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GYPSUM MINES

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GYPSUM MINES

1965

This report includes statistics for industry 073—Gypsum Mines of the Standard Industrial Classification Manual (Catalogue No. 12-501). For statistical purposes, the industry Gypsum Mines is defined as including establishments primarily engaged in mining gypsum. Establishments primarily engaged in manufacturing gypsum products which also mine gypsum, are classified in Industry No. 345—Gypsum Products Manufacturers.

Additional information on gypsum is shown in Review 24 published by the Department of Energy, Mines and Resources, 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 impervious, dispersed soil, and as a fertilizer of peanuts and other leguminous crops.

Data presented in this report under the heading of Gypsum Mines (Tables 1-8) reflect the full implementation of the revised Standard Industrial Classification (S.I.C.) and the New Establishment Concept including an extension of the latter to cover total activities of mining establishments (see Explanatory Notes section of 1964 report). Commodity statistics reflecting total production from all sources, world figures on production, trade data, etc. are presented along the same general lines as in the earlier issues of this report.

The combination of improvements in internal procedures with the introduction of the final stage of the establishment concept in the annual Census of Mining produced changes which, for some industries, required major adjustments in industry statistical data—see Explanatory Notes. However, in the case of the industry under review in this report, the changes were relatively minor as evidenced in the comparative series of statistics presented in Tables 1 and 2.



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.
- p preliminary figures.
- r revised figures.

TABLE 1. Principal Statistics, Gypsum Mines, 1961-65

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab- lish- ments	Mining activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of production	Value added	Working owners and partners		Employees		Value added
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961	8	498	1,008	1,736	300	1,636	5,826	3,890	—	—	599	2,231	3,883
1962	9	485	1,009	1,812	350	1,707	8,211	6,154	—	—	594	2,379	6,143
1963	9	565	1,236	2,293	450	2,233	9,771	7,089	—	—	677	2,919	7,076
1964	10	591	1,273	2,553	486	2,058	10,391	7,847	—	—	710	3,278	7,902
1965	10	531	1,089	2,272	424	1,460	9,742	7,858	—	—	646	2,966	7,885

Note: Refer to Explanatory Notes 1964 issue, for explanation of concepts and definitions. See also text page 5 and Note Table 10.

TABLE 2. Employment and Payroll, Gypsum Mines, 1961-65

Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office		Sales and distribution		Total		Production and related workers		Admin- istrative and office	Sales and distrib- ution	Total
	Manufacturing		Other								Manufacturing	Other			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female					
	number										\$'000				
1961	497	1	—	—	93	8	—	—	590	9	1,736	—	495	—	2,231
1962	484	1	—	—	98	11	—	—	582	12	1,812	—	567	—	2,379
1963	564	1	—	—	104	8	—	—	668	9	2,293	—	625	—	2,919
1964	590	1	6	—	105	8	—	—	701	9	2,553	28	697	—	3,278
1965	529	2	—	—	107	8	—	—	636	10	2,272	—	694	—	2,966

TABLE 3. Production and Related Workers, Gypsum Mines, 1964 and 1965

Basis: Revised Standard Industrial Classification and New Establishment Concept

Month	1964		1965	
	Male	Female	Male	Female
	number			
January	515	1	441	2
February	479	1	431	2
March	508	1	437	2
April	591	1	502	2
May	672	1	585	2
June	688	1	592	2
July	630	1	605	2
August	680	1	606	2
September	653	1	586	2
October	617	1	569	2
November	563	1	516	2
December	494	1	465	2
Averages	590	1	529	2

TABLE 4. Purchased Fuel and Electricity Used in Gypsum Mines, 1964 and 1965

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	1964		1965	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
Bituminous coal:				
(a) From Canadian mines	-	-	-	-
(b) Imported	-	-	-	-
Sub-bituminous coal (from Alberta mines only)	-	-	-	-
Anthracite coal	-	-	-	-
Lignite coal	-	-	-	-
Coke	-	-	-	-
Gasoline (including gasoline used in cars and trucks) Imp. gal.	41,893	17	44,637	16
Fuel oil including kerosene or coal oil "	1,486,716	256	1,294,851	201
Wood	-	-	-	-
Gas:				
(a) Liquefied petroleum gases Imp. gal.	-	-	2,270	794
(b) Other manufactured gas	-	-	-	-
(c) Natural gas	-	-	-	-
Other fuel	-	...	-
Electricity purchased kwh.	14,108,820	214	13,247,992	205
Steam purchased	-	...	-
Total fuel and electricity used	486	...	424
Electricity generated:				
(a) For own use	-	-	-	-
(b) For sale	-	-	-	-

TABLE 5. Materials and Supplies,¹ Gypsum Mines, 1964 and 1965

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Cost	
	1964	1965
	\$'000	
Ore or other semi-processed materials purchased and used in mine/mill operations	-	-
Containers, shipping materials and supplies used	3	-
Operating, maintenance and repair supplies used (excluding fuel)	1,804	1,299
Amount paid out to others for work done on materials owned by establishments	250	161
Totals	2,058	1,460

¹ Refer to Explanatory Notes, 1964 report for explanation of concepts and definitions.**TABLE 6. Value of Production, Gypsum Mines, 1964 and 1965**

Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Value	
	1964	1965
	\$'000	
1. Value of production:		
Crude gypsum and anhydrite	10,391	9,742
2. Amount received in payment for work done on materials and products owned by others	-	-
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above	-	-
Total value of production and work done	10,391	9,742

Note: See footnote Table 5 and Note Table 10.

TABLE 7. Drilling Completed on Gypsum¹ Deposits, 1964 and 1965

	Footage drilled	
	1964	1965
Diamond drilling for exploration and testing:		
By mining companies with their own personnel and equipment	—	5,329
By diamond drilling contractors	—	4,541
Other diamond drilling:		
Blast hole diamond drilling:		
By mining companies, with their own personnel and equipment	—	—
By diamond drilling contractors	—	—
Drilling by percussion or other machines ²	535,227	745,527

¹ Drilling done by firms classified to this industry.² Not complete as records are unobtainable at certain mines.TABLE 8. Specified Taxes Paid by Companies Engaged in Gypsum Mines Operations,¹ 1964 and 1965

Taxes paid	1964	1965
	\$'000	
Dominion income taxes	354	512
Provincial taxes	319	330
Municipal taxes	274	270

¹ Includes related corporate activities associated with operations of gypsum mines.TABLE 9. Miscellaneous Expenditures Made by Companies Engaged in Gypsum Mines Operations,¹ 1964 and 1965

	1964	1965
	\$'000	
(a) Workmen's compensation	35	51
(b) Silicosis treatment	—	—
(c) Unemployment insurance	29	41
(d) Aggregate cost of structures, roads, machinery, equipment etc., built by or purchased from outside contractors or supplies and chargeable to Fixed Assets Account	636	524
(e) Book value of fixed assets (new structures, roads, machinery, equipment, etc., including major repairs and alterations) produced by own employees and chargeable to Fixed Assets Account	332	52
(f) Other capital expenditures not reported in (d) and (e)	214	130
(g) Cost of materials and supplies used in the production of machinery and equipment and in the construction of roads and new structures (including major repairs and alterations by own employees and chargeable to Fixed Assets Account)	298	40
(h) Cost of office supplies used during the year, not chargeable to Fixed Assets Account. Excludes cost of stamps or meter expenses	16	18

¹ Includes related corporate activities, associated with Canadian operations of gypsum mines not allocable separately elsewhere.

TABLE 10. Producers' Shipments of Gypsum, by Province, 1964 and 1965

Province	1964		1965	
	Tons	Value less containers	Tons	Value less containers
		\$'000		\$'000
Newfoundland	331,990	893	442,685	1,089
Nova Scotia	5,097,232	8,082	4,862,485	8,620
New Brunswick	104,100	215	101,012	211
Ontario	517,239	1,377	531,918	1,444
Manitoba	121,555	374	159,854	521
British Columbia	188,569	582	207,705	648
Totals	6,360,685	11,524	6,305,629	12,533
Total crude gypsum and anhydrite mined and quarried	6,420,038	...	6,112,078	...

Note: The totals in Tables 10-12 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. The latter refer only to operators classified as establishments to the Gypsum Mines Industry in accordance with the new S.I.C.

TABLE 11. Producers' Shipments of Gypsum, 1956-65

Year	Tons	Value f.o.b. shipping point	Year	Tons	Value f.o.b. shipping point
		\$'000			\$'000
1956	4,895,811	7,260	1961	4,940,037	7,751
1957	4,577,492	7,745	1962	5,332,809	9,350
1958	3,964,129	5,189	1963	5,955,266	11,238
1959	5,878,630	8,394	1964	6,360,685	11,524
1960	5,205,731	9,499	1965	6,305,629	12,533

TABLE 12. Producers' Shipments of Gypsum, by Months, 1964 and 1965

Month	1964	1965	Month	1964	1965
	tons			tons	
January	340,702	345,954	August	643,995	707,348
February	298,022	237,162	September	630,843	637,990
March	419,869	364,738	October	700,497	632,193
April	451,204	501,461	November	543,585	528,125
May	602,627	610,325	December	381,364	447,038
June	644,931	659,146			
July	703,046	634,149	Totals	6,360,685	6,305,629

See Note Table 12.

TABLE 13. Imports and Exports of Gypsum, 1964 and 1965

	1964		1965	
	Tons	Value	Tons	Value
		\$'000		\$'000
Imports:				
Gypsum, crude and gypsum, ground, not calcined	80,940	715	75,433	267
Plaster of Paris, wall plaster	4,141	196	4,722	199
Exports:				
Gypsum, crude	5,057,253	9,061	4,746,638	8,335,175
Plaster of Paris, wall plaster	—	—	—	—

Source: "Trade of Canada, Imports by Commodities", Catalogue No. 65-007 and "Trade of Canada, Exports by Commodities" Catalogue No. 65-004.

TABLE 14. Consumption of Gypsum in the Portland Cement Industry, 1956-65

Year	Tons	Year	Tons
1956	234,545	1961	297,785
1957	287,786	1962	326,674
1958	293,514	1963	323,234
1959	278,298	1964	359,988
1960	262,002	1965	405,889

TABLE 15. World Production of Gypsum, by Countries,¹ 1961-65

Country ¹	1961	1962	1963	1964	1965
	thousand short tons				
North America:					
Canada ¹	5,060	5,398	6,082	6,361	6,211
Cuba ¹	21	21	24
Dominican Republic	451	484	39	121	99
Guatemala	13	11 ²	16	17 ²	17 ²
Jamaica	250	252	256	215	215
Mexico	857	876	1,210	1,284	1,192
Nicaragua	—	4	3	6	6
Trinidad	3	4	3	3	2
United States	9,500	9,969	10,388	10,684	10,035
Totals ²	16,155	17,019	18,021	18,691	17,777
South America:					
Argentina	212	237	216	166	220 ²
Brazil	172	119	132	93	165 ²
Chile	88	127 ²	116	131	118
Colombia	83	91	112	118	123
Paraguay	—	—	—	1	2
Peru	70	67	58	72	102
Venezuela	66	69 ²	71	72 ²	83 ²
Totals ²	691	710	705	633	813

See footnotes at end of table.

TABLE 15. World Production of Gypsum, by Countries,¹ 1961-63 - Concluded

Country ¹	1961	1962	1963	1964	1965
thousand short tons					
Europe:					
Austria ¹	750	754	644	626	681
Bulgaria	149	129	110	121 ²	121
Czechoslovakia	390	411	333	387	410
France ¹ (saleable)	4,227	4,406	4,639	5,415	5,401 ²
Germany, East ⁴	284	302	284	295	298
West (marketable)	1,315	1,227	1,168	1,329	1,362
Greece	99	104	105 ²	88 ²	110 ²
Ireland	184	194	225	251	241 ²
Italy	2,293	2,377	2,633	2,646 ²	2,646
Luxembourg	8	9	7	8	6
Poland	516	605	645	645 ²	661 ²
Portugal	79	80	66	72	72 ²
Spain	2,822	3,287	4,258	3,147	3,147 ²
Switzerland ²	110	110	110	110	110
U.S.S.R.	4,912	4,824	4,673	4,633	4,740 ²
United Kingdom ³	4,179	4,479	4,567	5,056	4,911
Yugoslavia	107	110 ²	156	170	154
Totals ²	22,510	23,520	24,730	25,110	25,180
Africa:					
Algeria ²	195	195	195	195	195
Angola	13	18	16	15 ²	15 ²
Ethiopia	—	—	—	4 ²	3 ²
Kenya	22	30	23	31	37
Libya	—	—	—	—	2
Morocco ²	28	28	33	33	33
Niger	—	—	—	—	—
South Africa, Republic of	191	212	207	265	335
Sudan	6	8	5	5	5
Tanzania	1	2	2	3	3
Tunisia	18	18	20	20 ²	20 ²
United Arab Republic (Egypt)	510	515	500	372	513
Totals ²	984	1,026	1,001	943	1,165
Asia:					
Burma	1	2	1	1 ²	1 ²
China, mainland ²	450	450	550	650	650
Cyprus	115	115	110	50	67 ²
India	953	1,239	1,313	970	1,265
Iran ^{2,6}	440	1,100	1,100	1,300	1,700
Iraq ²	550	550	550	550	550
Israel ^{2,6}	88	82	115	121	121
Japan	799	882	863	826	827 ²
Jordan	8	10	10 ¹	—	—
Mongolia ²	11	11	17	22	22
Pakistan	113	201	218	215	162
Philippines	9	16	34	45	30
Saudi Arabia	—	12 ²	40 ²	33 ²	25
Syrian Arab Republic	9	17	17	22	17 ²
Taiwan	14	18	29	19	31
Thailand	13	23	26	46	12
Turkey	66 ⁴	154	198	220 ²	243 ²
Totals ²	3,639	4,882	5,191	5,092	5,723
Oceania:					
Australia	683	707	770	881	948 ²
World totals ^{1,2}	44,660	47,870	50,420	51,370	51,610

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

² Estimate.

³ Includes anhydrite.

⁴ Crude production estimates based on calcined figures.

⁵ Less than 1/2 unit.

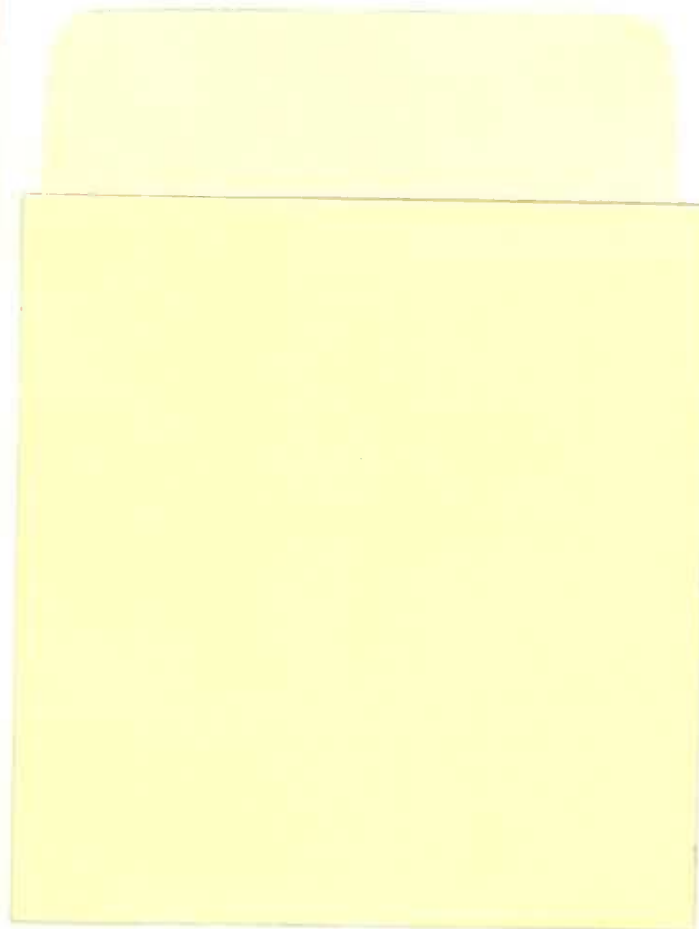
⁶ Year ended March 31 of year following that stated.

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

List of Establishments classified to this Industry, 1965

(Does not include establishments classified to other industries, particularly S.I.C. Industry No. 345 - Gypsum Products Manufacturers, which operate quarries as part of their manufacturing establishments.)

Name of firm	Head office address	Plant location
Newfoundland:		
Flintkote Company of Canada, Ltd.	Box 60, New Toronto, Ontario	Flat Bay
Nova Scotia:		
Georgia-Pacific Corporation	Port Hawkesbury	River Denys
Fundy Gypsum Co. Ltd.	Box 4034, Terminal A, Toronto, Ontario	Hants
Little Narrows Gypsum Co. Ltd.	790 Bay St., Toronto, Ontario	Little Narrows
National Gypsum (Canada) Ltd.	Box 637, Dartmouth, N.S.	East Milford, Walton
Manitoba:		
Domtar Construction Materials Ltd.	2210 Place Ville Marie, Montreal, P.Q.	Gypsumville
Western Gypsum Products Ltd.	2650 Lakeshore Hwy., Clarkson, Ontario	Amaranth and Silver Plains
British Columbia:		
Western Gypsum Products Ltd.	2650 Lakeshore Hwy., Clarkson, Ontario	Windermere



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