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## PETROLEUM REFINERIES

1964

CONSISTING OF:

1. Petroleum Refineries
2. Petroleum Refining
3. Manufacturers of Lubricating Oils and Greases

ANNUAL CENSUS  
OF MANUFACTURES

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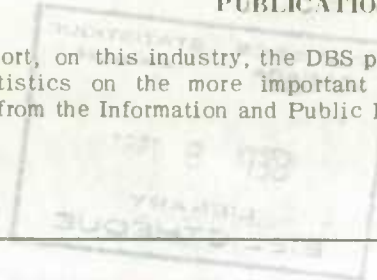
DOMINION BUREAU OF STATISTICS  
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A - Annual

O - Occasional

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# PETROLEUM REFINERIES

1964

## SECTION 1. PETROLEUM REFINERIES, 1964

For statistical purposes, the industry titled Petroleum Refineries in the revised Standard Industrial Classification covers establishments primarily engaged in refining crude petroleum and in producing fuel oils, lubricating oils, illuminating oils and other petroleum products. The industry also includes establishments primarily engaged in blending lubricating oils and greases which they have purchased.

It should be noted that for purposes of presentation of statistics in this report recognition is being given to Petroleum Refining and to Manufacturers of Lubricating Oils and Greases as sub-classifications within this industry group. The former industry includes establishments primarily engaged in refining crude petroleum while the latter includes establishments primarily engaged in blending lubricating oils and greases which they have purchased.

Value of shipments and other revenue (manufacturing and non-manufacturing) of the Petroleum Refineries industry amounted to \$1,450 millions in 1964, compared with \$1,386 millions in 1963, an increase of \$64 millions or about 5 per cent. Included in this total were shipments by the Petroleum Refining industry valued at \$1,371 millions and shipments by Manufacturers of Lubricating Oils and Greases at \$25 millions. Other revenue (non-manufacturing) accounted for \$54 millions.

The cost of materials and supplies, etc., used in the production of goods of own manufacture increased by \$33 millions. Cost of materials and supplies, etc., (inputs), in 1964 represented 79 per cent of value of shipments of own manufacture (outputs), compared to 80 per cent in 1963.

**Note:** Petroleum Refineries covered in the tables in Section 1 include the operations of two sub-classifications of industries (a) Petroleum Refining (see Section 2) which includes establishments primarily engaged in refining crude petroleum and (b) Manufacturers of Lubricating Oils and Greases (see section 3) which includes establishments primarily engaged in blending lubricating oils and greases.

### **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.

x confidential to meet secrecy requirements of the Statistics Act.

TABLE 1. Principal Statistics, 1961-64

Year and province	Establishments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
No.		'000			\$'000				\$'000				
1961													
<b>Totals</b> .....	<b>57</b>	<b>7,406</b>	<b>15,844</b>	<b>41,527</b>	<b>10,968</b>	<b>911,693</b>	<b>1,200,612</b>	<b>280,726</b>	<b>x</b>	<b>x</b>	<b>10,991</b>	<b>64,768</b>	<b>281,989</b>
1962													
<b>Totals</b> .....	<b>58</b>	<b>7,124</b>	<b>15,385</b>	<b>41,918</b>	<b>10,444</b>	<b>994,007</b>	<b>1,274,266</b>	<b>273,509</b>	<b>x</b>	<b>x</b>	<b>10,535</b>	<b>64,593</b>	<b>276,429</b>
1963													
Newfoundland .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	1	x	x	x	x	x	x	x	-	-	x	x	x
New Brunswick .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Quebec .....	8	1,783	3,896	11,157	2,780	338,808	417,452	80,724	-	-	2,562	16,891	81,271
Ontario .....	16	2,132	4,525	12,857	2,588	345,333	420,155	82,840	-	-	3,085	18,873	83,492
Manitoba .....	4	324	687	1,891	504	39,830	55,221	13,326	-	-	766	3,789	13,735
Saskatchewan .....	6	617	1,310	3,530	918	62,647	82,864	19,357	-	-	835	5,044	19,555
Alberta .....	9	790	1,691	4,774	1,921	93,648	124,608	28,046	-	-	1,121	7,150	28,449
British Columbia .....	8	680	1,461	4,121	1,266	89,685	116,651	23,588	-	-	978	6,349	24,155
Yukon and Northwest Territories	1	x	x	x	x	x	x	x	-	-	x	x	x
<b>Totals</b> .....	<b>55</b>	<b>6,905</b>	<b>14,930</b>	<b>41,752</b>	<b>10,882</b>	<b>1,069,805</b>	<b>1,344,872</b>	<b>274,824</b>	<b>-</b>	<b>-</b>	<b>10,088</b>	<b>83,692</b>	<b>278,526</b>
1964													
Newfoundland .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	2	x	x	x	x	x	x	x	-	-	x	x	x
New Brunswick .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Quebec .....	8	1,718	3,722	11,328	2,767	319,120	394,876	71,873	-	-	2,506	17,285	72,308
Ontario .....	16	2,105	4,810	13,465	3,536	375,494	474,909	90,057	-	-	3,105	21,009	90,311
Manitoba .....	4	330	713	1,962	528	44,265	58,211	14,210	-	-	770	3,930	14,648
Saskatchewan .....	6	582	1,219	3,450	886	60,365	77,292	15,595	-	-	787	4,970	15,900
Alberta .....	9	740	1,594	4,707	1,923	93,351	124,576	28,139	-	-	1,035	7,047	28,542
British Columbia .....	8	685	1,425	4,199	1,453	102,248	127,529	24,577	-	-	943	6,327	25,684
Yukon and Northwest Territories	1	x	x	x	x	x	x	x	-	-	x	x	x
<b>Totals</b> .....	<b>56</b>	<b>6,730</b>	<b>14,696</b>	<b>42,896</b>	<b>12,102</b>	<b>1,102,900</b>	<b>1,396,531</b>	<b>276,114</b>	<b>-</b>	<b>-</b>	<b>9,920</b>	<b>65,918</b>	<b>280,991</b>

TABLE 2. Principal Statistics classified by Size Group based on Value of Shipments of Goods of Own Manufacture, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity					
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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				
1963														
Under \$10,000	}	3	3	7	8	--	9	41	27	--	--	8	23	27
\$ 10,000 to \$ 24,999		3	11	21	40	4	31	243	104	--	--	24	118	121
25,000 " 49,999		3	17	34	65	30	557	974	413	--	--	49	245	434
50,000 " 99,999		3	29	61	122	14	1,192	2,090	966	--	--	72	387	987
100,000 " 199,999		8	271	615	1,468	413	16,244	22,067	5,532	--	--	378	2,074	5,982
200,000 " 499,999	35	6,574	14,192	40,048	10,421	1,051,773	1,319,457	267,781	--	--	9,557	60,844	270,974	
500,000 " 999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,000,000 " 4,999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	55	6,905	14,930	41,752	10,882	1,069,805	1,344,872	274,824	--	--	10,088	63,692	278,526	
1964														
Under \$10,000	}	3	7	14	24	2	23	81	56	--	--	10	35	56
\$ 10,000 to \$ 24,999		3	13	25	58	6	146	333	210	--	--	32	183	305
25,000 " 49,999		3	15	33	75	23	562	1,015	374	--	--	49	262	401
50,000 " 99,999		4	38	82	190	26	1,596	2,759	893	--	--	95	482	904
100,000 " 199,999		5	183	424	986	354	8,479	11,843	3,228	--	--	261	1,400	4,028
200,000 " 499,999	38	6,474	14,118	41,563	11,692	1,092,094	1,380,501	271,354	--	--	9,473	63,556	275,297	
500,000 " 999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,000,000 " 4,999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...	...
T Totals	56	6,730	14,696	42,896	12,102	1,102,900	1,396,531	276,114	--	--	9,920	65,918	280,991	

TABLE 3. Principal Statistics classified by Size Group based on Manufacturing Value Added, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity					
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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				
1963														
Under \$10,000	}	3	3	7	8	--	9	41	27	--	--	8	23	27
\$ 10,000 to \$ 24,999		4	14	28	51	7	229	534	195	--	--	36	166	220
25,000 " 49,999		3	23	46	82	29	831	1,240	440	--	--	61	290	482
50,000 " 99,999		4	88	193	397	52	4,601	5,945	1,362	--	--	149	708	1,538
100,000 " 199,999		5	184	422	1,034	311	8,893	12,798	3,557	--	--	252	1,487	3,832
200,000 " 499,999	15	1,389	2,973	8,251	2,809	190,883	235,760	42,605	--	--	2,224	12,965	44,573	
500,000 " 999,999	21	5,204	11,262	31,928	7,672	864,361	1,088,554	226,637	--	--	7,358	48,052	227,853	
1,000,000 " 4,999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...	...
T Totals	55	6,905	14,930	41,752	10,882	1,069,805	1,344,872	274,824	--	--	10,088	63,692	278,526	
1964														
Under \$10,000	}	4	8	16	29	4	64	156	97	--	--	14	56	116
\$ 10,000 to \$ 24,999		3	16	31	68	7	273	497	230	--	--	40	209	317
25,000 " 49,999		4	30	68	153	34	1,184	1,906	348	--	--	74	388	384
50,000 " 99,999		3	39	78	148	19	2,569	3,385	935	--	--	92	388	1,047
100,000 " 199,999		4	174	398	1,036	640	12,440	15,856	2,738	--	--	253	1,504	3,340
200,000 " 499,999	17	1,540	3,381	9,715	3,191	325,048	279,954	49,184	--	--	2,486	15,615	51,562	
500,000 " 999,999	21	4,923	10,724	31,748	8,207	861,321	1,094,778	222,582	--	--	6,961	47,758	224,235	
1,000,000 " 4,999,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...	...
T Totals	56	6,730	14,696	42,896	12,102	1,102,900	1,396,531	276,114	--	--	9,920	65,918	280,991	

TABLE 4. Principal Statistics classified by Size Group based on Total Value Added, 1963 and 1964

Size group	Estab-lish-ments	Manufacturing activity							Total activity					
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	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			
<b>1963</b>														
Under \$10,000 .....	}	3	3	7	8	--	9	41	27	--	--	8	23	27
\$ 10,000 to \$ 24,999 .....		4	14	28	51	7	229	534	195	--	--	36	166	220
25,000 " 49,999 .....		3	23	46	82	29	831	1,240	440	--	--	61	290	482
50,000 " 99,999 .....		4	88	193	397	52	4,601	5,945	1,362	--	--	149	708	1,538
100,000 " 199,999 .....		4	130	273	685	282	7,409	10,236	2,558	--	--	189	1,069	2,566
200,000 " 499,999 .....	15	1,300	2,918	7,800	2,589	174,371	214,759	38,611	--	--	2,095	12,246	40,786	
500,000 " 999,999 .....	22	5,347	11,584	32,728	7,921	882,356	1,112,117	231,631	--	--	7,550	49,198	232,905	
1,000,000 " 4,999,999 .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>55</b>	<b>6,905</b>	<b>14,930</b>	<b>41,752</b>	<b>10,882</b>	<b>1,069,805</b>	<b>1,344,872</b>	<b>274,824</b>	<b>--</b>	<b>--</b>	<b>10,088</b>	<b>63,692</b>	<b>278,526</b>	
<b>1964</b>														
Under \$10,000 .....	}	3	7	14	24	--	23	81	56	--	--	10	35	56
\$ 10,000 to \$ 24,999 .....		6	30	64	157	36	806	1,436	249	--	--	75	416	349
25,000 " 49,999 .....		4	40	81	144	16	1,926	2,751	883	--	--	91	381	937
50,000 " 99,999 .....		4	128	287	660	344	6,580	8,952	2,334	--	--	212	1,112	2,802
100,000 " 199,999 .....		18	1,602	3,527	1,164	3,498	232,244	288,534	50,010	--	--	2,571	16,215	52,612
200,000 " 499,999 .....	21	4,923	10,724	31,748	2,207	861,321	1,094,778	222,582	--	--	6,961	47,758	224,235	
500,000 " 999,999 .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1,000,000 " 4,999,999 .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>56</b>	<b>6,730</b>	<b>14,696</b>	<b>42,896</b>	<b>12,102</b>	<b>1,102,900</b>	<b>1,396,531</b>	<b>276,114</b>	<b>--</b>	<b>--</b>	<b>9,920</b>	<b>65,918</b>	<b>280,991</b>	

TABLE 5. Principal Statistics classified by Size Group based on Total Employed, 1963 and 1964

Size group	Estab-lish-ments	Manufacturing activity							Total activity					
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	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			
<b>1963</b>														
Under 5 employed .....	}	7	12	26	42	9	580	1,047	455	--	--	35	143	474
5- 14 employed .....		10	183	384	953	189	13,735	17,870	4,363	--	--	312	1,720	4,568
15- 49 " .....		8	442	1,000	2,455	832	53,632	69,803	14,011	--	--	591	3,469	15,509
50- 99 " .....		14	1,520	3,243	9,161	3,247	216,736	289,977	66,007	--	--	2,196	14,103	66,725
100-199 " .....		12	2,508	5,452	15,347	4,675	442,713	538,703	97,569	--	--	3,793	23,319	99,053
200-499 " .....	4	2,242	4,826	13,703	1,830	342,407	428,474	91,819	--	--	3,161	20,939	92,197	
500 employed and over .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>55</b>	<b>6,905</b>	<b>14,930</b>	<b>41,752</b>	<b>10,882</b>	<b>1,069,805</b>	<b>1,344,872</b>	<b>274,824</b>	<b>--</b>	<b>--</b>	<b>10,088</b>	<b>63,692</b>	<b>278,526</b>	
<b>1964</b>														
Under 5 employed .....	4	8	16	28	4	84	156	97	--	--	14	56	115	
5- 14 employed .....	4	19	42	105	20	945	1,504	253	--	--	44	241	325	
15- 49 " .....	8	116	253	590	127	9,287	12,131	2,882	--	--	255	1,178	3,218	
50- 99 " .....	7	361	865	2,159	1,024	53,520	69,935	14,640	--	--	499	3,133	16,309	
100-199 " .....	17	1,666	3,664	10,912	4,415	296,845	375,485	80,958	--	--	2,389	16,417	81,147	
200-499 " .....	12	2,412	5,161	15,588	4,585	403,332	513,801	98,965	--	--	3,696	24,198	101,401	
500 employed and over .....	4	2,148	4,695	13,543	1,928	338,906	423,519	78,320	--	--	3,053	20,695	78,475	
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>56</b>	<b>6,730</b>	<b>14,696</b>	<b>42,896</b>	<b>12,102</b>	<b>1,102,900</b>	<b>1,396,531</b>	<b>276,114</b>	<b>--</b>	<b>--</b>	<b>9,920</b>	<b>65,918</b>	<b>280,991</b>	

TABLE 6. Principal Statistics classified by Type of Organization, 1963 and 1964

Type of organization	Establishments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
No.		'000			\$'000				\$'000		\$'000		
1963													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Incorporated companies .....	55	6,905	14,930	41,752	10,882	1,069,805	1,344,872	274,824	...	...	10,088	63,692	278,526
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>55</b>	<b>6,905</b>	<b>14,930</b>	<b>41,752</b>	<b>10,882</b>	<b>1,069,805</b>	<b>1,344,872</b>	<b>274,824</b>	<b>-</b>	<b>-</b>	<b>10,088</b>	<b>63,692</b>	<b>278,526</b>
1964													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Incorporated companies .....	56	6,730	14,696	42,896	12,102	1,102,900	1,396,531	276,114	...	...	9,920	65,918	280,991
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>56</b>	<b>6,730</b>	<b>14,696</b>	<b>42,896</b>	<b>12,102</b>	<b>1,102,900</b>	<b>1,396,531</b>	<b>276,114</b>	<b>-</b>	<b>-</b>	<b>9,920</b>	<b>65,918</b>	<b>280,991</b>

TABLE 7. Calculation of Output, Input and Value Added, 1963 and 1964

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1963	1964	1963	1964	1963	1964
	\$'000					
Output						
1. Shipments and other revenue .....	1,344,872	1,396,531	41,093	53,619	1,385,965	1,450,150
Inventories— Goods of own manufacture:						
Add closing— Goods in process .....	22,927	24,222	...	...	22,927	24,222
Finished goods .....	127,880	122,957	...	...	127,880	122,957
Deduct opening— Goods in process .....	22,253	22,875	...	...	22,253	22,875
Finished goods .....	117,914	129,720	...	...	117,914	129,720
2. Net inventory change .....	10,640	(5,416)	...	...	10,640	(5,416)
3. Gross output (1 + 2) .....	1,355,512	1,391,115	41,093	53,619	1,396,605	1,444,734
Input						
4. Purchases of goods not of own manufacture .....	...	...	34,884	46,288	34,884	46,288
Inventories— Goods not of own manufacture:						
Add opening .....	...	...	3,970	4,300	3,970	4,300
Deduct closing .....	...	...	4,282	4,083	4,282	4,083
5. Cost of goods sold (not of own manufacture) .....	...	...	35,572	46,505	34,572	46,505
6. Materials, supplies, etc. ....	1,069,805	1,102,900	2,819	2,238	1,072,624	1,105,138
7. Fuel and electricity .....	10,882	12,102	...	...	10,882	12,102
8. Gross input (5 + 6 + 7) .....	1,080,687	1,115,002	37,391	48,743	1,118,078	1,163,745
<b>Value added (3 - 8) .....</b>	<b>274,824</b>	<b>276,114</b>	<b>3,702</b>	<b>4,877</b>	<b>278,526</b>	<b>280,991</b>



TABLE 8. Employment and Payroll, 1963 and 1964

Year and province	Employees										Salaries and wages				
	Production and related workers				Admini- trative and office		Sales and distribution		Total		Production and related workers		Admini- strative and office	Sales and distri- bution	Total
	Manufacturing		Other		Male	Female	Male	Female	Male	Female	Manufacturing	Other			
	Male	Female	Male	Female											
	number										\$'000				
1963															
Newfoundland .....	x	-	-	-	x	x	-	-	x	x	x	-	x	-	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
New Brunswick .....	x	x	-	-	x	x	-	-	x	x	x	-	x	-	x
Quebec .....	1,780	3	33	-	646	91	9	-	2,468	94	11,157	184	5,509	41	16,891
Ontario .....	2,102	30	40	-	744	125	44	-	2,930	155	12,857	233	6,464	320	19,873
Manitoba .....	324	-	20	-	113	43	241	25	696	68	1,891	75	964	859	3,789
Saskatchewan .....	613	4	14	-	173	19	12	-	812	23	3,530	89	1,376	49	5,044
Alberta .....	788	2	6	-	279	46	-	-	1,073	48	4,774	39	2,337	-	7,151
British Columbia .....	680	-	2	-	252	31	12	1	946	32	4,121	11	2,147	70	6,348
Yukon and Northwest Terri- tories .....	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
<b>Totals .....</b>	<b>6,852</b>	<b>53</b>	<b>118</b>	<b>-</b>	<b>2,349</b>	<b>372</b>	<b>318</b>	<b>26</b>	<b>9,637</b>	<b>451</b>	<b>41,752</b>	<b>646</b>	<b>19,935</b>	<b>1,339</b>	<b>63,692</b>
1964															
Newfoundland .....	x	-	-	-	x	x	-	-	x	x	x	-	x	-	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	x	-	x	-	x	x	-	-	x	x	x	x	x	-	x
New Brunswick .....	x	-	-	-	x	x	-	-	x	x	x	-	x	-	x
Quebec .....	1,716	2	27	-	667	84	10	-	2,420	86	11,328	156	5,752	49	17,285
Ontario .....	2,078	27	41	-	781	130	48	-	2,948	157	13,465	255	6,985	304	21,009
Manitoba .....	330	-	13	-	129	47	230	21	702	68	1,982	52	1,072	844	3,930
Saskatchewan .....	581	1	11	-	154	18	22	-	768	19	3,450	80	1,331	109	4,970
Alberta .....	740	-	12	-	246	37	-	-	998	37	4,707	76	2,264	-	7,047
British Columbia .....	665	-	4	-	236	23	14	1	919	24	4,199	26	2,018	84	6,327
Yukon and Northwest Terri- tories .....	x	-	x	-	x	x	-	-	x	x	x	x	x	-	x
<b>Totals .....</b>	<b>6,700</b>	<b>30</b>	<b>124</b>	<b>-</b>	<b>2,363</b>	<b>357</b>	<b>324</b>	<b>22</b>	<b>9,511</b>	<b>409</b>	<b>42,896</b>	<b>755</b>	<b>20,877</b>	<b>1,390</b>	<b>65,918</b>

TABLE 9. Production and Related Workers, - Manufacturing Activity, 1963 and 1964

Month	1963		1964	
	Male	Female	Male	Female
	number			
Establishments reporting monthly detail (large establishments only):				
January .....	6,895	49	6,537	27
February .....	6,768	50	6,509	30
March .....	6,789	48	6,615	28
April .....	6,839	52	6,699	30
May .....	7,018	54	6,838	30
June .....	7,118	56	6,928	30
July .....	7,274	54	7,043	30
August .....	7,189	60	6,939	30
September .....	6,718	51	6,756	30
October .....	6,602	47	6,583	30
November .....	6,609	46	6,457	29
December .....	6,506	52	6,463	30
Averages .....	6,852	53	6,700	30
Establishments reporting annual averages (small establishments only) .....	...	...	...	...
Average for all establishments .....	6,852	53	6,700	30

TABLE 10. Inventories, 1964

Province	Manufacturing				Non-manufacturing	Total inventories
	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale	
book value \$'000						
Opening:						
Newfoundland .....	x	x	x	x	x	x
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	x	x	x	x	x	x
New Brunswick .....	x	x	x	x	x	x
Quebec .....	17,772	5,610	39,989	63,371	849	64,220
Ontario .....	31,679	9,681	44,852	86,213	933	87,145
Manitoba .....	1,438	142	5,120	6,701	431	7,132
Saskatchewan .....	2,480	532	10,376	13,389	7	13,396
Alberta .....	2,781	1,498	11,060	15,339	148	15,488
British Columbia .....	5,261	1,895	10,885	18,041	472	18,513
Yukon and Northwest Territories .....	—	—	x	x	—	x
<b>Totals .....</b>	<b>64,804</b>	<b>22,875</b>	<b>129,720</b>	<b>217,399</b>	<b>4,300</b>	<b>221,699</b>
Closing:						
Newfoundland .....	x	x	x	x	x	x
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	x	x	x	x	x	x
New Brunswick .....	x	x	x	x	x	x
Quebec .....	14,460	6,024	38,459	58,943	571	59,514
Ontario .....	31,662	9,350	39,362	80,375	682	81,057
Manitoba .....	1,975	313	5,743	8,031	423	8,454
Saskatchewan .....	2,073	903	9,561	12,537	7	12,543
Alberta .....	2,034	1,773	9,622	13,428	161	13,589
British Columbia .....	5,433	3,554	9,976	18,963	596	19,559
Yukon and Northwest Territories .....	—	—	x	x	—	—
<b>Totals .....</b>	<b>63,036</b>	<b>24,222</b>	<b>122,957</b>	<b>210,215</b>	<b>4,083</b>	<b>214,298</b>

TABLE 11. Purchased Fuel and Electricity Used in Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
<b>1. Large establishments reporting commodity detail:</b>				
Bituminous coal:				
(a) From Canadian mines .....	ton	—	—	—
(b) Imported .....	"	156	178	2
Sub-bituminous coal (from Alberta mines only) .....	"	—	—	—
Anthracite coal .....	"	—	—	—
Lignite coal .....	"	—	—	—
Coke .....	"	—	—	—
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	127,225	112,874	42
Fuel oil including kerosene or coal oil .....	"	989,456	1,118,941	81
Wood .....	cord	—	—	—
Gas:				
(a) Liquefied petroleum gases .....	Imp. gal.	16,000	85	—
(b) Other manufactured gas .....	M cu. ft.	—	—	—
(c) Natural gas .....	"	8,762,071	8,789,431	2,051
Other fuel .....	...	2	...	2
Electricity purchased .....	kwh.	1,278,023,744	1,510,571,284	9,570
Steam purchased .....	...	285	...	354
<b>2. Small establishments not reporting commodity detail:</b>				
Estimate for fuel and electricity .....	—	—	—	—
<b>3. All establishments:</b>				
<b>Total fuel and electricity used .....</b>	...	<b>10,882</b>	...	<b>12,102</b>

SECTION 2. PETROLEUM REFINING

This industry includes establishments primarily engaged in refining crude petroleum. Establishments primarily engaged in blending lubricating oils and greases are covered in Section 3.

As of 1962, statistics for the Petroleum Refining sub-industry do not include the operations of a small refinery in New Brunswick. Details relating to the latter are now being included with the Petroleum and Gas Wells industry (S.I.C. Industry No. 063).

Value of shipments and other revenue (manufacturing and non-manufacturing) of the Petroleum Refining industry amounted to \$1,423 millions in

1964, compared with \$1,362 millions in 1963, an increase of \$61 millions or about 4 per cent. Included in this total were shipments of motor gasoline, kerosene, stove oil, diesel fuel, light and heavy fuel oils, lubricating oil and grease, and other petroleum products valued at \$1,371 millions. Other revenue (non-manufacturing) accounted for \$52 millions.

The cost of materials and supplies, etc., used in the production of goods of own manufacture increased by \$32 millions. Cost of materials and supplies etc., (inputs) in 1964 represented 79 per cent of value of shipments of own manufacture (outputs), compared to 80 per cent in 1963.

TABLE 1. Principal Statistics, 1961-64

Year and province	Estab-lish-ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	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		
<b>1961</b>													
<b>Totals</b> .....	<b>44</b>	<b>7,220</b>	<b>15,462</b>	<b>40,687</b>	<b>10,820</b>	<b>899,836</b>	<b>1,183,508</b>	<b>275,604</b>	-	-	<b>10,660</b>	<b>63,140</b>	<b>276,723</b>
<b>1962</b>													
<b>Totals</b> .....	<b>42</b>	<b>6,930</b>	<b>14,980</b>	<b>41,030</b>	<b>10,278</b>	<b>981,793</b>	<b>1,253,068</b>	<b>264,146</b>	-	-	<b>10,184</b>	<b>62,808</b>	<b>266,857</b>
<b>1963</b>													
Newfoundland .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia.....	1	x	x	x	x	x	x	x	-	-	x	x	x
New Brunswick.....	1	x	x	x	x	x	x	x	-	-	x	x	x
Quebec.....	6	1,735	3,795	10,933	2,746	334,787	411,210	78,442	-	-	2,484	16,517	76,682
Ontario.....	7	1,996	4,240	12,196	2,474	337,038	404,076	75,631	-	-	2,832	18,478	76,184
Manitoba.....	3	321	681	1,879	500	39,632	54,929	13,236	-	-	754	3,741	13,636
Saskatchewan.....	6	617	1,310	3,530	918	62,863	82,864	19,357	-	-	835	5,044	19,555
Alberta.....	8	789	1,689	4,770	1,919	93,623	124,544	28,009	-	-	1,117	7,130	28,401
British Columbia.....	6	676	1,453	4,110	1,264	89,677	116,602	23,552	-	-	971	6,331	24,118
Yukon and Northwest Territories	1	x	x	x	x	x	x	x	-	-	x	x	x
<b>Total</b> .....	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
<b>1964</b>													
Newfoundland .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia.....	2	x	x	x	x	x	x	x	-	-	x	x	x
New Brunswick.....	1	x	x	x	x	x	x	x	-	-	x	x	x
Quebec.....	6	x	x	x	x	x	x	x	-	-	x	x	x
Ontario.....	7	1,970	4,327	12,773	3,427	367,003	457,940	81,174	-	-	2,835	19,523	81,238
Manitoba.....	3	x	x	x	x	x	x	x	-	-	x	x	x
Saskatchewan.....	6	x	x	x	x	x	x	x	-	-	x	x	x
Alberta.....	8	x	x	x	x	x	x	x	-	-	x	x	x
British Columbia.....	6	x	x	x	x	x	x	x	-	-	x	x	x
Yukon and Northwest Territories	1	x	x	x	x	x	x	x	-	-	x	x	x
<b>Totals</b> .....	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 2. Principal Statistics classified by Size Group based on Value of Shipments of Goods of Own Manufacture, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity						Total activity					
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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			
1963													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
500,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
1,000,000 "	7	257	584	1,404	401	14,893	20,360	5,207	-	-	337	1,876	5,577
5,000,000 and over	33	6,456	13,943	39,436	10,326	1,042,365	1,301,784	259,963	-	-	9,397	59,959	263,067
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
1964													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
500,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
1,000,000 "	5	175	408	965	355	7,493	10,691	2,653	-	-	229	1,264	3,354
5,000,000 and over	36	6,360	13,860	40,916	11,595	1,081,639	1,360,649	261,552	-	-	9,318	62,608	268,251
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 3. Principal Statistics classified by Size Group based on Manufacturing Value Added, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity						Total activity					
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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			
1963													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
500,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
1,000,000 "	6	238	542	1,273	341	11,423	15,503	3,746	-	-	312	1,703	4,126
5,000,000 and over	20	5,125	11,095	31,511	7,608	858,502	1,076,566	220,984	-	-	7,252	47,449	222,188
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
1964													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
500,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
1,000,000 "	5	186	422	1,067	649	13,217	16,460	2,241	-	-	255	1,448	2,863
5,000,000 and over	16	1,502	3,282	9,474	3,157	220,442	272,720	46,491	-	-	2,432	15,252	48,620
Head offices, sales offices and auxiliary units	20	4,847	10,565	31,341	6,144	855,472	1,062,161	215,472	-	-	6,860	47,172	217,121
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 4. Principal Statistics classified by Size Group based on Total Value Added, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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		
<b>1963</b>													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	5	184	394	924	312	9,940	12,941	2,746	-	-	249	1,285	2,860
500,000 "	14	1,261	2,737	7,605	2,558	170,074	209,074	36,446	-	-	2,041	11,964	38,544
1,000,000 " 4,999,999	21	5,268	11,397	32,311	7,857	876,496	1,100,129	225,977	-	-	7,444	48,586	227,240
5,000,000 and over	-	-	-	-	-	-	-	-	-	-	-	-	-
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
<b>1964</b>													
Under \$10,000	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999	-	-	-	-	-	-	-	-	-	-	-	-	
25,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
50,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
100,000 "	-	-	-	-	-	-	-	-	-	-	-	-	
200,000 "	4	124	275	617	342	6,021	7,881	1,415	-	-	170	848	1,804
500,000 "	17	1,564	3,428	9,923	3,463	227,638	281,299	47,317	-	-	2,517	15,852	49,679
1,000,000 " 4,999,999	20	4,847	10,565	31,341	8,144	855,472	1,082,161	215,472	-	-	6,860	47,172	217,121
5,000,000 and over	-	-	-	-	-	-	-	-	-	-	-	-	-
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 5. Principal Statistics classified by Size Group based on Total Employed, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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		
<b>1963</b>													
Under 5 employed	-	-	-	-	-	-	-	-	-	-	-	-	
5- 14 employed	-	-	-	-	-	-	-	-	-	-	-	-	
15- 49 "	4	121	256	696	138	11,177	13,861	2,982	-	-	153	891	3,067
50- 99 "	7	403	918	2,260	901	50,083	63,118	11,846	-	-	537	3,187	13,267
100-199 "	13	1,441	3,075	8,744	3,183	210,878	277,988	60,954	-	-	2,090	13,500	61,060
200-499 "	12	2,506	5,452	15,437	4,675	442,713	538,703	97,569	-	-	3,793	23,319	99,053
500 employed and over	4	2,242	4,826	13,703	1,830	342,407	428,474	91,819	-	-	3,161	20,939	92,197
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
<b>1964</b>													
Under 5 employed	-	-	-	-	-	-	-	-	-	-	-	-	
5- 14 employed	4	78	173	440	105	7,416	9,450	1,709	-	-	115	647	1,894
15- 49 "	5	307	734	1,834	960	48,481	61,701	11,363	-	-	395	2,501	12,801
50- 99 "	16	1,590	3,505	10,505	4,352	290,996	362,868	73,848	-	-	2,288	15,832	74,034
100-199 "	12	2,412	5,161	15,558	4,585	403,332	513,801	98,965	-	-	3,696	24,196	101,401
200-499 "	4	2,148	4,694	13,543	1,927	338,906	423,619	78,320	-	-	3,053	20,695	78,475
500 employed and over	-	-	-	-	-	-	-	-	-	-	-	-	-
Head offices, sales offices and auxiliary units	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals</b>	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 6. Principal Statistics classified by Type of Organization, 1963 and 1964

Type of organization	Estab-lish-ments	Manufacturing activity						Total activity					
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	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		
1963													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Incorporated companies .....	40	6,713	14,527	40,840	10,727	1,057,259	1,322,143	265,170	...	...	9,734	61,835	268,644
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>40</b>	<b>6,713</b>	<b>14,527</b>	<b>40,840</b>	<b>10,727</b>	<b>1,057,259</b>	<b>1,322,143</b>	<b>265,170</b>	-	-	<b>9,734</b>	<b>61,835</b>	<b>268,644</b>
1964													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Incorporated companies .....	41	6,535	14,268	41,881	11,950	1,089,131	1,371,340	264,204	...	...	9,547	63,872	268,604
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>41</b>	<b>6,535</b>	<b>14,268</b>	<b>41,881</b>	<b>11,950</b>	<b>1,089,131</b>	<b>1,371,340</b>	<b>264,204</b>	-	-	<b>9,547</b>	<b>63,872</b>	<b>268,604</b>

TABLE 7. Calculation of Output, Input and Value Added, 1963 and 1964

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1963	1964	1963	1964	1963	1964
\$'000						
<b>Output</b>						
1. Shipments and other revenue .....	1,322,143	1,371,340	40,291	51,678	1,362,434	1,423,018
Inventories—Goods of own manufacture:						
Add closing—Goods in process .....	21,326	22,545	...	...	21,326	22,545
Finished goods .....	127,131	121,620	...	...	127,131	121,620
Deduct opening—Goods in process .....	20,282	21,356	...	...	20,282	21,356
Finished goods .....	117,163	128,864	...	...	117,163	128,864
2. Net inventory change .....	11,012	(6,055)	...	...	11,012	(6,055)
3. Gross output (1+2) .....	1,333,155	1,365,285	40,291	51,678	1,373,446	1,416,963
<b>Input</b>						
4. Purchases of goods not of own manufacture .....	...	...	34,329	44,833	34,329	44,833
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	3,889	4,196	3,889	4,196
Deduct closing .....	...	...	4,196	3,952	4,196	3,952
5. Cost of goods sold (not of own manufacture) .....	...	...	34,022	45,077	34,022	45,077
6. Materials, supplies, etc. ....	1,057,259	1,089,131	2,794	2,201	1,060,053	1,091,332
7. Fuel and electricity .....	10,727	11,950	...	...	10,727	11,950
8. Gross input (5+6+7) .....	1,067,986	1,101,081	36,816	47,278	1,104,802	1,148,359
<b>Value added (3-8) .....</b>	<b>265,170</b>	<b>264,204</b>	<b>3,475</b>	<b>4,400</b>	<b>268,644</b>	<b>268,604</b>

TABLE 8. Employment and Payroll, 1963 and 1964

Year and province	Employees										Salaries and wages				
	Production and related workers				Admini- trative and office		Sales and distribution		Total		Production and related workers		Admini- strative and office	Sales and distribution	Total
	Manufacturing		Other		Male	Female	Male	Female	Male	Female	Manufacturing	Other			
	Male	Female	Male	Female											
number										\$'000					
1963															
Newfoundland	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
New Brunswick	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
Quebec	1,732	3	33	-	631	85	-	-	2,396	88	10,933	184	5,400	-	16,517
Ontario	1,966	30	39	-	693	104	-	-	2,698	134	12,196	231	6,051	-	18,478
Manitoba	321	-	20	-	112	41	235	25	688	66	1,897	75	952	835	3,741
Saskatchewan	613	4	14	-	173	19	12	-	812	23	3,530	89	1,376	49	5,044
Alberta	787	2	6	-	277	45	-	-	1,070	47	4,770	39	2,320	-	7,130
British Columbia	676	-	2	-	250	30	12	1	940	31	4,110	11	2,140	70	6,331
Yukon and Northwest Territories	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
<b>Totals</b>	<b>6,660</b>	<b>53</b>	<b>117</b>	<b>-</b>	<b>2,278</b>	<b>341</b>	<b>259</b>	<b>26</b>	<b>9,314</b>	<b>420</b>	<b>40,840</b>	<b>645</b>	<b>19,396</b>	<b>954</b>	<b>61,835</b>
1964															
Newfoundland	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Prince Edward Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
New Brunswick	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Quebec	x	x	x	-	x	x	-	-	x	x	x	x	x	-	x
Ontario	1,943	27	40	-	723	102	-	-	2,706	129	12,773	251	6,500	-	19,523
Manitoba	x	-	x	-	x	x	x	x	x	x	x	x	x	x	x
Saskatchewan	x	x	x	-	x	x	x	-	x	x	x	x	x	x	x
Alberta	x	-	x	-	x	x	-	-	x	x	x	x	x	-	x
British Columbia	x	-	x	-	x	x	x	x	x	x	x	x	x	x	x
Yukon and Northwest Territories	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>Totals</b>	<b>6,505</b>	<b>30</b>	<b>123</b>	<b>-</b>	<b>2,287</b>	<b>319</b>	<b>261</b>	<b>22</b>	<b>9,176</b>	<b>371</b>	<b>41,881</b>	<b>751</b>	<b>20,221</b>	<b>1,020</b>	<b>63,872</b>

TABLE 9. Production and Related Workers, - Manufacturing Activity, 1963 and 1964

Month	1963		1964	
	Male	Female	Male	Female
number				
Establishments reporting monthly detail (large establishments only):				
January	6,610	49	6,347	27
February	6,583	50	6,319	30
March	6,604	48	6,425	28
April	6,654	52	6,506	30
May	6,621	54	6,640	30
June	6,919	56	6,721	30
July	7,072	54	6,834	30
August	6,991	60	6,731	30
September	6,524	51	6,565	30
October	6,410	47	6,390	30
November	6,416	46	6,271	29
December	6,314	52	6,276	30
Averages	6,660	53	6,505	30
Establishments reporting annual averages (small establishments only)	...	...	...	...
Average for all establishments	6,660	53	6,505	30

TABLE 10. Inventories, 1964

Province	Manufacturing				Non-manufacturing	Total Inventories
	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale	
book value \$'000						
Opening:						
Newfoundland .....	x	x	x	x	x	x
Prince Edward Island .....	-	-	-	-	-	-
Nova Scotia .....	x	x	x	x	x	x
New Brunswick .....	x	x	x	x	-	x
Quebec .....	x	x	x	x	x	x
Ontario .....	31,457	8,208	44,335	83,999	850	84,850
Manitoba .....	x	x	x	x	x	x
Saskatchewan .....	x	x	x	x	x	x
Alberta .....	x	x	x	x	x	x
British Columbia .....	x	x	x	x	x	x
Yukon and Northwest Territories .....	-	-	x	x	-	x
<b>Totals</b> .....	<b>63,162</b>	<b>21,356</b>	<b>128,864</b>	<b>213,383</b>	<b>4,196</b>	<b>217,579</b>
Closing:						
Newfoundland .....	x	x	x	x	x	x
Prince Edward Island .....	-	-	-	-	-	-
Nova Scotia .....	x	x	x	x	x	x
New Brunswick .....	x	x	x	x	-	x
Quebec .....	x	x	x	x	x	x
Ontario .....	31,327	7,674	38,533	77,534	801	78,135
Manitoba .....	x	x	x	x	x	x
Saskatchewan .....	x	x	x	x	x	x
Alberta .....	x	x	x	x	x	x
British Columbia .....	x	x	x	x	x	x
Yukon and Northwest Territories .....	-	-	x	x	-	x
<b>Totals</b> .....	<b>61,472</b>	<b>22,545</b>	<b>121,620</b>	<b>205,638</b>	<b>3,952</b>	<b>209,590</b>

TABLE 11. Purchased Fuel and Electricity Used in Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
<b>1. Large establishments reporting commodity detail:</b>				
Bituminous coal:				
(a) From Canadian mines .....	ton	-	-	-
(b) imported .....	"	-	-	-
Sub-bituminous coal (from Alberta mines only) .....	"	-	-	-
Anthracite coal .....	"	-	-	-
Lignite coal .....	"	-	-	-
Coke .....	"	-	-	-
Gasoline (including gasoline used in cars and trucks) .....	Imp. gal.	51,180	17	61,559
Fuel oil including kerosene or coal oil .....	"	11,810	3	5,023
Wood .....	cord	-	-	-
Gas:				
(a) Liquefied petroleum gases .....	Imp. gal.	-	-	-
(b) Other manufactured gas .....	M cu. ft.	-	-	-
(c) Natural gas .....	"	8,760,559	1,951	8,786,439
Other fuel .....		-	-	-
Electricity purchased .....	kwh.	1,274,234,543	8,471	1,506,868,130
Steam purchased .....		...	285	...
<b>2. Small establishments not reporting commodity detail:</b>				
Estimate for fuel and electricity .....		-	-	-
<b>3. All establishments:</b>				
<b>Total fuel and electricity used</b> .....		...	<b>10,727</b>	...
				<b>11,950</b>



TABLE 12. Materials and Supplies - Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost \$'000	Quantity	Cost \$'000
<b>1. Materials used:</b>				
Crude oil in its natural state, from Canadian wells .....	bbl. 178,080,016	534,678	192,598,898	578,848
Absorption gasoline, etc., from Canadian wells (run to stills) .....	" 4,470,096	13,377	5,140,003	14,728
Crude oil, in its natural state, imported, (run to stills):				
From United States .....	" -	-	-	-
From South America .....	bbl. 94,013,437	264,230	102,843,304	282,247
From other countries .....	" 52,355,093	140,223	41,309,808	108,581
Crude oil, not in its natural state (run to stills) .....	" 754,173	4,412	754,787	4,451
Benzol .....	" 37,240	366	6,120	40
Alkylate and cumene .....	" 344,240	2,522	643,830	3,832
Phenol .....	lb. 980,908	118	1,276,450	155
Sulphuric acid, 100% .....	" 24,442,831	354	29,224,001	452
Ammonia, anhydrous .....	" 557,236	56	629,468	72
Sulphur .....	" 321,242	14	311,430	10
Caustic soda .....	" 25,369,499	961	20,559,129	772
Soda ash .....	" 1,225,312	40	1,208,260	41
Litharge .....	" 194,600	28	190,620	34
Fuller's earth, bentonite and other clays .....	ton 2,379	172	2,332	148
Tetraethyl fluid .....	lb. 50,492,196	18,310	53,478,490	18,853
Dyes for gasoline .....	" ..	119	" ..	122
Inhibitor .....	" ..	849	" ..	1,051
Fluid catalytic cracking unit catalysts (Aerocat, Nalcat, Filtrol 100, FCCU catalyst, etc.) .....	" ..	5,635	" ..	5,935
Reforming or polymerization catalysts .....	" ..	1,203	" ..	1,218
Additives .....	" ..	3,716	" ..	3,286
All other materials and components used .....	" ..	37,938	" ..	33,203
<b>2. Containers and other packaging materials and supplies used .....</b>	...	8,557	...	8,325
<b>3. Operating, maintenance and repair supplies used (excluding fuel) .....</b>	...	14,369	...	16,546
<b>4. Amount paid out to others for work done on materials owned by establishments .....</b>	...	5,010	...	6,081
<b>Totals .....</b>	...	1,057,259	...	1,089,131

TABLE 13. Shipments of Goods of Own Manufacture, 1963 and 1964

Description	1963			1964		
	Quantity made including amounts for own use	Quantity shipped	Value of shipments	Quantity made including amounts for own use	Quantity shipped	Value of shipments
<b>1. Products:</b>						
Gasoline (excluding imported casing head-blended):						
Aviation gasoline .....	1,660,197	1,630,661	10,928	1,614,456	1,645,223	10,439
Motor gasoline .....	116,265,159	116,518,194	586,682	122,218,568	122,253,754	603,807
Naphtha specialties .....	740,146	691,932	4,028	745,797	729,815	3,591
Aviation turbine fuel .....	7,393,588	7,479,183	27,210	7,374,117	7,130,270	27,932
Kerosene, stove oil (No. 1 fuel oil) and tractor fuel .....	19,050,047	18,715,544	84,335	18,817,636	18,771,103	83,790
Diesel fuel .....	33,721,225	32,531,002	131,766	35,711,947	35,720,107	144,341
Light fuel oils (Nos. 2 and 3) .....	59,228,816	59,000,352	238,535	59,141,952	58,744,868	239,677
Heavy fuel oils (Nos. 4, 5, and 6) .....	59,047,611	46,076,300	101,385	60,046,498	48,160,413	107,525
Lubricating oil and grease .....	2,823,253	2,815,250	43,420	3,148,191	3,148,353	47,693
Asphalt .....	10,117,071	9,963,751	29,661	10,767,552	10,812,849	32,573
Petroleum coke .....	..	958,251	1,812	..	992,710	1,978
Petrochemical feed stocks .....	6,957,948	6,661,747	19,346	8,901,610	8,867,201	28,026
Liquefied petroleum gases .....	5,034,563	4,408,687	11,692	5,734,605	4,788,484	12,679
All other products .....	...	...	32,136	...	...	28,805
<b>2. Amount received in payment for work done on materials and products owned by others .....</b>	...	...	2,009	...	...	357
<b>Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above .....</b>	...	...	(2,800)	...	...	(865)
<b>Net adjustment for establishments receiving progress payments .....</b>	..	..	-	...	...	(1,006)
<b>Total adjusted value of shipments and work done .....</b>	...	...	1,322,140	...	...	1,371,340

**TABLE 14. Stocks on Hand at the Refineries at the End of December 31, 1964**

	Quantity
	barrels
Crude oil and naphtha, in its natural state, from Canadian wells .....	4,677,818
Absorption gasoline, etc., from Canadian wells .....	655,336
Crude oil, imported:	
In its natural state .....	6,683,933
Not in its natural state .....	-
<b>Total crude .....</b>	<b>12,017,087</b>
Naphtha specialties .....	219,249
Aviation gasoline .....	214,571
Motor gasoline .....	10,415,375
Aviation turbine fuel .....	848,549
Kerosene, stove oil (No. 1 fuel) and tractor fuel .....	2,029,740
Diesel fuel .....	3,661,428
Light fuel oils (Nos. 2 and 3) .....	8,142,118
Heavy fuel oils (Nos. 4, 5 and 6) .....	4,113,983
Lubricating oils and greases .....	490,880
Liquefied petroleum gases (propane, butane, etc.) .....	365,222
Petroleum coke .....	154,577

**TABLE 15. Refinery Production<sup>1</sup> of Gasoline, 1955-64**

Year	Motor gasoline	Aviation gasoline	Total
1955 .....	76,674,069	735,706	77,409,775
1956 .....	85,846,938	758,826	86,605,764
1957 .....	86,290,914	593,253	86,884,167
1958 .....	89,329,101	675,870	90,004,971
1959 .....	95,519,002	677,963	96,196,965
1960 .....	101,397,928	1,280,440	102,678,368
1961 .....	106,628,143	1,137,454	107,765,597
1962 .....	111,032,529	1,539,803	112,572,332
1963 .....	116,265,159	1,660,197	117,925,356
1964 .....	122,218,568	1,614,456	123,833,024

<sup>1</sup> Includes production made for own use.

**TABLE 16. Number<sup>1</sup> and Total Capacity of Petroleum Refineries in Operation, December 31, 61-64**

Province	1961		1962		1963		1964	
	Number	Capacity, in barrels of crude per day	Number	Capacity, in barrels of crude per day	Number	Capacity, in barrels of crude per day	Number	Capacity, in barrels of crude per day
Newfoundland .....	1	8,500	1	8,500	1	8,500	1	8,500
Nova Scotia .....	1	50,000	1	50,000	1	50,000	2	72,000
New Brunswick .....	2	47,800	2	45,300	2	45,300	1	45,000
Quebec .....	6	297,000	6	304,500	6	305,000	6	318,700
Ontario .....	7	260,820	7	279,170	8	305,470	7	306,900
Manitoba .....	3	37,420	3	37,420	3	40,420	3	41,300
Saskatchewan .....	6	70,750	6	69,720	6	70,010	6	70,010
Alberta .....	10	90,670	10	94,560	8	88,800	7	86,700
British Columbia .....	6	97,300	6	97,300	6	97,300	6	101,500
Northwest Territories .....	1	1,500	1	1,900	1	1,900	1	1,900
<b>Canada .....</b>	<b>44</b>	<b>961,760</b>	<b>43</b>	<b>987,970</b>	<b>42</b>	<b>1,012,700</b>	<b>40</b>	<b>1,052,510</b>

<sup>1</sup> Number of refineries in above table may not agree with number of establishments shown in Table 1 et seq. because of different methods used in accounting for refineries in partial operations or terminating operations during the year by the two agencies involved.

Note: 1 barrel = 35 Imperial gallons.

Source: Petroleum Refineries in Canada, January 1, 1965 issued by Department of Energy, Mines and Resources, Catalogue No. M36-65/5.

TABLE 17. Consumption of Crude Oil in Petroleum Refineries, showing Canadian and Imported Separately, 1955-64

Year	Canadian <sup>1</sup>	Imported	Total
		barrels	
1955	108,336,326	86,719,894	195,056,220
1956	125,576,963	105,738,257	231,315,220
1957	128,017,186	110,836,969	238,854,155
1958	138,547,168	106,458,959	240,006,127
1959	152,143,029	115,599,492	267,742,521
1960	152,033,834	125,851,879	277,885,713
1961	162,601,125	132,469,105	295,070,230
1962	175,022,688	134,080,865	309,103,553
1963	182,550,112	147,122,703	329,672,815
1964	197,738,901	144,907,899	342,646,800

<sup>1</sup> Includes the crude naphtha and absorption gasoline from Canadian wells which were run to refinery stills.

List of Establishments classified to This Industry, 1964

(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Name	Location
<b>Newfoundland:</b>	
Golden Eagle Refining Co. of Canada Ltd.	St. John's
<b>Nova Scotia:</b>	
Imperial Oil Limited	Imperial
Texaco Canada Ltd.	Halifax
<b>New Brunswick:</b>	
Irving Refining Limited	Saint John
<b>Quebec:</b>	
R.P. Refinery Canada Limited	Ville d'Anjou
British American Oil Co. Limited	Montreal East
Canadian Petrofina Ltd.	Pointe-aux-Trembles
Imperial Oil Limited	Montreal East
Shell Canada Ltd.	Montreal East
Texaco Canada Limited	Montreal East
<b>Ontario:</b>	
B.P. Refinery Canada Limited	Oakville
British American Oil Co. Limited	Clarkson
Imperial Oil Limited	Sarnia
Shell Canada Ltd.	Corunna, Oakville
Sun Oil Company Limited	Sarnia
Texaco Canada Limited (Regent Refining Div.)	Port Credit
<b>Manitoba:</b>	
Anglo-Canadian Oils Ltd.	Brandon
Imperial Oil Limited	East St. Paul
Shell Canada Limited	St. Boniface
<b>Saskatchewan:</b>	
British American Oil Co. Limited	Moose Jaw
Canadian Husky Oil Ltd.	Moose Jaw
Consumers' Co-operative Refineries Limited	Regina
Imperial Oil Limited	Regina
Northern Petroleum Corporation Ltd.	Kamsack
Royalite Oil Co. Ltd.	Saskatoon
<b>Alberta:</b>	
British American Oil Co. Limited	Calgary, Edmonton
Canadian Husky Oil Ltd.	Lloydminster
Imperial Oil Limited	Calgary, Edmonton
Shell Canada Limited	Grande Prairie, Innisfall
Texaco Canada Limited	Edmonton
<b>British Columbia:</b>	
British American Oil Co. Limited	Port Moody
Imperial Oil Limited	Ioco
Royalite Oil Co. Ltd.	Kamloops
Shell Canada Ltd.	North Burnaby
Standard Oil Company of British Columbia Ltd.	North Burnaby
Pacific Petroleum Ltd.	Dawson Creek
<b>Northwest Territories:</b>	
Imperial Oil Limited	Norman Wells

**SECTION 3. MANUFACTURERS OF LUBRICATING OILS AND GREASES**

This industry includes establishments primarily engaged in blending lubricating oils and greases. Establishments primarily engaged in refining crude petroleum are covered in Section 2.

Value of shipments and other revenue (manufacturing and non-manufacturing) of the Manufacturers of Lubricating Oils and Greases amounted to \$27,131,000 in 1964, compared with \$23,530,000 in 1963, an increase of \$3,601,000 or about 15 per cent. Included in this total were shipments of

lubricating oils and lubricating greases, etc. valued at \$25,191,000. Other revenue (non-manufacturing) accounted for \$1,940,000.

The cost of materials and supplies, etc. used in the production of goods of own manufacture increased by \$1,221,000. Cost of materials and supplies, etc., (inputs) in 1964 represented 55 per cent of value of shipments of own manufacture (outputs), compared to same percentage in 1963.

**TABLE 1. Principal Statistics, 1961 - 64**

Year and province	Estab-lish-ments	Manufacturing activity							Total activity				
		Production and related workers			Cost of fuel and elec-tricity	Cost of materials and supplies	Value of shipments of goods of own manu-facture	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			
<b>1961</b>													
<b>Totals</b> .....	<b>13</b>	<b>186</b>	<b>382</b>	<b>839</b>	<b>148</b>	<b>11,857</b>	<b>17,105</b>	<b>5,122</b>	<b>x</b>	<b>x</b>	<b>331</b>	<b>1,628</b>	<b>5,267</b>
<b>1962</b>													
<b>Totals</b> .....	<b>16</b>	<b>194</b>	<b>405</b>	<b>889</b>	<b>166</b>	<b>12,214</b>	<b>21,197</b>	<b>9,364</b>	<b>x</b>	<b>x</b>	<b>351</b>	<b>1,785</b>	<b>9,573</b>
<b>1963</b>													
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec .....	2	x	x	x	x	x	x	x	-	-	x	x	x
Ontario .....	9	136	284	661	114	8,295	16,079	7,209	-	-	253	1,395	7,308
Manitoba .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta .....	1	x	x	x	x	x	x	x	-	-	x	x	x
British Columbia .....	2	x	x	x	x	x	x	x	-	-	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals</b> .....	<b>15</b>	<b>192</b>	<b>402</b>	<b>912</b>	<b>155</b>	<b>12,547</b>	<b>22,728</b>	<b>9,654</b>	<b>-</b>	<b>-</b>	<b>354</b>	<b>1,856</b>	<b>9,881</b>
<b>1964</b>													
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Quebec .....	2	x	x	x	x	x	x	x	-	-	x	x	x
Ontario .....	9	135	282	692	109	8,491	16,969	8,883	-	-	270	1,486	9,073
Manitoba .....	1	x	x	x	x	x	x	x	-	-	x	x	x
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Alberta .....	1	x	x	x	x	x	x	x	-	-	x	x	x
British Columbia .....	2	x	x	x	x	x	x	x	-	-	x	x	x
Yukon and Northwest Territories	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals</b> .....	<b>15</b>	<b>195</b>	<b>428</b>	<b>1,014</b>	<b>152</b>	<b>13,768</b>	<b>25,191</b>	<b>11,910</b>	<b>-</b>	<b>-</b>	<b>373</b>	<b>2,045</b>	<b>12,386</b>

TABLE 2. Principal Statistics classified by Size Group based on Value of Shipments of Goods of Own Manufacture, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity						
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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					
1963															
Under \$10,000 .....	}	3	3	7	8	--	9	41	27	-	-	8	23	27	
\$ 10,000 to \$ 24,999 .....		3	11	21	40	4	31	243	104	-	-	24	118	121	
25,000 " 49,999 .....		3	17	34	65	30	557	974	413	-	-	49	245	434	
50,000 " 99,999 .....		3	29	61	122	14	1,192	2,090	966	-	-	72	387	987	
100,000 " 199,999 .....		3	132	280	677	107	10,759	19,381	8,144	-	-	201	1,082	8,312	
200,000 " 499,999 .....															
500,000 " 999,999 .....															
1,000,000 " 4,999,999 .....															
5,000,000 and over .....															
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
<b>Totals .....</b>	<b>15</b>	<b>192</b>	<b>402</b>	<b>912</b>	<b>155</b>	<b>12,547</b>	<b>22,728</b>	<b>9,654</b>	<b>-</b>	<b>-</b>	<b>354</b>	<b>1,856</b>	<b>9,881</b>		
1964															
Under \$10,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999 .....	}	3	7	14	24	2	23	81	56	-	-	10	35	56	
25,000 " 49,999 .....		3	13	25	57	6	146	333	210	-	-	32	183	304	
50,000 " 99,999 .....		3	15	33	75	23	562	1,015	374	-	-	49	262	401	
100,000 " 199,999 .....															
200,000 " 499,999 .....		6	160	357	858	122	13,037	23,763	11,270	-	-	282	1,565	11,625	
500,000 " 999,999 .....															
1,000,000 " 4,999,999 .....															
5,000,000 and over .....															
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
<b>Totals .....</b>	<b>15</b>	<b>195</b>	<b>428</b>	<b>1,014</b>	<b>152</b>	<b>13,768</b>	<b>25,191</b>	<b>11,910</b>	<b>-</b>	<b>-</b>	<b>373</b>	<b>2,045</b>	<b>12,386</b>		

TABLE 3. Principal Statistics classified by Size Group based on Manufacturing Value Added, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity						
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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					
1963															
Under \$10,000 .....	}	3	3	7	8	--	9	41	27	-	-	8	23	27	
\$ 10,000 to \$ 24,999 .....		4	14	28	51	7	229	534	195	-	-	36	168	220	
25,000 " 49,999 .....		3	23	46	82	29	831	1,240	440	-	-	61	290	482	
50,000 " 99,999 .....															
100,000 " 199,999 .....		5	152	322	770	118	11,478	20,913	8,992	-	-	249	1,377	9,152	
200,000 " 499,999 .....															
500,000 " 999,999 .....															
1,000,000 " 4,999,999 .....															
5,000,000 and over .....															
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
<b>Totals .....</b>	<b>15</b>	<b>192</b>	<b>402</b>	<b>912</b>	<b>155</b>	<b>12,547</b>	<b>22,728</b>	<b>9,654</b>	<b>-</b>	<b>-</b>	<b>354</b>	<b>1,856</b>	<b>9,881</b>		
1964															
Under \$10,000 .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
\$ 10,000 to \$ 24,999 .....	}	3	7	14	24	2	23	81	56	-	-	10	35	56	
25,000 " 49,999 .....		4	17	33	73	9	314	572	271	-	-	44	230	376	
50,000 " 99,999 .....		3	22	49	100	22	835	1,383	501	-	-	62	315	537	
100,000 " 199,999 .....															
200,000 " 499,999 .....		5	149	332	818	119	12,596	23,155	11,082	-	-	257	1,485	11,417	
500,000 " 999,999 .....															
1,000,000 " 4,999,999 .....															
5,000,000 and over .....															
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
<b>Totals .....</b>	<b>15</b>	<b>195</b>	<b>428</b>	<b>1,014</b>	<b>152</b>	<b>13,768</b>	<b>25,191</b>	<b>11,910</b>	<b>-</b>	<b>-</b>	<b>373</b>	<b>2,045</b>	<b>12,386</b>		

TABLE 4. Principal Statistics classified by Size Group based on Total Value Added, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity						
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	Value added	Working owners and partners		Employees		Value added		
		Number	Man- hours paid	Wages					Number	With- drawals	Number	Salaries and wage			
No.		'000			\$'000			\$'000		\$'000					
1963															
Under \$10,000 .....	}	3	3	7	8	--	9	41	27	--	--	8	23	27	
\$ 10,000 to \$ 24,999 .....		4	14	28	51	7	229	534	195	--	--	36	166	220	
25,000 " 49,999 .....		3	23	46	82	29	831	1,240	440	--	--	61	290	482	
50,000 " 99,999 .....		}	5	152	322	770	118	11,478	20,913	8,992	--	--	249	1,377	9,152
100,000 " 199,999 .....			5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...
200,000 " 499,999 .....	5,000,000 and over .....		...	...	...	...	...	...	...	...	...	...	...	...	
500,000 " 999,999 .....	Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	
1,000,000 " 4,999,999 .....	Totals .....	15	192	402	912	155	12,547	22,708	9,654	--	--	354	1,856	9,881	
1964															
Under \$10,000 .....	}	3	7	14	24	2	23	81	56	--	--	10	35	56	
\$ 10,000 to \$ 24,999 .....		5	22	45	104	24	456	913	401	--	--	63	343	503	
25,000 " 49,999 .....		3	20	44	82	9	1,065	1,672	644	--	--	51	241	685	
50,000 " 99,999 .....		}	4	146	326	805	118	12,224	22,526	10,809	--	--	249	1,428	11,143
100,000 " 199,999 .....			5,000,000 and over .....	...	...	...	...	...	...	...	...	...	...	...	...
200,000 " 499,999 .....	5,000,000 and over .....		...	...	...	...	...	...	...	...	...	...	...	...	
500,000 " 999,999 .....	Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...	
1,000,000 " 4,999,999 .....	Totals .....	15	195	428	1,014	152	13,768	25,191	11,910	--	--	373	2,045	12,386	

TABLE 5. Principal Statistics classified by Size Group based on Total Employed, 1963 and 1964

Size group	Estab- lish- ments	Manufacturing activity							Total activity						
		Production and related workers			Cost of fuel and elec- tricity	Cost of materials and supplies	Value of shipments of goods of own manu- facture	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					
1963															
Under 5 employed .....	}	7	12	26	42	9	580	1,046	455	--	--	35	143	474	
5- 14 employed .....		8	180	377	869	146	11,966	21,682	9,199	--	--	319	1,714	9,407	
15- 49 " .....		}	...	...	...	...	...	...	...	...	...	...	...	...	
50- 99 " .....			...	...	...	...	...	...	...	...	...	...	...	...	
100-199 " .....			...	...	...	...	...	...	...	...	...	...	...	...	
200-499 " .....	500 employed and over .....	...	...	...	...	...	...	...	...	...	...	...	...		
Head offices, sales offices and auxiliary units .....	Totals .....	15	192	402	912	155	12,547	22,728	9,654	--	--	354	1,856	9,881	
1964															
Under 5 employed .....	}	4	8	16	28	4	64	156	97	--	--	14	56	115	
5- 14 employed .....		3	11	23	53	7	596	981	405	--	--	32	167	478	
15- 49 " .....		5	46	98	202	34	2,220	3,204	1,020	--	--	122	604	1,172	
50- 99 " .....		}	3	130	291	731	107	10,888	20,850	10,387	--	--	205	1,218	10,622
100-199 " .....			500 employed and over .....	...	...	...	...	...	...	...	...	...	...	...	...
200-499 " .....	500 employed and over .....		...	...	...	...	...	...	...	...	...	...	...	...	
Head offices, sales offices and auxiliary units .....	Totals .....	15	195	428	1,014	152	13,768	25,191	11,910	--	--	373	2,045	12,386	

TABLE 6. Principal Statistics classified by Type of Organization, 1963 and 1964

Type of organization	Establishments	Manufacturing activity						Total activity					
		Production and related workers			Cost of fuel and electricity	Cost of materials and supplies	Value of shipments of goods of own manufacture	Value added	Working owners and partners		Employees		Value added
		Number	Man-hours paid	Wages					Number	Withdrawals	Number	Salaries and wages	
No.		'000			\$'000			\$'000		\$'000			
1963													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	
Incorporated companies .....	15	192	402	912	155	12,547	22,728	9,654	...	...	354	1,856	9,881
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>15</b>	<b>192</b>	<b>402</b>	<b>912</b>	<b>155</b>	<b>12,547</b>	<b>22,728</b>	<b>9,654</b>	-	-	<b>354</b>	<b>1,856</b>	<b>9,881</b>
1964													
Individual ownerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Partnerships .....	-	-	-	-	-	-	-	-	-	-	-	-	-
Incorporated companies .....	15	195	428	1,014	152	13,768	25,191	11,910	...	...	373	2,045	12,386
Co-operatives .....	-	-	-	-	-	-	-	-	...	...	-	-	-
Head offices, sales offices and auxiliary units .....	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Totals .....</b>	<b>15</b>	<b>195</b>	<b>428</b>	<b>1,014</b>	<b>152</b>	<b>13,768</b>	<b>25,191</b>	<b>11,910</b>	-	-	<b>373</b>	<b>2,045</b>	<b>12,386</b>

TABLE 7. Calculation of Output, Input and Value Added, 1963 and 1964

	Manufacturing activity		Non-manufacturing activities		Total activity	
	1963	1964	1963	1964	1963	1964
\$'000						
<b>Output</b>						
1. Shipments and other revenue .....	22,728	25,191	802	1,940	23,530	27,131
Inventories—Goods of own manufacture:						
Add closing—Goods in process .....	1,600	1,677	...	...	1,600	1,677
Finished goods .....	749	1,337	...	...	749	1,337
Deduct opening—Goods in process .....	1,971	1,519	...	...	1,971	1,519
Finished goods .....	751	856	...	...	751	856
2. Net inventory change .....	(373)	639	...	...	(373)	639
3. Gross output (1 + 2) .....	22,355	25,830	802	1,940	23,157	27,770
<b>Input</b>						
4. Purchases of goods not of own manufacture .....	...	...	555	1,454	555	1,454
Inventories—Goods not of own manufacture:						
Add opening .....	...	...	80	104	80	104
Deduct closing .....	...	...	86	131	86	131
5. Cost of goods sold (not of own manufacture) .....	...	...	549	1,427	549	1,427
6. Materials, supplies, etc. ....	12,547	13,768	25	37	12,572	13,805
7. Fuel and electricity .....	155	152	...	...	155	152
8. Gross input (5 + 6 + 7) .....	12,702	13,920	574	1,464	13,276	15,384
<b>Value added (3 - 8) .....</b>	<b>9,654</b>	<b>11,910</b>	<b>228</b>	<b>476</b>	<b>9,881</b>	<b>12,386</b>

TABLE 8. Employment and Payroll, 1963 and 1964

Year and province	Employees										Salaries and wages				
	Production and related workers				Adminis-trative and office		Sales and distribution		Total		Production and related workers		Adminis-trative and office	Sales and distri-bution	Total
	Manufacturing		Other		Male	Female	Male	Female	Male	Female	Manufacturing	Other			
	Male	Female	Male	Female											
	number										\$'000				
1963															
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quebec .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
Ontario .....	136	-	1	-	51	21	44	-	232	21	661	1	413	320	
Manitoba .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alberta .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
British Columbia .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
Yukon and Northwest Terri-tories .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Totals .....</b>	<b>192</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>71</b>	<b>31</b>	<b>59</b>	<b>-</b>	<b>323</b>	<b>31</b>	<b>912</b>	<b>1</b>	<b>558</b>	<b>385</b>	
1964															
Newfoundland .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Prince Edward Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nova Scotia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
New Brunswick .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Quebec .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
Ontario .....	135	-	1	-	58	28	48	-	242	28	692	5	486	304	
Manitoba .....	x	-	-	-	x	x	x	-	x	x	x	-	x	x	
Saskatchewan .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Alberta .....	x	-	-	-	x	x	-	-	x	x	x	-	x	x	
British Columbia .....	x	-	-	-	x	-	-	-	x	-	x	-	x	x	
Yukon and Northwest Terri-tories .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Totals .....</b>	<b>195</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>76</b>	<b>38</b>	<b>63</b>	<b>-</b>	<b>335</b>	<b>38</b>	<b>1,014</b>	<b>5</b>	<b>656</b>	<b>370</b>	

TABLE 9. Production and Related Workers, - Manufacturing Activity, 1963 and 1964

Month	1963		1964	
	Male	Female	Male	Female
	number			
Establishments reporting monthly detail (large establishments only):				
January .....	185	-	190	-
February .....	185	-	190	-
March .....	185	-	190	-
April .....	185	-	193	-
May .....	197	-	198	-
June .....	199	-	207	-
July .....	202	-	209	-
August .....	198	-	208	-
September .....	194	-	191	-
October .....	192	-	193	-
November .....	193	-	186	-
December .....	192	-	187	-
Averages .....	192	-	195	-
Establishments reporting annual averages (small establishments only) .....	...	...	...	...
Average for all establishments .....	192	-	195	-



TABLE 10. Inventories, 1964

Province	Manufacturing				Non-manufacturing	Total inventories
	Materials, supplies, etc.	Goods in process	Finished goods of own manufacture	Total	Products or materials purchased for resale	
book value \$'000						
Opening:						
Newfoundland .....	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	—	—	—	—	—	—
New Brunswick .....	—	—	—	—	—	—
Quebec .....	x	—	x	x	x	x
Ontario .....	222	1,474	518	2,214	82	2,296
Manitoba .....	x	x	—	x	x	x
Saskatchewan .....	—	—	—	—	—	—
Alberta .....	x	x	x	x	—	x
British Columbia .....	x	—	x	x	—	x
Yukon and Northwest Territories .....	—	—	—	—	—	—
<b>Totals .....</b>	<b>1,642</b>	<b>1,519</b>	<b>856</b>	<b>4,017</b>	<b>104</b>	<b>4,120</b>
Closing:						
Newfoundland .....	—	—	—	—	—	—
Prince Edward Island .....	—	—	—	—	—	—
Nova Scotia .....	—	—	—	—	—	—
New Brunswick .....	—	—	—	—	—	—
Quebec .....	x	—	x	x	x	x
Ontario .....	335	1,677	829	2,841	81	2,922
Manitoba .....	x	—	x	x	x	x
Saskatchewan .....	—	—	—	—	—	—
Alberta .....	x	—	x	x	—	x
British Columbia .....	x	—	x	x	—	x
Yukon and Northwest Territories .....	—	—	—	—	—	—
<b>Totals .....</b>	<b>1,563</b>	<b>1,677</b>	<b>1,337</b>	<b>4,577</b>	<b>131</b>	<b>4,708</b>

TABLE 11. Purchased Fuel and Electricity Used in Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost \$'000	Quantity	Cost \$'000
1. Large establishments reporting commodity detail:				
Bituminous coal:				
(a) From Canadian mines .....	ton	—	—	—
(b) Imported .....	"	156	178	2
Sub-bituminous coal (from Alberta mines only) .....	"	—	—	—
Anthracite coal .....	"	—	—	—
Lignite coal .....	"	—	—	—
Coke .....	"	—	—	—
Gasoline (including gasoline used in cars and trucks) .....	imp. gal.	76,045	51,315	18
Fuel oil including kerosene or coal oil .....	"	977,646	1,113,916	80
Wood .....	cord	—	—	—
Gas:				
(a) Liquefied petroleum gases .....	imp. gal.	16,000	85	—
(b) Other manufactured gas .....	M cu. ft.	—	—	—
(c) Natural gas .....	"	1,512	2,992	3
Other fuel .....		2	...	2
Electricity purchased .....	kwh.	3,789,201	3,703,154	47
Steam purchased .....		...	...	1
2. Small establishments not reporting commodity detail:				
Estimate for fuel and electricity .....		...	...	—
3. All establishments:				
<b>Total fuel and electricity used .....</b>		<b>...</b>	<b>...</b>	<b>152</b>

TABLE 12. Materials and Supplies - Manufacturing Activity, 1963 and 1964

Description	1963		1964	
	Quantity	Cost	Quantity	Cost
		\$'000		\$'000
<b>1. Materials used:</b>				
Oils for blending:				
Canadian .....	Imp. gal.	10,338,122	3,339	8,726,253
Imported .....		10,088,725	3,131	13,102,630
Grease for blending:				
Imported .....	lb.	314,394	36	446,175
Additives for lubeoils and greases .....		..	1,684	..
All other materials and components used <sup>1</sup> .....		...	1,266	...
<b>2. Containers and other packaging materials and supplies used .....</b>		...	2,750	...
<b>3. Operating, maintenance and repair supplies used (excluding fuel) .....</b>		...	270	...
<b>4. Amount paid out to others for work done on materials owned by establishments ....</b>		...	70	...
<b>Totals .....</b>		...	12,547	...

<sup>1</sup>No detailed information on materials used was collected from small establishments, the estimated costs for which are included here. These estimated costs were \$31,625 in 1963 and \$98,936 in 1964.

TABLE 13. Shipments of Goods of Own Manufacture, 1963 and 1964

Description	1963		1964	
	Quantity	Value	Quantity	Value
		\$'000		\$'000
<b>1. Products:</b>				
Oils, lubricating .....	Imp. gal.	20,639,691	19,904	22,354,139
Greases, lubricating .....	lb.	16,741,681	2,874	18,814,624
All other products .....		...	271	...
<b>2. Amount received in payment for work done on materials and products owned by others</b>		...	27	...
Less adjustment for value of sales taxes, excise duties and outward transportation charges which could not be deducted from individual commodity items described above .....		...	(348)	...
Net adjustment for establishments receiving progress payments .....		...	-	...
<b>Total adjusted value of shipments and work done .....</b>		...	22,728	...

TABLE 14. Sales of Lubricating Oils and Greases by Class of Trade, 1964

Product	Retail gasoline pump outlets	Railways, excluding marine uses	Farms	Other	Total sales
<b>Lubricating oil:</b>					
Atlantic Provinces <sup>1</sup> .....	102,490	20,455	9,902	175,235	308,082
Quebec .....	292,449	61,672	33,651	405,312	793,084
Ontario .....	416,011	41,111	62,721	834,448	1,354,291
Manitoba .....	51,530	38,079	39,998	53,832	183,439
Saskatchewan .....	66,816	1,579	105,945	81,574	255,914
Alberta .....	79,261	31,463	100,678	202,306	413,708
British Columbia .....	94,882	20,900	21,193	244,106	381,081
Northwest Territories and Yukon .....	648	-	225	9,612	10,485
<b>Canada .....</b>	<b>1,104,087</b>	<b>215,259</b>	<b>374,313</b>	<b>2,006,425</b>	<b>3,700,084</b>
<b>Grease:<sup>2</sup></b>					
Atlantic Provinces <sup>1</sup> .....	6,148	1,530	512	8,413	16,603
Quebec .....	14,059	2,307	1,879	26,574	44,819
Ontario .....	21,420	1,454	5,091	42,726	70,691
Manitoba .....	2,265	1,452	7,236	2,684	13,637
Saskatchewan .....	2,300	57	9,018	2,797	14,172
Alberta .....	2,430	1,241	6,778	5,922	16,371
British Columbia .....	3,170	369	898	11,662	16,099
Northwest Territories and Yukon .....	6	-	3	187	196
<b>Canada .....</b>	<b>51,798</b>	<b>8,410</b>	<b>31,415</b>	<b>100,965</b>	<b>192,588</b>

<sup>1</sup> Includes Newfoundland, Prince Edward Island, Nova Scotia and New Brunswick.

<sup>2</sup> Includes greases at 10 pounds to a gallon.

**List of Establishments classified to This Industry, 1964**

(Does not include establishments classified to other industries, which as a secondary activity, manufacture products typical of this industry)

Name	Location
<b>Quebec:</b>	
Shell Canada Ltd. ....	6010 Notre Dame St. E., Montreal
Tide Water Oil Company (Canada) Ltd. ....	50 DeLouvain St. W., Montreal
<b>Ontario:</b>	
Campbell Lubricating Specialties Ltd. ....	414 Eastern Ave., Toronto
Canadian D.A. Stuart Oil Co. Ltd. ....	43 Upton Rd., Scarborough
Houghton, E.F. and Co. Canada Ltd. ....	100 Symes Rd., Toronto
Kendall Refining Co. of Canada Ltd. ....	2 Bradpenn Rd., Toronto
Kerns Lubricants Ltd. ....	280 Midwest Rd., Scarborough
Ontario Lubricating Co. Ltd., The ....	120 Chatham St., Hamilton
Stone Oil Co. Ltd. ....	115 Unwin Ave., Toronto
Texaco Canada Limited ....	51 Commissioner St., Toronto
Tide Water Oil Company (Canada) Ltd. ....	55 Wade Ave., Toronto
<b>Manitoba:</b>	
Tide Water Oil Company (Canada) Ltd. ....	471 Madison St., Winnipeg
<b>Alberta:</b>	
Jet-Lube of Canada Ltd. ....	8925-77th Ave. S.W., Edmonton
<b>British Columbia:</b>	
Star Oil Refining Ltd. ....	1651 Island Hwg., Victoria
Wills Oil Co. Ltd. ....	533 Powell St., Vancouver

# CONCEPTS AND DEFINITIONS

## Census of Manufactures

### General

The Census of Manufactures is an annual mail survey covering Canada's Manufacturing Industries. It is based on the Standard Classification of Industries and full details concerning the system may be found in the Standard Industrial Classification manual, Catalogue No. 12-501 which is available from the Queen's Printer or the Dominion Bureau of Statistics. In summary, the Classification as it relates to the manufacturing industries provides for a breakdown into 140 industries arranged in 20 major industry groups. Of the 140 (3 digit) industries, 18 are further broken down into 56 (4 digit) sub classes. At the Canada level, principal statistics are collected and compiled for 176 separate industries. They cannot all be published separately by province, however, because of the confidential nature of the data in certain provinces.

The reporting unit for the Census is designated as the **establishment** (see definition of "Establishment" in following section) and a return is requested from every establishment classified to a manufacturing industry. Although respondents are required to submit reports covering the calendar year, financial year reports other than the calendar year are accepted in instances where respondents find it impossible to supply calendar year data from accounting records. When an establishment is operated for only part of a year a report is required covering the period of operation.

There are four different questionnaires used in the Census of Manufactures; (a) short form (b) long form (c) head office questionnaire and (d) commodity questionnaire. The short and long forms are used to obtain principal statistics and commodities shipped from establishments classified to manufacturing industries and differ only in the amount of detail requested. The short form is a single-sheet questionnaire sent to small manufacturers generally reporting shipments of less than \$100,000; this cut-off, however, varies somewhat between industries. The head office questionnaire is generally used for company head offices and/or auxiliary units separately located from the manufacturing establishment(s), (see following notes on Head offices and auxiliary units). The Commodity questionnaire is used to survey certain establishments which are coded (on the basis of their principal activity) to industries other than manufacturing in the Standard Industrial Classification system, but which undertake some manufacturing as a subsidiary activity. This single-sheet questionnaire is designed to collect information on the quantity and value of goods of own manufacture shipped by such establishments in order to achieve full coverage of domestically manufactured commodities (see the following note under Shipments).

The results of the Census are presented in some 140 publications. In addition to these annual industry publications there are annual summary reports for Canada and the provinces and special reports giving principal statistics by detailed geographic areas, by type of ownership and size of establishment. A special annual report covering the shipments of all manufactured commodities arranged in alphabetical order is also published.

Since 1960 the following major changes have been implemented in the Census of Manufactures: (a) a revised Standard Industrial Classification (b) a new establishment definition and (c) an extension of the establishment definition to cover the non-manufacturing activities of manufacturing establishments. The statistics presented in the various 1963 reports reflect the complete implementation of these changes and enable comparisons to be made with the years 1961 and 1962. For a complete description of the procedures followed in establishing the revised series, reference should be made to the Explanatory Notes included in the 1960, 1961 and 1962 industry publications. The statistical framework within which the Census of Manufactures is now carried out is based on the following concepts and definitions which have been developed as part of a general programme to achieve a fully integrated system of economic statistics.

### Establishment

A manufacturing establishment is typically a factory, mill or plant principally engaged in manufacturing activities. The majority of such establishments are firms but many firms have more than one establishment. Such firms are requested to submit a separate Census of Manufactures report for each manufacturing establishment which can meet the reporting requirements embodied in the following definition of the "establishment":

"The smallest unit which is a separate operating entity capable of reporting the following principal statistics:

- Materials and supplies used
- Goods purchased for resale as such
- Fuel and power consumed
- Number of employees and salaries and wages
- Man-hours worked and paid
- Inventories
- Shipments or sales."

Each establishment is required to report on all the activities carried out within its accounting boundaries (except income from investments such as rent, interest and dividends) and data on the different activities (manufacturing, trading in goods not of own manufacture, construction by own labour

force, revenue from services, etc.) are requested to be reported separately. It should be noted that the statistics for separate activities are not completely consistent since some respondents cannot distinguish, in their records, materials, shipments and inventories relating solely to their own manufacturing activities. For example, inventory of goods purchased for re-sale may not be distinguishable from inventory of own manufactured goods. Complete consistency, therefore, can be obtained only at the "all operations" (total activity) level and for studies or statistical measures requiring accurate coordinated data, the "total" statistics should be used.

The number of establishments represents the number of operating units that are principally engaged in the activities of the manufacturing industries to which they have been classified. These units do not necessarily represent the total number engaged in the production of a commodity mainly produced in a certain industry. Some commodities are produced as secondary products in other manufacturing and non-manufacturing industries. It should be noted that head offices and auxiliary units which are surveyed separately are not included in the establishment count, (see following notes on head offices and auxiliary units).

#### **Head Offices and Auxiliary Units**

All head offices and auxiliary units of companies classified to the manufacturing industries such as sales offices, administrative offices, warehouses, laboratories, etc. are now surveyed as part of the Census of Manufactures.

These head offices and auxiliary units are either included in an establishment report or are surveyed by means of the head office questionnaire. The former is the most common case where a single establishment firm has its executive personnel, sales office, etc. located at the site of the manufacturing plant (establishment). The special head office questionnaire is generally used where a firm, regardless of the number of establishments, has separately located offices or auxiliary units. Such offices or units do not constitute establishments within the Census of Manufactures as they do not normally generate operational revenues, but give rise only to costs of operations (mainly salaries and wages) which are automatically included in the value of shipments or sales. Although not considered as establishments, and hence, not included in the "establishment" count for an industry, the operational costs are reflected in either the "Industry" statistics (3 or 4 digit level) or the "Major group" statistics (2 digit level) according to the following rules:

(a) In the case of single establishment firms, statistics for separately located offices and units are classified to the same industry (3 or 4 digit) as the establishment;

(b) In the case of multi-establishment firms, the statistics for such offices and units are coded to the same industry as the establishments of the firm, when all establishments are in the same industry (3 or 4 digit). When establishments of

such firms are coded (1) to different industries within a major group, (2) to industries in different major groups or (3) to industries in different divisions of the Standard Industrial Classification, then the statistics are included in the major group totals (2 digit level) in which the major part of the company's operations are classified. Although this may result in some distortion of major group statistics in the case of (2) and (3) the statistics at the industry (3 or 4 digit) level in all cases will be left free of these company-wide data.

#### **Employees**

##### **(a) Production and related workers – Manufacturing activities**

In addition to those engaged in production and assembling activities, they include those employed in storing, inspecting, handling, packing, warehousing, etc. They also include employees engaged in maintenance, repair, janitorial and watchman services and line supervisors (working foremen) engaged in similar work to that of the employees they supervise. For those establishments reporting on the "long" form, production and related workers engaged in manufacturing activity are reported as those receiving pay during the last pay period of each month, an average for the year being obtained by summing the monthly figures and dividing by 12. This procedure is followed even though the establishment did not operate in all months in order to arrive at equivalent annual full-time employment. The numbers are somewhat affected by turnover, in that employment is overstated when an employee changes employment during a pay period. In the case of those establishments reporting on the "short" form, respondents are requested to report average annual figures. The man-hours of production and related workers in manufacturing activity represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). Data on man-hours are not collected from establishments reporting on the short form. Man-hours for these establishments are estimated on the basis of ratios derived from the 1958 census. During this census all establishments reported on the long form. In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour and which are based on selected occupations.

##### **(b) Production and related workers – Non-manufacturing activities**

Such employees include those on manufacturing establishments' payrolls engaged in activities such as construction undertaken for the use of these establishments, some outside piece-workers employed in certain industries, logging employees who are reported as part of a sawmilling establishment and any other production workers who are not engaged in manufacturing-type operations.

**(c) Administrative and office employees**

This category includes all executive and supervisory officials such as presidents, vice-presidents, comptrollers, secretaries, treasurers, etc., together with managers, professional, technical and research employees, superintendents and factory supervisors above the line supervisor or working foreman level, and clerical staffs. Also included are employees in activities such as advertising, credit collections, purchasing, personnel, legal, medical, etc. It should be noted that prior to 1961 this category also included working owners and partners. Also included in this category are employees located at head offices or auxiliary units separately located from the establishment; these are generally included in the figures for the province in which they are located according to the rules outlined under "Head offices and auxiliary units" above.

**(d) Sales and distribution workers**

This category includes office personnel whose salaries are charged to selling expense, travelling salesmen, driver salesmen, truckdrivers and their helpers, etc. It may also include some sales employees who are reported as part of a manufacturing establishment but are not working at the establishment's location. These are generally broken down by province in cases where more than 15 employees are involved in any one province. The figures exclude persons working on a commission basis who are not considered regular employees of the establishment.

**(e) Total Employees**

This total comprises the foregoing categories including employees located at separately located head offices and auxiliary units. The numbers of employees included under categories (b), (c) and (d) are reported in the form of annual averages and represent as closely as possible full time employment; adjustments are made when reported figures indicate the existence of part time or seasonal employment. In all the above categories, figures on employment refer to the calendar year whether or not other establishment statistics can only be reported on a fiscal year other than the calendar year.

**Working Owners or Partners**

These are not now included in the statistics of employees and salaries and wages. There is some duplication in numbers when a person owns more than one establishment and is reported as a working owner on each Census return. Withdrawals of working owners are defined as amounts withdrawn by owners or partners for normal living expenses excluding withdrawals for payment of income tax.

**Salaries and Wages**

Salaries and wages refer to gross earnings of employees before deductions for income tax and employees contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages,

bonuses, profits shared with employees, the value of room and board where provided, commissions (paid to regular employees only) as well as any other allowance forming part of the worker's earnings. Payments for over-time are included. Figures on salaries and wages refer to the calendar year.

**Fuel and Electricity**

Figures for fuel refer to amounts actually used (including fuel used in cars, trucks, locomotives, etc.), not to purchases unless the quantities are substantially the same. **Any fuel and electricity produced by establishments for internal consumption are not included in the total cost.** Values represent laid down cost at the establishment including freight, duty, etc. Although fuel and electricity used is considered part of manufacturing activity it should be noted that it also includes relatively small amounts used in non-manufacturing activities since these cannot be reported separately.

**Materials and Supplies**

**(a) Manufacturing activities**

Figures represent quantities and laid down cost values, at the establishment, of materials, supplies and purchased components owned and used during the year in manufacturing activities and related processes. These statistics represent only commodity items or physical goods (cost of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Included are maintenance and repair supplies not chargeable to fixed assets accounts and any amounts charged by other establishments for work done on materials owned by the reporting establishment. Cost of repairs or maintenance done by outside contractors and cost of returnable containers are not included.

**(b) Non-manufacturing activities**

**1. Purchases for re-sale as such**

Figures represent cost of materials or products purchased from others by the reporting establishment (or received as transfers from other establishments of the reporting company) for re-sale as such in the same condition as purchased. Included are any finished products received on consignment from other countries.

**2. Other materials and supplies used**

Figures represent the cost of materials and supplies, if any, used in new construction and in the production of machinery and equipment (for the use of the reporting establishment) by the establishment's own employees. Included are materials used for any capital repairs and alterations carried out by the establishment's employees. Amounts paid to outside contractors for construction and repair work are not included nor is the cost of

purchased machinery and equipment. Also included is the cost of office supplies not chargeable to fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment-operated cafeterias and lunch counters, first aid and medical supplies, laboratory supplies, etc.

## **Shipments**

### **(a) General**

The figures represent revenue from all production, sales, services and related activities of reporting establishments with shipments valued in Canadian dollars at the point at which the establishment relinquishes control. The unsold portion at year end of consignment shipments in Canada is treated as inventory and not as shipments but all shipments to foreign countries for which the form B13 "Customs Canada Export Entry" has been completed, are treated as shipments.

In those industries where work on principal products extends over a relatively long period, (Fabricated Structural Metal Industry, Aircraft and Parts Manufacturers, Railroad Rolling Stock Industry and Shipbuilding and Repair Industry) the value of production rather than the value of shipments is recorded. There are certain establishments in other industries which also operate on a basis of progress payments. For these establishments, shipments are also adjusted to work put in place on the basis of the net change in progress payments over the year.

### **(b) Shipments of goods of own manufacture**

These figures represent shipments of goods made from own materials either in the reporting establishments or by other manufacturers on the basis of a charge to the reporting establishments for work done. Included are revenue from repair and custom work, amounts received in payment for work done on materials owned by other establishments and the cost (book value) of any goods shipped on a rental basis.

All products and by-products of own manufacture shipped from the establishment are covered, including transfer shipments to sales outlets, distributing warehouses or to other manufacturing plants of the reporting firm, when such units are treated as separate establishments. The value of shipments are net of returned goods, discounts, returns, allowances, sales tax and excise taxes and duties, returnable containers and charges for outward transportation by common or contract carriers. Transportation or delivery expense incurred by the reporting establishment's own carriers are included.

Shipments of goods of own manufacture of establishments which are coded to some other division of the Standard Industrial Classification (on the basis of principal activity) but which are engaged in manufacturing as a subsidiary activity

are collected by means of the Commodity questionnaire referred to earlier. Such shipments together with shipments of goods of own manufacture of establishments forming the universe of manufacturing industries are compiled and recorded in the various industry publications.

### **(c) Shipments of goods not of own manufacture**

These figures represent the net selling value at establishment (net of discounts, returns, allowances, sales taxes and excise duties and taxes and transportation charges by common or contract carriers) of all products or materials (including products transferred from other establishments of the reporting firm) sold as such in the same condition as purchased or received as transfers. For those industries which ship such goods on a rental basis, the value of shipments represents the book value of these goods. All sales of consignment goods from other countries are included.

### **(d) Other revenue**

Figures represent the book value of fixed assets, if any, (new construction and machinery and equipment including major repairs, alterations, additions, modifications, installation and assembly work) produced during the year for the use of reporting establishments by the establishment's own employees and for which depreciation accounts are maintained. Included also are any revenues from the sale of electricity and from any operations performed by the establishment's own employees, such as revenue from goods produced or purchased for rental (the book value of such goods are included as part of shipments of goods of own manufacture or shipments of goods not of own manufacture), servicing revenues, commissions on sales (when not included in value of sales), revenue for company-operated cafeterias and lunch counters and revenue from outside installation or construction work not related to the establishment's own products, sale of used materials (excluding sale of used fixed assets) research and development work, etc. As mentioned previously the figures do not include non-operating revenue such as rent, dividends, interest, etc.

## **Inventories**

### **(a) Manufacturing activities**

Values represent the book values of manufacturing inventory 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. Figures consist of inventory owned at the plant and at warehouses or selling outlets which are treated as extensions of establishments for the purpose of reporting shipments. Inventory owned in transit in Canada or on consignment in Canada is included. Goods shipped abroad and held in inventory are included in shipments. Opening inventories may differ from the closing inventories of the previous year because of changes in classification, the



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receipt of revised data, the inclusion of new establishments and the removal of establishments which did not operate during the survey year.

**(b) Non-manufacturing activities**

Figures represent the book value of inventory of goods purchased for re-sale as such without further processing, owned by the reporting establishments and held at plants and at any warehouses or selling outlets which are treated as extensions of establishments. Other characteristics are the same as in (a) above.

**Value Added**

**(a) By manufacturing activities**

Figures are compiled by deducting the cost of manufacturing materials, supplies, etc. and fuel and electricity consumed from the (value of shipments of goods of own manufacture adjusted for changes in the value of inventories of finished goods and goods in process).

**(b) By non-manufacturing activities**

The figures are compiled by deducting the cost of goods purchased for re-sale (adjusted for changes in the value of inventories of goods pur-

chased for re-sale) and the cost of non-manufacturing materials and supplies used from the value of shipments of goods not of own manufacture, plus other revenue.

**(c) By Total activities**

The figures consist of value added by manufacturing activities plus value added by non-manufacturing activities. This total value added figure may, in some cases, be less than value added by manufacturing activities as a result of expenditures associated with non-manufacturing exceeding revenues from such activities or because of a decrease in inventory of goods not of own manufacture exceeding the mark-up on the sale of such goods. "Value added" is sometimes referred to as net output or net production. However, to arrive at the National Accounts concept of net production, or Gross Domestic Product at "Factor cost" it would be necessary to subtract also the cost of advertising, insurance and other business expenses which are not collected as part of the annual Census of Manufactures. "Value added" figures for the primary industries, manufacturing and construction are published in DBS publication Catalogue No. 61-202, "Survey of Production".