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DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

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MINING, METALLURGICAL & CHEMICAL STATISTICS

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THE SAND AND GRAVEL INDUSTRY

IN

CANADA

1947



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THE SAID AND GRAVEL INDUSTRY - 1947

The commercial production of sand and gravel in Canada during 1947 amounted to 56,789,569 tons valued at \$23,114,431 compared with 39,949,994 tons valued at \$15,529,700 in 1946, an increase of 42 per cent in tonnage and 49 per cent in value. The totals included sand and gravel used by railroads as ballast, gravel used by mines as backfill and recoveries of sand by dredges as well as similar materials from other sources.

Ontario was the leading province with a production of 20,230,499 tons, with Quebec continuing in second position with 16,537,303 tons. Canadian sand and gravel plants screened or washed 7,330,996 tons in 1947 compared with 6,152,580 tons in 1946, and the quantity of bank or pit-rum grades amounted to 49,458,573 tons compared with 33,797,414 tons in the preceding year.

Of the sand and gravel (mixed) output in 1947, there were 41,887,705 tons used for roads, concrete etc., and 3,418,072 tons of straight-rum sand for building, concrete etc.; 26,397 tons for moulding; 2,519 tons for core sand, and 43,653 tons for other purposes. The quantity of crushed gravel produced during the year was 5,356,229 tons. Other sand used as mine backfill in 1947 totalled 1,894,443 tons.

Imports of sand and gravel amounted to 94,335 tons valued at \$85,216 in 1947 and exports totalled 376,536 tons valued at \$295,301.

The following extract with regard to sand and gravel in Canada has been taken from the annual review by the Bureau of Mines, Ottawa:

"Deposits of sand and gravel are numerous throughout Canada, with the exception of parts of the western prairies, although gravels do not cover such large areas as sands. Some grades of sand particularly suitable for certain industries command a much higher price than does ordinary sand. Such grades, either form natural deposits or are processed by the sand-excavating firms in compliance with specifications supplied by customers.

"Road construction and improvement, concrete works, railway ballast, and airport runways absorb by far the greater part of the gravel and much of the sand used. Gravel in particular has proved a good material for low cost, all-weather road surfaces and also for pavement bases on rural highways, and its use has steadily increased with the growth of motor traffic. On main railway lines gravel ballast is being gradually replaced by crushed stone ballast. This practice was started many years ago but the large increase in rail traffic during the late war greatly intensified the work of replacement. A considerable tonnage of sand and gravel is also used for re-filling the worked out parts of mines.

"Most of the gravel used for road work comes from pits worked for that purpose. Usually a portable or semi-portable plant is used to extract enough gravel to supply the immediate need and then a sufficient reserve is built up, in the form of stock piles, for several years' requirements. Road pits may remain idle for two years or more. The amount of gravel produced from year to year depends upon the program of road construction and improvement and thus operation of the pits is intermittent. This pertains also to railway pits, which may remain idle for several years.

"Part of the gravel used is crushed, screened, and in some cases washed, and the proportion thus processed is increasing steadily. Some provincial highway departments have used crushed instead of pitrun gravel on their main highways for a number of years. Most of the large commercial plants are equipped for producing crushed gravel, a product that can compete with crushed stone.

"Most of the sand excavated is used in the building industry, such as concrete work, cement and lime mortar, and wall plaster. For these purposes the sand must be free from dust, loam, organic matter, and clay, but the specifications are otherwise fairly broad, and the sand can usually be obtained from local deposits. Special grades of sand are required for moulding in foundries; filtering of water supply; and glass-making."

Table 1 - PRINCIPAL STATISTICS (x) FOR THE SAND AND GRAVEL INDUSTRY IN CANADA, 1946 and 1947

Province	Estab-	Em-	Salaries and	Cost of fuel and electri-	Cost of process	Gross value of products sold during year
1 9 4 6	Mo.	No.	Wages	city	supplies	(f.o.b. works)
Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	4 5 893 620 11 7 6 22	291 255 1,102 539 230 135 .36 205	248,549 256,924 1,118,710 871,116 441,663 80,904 52,717 343,293	1,950 983 92,989 295,218 19,599 501 20,723 69,504	168 420 11,169 23,289 22,008 11,212 3,595 6,161	450,293 680,380 3,189,541 6,342,488 375,489 865,249 1,006,354 1,742,139
TOTAL	1,568	2,793	3,413,876	501,467	78,022	14,651,933
1 9 4 7						
Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia	887 635 13 24 6	444 339 1,240 684 288 151 56 228	387,274 461,921 1,424,181 1,310,990 469,885 104,887 97,552 451,271	18,078 195 103,513 413,388 21,897 1,988 24,876 102,550	12,892 54,094 31,649 14,830 4,259 8,818	1,337,547 1,178,640 4,733,362 8,692,201 506,836 1,094,281 1,118,537 3,638,993
TOTAL	1,598	3,430	4,707,961	686,485	126,542	22,300,397

⁽x) Does not include data on sand and gravel produced by railroads. In 1947, railroad production by 23 operators was 4,091,032 tons valued at \$814,034. Salaries and wages paid to workers at these pits was \$233,187 for the year. In 1946, railroad production by 21 operators was 4,255,306 tons valued at \$877,767 and salaries and wages totalled \$186,921.

Table 2 - PRODUCTION (x) OF SAND AND GRAVEL IN CANADA, 1938-1947

Year	Tons	*
1938	32,223,882	12,002,554
1939	31,294,341	11,241,102
1940	31,375,415	11,759,245
1941	31,604,806	10,375,723
1942		9,005,414
1943		9,005,857
1944		10,280,119
1945		10,568,363
1946		15,529,700
1947		23,114,431

⁽x) Does not include production of natural silica sand or of silica sand manufactured from quarts or silica rock; production of these are recorded under quartz.

Table 3 - PRODUCTION IN CANADA OF SAND AND GRAVEL, 1946 and 1947

adie) - Modociton in Canada or Sand and Charles, 1740 and	Washed or screened	Bank or pit run	Total Value
	tons	tons	\$
1 9 4 6			
Production (x) - Sand:			
Moulding sand	24.411	7,964	61,419
Building sand and sand for concrete, roadwork, etc	2,558,531	863,299	1,681,572
Core sand	918	1,439	4,091
Mine filling	52,956	1,971,073	426,063
Other sand (including blast sands, engine sands, etc.)	8,807	50,637	15,026
Sand and Gravel:			
Sand and gravel for railway ballast	207,229	3,760,894	867,616
Sand and gravel for concrete, road-building, etc	2,383,513	24,256,603	10,530,718
Crushed gravel	916,215	2,885,505	1,943,195
TOTAL	6,152,580	33,797,414	15,529,700
1 9 4 7			
roduction (x) -			
Sand:	20 160	1 020	/2 82/
Moulding sand	21,467	4,930	61,736
Core sand	2,504,669	913,403	1,981,328
Mine filling	25,743	1,868,100	429,946
Other sand (including blast sands, engine sands, etc.)	3,411	40,242	13,900
Sand and Gravel:	010 00		
Sand and gravel for railway ballast	312,905	3,848,246	986,241
Sand and gravel for concrete, road-building, etc Crushed gravel	2,997,730	38,889,975	16,619,097
ormaned Braker sessessessessessessessessessesses	1,465,071	3,891,158	3,017,733
TOTAL	7,330,996	49,458,573	23,114,431

⁽x) Does not include production of natural silica sand or of silica sand manufactured from quartz or silica rock; production of these are recorded under quartz in the bulletin "The Feldspar and Quartz Mining Industry".

Table 4 - PRODUCTION OF SAND AND GRAVEL, BY PROVINCES, 1943-1947

Province		1943	1944	1945	1946	1947
Prince Edward Island		No commercial	production rep	ported.		
Nova Scotia	Tons	917,376	911,970	1,308,848	1,105,980	2,966,680
	\$	585,007	411,041	555,809	484,585	1,363,363
New Brunswick	Tons	719,531	1,960,382	1,627,371	2,203,646	3,464,347
	\$	372,936	958, 524	686,267	807,045	1,278,376
Quebec	Tons	10,601,376	8,541,400	8,971,960	12,374,125	16,537,303
	\$	2,362,635	2,140,856	2,279,537	3,313,103	4,877,339
Ontario	Tons	8,285,309	9,529,803	10,466,891	14,881,918	20,230,499
	\$	3,620,852	4,417,427	4,466,862	6,738,595	9,034,131
Manitoba	Tons	1,048,673	1,102,448	1,497,062	1,333,890	1,765,976
	\$	293,938	296,086	516,380	416,431	549,640
Saskatchewan	Tons	1,288,263	1,163,097	1,237,595	1,732,731	2,131,705
	8	583,687	533,175	563,276	910,661	1,137,609
Alberta	Tons	626,157	833.524	919,736	1,812,468	2,058,142
	\$	309,389	328,151	433,436	1,060,703	1,170,883
British Columbia	Tons	2,257,784	4,357,362	3,721,240	4,505,236	7,634,917
	\$	877,413	1,194,859	1,066,796	1,798,577	3,703,090
CANADA	Tons	25,744,469	28,399,986	29,750,703	39,949,994	56,789,569
	\$	9,005,857	10,280,119	10,568,363	15,529,700	23,114,431

Table 5 - PRODUCTION OF WASHED AND SCREENED AND PIT RUN GRADES, BY PROVINCES, 1947

Province	Washed or, screened	Bank or pit run	Total Value
	tons	tons	\$
Nova Scotia	218,070	2,748,610	1,363,363
New Brunswick	1,209,373	3,464,347 15,327,930	1,278, 376 4,877. 339
Ontario	3,933,961 82,591	16,296,538	9,034,131 549,640
Saskatchewan	861	2,130,844	1,137,609
Alberta	349,993 1,536,147	1,708,149 6,098,770	1,170,883 3,703,090
TOTAL	7,330,996	49,458,573	23,114,431

Table 6 - PRODUCTION OF SAND FOR BUILDING AND FOR CONCRETE, ROADS, ETC., AND SAND AND GRAVEL FOR PAILWAY
BALLAST AND FOR CONCRETE, ROADS, ETC., 1938-1947

	Sa	n d		Sand an	d Grave	avel	
Year	For buildin roads, e	g, concrete,	For railwa	ay ballast	For concrete, roads, etc.		
	Tons	\$	Tons	\$	Tons	\$	
1938	1,750,187	685,976	2,359,703	443,936	22,513,256	9,101,882	
1939	1,169,899	364,829	3,223,718	603,288	22,899,751	8,988,114	
1940	1,961,604	537,937	3,834,904	699,518	21.465.961	9,100,612	
1941	2,192,405	729,901	4,836,908	916,979	19,769,798	7,135,258	
1942	2,535,366	934.777	4,610,323	957,781	16,139,859	6,010,412	
1943	1,970,316	775,392	3,837,111	712,140	16,060,686	6,155,625	
1944	1,605,514	743,191	4,428,721	900,610	16,648,511	6,898,582	
1945	2,247,887	918,739	4,625,513	1,116,297	17,582,686	6,573,527	
1946	3,421,830	1,681,572	3,968,123	867,616	26,640,116	10,530,718	
1947 -						, , ,	
Nova Scotia		0.0 0	262,573	84.737	2,651,490	1,210,892	
New Brunswick	1,164	302	191,546	28,377	3,154,669	1,179,030	
Quebec	1,282,027	690,973	401,622	80,230	11,509,773	2,619,782	
Ontario	1,766,177	1,100,291	2,319,453	559,901	13,816,096	5,923,853	
Manitoba	97,437	47,199	327,234	87,218	1,251,863	345,744	
Saskatchewan	25,776	3,832	247,070	42,656	1,858,859	1,091,121	
Alberta	82,684	57,851	199,018	35,097	1,495,196	988,716	
British Columbia	162,807	80,880	212,635	68,025	6,149,759	3,259,959	
CANADA, 1947 .	3,418,072	1,981,328	4,161,151	986,241	41,887,705	16,619,097	

⁽x) Exclusive of engine and other sands and mine fill.

Table 7 - PRODUCTION OF MOULDING AND CORE SAND AND CRUSHED GRAVEL, BY PROVINCES, 1947

Province	Mouldi	ng Sand	Core	Sand	Crushed	Gravel
Frovince	Tons		Tons	\$	Tons	\$
Nova Scotia	1,505	6,400			51,112	61,334
New Brunswick	***	* * *			116,968	70,667
Quebec	24,174	54,618 718	2,420	4,368	3,077,808 1,380,148 84,874	1,413,242 1,133,040 67,151
Saskatchewan	* * *					
Alberta		***			281,244 364,075	89,219 183, 080
CANADA, 1947	26,397	61,736	2,519	4,450	5,356,229	3,017,733
CANADA, 1946	32,375	61,419	2,357	4,091	3,801,720	1,943,195

Table 8 - WORKMEN (x) IN THE SAND AND GRAVEL INDUSTRY IN CANADA, BY MONTHS, 1946 and 1947

		1 9 4 6			1 9 4 7	
Month	Male	Female	Total	Male	Female	Total
January	648	4	652	753	1	754
February	660	7.	664	788	ī	789
March	771	7	775	966	ī	967
April	871	8	879	1,192	9	1,201
May	3,226	10	3,236	3,756	12	3,768
June	7,520	13	7,533	9,584	10	9,594
July	7,698	14	7,712	9,707	11	9,718
August	3,814	14	3,828	4,492	51.	4,543
September	3,419	14	3,433	4,014	11	4,025
October	1,286	14	1,300	1,576	10	1,586
November	1,093	11	1,104	1,289	9	1,298
December	830	6	836	1,018	4	1,022
AVERAGE	2,658	12	2,670	3,273	10	3,283

⁽x) This report does not include employment data relating to the production of sand and gravel by rail-roads owing to the difficulty of separating statistics pertaining to part-time work conducted by railroad maintenance employees and work done by contractors. In 1947, the combined amount paid by railroads to contractors and wages paid railroad employees for the production of sand and gravel totalled \$233,187.

Table 9 - FUEL AND ELECTRICITY USED, 1946 and 1947 (x)

Kind	Unit of	1 9	4_6	1 9	4 7
ALIM	measure	Quantity	Value	Quantity	Value
			\$		*
Bituminous coal - Canadian Foreign Sub-bituminous coal (from	short ton	4,855 13,628	46,890 112,838	2,713 12,163	30,114 117,542
Alberta mines only)	short ton	58 327	368 3,446	62	762
Coke	short ton Imp.gal. Imp.gal.	776,134 18,829	219,540 4,085	936,774	268,431 861
Fuel oil	Imp.gal. cord M cu.ft.	135,657 45 158	18,144 175 95	1,172,944 33 3,966	129,850 330 1,086
Electricity purchased	K.W.H.	6,550,328	95,886	10,973,809	137,509
TOTAL			501,467		686,485

⁽x) Does not include data relating to fuel and electricity used by railroads for the production of sand and gravel.

Table 10 - POWER EQUIPMENT, 1947

	Number of units (x)	Horse power
Steam engines	22	1,106
Steam turbines		4 + 1
Diesel engines	loly.	3,348
asoline, gas and oil engines	113	5,012
ydraulic turbines or water wheels	7	240
lectric motors operated by purchased power	354	8,326
Electric motors operated by establishments' power	10	8,326 185
lotor-generator sets		
Stationary boilers	9	627
y) Includes reserve equipment		

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PRINCIPAL SAND AND GRAVEL OPERATORS - 1947

In addition to the names listed below, production has been reported by the railway companies for ballast, and also a considerable amount by counties and townships in Ontario for road use.

(w) Markets washed or screened material.

Name of Firm	Head Office Address	Location
Nova Scotia -		
Crockett, V. B.	Wallace	Belmont
Nova Scotia Department of Highways	Halifax	various
Rayner Construction Ltd. (w)	29 Commercial Rd., Leaside	Debert
New Brunswick -		
Anderson, A. W. Estate	Fairville	Fairville
Likely, Jos. A., Ltd.	Saint John	East Saint John
Mazwell, Elmer E.	St. Stephen	Charlotte County
New Brunswick Department of Highways	Fredericton	various
Quebec -		
Asselin, Adrien	112 avenue des Oblats, Quebec	Ste. Foy
Beaudry, Antoine	Lachenaie	Mascouche
Belleterre Quebec Mines Ltd.	25 Ring St. W., Toronto 1, Ont.	Guillet Tp.
Bonner Sand & Ballast Ltd. (w)	1434 St. Catherine St. W., Montreal	South Durham
Breen, Mary Ann	Guigues	Guigues
Brouillet Sand & Gravel Co. Ltd., (w)	Rawdon	Ste. Julienne
Canadian Johns-Manville Co. Ltd.	1062 Sun Life Bldg., Montreal	Asbestos
Chavot & Vincelette	St. Jean Baptiste	St. Jean Baptiste
Coaticook, City of	Coaticook	Coaticook
La Compagnie de Sable Ltée. (w)	20 - 3ième Ave., Quebec	Beauport Est
Consolidated Oka Sand & Gravel Co. Ltd. (w)	248 McCord St., Montreal	Lake of Two Mountains
East Malartic Mines Ltd.	Norrie	Fournier Tp.
Gagnon, Arthur	1740 - 4ième rue, Grand'Mere	Grand Mere
Goyer, Edouard & Frère	St. Bruno	St. Hilaire and
Y-4 A Y-4-	dan amana Pamaa Pamaanh	St. Bruno
Hains, A. Ltée.	837 avenue Royale, Beauport	Ste. Therese de Lisieux
Laberge, E.	Ste. Foy	Ste. Foy
Latulippe, P. (w)	240 rue de la Ronde, Quebec	St. Charles River
Magog, City of Malartic Gold Fields Ltd.	Magog 355 St. James St. W., Montreal	Magog Abitibi
Marchand & Frère	505 - 8e rue, Almaville-en-haut,	
Martine 2 Day Maria Consusts 343 (-)	Quebec Manhana	Mont Carmel
Montreal Dual Mixed Concrete Ltd. (w)	6301 Park Ave., Montreal	Charette
Normetal Mining Corporation Ltd.	350 Bay St., Toronto 1, Ont.	Abitibi
O'Brien Gold Mines Ltd.	Kewagama	Cadillac Tp.
Poirier, Maurice Potier & Frère	St. Felix de Valois	Notre Dame de Lourdes
Rimouski, City of	8645 Casgrain St., Montreal Rimouski	St. Andre d'Argenteuil Sacre Coeur
Robert & Dufour Enrg.	929 ave. Royale, Beauport	Ste. Therese
Angus Robertson Ltd.	5035 Western Ave., Montreal	Pontiac
St. Francis River Dredging Co. (w)	St. Francois du Lac	St. Francis River
St. Hilaire, N.	New Liverpool	Chaudiere-Bassin
Les Sables des Mille Iles Ltée. (w)	19 rue Dupont, Montreal	St. Henri de Mascouche
Sherbrooke, City of	Sherbrooke	Orford Tp.
Standard Lime Co. Ltd. (w)	Joliette	Ste. Emelie
Standard Sand & Gravel Ltd. (w)	194 rue Principale,	
	St. Felix de Valois	St. Felix de Valois
Tremblay, J. Albert (w)	221 rue Ste. Famille, Kenogami	Simard Tp.
Tremblay, Jos.	276 rue Georges, Shawinigan Falls	Almaville
Two Mountains Sand Co. Ltd.	517 Canada Cement Bldg., Montreal	Pointe Calumet

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Cooke, J. Ltd. (w) Cooper, Alf. & Co. (w) Cudsore, H. Curran & Briggs Ltd. (w) Dibblee Construction Co. Ltd. (w) Dibblee Construction Co. Ltd. (w) Dixie Sand & Gravel Ltd. (w) Dixie South Porcupine Durham Fillott, Jack Filliott, Marya Filliott,	Name of Firm	Head Office Address	Location
Arrong Bros, (w) Arford, K. R. Barnes, Ws. R. Co. Ltd. (w) Blark, Milton Blake, John Blake, John Blake, John Blake, John Burrows, J. W. Cadwell Marine Ltd. (w) Caswell Construction Ltd. Chatham Sand & Gravel Ltd. (w) Cooke, J. Ltd. (w) Cooke			
Arford, K. R. Barmes, NR. R. Co. Ltd. (w) Blafr, Milton Blafr, Milton Blafr, Milton Brass Bros. Sand Co. Burnows, J. W. Carleton Co. Burnows, J. W. Carleton Co. Carleton Co. Carleton Co. Burnows, J. W. Carleton St., Ottawa Carleton Co. Carleton Co. Burnows, J. W. Carleton St., Ottawa Carleton Co. Carleton Co. Burnows, J. W. Carleton St., Ottawa Consolidated Sand & Gravel Ltd. (w) Cooke, J. Ltd. (w) Cooke	The state of the s	75 Main St. W. Bronnton	Ohd name and The
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PRINCIPAL SAND AND GRAVEL OPERATORS - 1947 (Continued)

ame of Firm	Head Office Address	Location
ntario - (Concluded)		
National Sand & Material Co. Ltd. (w)	402 Harbour Building, Toronto	Lake Ontario
Nevill, George	R. R. 5, Aylmer West	Malahide Tp.
Northey, Cecil	Peterborough	Smith Tp.
Ontario Sand & Gravel Co. Ltd. (w)	1211 Bathurst St., Toronto	Maple
Park Bros.	Lucan	Lucan
eninsula Sand Co.	Stamford Centre	Stamford Tp.
Pioneer Construction Co. Ltd. (w)	Sudbury	Sudbury
uigley Foundry Sands	Bartonville	Waterdown
ichardson, J. E.	Thamesville	Camden Tp.
Sarjeant Co. Ltd.	2 Mary St., Barrie	Barrie
Shelton, Russell	Ingersoll	Dereham Tp.
Sherman Sand & Gravel	Port Credit	
		Port Credit
mythe, C. Ltd. (w)	Box 8, Postal Station D., Toronto 9	Mt. Dennis
peeran, Geo. A.	Brussels	Grey Tp.
pratt, G. H.	Billings Bridge	Billings Bridge
tapledon, W. H.	Britannia Heights	Britannia Heigh
touffville Sand & Gravel Ltd.	Stouffville	Stouffville
uperior Sand, Gravel & Supplies Ltd. (w)	347 Bay St., Toronto	Vaughan Tp.
nited Towing & Salvage Co. Ltd., (w)	635 Common St., Montreal, Que.	Lake Superior
ogan, David		
- ,	Goderich	Goderich
arren Bituminous Paving Co. (w)	1454 Bloor St. W., Toronto	Smith Tp.
oodbridge Sand & Gravel Co. (w)	R. R. 3, Woodbridge	Woodbridge
collatt Fuel & Supply Co. Ltd. (w)	2171 Ottawa St., Windsor	Leamington
<u>nitoba -</u> lsip Brick, Tile & Lumber Co. Ltd.	537 Portage Ave., Winnipeg	Beausejour
randon, City of	Brandon	Brandon
uilding Products & Coal Co. Ltd.		
	111 Christie St., Winnipeg	Birds Hill
reater Winnipeg Water District	185 King St., Winnipeg	Winnipeg
anitoba Department of Highways	Winnipeg	various
cCurdy Supply Co. Ltd.	Sargent & Erin Sts., Winnipeg	
rovincial Gravel & Coal Co. Ltd. (w)	356 Main St., Winnipeg	Springfield
osser, Municipality of	Rosser	Rosser
innipeg, City of	223 James Ave., Winnipeg	Birds Hill
skatchewan -	2.412	Take the second
ollins, A. E.	Cutimife	Cationife
amon, H. & Co.	Biggar	Biggar
lander, John	Flin Flon	Flin Floa
udson Bay Mining & Smelting Co. Ltd.	500 Royal Bank Bldg., Winnipeg	Flin Flon
ogan, Foster	Gull Lake	Gull Lak
cLachlan Bros.	Yorkton	Yorkton
rince Albert, City of	Prince Albert	Prince Albert
eliance Services Ltd.	Flin Flon	Flin Flon
askatchewan Department of Highways	Regina	various
ilverwood, W. A.	708 Queen St., Saskatoon	Saskatoon
berta	**	
lberta Department of Highway:	Admenton	variour
oncaster Construction Co. Ltd. (w)	Garneau Theatre, Edmonton	Edmonton
efferies & Sons Ltd. (w)	Calgary	Calgary
ountain View, Municipal District (w)	Didsbury	Didshay
Addah Calambia		
itish Columbia -	111 - 4 a - 1 a	
and the de Colombia December of the least	Victoria	various
British Columbia Department of Highways C. Electric Railway Co. Ltd. Burnaby, Corporation of	425 Carrall St., Vancouver	various Burnady

PRINCIPAL SAND AND GRAVEL OPERATORS - 1947 (Concluded)

Name of Firm	Head Office Address	Location
British Columbia - (Concluded)		
Chilliwack, City of	Chilliwack	Chilliwack
Consolidated Mining & Smelting Co. of		Kimberly and
Canada Ltd. (w)	Trail	Tadanac
Cranbrook, City of	Cranbrook	Cranbrook
Deeks Sand & Gravel Co. Ltd. (w)	1051 Main St., Vancouver	Seymour Creek
Delta, Corporation of	Ladner	Ladner
Fernie, City of	Fernie	Fernie
Gilley Bros. Ltd. (w)	902 Columbia St., New Westminster	Port Coquitlam
Highland Sand & Gravel Co. Ltd. (w)	Lynnmour	Lynnmour
Hillside Sand & Gravel Ltd. (w)	1075 Main St., Vancouver	Hillside
McHaltie, J. T.	Royal Oak P.O., Saanich	Saanich
Nelson, City of (w)	Nelson	Nelson
Pitkethly Bros. (w)	8699 Angus Drive, Vancouver	Vancouver
Port Alberni, City of	Port Alberni	China Creek
Producers Sand & Gravel Co. (1929) Ltd. (w)	1902 Store St., Victoria	Royal Bay
Road Materials Ltd. (w)	8699 Hudson St., Vancouver	North Vancouver
Saanich, Corporation of	Royal Oak P.O., Saanich	Saanich
Trail, City of (w)	1394 Pine Ave., Trail	Trail
West Kootenay Power & Light Co. Ltd. (w)	1387 Cedar Ave., Trail	Trail

