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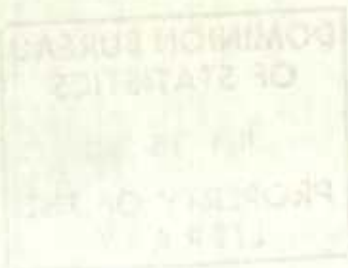
SMELTING AND REFINING 1962

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SYMBOLS

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SMELTING AND REFINING

1962

This report includes statistics for industry 295—Smelting and Refining of the Standard Industrial Classification Manual (Catalogue No. 12-501).

Data presented in Tables 1-6 of this report reflect, for the subject industry, a further advance in the implementation of the revised Standard Industrial Classification (S.I.C.) and the new Establishment Concept which are now being used by the Dominion Bureau of Statistics in its compilation of industry statistics—see text and items "Standard Industrial Classification" and "Establishment" in the Explanatory Notes of the 1961 report. Full implementation is being delayed until investigations into certain areas of the industry affected by the changes in concept are completed. Important revisions in the statistics for this industry are indicated and, under these circumstances, material presented in the current report should be considered to be provisional only. Fully revised data will be included in subsequent issues of this report and will incorporate changes for all years back to and including 1961.

Commodity statistics are shown in Table 7 and subsequent tables. These tables include data from other industries. As an example, the gold shipped by the gold quartz mines, in bullion to the mint, and in gold concentrates exported are included in Table 8. The commodity tables show the producers' shipments from all the Canadian mines, including the material which may have by-passed the smelters and refineries.

TABLE 1. Principal Statistics — Manufacturing Activity, 1957-61
Basis: Revised Standard Industrial Classification and New Establishment Concept

Year	Estab- lish- ments	Employees						Cost of fuel and elec- tricity ⁴	Cost of materials and supplies used ⁴	Value of shipments of goods of own manu- facture ^{1,4}	Value added ⁴
		Production and related workers ⁴		Administrative and office employees ³		Total ⁴					
		Number	Wages	Number	Salaries	Number	Salaries and wages				
	No.		\$'000		\$'000		\$'000				
1957	22	24,580	107,125	5,508	29,934	30,088	137,058	42,735	749,038	1,265,325	..
1958	24	21,765	99,225	5,596	33,840	27,361	133,066	43,866	666,721	1,132,702	532,213
1959	23	22,780	106,750	5,392	32,569	28,172	139,320	47,341	788,218	1,283,938	459,180
1960	22	24,411	120,509	5,613	34,906	30,024	155,415	50,787	896,613	1,506,008	558,608
1961	24	23,508	118,532	5,782	37,416	29,290	155,948	48,085	891,951	1,471,048	530,097

See footnotes following Table 3 A.

TABLE 1A. Principal Statistics — Manufacturing Activity and Total Activity, 1961 and 1962
Basis: Revised Standard Industrial Classification and New Establishment Concept

Year and province	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers ⁴			Cost of fuel and elec- tricity ⁵	Cost of materials and supplies used ⁴	Value of shipments of goods of own manu- facture ^{1,4}	Value added ⁴	Working owners and partners ⁶		Total employees ⁷		Total value added ⁴
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961													
Quebec	9	8,557	18,568	45,289	18,793	412,510	591,160	159,858	—	—	11,427	62,909	165,348
Ontario	9	9,322	18,120	45,103	20,474	352,216	638,856	266,166	—	—	11,040	56,464	266,166
Manitoba	6	5,629	13,650	28,140	9,734	127,225	241,264	104,304	—	—	7,372	39,773	104,641
Saskatchewan													
Alberta													
British Columbia													
Totals	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	—	—	29,839	159,145	536,155
1962													
Quebec	9	8,140	17,270	43,505	18,105	448,709	635,850	169,036	—	—	11,036	61,443	175,789
Ontario	8	8,748	16,654	41,917	17,987	334,435	608,216	255,793	—	—	10,487	53,840	255,828
Manitoba	6	5,733	12,394	30,627	9,611	132,822	304,982	162,550	—	—	7,780	44,157	165,204
Saskatchewan													
Alberta													
British Columbia													
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	—	—	29,303	159,439	596,819

See Table 2 and footnotes following Table 3 A.

TABLE 1B. Principal Statistics Classified by Size Groups based on Shipments of Goods of Own Manufacture, 1961 and 1962
 Basis: Revised Standard Industrial Classification and New Establishment Concept

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers ^a			Cost of fuel and elec- tricity ^b	Cost of materials and supplies used ^c	Value of shipments of goods of own manu- facture ^{d,4}	Value added ⁴	Working owners and partners ⁵		Total employees ⁷		Total value added ⁶
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
1961	No.		'000			\$'000				\$'000		\$'000	
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	-
25,000 " 49,999	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000 " 99,999	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 " 199,999	4	552	1,130	2,421	1,506	4,341	8,216	2,370	-	-	660	3,011	2,370
200,000 " 499,999													
500,000 " 999,999													
1,000,000 " 4,999,999													
5,000,000 and over	20	22,956	49,208	116,111	47,494	887,610	1,463,063	527,958	-	-	29,179	156,134	533,785
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	-	-	29,839	159,145	536,155
1962													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	-
25,000 " 49,999	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000 " 99,999	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 " 199,999	-	-	-	-	-	-	-	-	-	-	-	-	-
200,000 " 499,999	-	-	-	-	-	-	-	-	-	-	-	-	-
500,000 " 999,999	3	772	1,528	3,243	1,653	4,214	10,033	4,167	-	-	928	4,376	4,229
1,000,000 " 4,999,999													
5,000,000 and over													
Head offices, sales offices and auxiliary units													
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	-	-	29,303	159,439	596,819

See footnotes following Table 3 A.

TABLE 1C. Principal Statistics classified by Size Groups based on Manufacturing Value Added, 1961 and 1962
 Basis: Revised Standard Industrial Classification and New Establishment Concept

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers ^a			Cost of fuel and elec- tricity ^b	Cost of materials and supplies used ^c	Value of shipments of goods of own manu- facture ^{d,4}	Value added ⁴	Working owners and partners ⁵		Total employees ⁷		Total value added ⁶
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
1961	No.		'000			\$'000				\$'000		\$'000	
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	-
25,000 " 49,999	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000 " 99,999	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 " 199,999	3	379	784	1,860	821	2,365	3,806	420	-	-	460	2,361	420
200,000 " 499,999													
500,000 " 999,999													
1,000,000 " 4,999,999													
5,000,000 and over	15	21,280	45,717	108,678	43,593	610,273	1,163,723	509,856	-	-	27,087	146,528	515,690
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	-	-	29,839	159,145	536,155
1962													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	-
25,000 " 49,999	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000 " 99,999	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 " 199,999	-	-	-	-	-	-	-	-	-	-	-	-	-
200,000 " 499,999	8	2,152	4,336	9,924	6,292	162,510	191,729	22,926	-	-	2,515	12,458	22,957
500,000 " 999,999													
1,000,000 " 4,999,999													
5,000,000 and over													
Head offices, sales offices and auxiliary units	15	20,469	41,983	106,125	39,410	753,457	1,357,320	564,452	-	-	28,788	146,984	573,862
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	-	-	29,303	159,439	596,819

See footnotes following Table 3 A.

TABLE 1D. Principal Statistics classified by Size Groups based on Total Value Added, 1961 and 1962
Basis: Revised Standard Industrial Classification and New Establishment Concept

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers ⁴			Cost of fuel and elec- tricity ⁵	Cost of materials and supplies used ⁶	Value of shipments of goods of own manu- facture ^{1,4}	Value added ⁴	Working owners and partners ⁸		Total employees ⁷		Total value added ⁹
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
	No.		'000			\$'000				\$'000		\$'000	
1961													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	3	379	784	1,860	621	2,365	3,606	420	—	—	460	2,361	420
100,000 " 199,999													
200,000 " 499,999													
500,000 " 999,999													
1,000,000 " 4,999,999	6	1,849	3,837	7,993	4,586	279,313	303,951	20,052	—	—	2,292	10,257	20,045
5,000,000 and over	15	21,280	45,717	108,678	43,593	610,273	1,163,723	509,856	—	—	27,087	146,528	515,690
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	—	—	29,839	159,145	536,155
1962													
Under \$10,000	—	—	—	—	—	—	—	—	—	—	—	—	—
\$ 10,000 to \$ 24,999	—	—	—	—	—	—	—	—	—	—	—	—	—
25,000 " 49,999	—	—	—	—	—	—	—	—	—	—	—	—	—
50,000 " 99,999	8	2,152	4,336	9,924	6,292	162,510	191,729	22,927	—	—	2,515	12,456	22,957
100,000 " 199,999													
200,000 " 499,999													
500,000 " 999,999													
1,000,000 " 4,999,999	15	20,469	41,983	108,125	39,410	753,457	1,357,320	564,452	—	—	26,788	146,964	573,862
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	—	—	29,303	159,439	596,819

See footnotes following Table 3 A.

TABLE 1E. Principal Statistics classified by Size Groups based on Total Employed,¹ 1961 and 1962
Basis: Revised Standard Industrial Classification and New Establishment Concept

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers ⁴			Cost of fuel and elec- tricity ⁵	Cost of materials and supplies used ⁶	Value of shipments of goods of own manu- facture ^{1,4}	Value added ⁴	Working owners and partners ⁸		Total employees ⁷		Total value added ⁹
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wages	
1961	No.		'000			\$'000				\$'000			\$'000
Under 5 employees	—	—	—	—	—	—	—	—	—	—	—	—	—
5- 14 employees	—	—	—	—	—	—	—	—	—	—	—	—	—
15- 49 "	3	148	338	563	606	22,371	26,680	3,704	—	—	194	783	3,704
50- 99 "													
100- 199 "													
200- 499 "													
500 employees and over	6	1,517	3,273	7,117	5,471	102,269	133,567	25,828	—	—	1,813	8,839	25,821
Head offices, sales offices and auxiliary units	15	21,843	46,727	110,652	42,924	767,311	1,311,032	500,797	—	—	27,832	149,523	506,630
Totals	24	23,508	50,336	118,532	49,000	891,951	1,471,280	530,328	—	—	29,839	159,145	536,155
1962													
Under 5 employees	—	—	—	—	—	—	—	—	—	—	—	—	—
5- 14 employees	—	—	—	—	—	—	—	—	—	—	—	—	—
15- 49 "	8	1,929	3,947	8,974	6,365	140,871	180,557	33,321	—	—	2,284	11,290	33,351
50- 99 "													
100- 199 "													
200- 499 "													
500 employees and over	15	20,692	42,373	107,075	39,338	775,096	1,368,491	554,058	—	—	27,039	148,150	563,468
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	—	—	29,303	159,439	596,819

See footnotes following Table 3 A.

TABLE 1 F. Principal Statistics classified by Type of Organization, 1961 and 1962
 Basis: Revised Standard Industrial Classification and New Establishment Concept

Type of organization	Establishments	Manufacturing activity							Total activity				
		Production and related workers ⁴			Cost of fuel and electricity ³	Cost of materials and supplies used ⁴	Value of shipments of goods of own manufacture ^{1,4}	Value added ⁴	Working owners and partners ⁴		Total employees ⁷		Total value added ⁶
		Number	Man-hours paid	Wages					Number	With-drawals	Number	Salaries and wages	
	No.		'000			'000				'000		'000	
1961													
Individual ownerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Partnerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Incorporated companies	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	—	—	29,839	159,145	536,155
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	24	23,508	50,338	118,532	49,000	891,951	1,471,280	530,328	—	—	29,839	159,145	536,155
1962													
Individual ownerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Partnerships	—	—	—	—	—	—	—	—	—	—	—	—	—
Incorporated companies	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	—	—	29,303	159,439	596,819
Cooperatives	—	—	—	—	—	—	—	—	—	—	—	—	—
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	23	22,621	46,320	116,049	45,703	915,967	1,549,049	587,379	—	—	29,303	159,439	596,819

See footnotes following Table 3 A.

TABLE 2. Industry Outputs, Inputs and Value Added, 1961 and 1962
 Basis: Revised Standard Industrial Classification and New Establishment Concept

Item	1961	1962
	\$'000	
Manufacturing activity:		
Value of shipments ¹ —Goods of own manufacture	1,471,280	1,549,049
Add: Closing inventory—Goods in process .....	..	..
Finished goods .....	..	..
Deduct: Opening inventory—Goods in process .....	..	..
Finished goods .....	..	..
Gross output—Manufacturing activity	1,471,280	1,549,049
Deduct: Cost of materials and supplies used in manufacturing activity	891,951	915,967
Cost of fuel and electricity used	49,000	(940,951)
Value added—Manufacturing activity	530,328	587,379
Non-manufacturing activities:		
Value of shipments—Goods not of own manufacture .....	..	—
Add: All other revenue .....	..	10,964
Closing inventory—Goods purchased for resale	—	10,964
Deduct: Purchases of goods for resale as such .....	..	—
Opening inventory—Goods not of own manufacture	—	—
Cost of all other materials and supplies used .....	..	1,524
Value added—Non manufacturing activities	5,807	9,440
Total value added	536,155	596,819

See footnote following Table 3 A.

TABLE 3. Employment and Payroll, 1961 and 1962
 Basis: Revised Standard Industrial Classification and New Establishment Concept

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis- trative and office ^{1,2}		Sales, and distribution ³		Total employees ^{4,5}		Production and related workers		Admin- istra- tive and office	Sales, and distri- bution	Total salaries and wages
	Manufacturing ⁶		Other ⁷												
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Manufac- turing	Other			
	number										\$'000				
1961															
Quebec.....	8,549	8	..	..	..	..	..	..	11,148	279	45,289	..	..	..	62,909
Ontario	9,319	3	..	..	..	..	..	..	10,843	197	45,103	..	..	..	56,464
Manitoba	5,595	34	..	..	..	..	..	..	7,111	261	28,140	..	..	..	39,773
Saskatchewan															
Alberta															
British Columbia															
Totals	23,463	45	..	..	..	..	..	..	29,102	737	118,532	..	..	..	159,145
1962															
Quebec	8,129	11	288	37	2,317	251	2	1	10,736	300	43,505	1,548	16,365	26	61,443
Ontario	8,734	14	—	—	1,541	198	—	—	10,275	212	41,917	—	11,922	—	53,840
Manitoba	5,699	34	836	107	935	169	—	—	7,470	310	30,627	6,058	7,471	—	44,157
Saskatchewan															
Alberta															
British Columbia															
Totals	22,562	59	1,124	144	4,793	618	2	1	28,481	822	116,049	7,606	35,758	26	159,439

See footnotes following Table 3 A.

TABLE 3 A. Production and Related Workers,⁴ — Manufacturing Activity, by Months, 1962

Basis: Revised Standard Industrial Classification and New Establishment Concept

Month	Establishments reporting monthly detail	
	Male	Female
	number	
January	22,855	59
February	22,748	59
March	22,690	58
April	23,216	59
May	23,272	63
June	23,579	65
July	23,638	60
August	23,450	57
September	22,481	56
October	20,977	56
November	20,966	57
December	20,880	55
Monthly averages	22,562	59

¹ Value of production for this industry.

² Includes paid employees and working owners but excludes unpaid family workers.

³ This category, in this table only, includes working owners and partners. Since administrative and office employees are engaged in a variety of activities they have been excluded from manufacturing activity beginning with the revised 1961 series shown in the following tables. They are included here for purposes of comparison with the tabulations of previous years.

⁴ Conceptually identical to previous years.

⁵ Cannot be reported separately for manufacturing and non-manufacturing activities but related substantially to manufacturing activity. Identical concept to previous years.

⁶ Working owners and partners were included with administrative and office employees in the "Manufacturing series" published in former years.

⁷ Includes production and related workers, administrative and office employees, sales distribution and other employees.

⁸ Value of total shipments and other operational revenue less total cost of materials, supplies, fuels used and purchases of products and materials for resale in the same condition; all adjusted for inventory changes where required. See Table 2.

⁹ Sales and distribution workers and production workers (non-manufacturing) are included for the first time as a result of the further implementation of the new definition of the establishment. The figures for production workers (non-manufacturing), administrative and office employees and sales and distribution workers are not yet available for 1961 but form part of total employees. Sales and distribution workers may include some employees that are reported as part of a manufacturing establishment but are not working at the establishment's location. Head offices, sales offices, etc., which report separately are included in the figures for the province in which they are located.

Note: Figures may not add due to rounding.

TABLE 4. Fuel and Electricity Used in Manufacturing Activity, 1962
Basis: Revised Standard Industrial Classification and New Establishment Concept

Description	Quantity	Cost
		\$'000
Bituminous coal:		
(a) From Canadian mines	ton 478,165	6,112
(b) Imported	" 183,638	2,275
Sub-bituminous coal (from Alberta mines only)	" 6,527	52
Anthracite coal	" 93,342	1,263
Lignite coal	—	—
Coke	ton 238,607	5,244
Gasoline (including gasoline used in cars and trucks)	Imp. gal. 928,942	261
Fuel oil including kerosene or coal oil	" 58,911,405	4,983
Wood	cord 1,688	61
Gas:		
(a) Liquefied petroleum gases	Imp. gal. 475,892	106
(b) Other manufactured gas	—	—
(c) Natural gas	M cu. ft. 12,117,311	4,443
Other fuel .....	...	19
Electricity purchased	kwh. 5,046,273,802	20,884
Steam purchased .....	...	—
Total fuel and electricity used .....	...	45,703

TABLE 5. Industry Inventories, 1962¹
Basis: Revised Standard Industrial Classification and New Establishment Concept

Province	Manufacturing				Non-manufacturing	Total inventories
	Raw materials and supplies	Goods in process	Finished goods of own manufacture	Total manufacturing	Products or materials purchased for resale	
book value \$'000						
Opening: ¹						
Quebec	44,598	8,718	49,066	102,382	—	102,382
Ontario	42,721	23,158	18,752	84,631	—	84,631
Manitoba	35,452	9,878	31,654	76,984	—	76,984
Saskatchewan						
Alberta						
British Columbia						
Totals ²	122,771	41,754	99,472	263,997	—	263,997
Closing:						
Quebec	46,206	8,728	33,721	88,655	—	88,655
Ontario	42,916	24,054	29,273	96,243	—	96,243
Manitoba	31,383	7,146	33,578	72,107	—	72,107
Saskatchewan						
Alberta						
British Columbia						
Totals ³	120,505	39,928	96,572	257,005	—	257,005

¹ Values represent book values of inventories owned in Canada. Inventories held for which progress payments have been received are not included. Where progress payment accounts are maintained the change in these accounts is treated as a net adjustment to shipments.

² The opening inventories may differ from the closing inventories for the previous survey year because of changes in classification, the receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

³ Figures may not add due to rounding.

TABLE 6. Capital and Repair Expenditures, 1962

Year	Capital expenditures			Repair expenditures			Total capital and repair expenditures		
	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Sub-total	Construction	Machinery and equipment	Total
	\$'000								
1962	29,248	43,141	72,389	11,541	57,333	68,874	40,789	100,474	141,263

Source: Business Finance Division. - DBS.

TABLE 7. Average Annual Metal Prices, in Canadian Dollars, 1953-62

Year	Gold	Silver	Copper	Lead	Zinc
	Troy oz.	Troy oz.	Pound	Pound	Pound
	dollars				
1953	34.42	0.8401	0.2994	0.1293	0.1196
1954	34.07	0.8326	0.2918	0.1333	0.1198
1955	34.52	0.8818	0.3887	0.1438	0.1365
1956	34.45	0.8968	0.4141	0.1551	0.1484
1957	33.55	0.8737	0.2895	0.1396	0.1209
1958	33.98	0.8681	0.2542	0.1138	0.1088
1959	33.57	0.8778	0.2961	0.1061	0.1224
1960	33.95	0.8891	0.3029	0.1068	0.1335
1961	35.46	0.9426	0.2919	0.1021	0.1259
1962	37.41	1.1650	0.3100	0.0992	0.1210

TABLE 8. Production of New Gold and Silver, 1958-62 (From all types of ores)

Year	Gold		Silver	
	Fine ounces	Value	Fine ounces	Value
		\$		\$
1958	4,571,347	155,334,370	31,163,470	27,053,007
1959	4,483,416	150,508,275	31,923,969	28,022,860
1960	4,628,911	157,151,527	34,016,829	30,244,363
1961	4,473,699	158,637,366	31,381,977	29,580,651
1962	4,178,396	156,313,794	30,422,972	35,442,761

TABLE 9. Source of Canadian Gold Production, 1958-62

Source	1958	1959	1960	1961	1962
	per cent				
In alluvial gold	1.57	1.63	1.75	1.55	1.38
In crude gold bullion produced at mines	84.06	84.47	83.18	83.08	82.73
In base bullion produced at lead smelters	0.20	0.21	0.26	0.22	0.21
In blister copper	12.64	12.52	12.82	13.25	13.72
In ores, matte, slags, etc., exported	1.53	1.17	1.99	1.90	1.96

TABLE 10. Source of Canadian Silver Production, 1958 - 62

Source	1958	1959	1960	1961	1962
	per cent				
In silver-cobalt ores	19.39	20.85	21.04	14.92	15.47
In base bullion ¹	40.84	22.70	23.58	25.50	19.91
In gold bullion and placer	2.32	2.02	2.05	2.17	2.15
In blister and anode copper	23.77	24.04	23.52	24.38	26.46
In matte, copper ores and silver-lead ores, etc., exported (other than silver-cobalt ores)	13.68	30.39	29.81	33.03	36.01

¹ Includes silver bullion from silver-lead ores.

TABLE 11. Production of Copper, 1958 - 62 (From all types of ores)

Year	Copper in all forms ¹		Refined copper ²
	Tons	Value	Tons
		\$	
1958	345,114	174,430,930	329,239
1959	395,269	233,102,813	365,366
1960	439,262	264,846,637	417,029
1961	434,088	255,157,626	406,359
1962	407,385	282,732,696	382,868

¹ Blister copper plus recoverable copper in concentrates and matte exported.

² Does not include a small tonnage recovered from scrap in secondary smelters.

TABLE 12. Production of Copper, by Sources, 1961 and 1962

Source	1961		1962	
	Tons	Value	Tons	Value
		\$		\$
In blister and anode copper produced ¹	396,866	231,690,694	370,923	229,972,836
In ores, concentrates and any copper matte exported	23,200	13,499,310	69,874	43,304,801
In nickel-copper matte exported	19,022	9,967,622	16,588	9,455,059
Totals	434,088	255,157,626	457,385	282,732,696

¹ Includes a quantity of copper contained in gold-silver, and nickel-copper ores shipped to Canadian smelters.

TABLE 13. Production¹ of Nickel, 1958 - 62

Year	Tons	Value
		\$
1958	139,559	194,142,019
1959	186,555	257,008,801
1960	214,506	295,640,279
1961	232,991	351,261,720
1962	232,242	383,784,622

¹ Includes nickel in matte exported, refined nickel produced in Canada and nickel in oxides and salts sold or produced.

TABLE 14. Production of Lead (From all types of ores), 1958-62

Year	Lead in all forms ¹		Refined lead ²
	Tons	Value	Tons
		\$	
1958	186,680	42,413,805	132,987
1959	186,696	39,616,835	135,296
1960	205,650	43,926,888	158,510
1961	230,435	47,054,765	171,833
1962	215,329	42,721,341	152,217

¹ Lead content of base bullion produced from Canadian ores plus recoverable lead in ores exported.² Includes some lead refined from foreign ores; does not include a small tonnage recovered from scrap in secondary smelters.

TABLE 15. Production of Zinc (From all types of ores), 1958-62

Year	Zinc in all forms ¹		Refined zinc ²
	Tons	Value	Tons
		\$	
1958	425,099	92,501,496	252,093
1959	396,008	96,942,663	255,306
1960	406,873	108,635,003	260,968
1961	416,004	104,749,879	268,007
1962	463,145	112,080,981	280,159

¹ Refined zinc produced in Canada plus recoverable zinc in ores exported.² Includes some refined zinc from foreign ores; does not include a small tonnage recovered from scrap in secondary smelters.TABLE 16. Production¹ of Bismuth and Cadmium, 1958-62

Year	Bismuth		Cadmium	
	Pounds	Value	Pounds	Value
		\$		\$
1958	412,797	771,267	1,756,050	2,669,195
1959	334,736	590,212	2,160,363	2,765,265
1960	423,827	762,048	2,357,497	3,347,646
1961	478,118	957,625	1,357,874	2,172,598
1962	425,102	839,912	2,604,973	4,730,957

¹ Includes refined metal and recoverable metal in concentrates shipped.

TABLE 17. Production of Selenium and Tellurium, 1958-62

Year	Selenium		Tellurium	
	Pounds	Value	Pounds	Value
		\$		\$
1958	306,990	2,302,426	38,250	65,025
1959	368,107	2,576,749	13,023	27,999
1960	521,638	3,651,466	44,682	156,388
1961	430,612	2,798,978	77,609	376,404
1962	487,066	2,800,630	58,725	352,350

TABLE 18. Production (Shipments) of New Aluminum and Magnesium, 1958-62

Year	Aluminum ¹	Magnesium	
	Tons	Pounds	Value
			\$
1958	634,102	13,591,705	4,064,825
1959	593,630	12,204,448	3,179,515
1960	762,012	14,577,138	4,313,987
1961	663,173	15,270,618	4,307,570
1962	690,297	17,631,310	4,821,823

¹ All from imported ores.

TABLE 19. Production of New Antimony and Tin, 1958-62

Year	Antimony ¹		Tin ²	
	Pounds	Value	Pounds	Value
		\$		\$
1958	858,633	284,208	795,496	625,260
1959	1,657,797	540,276	747,443	630,094
1960	1,651,766	538,482	621,718	522,243
1961	1,331,297	469,948	1,119,350	727,578
1962	1,931,397	748,223	650,941	442,640

¹ Content of antimonial lead, Doré slag and flue dust.² Tin content of concentrates and lead-tin alloy.

TABLE 20. Production (Shipments) of Molybdenum Concentrates and Tungsten Concentrates, 1958-62

Year	Molybdenite concentrates and molybdic oxide			Tungsten concentrates		
	Gross weight	Mo. content	Value	Gross weight	WO ³ content	Value
	tons		\$	tons		\$
1958	744	444	1,152,838	511	345	1,898,455
1959	374	940,596	—	—	—
1960	384	1,015,380	—	—	—
1961	386	1,092,201	—	—	—
1962	409	1,261,451	..	2	1,611

TABLE 21. Production of Cobalt and Arsenic, 1958-62

Year	Cobalt ¹		Arsenious oxide ^{2,3}	
	Pounds	Value	Tons	Value
		\$		\$
1958	2,436,064	4,866,267	1,162	94,542
1959	3,150,027	5,954,916	789	63,786
1960	3,568,811	6,763,016	862	70,400
1961	3,182,897	4,751,543	210	16,772
1962	3,481,922	6,345,205	80	6,832

¹ Content in metal and oxide produced in Canada and in ores exported.² Refined white arsenic produced in Canada plus arsenic content of crude arsenic exported. Excludes arsenic in ores exported from British Columbia as it is not paid for.³ Includes some arsenic recovered from foreign ores.

TABLE 22. Platinum Metal¹ Producers' Shipments, 1958-62

Year	Platinum palladium and other platinum metals	
	Troy ounces	Value
		\$
1958	300,458	14,321,443
1959	332,095	16,932,438
1960	483,604	26,873,508
1961	416,278	24,534,349
1962	470,787	26,848,637

¹ Figures represent the metal content of concentrates produced from nickel-copper ores. Included are metals recovered from alluvial deposits.

TABLE 23. Production of Titanium Dioxide and Iron (Remelt), 1958-62

Year	Titanium dioxide, etc.		Iron (remelt)	
	Tons	Value	Tons	Value
		\$		\$
1958	6,583,921	..	5,120,620
1959	8,507,149	..	7,187,434
1960	12,947,000	..	10,972,979
1961	16,723,743	..	14,720,064
1962	11,573,862	..	9,845,669

TABLE 24. Capacities of Canadian Copper Smelting and Refining Works, 1962

Company	Blast furnaces		Reverberatories		Converters
	Number	Annual capacity — Tons of ore and concentrates	Number	Annual capacity — Tons of ore and concentrates	Number
Falconbridge Nickel Mines, Ltd.	3	590,000	—	—	6
Hudson Bay Mining and Smelting Co., Ltd.	—	—	1	575,000	3
Noranda Mines Ltd.	—	—	3	1,800,000	5
International Nickel Co. of Canada, Ltd.:					
Copper Cliff	—	—	9	4,000,000	20
Coniston	4	800,000	—	—	5
Thompson	—	—	..	600,000	..
Gaspe Copper Mines Ltd.	—	—	1	300,000	2
Annual capacity					
short tons					
Electrolytic copper refineries:					
Canadian Copper Refiners, Ltd.			284,000		
International Nickel Co. of Canada, Ltd.			168,000		

TABLE 25. Lead Smelting Capacity of Canada, 1962

Company	Number of blast furnaces	Annual capacity
		tons of charge
Consolidated Mining & Smelting Company of Canada, Limited, Trail, British Columbia	4	623,000

TABLE 26. Capacity of Electrolytic Zinc Plants in Canada, 1962

Company	Estimated annual capacity for cathode zinc
	short tons
Consolidated Mining & Smelting Company of Canada, Ltd.	200,000
Hudson Bay Mining & Smelting Co., Ltd.	84,000

List of Establishments, 1962

Name of firm	Head or executive office address	Location of plant
Quebec:		
Aluminum Company of Canada Ltd.	1700 Sun Life Bldg., Montreal	Arvida, Shawinigan Falls, Isle Maligne, Beauharnois
Canadian British Aluminum Co., Ltd.	Baie Comeau	Baie Comeau
Canadian Copper Refiners Ltd.	1700 Bank of Nova Scotia Bldg., Toronto, Ontario	Montreal East
Gaspe Copper Mines Ltd.	44 King St., W., Toronto, Ontario	Murdochville
Noranda Mines Limited	1709 Bank of Nova Scotia Bldg., Toronto, Ontario	Noranda
Quebec Iron and Titanium Corp.	Sorel	Sorel
Ontario:		
Cobalt Refinery	Cobalt	Cobalt
Dominion Magnesium Ltd.	320 Bay St., Toronto	Haley
Falconbridge Nickel Mines Ltd.	44 King St. West, Toronto	Falconbridge
International Nickel Co. of Canada, Limited	Copper Cliff	Copper Cliff, Coniston, Port Colborne
Eldorado Mining & Refining Ltd.	Box 379, Ottawa	Port Hope
Manitoba:		
Hudson Bay Mining and Smelting Co., Limited	500 Royal Bank Bldg., Winnipeg	Flin Flon
International Nickel Co. of Canada Limited	Copper Cliff, Ontario	Thompson
Alberta:		
Sherritt Gordon Mines Ltd.	25 King St. W., Toronto, Ontario	Fort Saskatchewan
British Columbia:		
Consolidated Mining & Smelting Co. of Canada Limited	Trail	Trail
Aluminum Company of Canada Ltd.	1700 Sun Life Bldg., Montreal, Quebec	Kitimat

Note: Information relating to operations of the Eldorado Mining and Refining Co. at Port Hope, Ontario, is excluded for the years 1941-1954.

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