219,461	1960	262,002
1956	234,545	1961	297,785
1957	287,786	1962	326,674
1958	293,514	1963	323,234

TABLE 7. Employees and their Earnings, Gypsum Mines, 1958 - 63

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees					Man- hours worked (all em- ployees)	Earnings		
	Administrative and office		Workmen		Total		Adminis- trative and office	Workmen	Total
	Male	Female	Male	Female					
	number						dollars		
1958	85	7	407	2	501	1,316,227	427,010	1,363,659	1,790,669
1959	99	10	644	2	755	1,663,309	522,136	2,169,284	2,691,420
1960	99	10	574	2	685	1,375,529	519,377	1,912,352	2,431,729
1961	94	8	510	1	613	1,173,122	500,161	1,772,316	2,272,477
1962	99	11	497	7	608	1,248,424	571,584	1,836,078	2,407,662
1963	106	8	565	1	680	1,481,113	625,464	2,250,781	2,876,245

TABLE 8. Number of Workmen, by Months, Gypsum Mines, 1962 and 1963

Month	1962					1963				Total
	Mine			Mill	Total	Mine			Mill	
	Surface		Under-ground	Male		Surface		Under-ground	Male	
	Male	Female				Male	Female			
January	321	1	11	39	372	380	1	—	39	420
February	331	1	11	39	382	369	1	—	36	406
March	338	1	11	50	400	409	1	—	38	448
April	394	1	14	55	464	452	1	—	48	501
May	450	1	13	64	528	533	1	9	59	602
June	478	1	1	71	551	573	1	10	75	659
July	498	1	2	72	573	541	1	10	77	629
August	503	1	1	72	577	594	1	10	68	673
September	503	1	1	73	578	586	1	10	55	652
October	467	1	10	76	554	578	1	10	55	644
November	450	1	13	71	535	537	1	10	57	605
December	391	1	—	58	450	497	1	10	47	555
Averages	428	1	7	62	498	504	1	7	54	566
Man hours worked.....					1, 028, 245					1, 235, 661

TABLE 9. Fuel and Electricity Used, Gypsum Mines, 1963

Kind	Quantity	Cost at plant
		\$
Bituminous coal (a) From Canadian mines	—	—
(b) Imported	—	—
Sub-bituminous coal (from Alberta mines only)	—	—
Anthracite coal	—	—
Lignite coal	—	—
Coke (for fuel only)	—	—
Gasoline, (includes gasoline used in cars and trucks) Imp. gal.	50,598	18,968
Kerosene or coal oil	—	—
Fuel oil	Imp. gal.	236,239
Wood (cords of 128 cubic feet of piled wood)	—	—
Gas (a) Liquefied petroleum gases (propane, etc.)	—	—
(b) Other manufactured gas	—	—
(c) Natural gas	—	—
Other fuel	—	—
Electricity purchased for power and lighting kwh.	10,608,924	193,320
Electricity purchased for other purposes	—	—
Total (cost only) .....	...	448,527
Electricity generated (a) For own use	—	—
(b) For sale	—	—

TABLE 10. World Production of Gypsum, by Countries¹

Country ¹	1959	1960	1961	1962	1963
thousand short tons ²					
North America:					
Canada ³	5,983	5,093	5,060	5,333	5,932
Cuba ⁴	45 ⁴	29	21	21	24
Dominican Republic	175	358	451	485 ⁴	485 ⁴
Guatemala	20	16	13	11 ⁴	11 ⁴
Jamaica	524	275	250	252	256
Mexico	913	871	857	876	1,210
Nicaragua	—	—	—	4	3
Trinidad	5	7	4	4 ⁴	4 ⁴
United States	10,900	9,825	9,500	9,969	10,388
Totals^{1,4}	18,165	16,474	16,156	16,955	18,313
South America:					
Argentina	127	160	198	237	276
Brazil	202	114	172	119	121 ⁴
Chile	87	45	88	127 ⁴	116
Colombia	77	77	83	91	91 ⁴
Peru	61	69	65	67	72 ⁴
Venezuela	73	64	66	69 ⁴	71
Totals^{1,4}	627	529	677	710	747
Europe:					
Austria ³	621	730	750	754	644
Bulgaria	121	132	149	129	132 ⁴
Czechoslovakia	319	364	390	411	411
France ³ (saleable)	4,126	4,163	4,227	4,519	4,519 ⁴
Germany, East ⁶	279	276	284	302	303
West (marketable)	1,115	1,153	1,315	1,227	1,218 ⁶
Greece	89	94	99	99 ⁴	99 ⁴
Ireland	152	200	184	130	132 ⁴
Italy	2,186	2,098	2,315 ⁴	3,496	3,527 ⁴
Luxembourg	7	9	8	9	7
Poland	518 ⁴	573 ⁴	516	605	606 ⁴
Portugal	60	68	79	80	80 ⁴
Spain	2,357	2,296	2,822	3,287	3,307 ⁴
Switzerland	110	110 ⁴	110 ⁴	110 ⁴	110 ⁴
U.S.S.R.	7,275 ⁴	7,715 ⁴	8,000 ⁴	8,275 ⁴	8,815 ⁴
United Kingdom ³	3,794	4,026	4,179	4,479	4,614
Yugoslavia	102	137	138	110 ⁴	156
Totals^{1,4}	23,310	24,230	25,620	28,130	28,790
Asia:					
Burma	2	1	1	2	2 ⁴
China ⁴	550	650	450	450	550
Cyprus	94	106	56	44 ⁴	44 ⁴
India	948	1,099	953	1,239	1,309
Iran ^{4,7}	440	440	600	600	550
Iraq ⁴	440	440	^s 600	^s 600	^s 550
Israel ⁴	66	66	88 ⁷	84 ⁷	85 ⁷
Japan	596	810	799	882	863
Jordan	—	—	8	10	10
Mongolia	10	10	10	10	15
Pakistan	109	100	112	167	165 ⁴
Philippines	2	10	9	16	35
Saudi Arabia	—	—	—	12 ⁴	12 ⁴
Syrian Arab Republic ⁸	7 ⁴	15	9	17	17 ⁴
Taiwan (Formosa)	11	12	13	18	29
Thailand (Siam)	9	16	13	23	26
Turkey	57 ⁴	67	66 ⁴	154	198
Totals^{1,4}	3,341	3,842	3,627	4,168	4,350

See footnotes at end of table.

TABLE 10. World Production of Gypsum, by Countries¹ - Concluded

Country ¹	1959	1960	1961	1962	1963
thousand short tons ²					
Africa:					
Algeria	189	195	195 ⁴	195 ⁴	195 ⁴
Angola.....	15	14 ⁴	14 ⁴	18	18 ⁴
Congo, Republic of the	—	—	—	—	—
Kenya	15	19	22	29	22
Morocco	28 ⁴	28 ⁴	28 ⁴	28 ⁴	28 ⁴
South Africa, Republic of	224	216	191	212	207
Sudan	2 ⁴	—	6	2 ⁴	5
Tanganyika	8	5	1	2	2
Tunisia	13	15	18	18	20
United Arab Republic (Egypt).....	577	441	510	515	515 ⁴
Totals	1,071	933	985	1,019	1,012
Oceania:					
Australia	579	651	683	707	740 ⁴
New Caledonia	—	—	—	—	—
Totals	579	651	683	707	740⁴
World totals (estimate)^{1,2}	47,500	46,660	47,750	51,690	54,000

¹ Gypsum is produced in Rumania, but production data are not available. Estimates are included in the totals. Production in Ceylon, Ecuador, and Korea is negligible.

² This table incorporates revisions. Data do not add to totals shown due to rounding where estimated figures are included in the detail.

³ Includes anhydrite.

⁴ Estimate.

⁵ Data not available; estimate included in total.

⁶ Crude production estimates based on calcined figures.

⁷ Year ended March 31 of year following that stated.

⁸ Some pure, some 80 per cent gypsum and 20 per cent limestone.

Source: The "Minerals Yearbook" published by the United States Bureau of Mines.

Operators of Gypsum Mines or Quarries, 1963

Name of firm	Head office address	Plant location
Newfoundland:		
Flintkote Company of Canada, Ltd. ¹	Box 160, Toronto 14, Ontario	Flat Bay
Nova Scotia:		
Bestwall Gypsum Co.	2 Industrial Blvd, Paoli, Penna. USA	River Denys
Domtar Construction Materials Ltd.	2210 Place Ville Marie, Montreal, P.Q.	Windsor, Nappan
Fundy Gypsum Co. Ltd. ¹	Box 400, Windsor, N.S.	Hants
Little Narrows Gypsum Co. Ltd. ¹	790 Bay St., Toronto, Ontario	Little Narrows
National Gypsum (Canada) Ltd. ¹	Box 637, Dartmouth, N.S.	East Milford, Cheverier, Walton
New Brunswick:		
Canada Cement Co. Ltd.	Box 490, Station B, Montreal, Quebec.....	Westmorland
Canadian Gypsum Co. Ltd.	Box 4034, Postal Station A, Toronto, Ontario	Hillsborough
Ontario:		
Canadian Gypsum Co. Ltd.	Box 4034, Postal Station A, Toronto, Ont.	Hagersville
Domtar Construction Materials Ltd.	2210 Place Ville Marie, Montreal, P.Q.	Caledonia
Manitoba:		
Domtar Construction Materials Ltd. ¹	2210 Place Ville Marie, Montreal, P.Q.	Gypsumville
Western Gypsum Products Ltd. ¹	2650 Lakeshore Hwy., Clarkson, Ontario	Amaranth
British Columbia:		
Western Gypsum Products Ltd. ¹	2650 Lakeshore Hwy., Clarkson, Ontario	Windermere

¹ Terms in the Gypsum Mines Industry.

Note: Firms in the above directory include all producers including operators classified as establishments in the Gypsum Mines Industry as well as other operators which have been reclassified to the Gypsum Products Industry as a result of combinations in line with the New Establishment Concept.

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