

Mining, Metallurgical and Chemical Branch
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The petroleum industry in Canada is divided into two main groups - (1) the primary production from Canadian wells, and (2) the secondary production, or the manufacture of petroleum products from Canadian and imported oil. In 1931, crude petroleum production in Canada was valued at \$4,211,674, while the value of petroleum products reached a total of \$76,153,644.

Early in January, the Spooner #4 well in the Turner Valley field was brought into production. About the middle of February, the Scottish United well in the Red Coulee field was drilled into production. The Vanalta #4 well in the same field came into production early in April. Towards the middle of May, the East Crest #3 and the Mayland #6 wells in the Turner Valley field were drilled into production; during the same period reports from the southern part of this field showed that the Merland well had come in with a large flow of wet gas. In September, the Southern Lowery #3 well in the Turner Valley field was brought into production. During October the Hylo well in the same field shipped a considerable quantity of crude oil to the refineries, although drilling operations were being continued. Towards the close of December, the Sterling Pacific #2 wet gas well was drilled into production.

	<u>New price</u>	<u>Old price</u>
Clear naphtha	\$ 3.12	\$ 2.74
Discolored naphtha	2.88	2.50
Crude oil, 50° higher	2.65	2.36
Crude oil, 45° - 49.9°	2.08	1.87

Companies operating and drilling oil wells in Canada during 1931 reported total capital employed at \$57,620,950. Employment was furnished by this industry to 1,209 salaried employees and wage-earners, who received \$1,634,517. The cost of fuel and electricity consumed during the year was \$303,511.

PRINCIPAL STATISTICS OF THE CRUDE PETROLEUM INDUSTRY IN CANADA, 1930 and 1931.

	1930	1931
Number of firms	234	160
Capital employed	63,300,244	57,620,950
Number of employees - On salary	245	166
On wages	1,624	1,043
Total	1,869	1,209
Salaries and wages - Salaries	459,412	368,320
Wages	2,878,342	1,266,197
Total	3,337,754	1,634,517
Cost of fuel and electricity	363,998	303,511
Selling value of products	5,033,820	4,211,674

PRODUCTION OF CRUDE PETROLEUM IN CANADA, 1931.

Province	Barrels	Total Value
NEW BRUNSWICK	6,577	15,461
ONTARIO -		
Petrolia and Enniskillen	57,515	101,946
Oil Springs	30,792	57,628
Moore Township	3,739	6,621
Sarnia Township	1,466	2,600
Plympton Township	295	523
Bothwell Township	18,024	31,933
West Dover	891	1,581
Onondaga	34	129
Moza Township	8,517	15,092
Euphemia	121	216
Dutton	508	902
Thamesville	463	822
Total for Ontario	122,365	219,993
ALBERTA	1,413,631	3,976,220
CANADA	1,542,573	4,211,674

PRODUCTION OF CRUDE PETROLEUM IN CANADA, BY MONTHS, 1931.
(Barrel = 35 imp. gal.)

Month	New Brunswick	Ontario	Alberta	CANADA
	Barrels	Barrels	Barrels	Barrels
January	678	10,248	163,928	174,854
February	462	10,189	140,828	151,479
March	696	9,914	145,439	156,049
April	694	10,467	138,442	149,603
May	715	10,044	141,442	152,201
June	464	11,208	132,990	144,662
July	509	10,002	105,685	116,196
August	493	10,009	90,141	100,643
September	466	10,249	88,110	98,825
October	465	10,407	86,490	97,362
November	467	10,007	86,790	97,264
December	468	9,621	93,346	103,435
TOTAL	6,577	122,365	1,413,631	1,542,573

2. PETROLEUM PRODUCTS - Twenty plants in Canada were engaged during 1931 in refining of oils for the production of gasoline, fuel oil, kerosene, lubricating oils, asphalt, waxes, petroleum coke and grease. These refineries had a total capacity of 133,350 barrels of crude oil per day and were located at strategic points across the Dominion for convenience in marketing their products. During 1931, the Canadian refineries treated 49.7 million gallons of oil from Canadian wells (including naphtha from the Turner Valley field in Alberta), and 1,025.1 million gallons of oil imported principally from the United States, Colombia, Peru,

Venezuela and Trinidad. Gasoline production amounted to 489.9 million gallons, of which 40.8 per cent or 191.6 million gallons were made by the cracking process. Fuel and gas oil sales totalled 374.2 million gallons; in addition to which the refineries used 54.55 million gallons for fuel purposes.

Twelve plants were engaged in compounding lubricating oils and greases in 1931. These plants produced products worth \$570,219 during the year.

Capital employed in Canada's petroleum refining and lubricating oil compounding industries in 1931 amounted to \$68,136,281. Employment was furnished to 4,122 employees whose salaries and wages totalled \$6,214,745. Fuel and electricity consumed during the year cost \$3,378,599. Materials used in 1931 were valued at \$50,617,742.

PRINCIPAL STATISTICS OF THE PETROLEUM PRODUCTS INDUSTRY IN CANADA, 1930 and 1931.

	1930	1931
Number of plants	28	32
Capital employed	70,334,381	68,136,281
Number of employees	5,134	4,122
Salaries and wages	8,190,130	6,214,745
Cost of fuel and electricity	3,868,544	3,378,599
Selling value of products at works	91,787,205	76,158,644

OUTPUT OF THE PETROLEUM PRODUCTS INDUSTRY IN CANADA, 1931.

Products	Made for own use		Made for sale	
	Quantity	Value at works	Quantity	Selling value at works
Petroleum refining -				
Gasoline (a) straight run.Imp.gal.	77,041	8,039	278,215,832	29,876,513
(b) by cracking process .....Imp.gal.	...	...	191,632,502	20,224,691
Fuel and gas oils .....Imp.gal.	54,551,901	1,640,400	374,201,530	12,400,027
V.M. & P. or solvent				
naphtha .....Imp.gal.	22,462	2,252	8,468,995	769,201
Kerosene .....Imp.gal.	44,245	4,810	39,421,314	4,125,272
Lubricating oils .....Imp.gal.	54,823	8,852	15,157,068	2,548,923
Grease lb.	2,205	32	9,390,866	187,216
Tar lb.	...	...	902,000	9,020
Asphalt .....Imp.gal.	3,827	224	37,937,082	1,836,403
Petroleum coke ton	20,029	96,676	52,310	280,660
Still gas .....M cu.ft.	5,161,905	980,628	...	...
Wax and candles lb.	109	9	10,197,369	368,677
Other products -	...	32,937	...	186,963
TOTAL .....	...	2,774,859	...	72,813,566
Fuel and gas oils made and used in pressure cracking process.Imp.gal.	441,297,994	20,753,116	...	...
Lubricating oils and greases -				
Lubricating oils .....Imp.gal.	...	...	749,333	477,131
Compounds lb.	...	...	...	...
Lubricating greases lb.	...	...	537,655	56,547
Soaps lb.	...	...	308,690	27,283
Other products..... -	...	...	...	9,258
TOTAL .....	...	...	...	570,219
GRAND TOTAL .....	...	\$76,158,644	...	...

3. IMPORTS AND EXPORTS OF PETROLEUM, ASPHALT AND THEIR PRODUCTS - The value of petroleum, asphalt and their products imported into Canada in 1931 declined 39.0 per cent to \$40,632,795 as compared with the preceding year's import valuation of \$66,619,649.

In 1931, Canada's supply of imported crude petroleum was obtained from the following sources - The United States, 70.7 per cent; Colombia, 16.8 per cent; Peru, 9.4 per cent; Venezuela, 2.9 per cent; and Trinidad, 0.2 per cent. Gasoline importations totalled 116.7 million gallons in 1931, of which the United States supplied 83.6 per cent and the Dutch West Indies, 16.4 per cent. Imports of fuel oil for Canadian consumption were recorded at 53.5 million gallons, consisting of 63.3 per cent from the United States, 20.1 per cent from Dutch West Indies, and 16.6

per cent from Peru. In addition to this quantity, approximately 35.9 million gallons of imported fuel oil were ex-warehoused for bunker purposes.

IMPORTS INTO CANADA AND EXPORTS OF PETROLEUM, ASPHALT AND THEIR PRODUCTS, 1931.

	Quantity	Value
<u>IMPORTS -</u>		\$
<u>Asphalt and Its Products</u>		
Asphaltum or asphalt, solid	cwt. 738,018	517,532
Asphalt, not solid .....	...	35,854
Asphaltum oil for paving purposes only .....	...	45,557
<u>Crude Petroleum, Fuel and Gas Oils</u>		
Crude petroleum in the natural state, 0.7900 specific gravity or heavier at 60 degrees temperature, when imported by oil refiners to be refined in their own factories	gal. 1,017,388,091	22,670,225
Crude petroleum, gas oils other than naphtha, benzine and gasoline lighter than 0.8235 but not less than 0.775 specific gravity at 60 degrees	gal. 77,280	3,221
Petroleum (not including crude petroleum imported to be refined or illuminating or lubricating oils) 0.8235 specific gravity or heavier at 60 degrees temperature (fuel oil) gal.	53,550,063	1,760,513
Petroleum, and other oils imported by miners or mining companies or concerns, for use in the concentration of ores of metals in their own concentrating establishments....	gal. 127,830	59,426
Petroleum, crude, not in its natural state, when imported by oil refiners to be refined in their own factories, .725 to .770 and .790 specific gravity or heavier	gal. 3,296,711	161,228
Fuel oil, ex-warehoused for ships' stores	gal. 35,900,828	891,962
<u>Kerosene and Illuminating Oils</u>		
Coal oil and kerosene, lighter than .8235 specific gravity at 60 degrees temperature, n.o.p.	gal. 3,493,849	212,420
Illuminating oils, composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than 30 cents per gallon	gal. 33,322	15,033
Engine distillate, lighter than .8235 specific gravity at 60 degrees temperature	gal. 172,588	15,246
<u>Lubricating Oils</u>		
Lubricating oils, composed wholly or in part of petroleum, and costing less than 25 cents per gallon	gal. 9,319,547	1,561,795
Lubricating oils, n.o.p.	gal. 4,459,269	1,975,349
<u>Gasoline and Other Oils</u>		
Gasoline, lighter than .8235 specific gravity at 60 degrees temperature (a)	gal. 73,243,020	6,372,346
Gasoline, 0.725 specific gravity and heavier, but not heavier than .770 specific gravity at 60 degrees temperature (b) gal.	8,610	821
Gasoline, natural casinghead, compression or absorption, lighter than .6600 specific gravity at 60 degrees temperature, when imported by distillers of petroleum for blending with other gasolines distilled in Canada	gal. 32,140,805	2,152,102
Gasoline, n.o.p. (b)	gal. 11,320,270	1,147,897
All other oils, n.o.p.	gal. 578,535	127,343
<u>Other Products of Petroleum</u>		
Grease, axle	lb. 4,148,459	206,770
Paraffine wax	lb. 2,473,199	74,361
Paraffine wax candles	lb. 429,976	79,437
Vaseline and all similar preparations of petroleum for toilet, medicinal and other purposes .....	...	186,290
Naphtha and products of petroleum, n.o.p., lighter than .8235 specific gravity at 60 degrees temperature	gal. 3,443,531	329,867
TOTAL .....	...	40,632,795
<u>EXPORTS -</u>		
Oil, petroleum, crude	gal. 16,277,182	677,375
Oil, coal and kerosene, refined	gal. 504,364	52,328
Oil, gasoline and naphtha	gal. 5,500,606	889,827
Oil, mineral, n.o.p.	gal. 885,122	185,177
Wax, mineral	cwt. 9,469	31,092
TOTAL	1,835,802

(a) From April 1 to December 31, 1931.

(b) From January 1 to March 31, 1931.

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WORLD PRODUCTION - The world production of crude petroleum in 1931, according to the Imperial Institute's latest report, totalled 186,700,000 long tons, or 3.7 per cent below the 1930 output of 193,800,000 long tons. Russia, Roumania and Persia were the only important petroleum producing countries to show increased outputs in 1931.

WORLD PRODUCTION OF CRUDE PETROLEUM
(Supplied by Imperial Institute)
(Long tons)

	1929	1930	1931
<u>BRITISH EMPIRE</u>			
United Kingdom (estimated) (c)	166,000	164,000	143,000
Canada (b)	141,439	192,686	194,557
Barbados	1,357	(a)	(a)
Trinidad (b)	1,193,525	1,290,261	1,334,726
British Borneo (Sarawak)	748,405	688,424	527,020
India (b)	1,182,039	1,200,868	1,177,679
TOTAL	3,430,000	3,540,000	3,380,000
<u>FOREIGN COUNTRIES</u>			
Czechoslovakia	13,645	22,436	19,424
Estonia (c)	4,586	9,847	15,316
France	78,025	80,564	78,038
Germany	101,242	171,575	225,315
Greece	300	443	(a)
Italy	5,793	7,668	15,932
Jugoslavia .....	...	273	207
Poland	664,033	652,296	620,526
Roumania	4,760,581	5,700,830	6,532,652
Russia	14,543,600	18,327,700	22,578,700
Spain (c)	6,221	5,715	5,608
Algeria	3,000	2,376	1,063
Egypt	267,816	280,585	280,360
Morocco (French)	40	(a)	(a)
Mexico (b)	6,770,876	5,989,390	5,005,815
United States (b)	136,124,700	121,352,800	115,010,900
Argentina	1,319,074	1,252,722	1,678,079
Colombia (b)	2,870,980	2,865,600	2,497,151
Ecuador	188,421	212,031	246,937
Peru	1,748,697	1,750,058	1,412,871
Venezuela	19,531,514	19,835,609	16,920,350
China	4,367	53,250	55,031
Formosa (b)	9,253	(d)	(d)
Iraq	118,986	119,567	118,374
Japan	253,082	274,638	280,271
Netherlands East Indies	5,155,807	5,444,182	4,448,761
Persia	5,718,745	5,940,979	6,338,444
TOTAL	200,300,000	190,300,000	183,300,000
WORLD'S TOTAL	203,700,000	193,800,000	186,700,000

(a) Information not available.

(b) The following conversion rates have been used: 35 gallons = 1 barrel and the undermentioned barrels = 1 ton:- Canada, 7.9, Mexico 5.6, Trinidad 7.3, India 7.4, United States 7.4, Colombia 7.1, Formosa 7.0

(c) Including shale oil

(d) Included with Japan.

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