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CANADA

DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

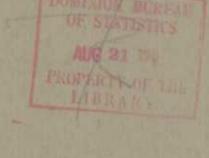
MINING, METALLURGICAL & CHEMICAL BRANCH

THE NATURAL GAS INDUSTRY

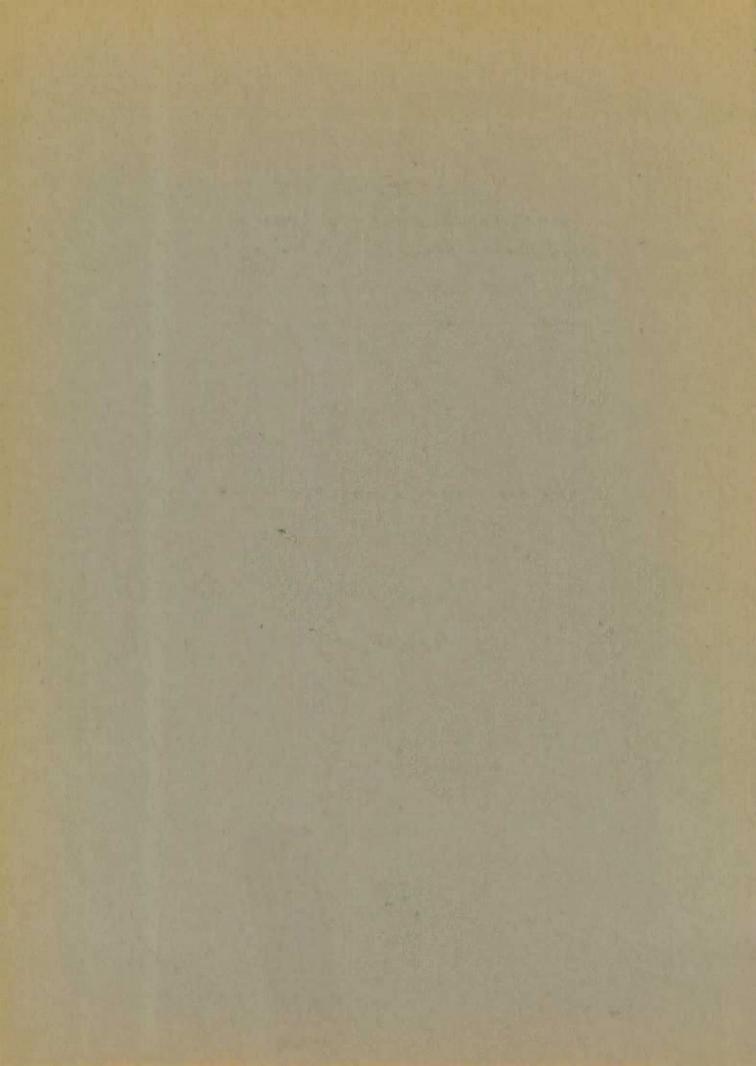
IN

CANADA

1938







DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS MINING, METALLURGICAL AND CHEMICAL BRANCH OTTAWA - CANADA

Dominion Statistician: Chief, Mining, Metallurgical Branch: Fuel Statistician: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.)

W. H. Losee, B.Sc.

B. R. Hayden.

THE NATURAL GAS INDUSTRY IN CANADA, 1938.

Natural gas production in Canada during 1938 advanced to 33,444,791 thousand cubic feet valued at \$11,587,450 from the 1937 output of 32,380,991 thousand cubic feet worth \$11,674,802 and, the 1936 total of 28,113,348 thousand cubic feet at \$10,762,243,

New Brunswick wells produced 577,492 thousand cubic feet compared with 576,671 thousand cubic feet, a year ago. Wells in the Stoney Creek field, near Moncton supplied gas for the use of approximately 5,700 consumers in Moncton and Hillsboro. There were 36 gas wells in operation in this province at the end of 1938.

An increase of 1.9 per cent was recorded in Ontario's output; the 1938 total was 10,952,806 thousand cubic feet as against 10,746,334 thousand cubic feet in 1937. Developments in this province during 1938 were summarized as follows by Col. R. B. Harkness, Commissioner of Gas for Ontario:

"On the whole, the natural gas industry is in a healthy state and producers are optimistic as indicated by the great increase in acreage under lease. The gas fields are producing sufficient to meet the demands, although the pressure in the old fields is becoming dangerously low. Drilling in the Brownsville field has practically ceased; wells have been spaced much closer than has ever before been the practice excepting along boundaries of lease blocks.

"The practice of "crowding the line" along competitive boundary lines has been frowned on by the Department of Mines since the control of the industry was first placed in the hands of the government. A regulation was put into effect in 1919 fixing the distance between the wells of opposing interests at 1,000 feet, a distance considered to be good practice. Prior to this date wells of opposing interests had been drilled as close as 50 feet. The 1919 regulation was found unsatisfactory, because where wells were drilled on small acreages or on narrow leases and all others made to keep 1,000 feet distant, other lease owners would in many cases have been deprived of the right to drill for and recover their own gas. So much investigation and arbitration was entailed in the administration of this regulation and such difficulty was found in carrying it out that it was repealed by common consent and a new regulation substituted on February 4th, 1937. The new regulation is:

No person shall drill any well within three hundred and fifty (350) feet of a boundary line of a property owned or leased by any person or company other than the person or company which proposes to drill the said well, without the approval of the Commissioner.

"Manufacturers of gas appliances continue to improve their wares both along lines of convenience, efficiency and in colour schemes. A new gas range known as the C.P. Range (Certified Performance) is now offered that fulfills any and every task that the most particular housewife might demand. Other than new and improved labour-saving devices and perfected insulation, a pressure regulator and filter has been added which insures against imperfect combustion resulting from pressure variations. With the assurance that no carbon monoxide can be formed from partially burned gases, the smoke pipe has been removed from most modern gas stoves. Another appliance that has reached maturity of design and has passed trials in the hands of the public is the gas refrigerator. It operates on either gas or kerosene and has no moving parts. Further advances have been made in the design of moderate price water heaters and furnace burners.

The increase in the consumption of gas in 1938 over 1937 is only about 2 percent and can be accounted for by the increase in the number of consumers. Brownsville and Glencoe have been added to the municipalities supplied with natural gas. There has been a healthy growth in the demand for natural gas for all purposes.

"There has been little change in the rates charged for natural gas, and any revision has been somewhat downward in the average price.

*Drilling continued in the Declute field with average success. The wells drilled in Raleigh township are in the extension of the Dover township gas and oil field, which now reaches across the Thames river into Raleigh township for about one mile, and the limits have not yet been reached. These wells are about 3,000 feet deep, and most of them produce both gas and oil. No drilling was done in Chatham township in 1938, where eight producing wells are now closed in until further exploratory work is done. Drilling in the Dawn field in Lambton county has been most discouraging in 1937 and 1938; no producing wells have been found. Drilling in Middlesex to test the producing horizons of the Guelph and Clinton has met with no success, nor has a deep test to the Trenton limestone in Blanchard township, Perth county. In the Brownsville field drilling continued throughout the year. There were at the end of the year seventy-seven producing wells. Nine dry holes were drilled in Elgin county, in search of gas in the Guelph which is the producing horizon of the Brownsville field. There was little drilling in Norfolk county. Drilling in Haldimand county has fallen off greatly; 50 wells were drilled in 1938 as compared with 67 wells in 1937. In previous years most of this drilling was in Walpole township, but in the past year Rainham township received the most attention. In Lincoln, Welland and Brant counties a few wells are drilled each year. These fields are very old, and the rock pressure has declined to a minimum. Drilling in Bruce and Grey counties did not prove profitable, and the few producers drilled in 1936 with one exception have been abandoned. Two more producing wells have been drilled in the vicinity of Picton Prince Edward county.

"Although drilling activity as represented by totals was not as active in 1938 as in 1937, the year saw considerable exploratory work, which in 1939 is rapidly developing a new gas field in Malahide township. A new territory in the northern part of Huron county is claiming the attention of prospectors, who believe that a promising structure has been located. This structure was indicated in a map by M.Y. Williams published by Geological Survey of Canada in Memoir Ill, "The Silurian Geology and Faunas of Ontario Peninsula and Manitoulin and Adjacent Islands". Further work by independent geologists has been done since the work mentioned was published in 1919.

"In 1938, 53 dry wells with a footage of 63,885 and 118 producing wells with a footage of 114,801 were drilled; a total of 171 wells and 178,686 feet.

"The number of drilling rigs working was 63 and the number of men employed, 148. The wages paid them was \$95,149. The capital invested in drilling equipment amounted to \$327,716.

"In the past year distributing companies have spent a very considerable sum in improvements to service.

"A distributing system was installed in Brownsville by the Oxford Pipe Line Company and in Glencoe by the Union Gas Company, giving these municipalities natural gas for the first time.

"A compressor station was built by the Dominion Natural Gas Company at Rainham, in the central part of Haldimand county in order to improve service to the Port Colborne and St. Catherine areas. Some remote wells in Sherbrooke township were also connected into the Port Colborne pipeline, and some larger sized pipelines were added in St. Catherines. In St. Thomas a considerable amount of new intermediate pressure line was laid, and two new regulator stations were installed. This became necessary through the increase in the demand for gas.

"The Dominion Natural Gas Company sold its wells and lines in and around the villages of Vienna, Port Burwell, and Straffordville to the Central Pipe Line Company. The Dominion Natural Gas Company report seven leakage surveys, renewals, and repairs throughout their pipeline system.

"The Union Gas Company report having laid 19 miles of high pressure transmission pipeline from 3 inch to 10 inch to replace old pipe, which was mostly of smaller sizes. This includes renovating and various alterations to improve service to municipalities. Five miles of new distributing lines were laid to replace old pipe in Windsor, Wallaceburg, Petrolia, Sarnia, Dresden and Tilbury.

The Provincial Gas Company report having replaced one mile of 8 inch pipe and 12 miles of smaller sizes.

"The Central Pipe Line Company extended their operations in the Brownsville field. Originally they had two wells supplying gas through a 3-inch pipeline to Aylmer, with a purification plant at Springfield; they have now drilled producing wells in the adjoining lots in Bayham township and are delivering gas through an 8-inch pipeline to the Dominion Natural Gas Company's transmission line near the village of Eden. This company has built another purification plant near Corinth."

Ontario's natural gas industry in 1938 included the activities of 183 operating, distributing and drilling firms who reported a total capital investment of \$51,054,815. Employment was furnished by these firms to 1,412 salaried employees and wage-earners who received salaries and wages totalling \$1,657,917. Fuel consumption by these operators necessitated an expenditure of \$49,030; 77.2 per cent of this outlay was for natural gas.

Natural gas production in Saskatchewan declined to 90,285 thousand cubic feet from the 1937 output of 100,380 thousand cubic feet. The 1938 output was used principally to supply consumers in Lloydminster.

Production from Alberta wells was recorded at 21,822,108 thousand cubic feet; this represented an increase of 4.1 per cent over the output a year ago. These figures include only the natural gas consumed for industrial and domestic purposes and do not take into account the waste gas burned in the Turner Valley field and the gas piped to the Bow Island field for storage.

The Turner Valley field, about 35 miles southwest of Calgary, is the largest natural gas producing area in Canada. In 1938, the consumption of Turner Valley gas for industrial (including drilling) and domestic use was 15,333,488 thousand cubic

feet as against 14,101,222 thousand cubic feet a year ago. Approximately 23,800 consumers in Calgary, Lethbridge and the district were served with this gas in 1938; in addition, a considerable quantity was used in the field for drilling purposes. Continuing the practice of previous years, a large quantity of Turner Valley gas was piped to the Bow Island field for repressuring wells in that area. Since 1930, approximately 13,755,000 thousand cubic feet of this gas has been piped into these wells.

Consumption in the city of Medicine Hat totalled 1,999,404 thousand cubic feet compared with 2,262,552 thousand cubic feet in 1937. Some 2,500 consumers were supplied with gas from the Medicine Hat field in 1938. About 270 industrial and domestic users were supplied with 594,119 thousand cubic feet of gas from the Redcliff field which is located about two miles west of Medicine Hat.

The Viking field, located approximately 80 miles southeast of Edmonton, supplied 11,500 consumers in that city and users outside the city with 3,338,955 thousand cubic feet of gas in 1938. Twenty-one wells were in operation in the Viking field during the year.

Approximately 300 consumers in Wainwright were supplied with gas from the Maple Leaf well in the Fabyan field.

There were 97 wells in Alberta producing natural gas ONLY on December 31, 1938; a year ago, 100 wells were active. Companies operating in this industry in 1938 reported capital employed amounting to \$26,057,961 as against \$24,710,670 in 1937. The industry employed 445 persons, who received salaries and wages totalling \$703,472. Fuel and electricity used during the year cost \$2,660.

At Fort Norman, in the Northwest Territories 1,500 thousand cubic feet of natural gas were used for power purposes in 1938.

Imports of mixed gas (natural and artificial) by pipeline from the United States amounted to 133,062 thousand cubic feet worth \$87,311. In 1937, importations totalled 114,275 thousand cubic feet at \$74,799.

There were 218 operators in the natural gas industry in Canada in 1938; capital employed by these operators totalled \$79,143,830. This industry furnished employment to 1,966 employees who were paid \$2,506,121. The cost of fuel and electricity used during the year was \$67,725.

Table 1 - PRODUCTION OF NATURAL GAS IN CANADA, BY PROVINCES, 1937 and 1938.

	1 9	3 7	1 9 3 8		
Province	M cu. ft.	Value	M cu. ft.	Value	
	Amelikanikanika iki ilikusisis ilimpia analahan analahan ilimpia analahan ilimpia analahan ilimpia analahan ilimpia analahan ilimpia analahan ilimpia analahan anala	\$		\$	
New Brunswick	576,671	283,922	577,492	284,689	
Ontario	10,746,334	6,588,798	10,952,806	6,460,764	
Manitoba	600	180	600	180	
Saskatchewan	100,380	35,130	90,285	34,136	
Alberta	20,955,506	4,766,437	21,822,108	4,807,346	
Northwest Territories.	1,500	335	1,500	335	
CANADA	32,380,991	11,674,802	33,444,791	11,587,450	

Table 2 - NATURAL GAS PRODUCTION IN ONTARIO, BY FIELDS, 1937 and 1938. (a)

County	Field	1937	1938
		M cu.ft.	M cu.ft.
Essex	Kingsville) (Tilbury)	3,245,333	3,265,726
	(Declute	1,512,300	1,797,789
Kent	(Dover	636,552	509,677
Lambton	Dawn and Oil Springs	1,890,874	1,894,730
Oxford	(Brownsville (Dereham	455,611	506,005
Elgin	(Field (Bayham	31,320	50,917
Elgin	Bayham	260,974	113,651
Norfolk	Norfolk	441,375	437,867
Lincoln	Lincoln)		
Haldimand	Haldimand)	1,784,257	1,912,882
Wentworth	Wentworth)		
Brant	Onondaga	112,482	135,348
Bruce	Amabel	2,763	1,129
Welland	Welland	298,493	253,085
Wells in surface drift	Howard and Harwich	14,000	14,000
Private wells		60,000	60,000
Total Produced		10,746,334	10,952,806
Value		\$ 6,588,798	6,460,763
Imported mixed gas		113,495	125,807
Total distributed		10,859,829	11,078,613

(a) Prepared by the Ontario Department of Mines.

Table 3 - PRODUCTION OF NATURAL GAS IN CANADA, BY MONTHS, 1937 and 1938.

	New Brunswick	Ontario	(a) Manitoba	Saskat- chewan	Alberta	CANADA
1937	M cu.ft.	M cu.ft.	M cu.ft.	M cu.ft.	M cu.ft.	M cuaft.
January	67,813	1,194,640	50	17,659	3,195,979	4,476,141
February	67,845	1,140,411	50	14,779	2,598,469	3,821,554
March	65,788	1,117,123	50	11,665	1,992,147	3,186,773
April	64,111	937,775	50	6,498	1,604,708	2,613,142
May	48,303	723,575	50	3,677	1,132,334	1,907,939
June	33,947	568,068	50	2,431	891,356	1,495,852
July	26,778	528,138	50	1,879	850,464	(b)1,407,809
August	22,631	498,283	50	2,854	904,582	(b)1,428,900
September	26,225	734,357	50	3,437	1,069,176	(b)1,833,745
October	41,542	874,829	50	6,976	1,631,390	2,554,787
November	52,005	1,063,788	50	12,345	2,219,256	3,347,444
December	59,683	1,365,347	50	16,180	2,865,645	4,306,905
TOTAL	675,671	10,746,534	600	100,380	20,955,506	32,380,991
1938	and the second second					
January	72,760	1,576,320	50	11,957	2,404,750	4,065,837
February	69,635	1,437,690	50	16,564	2,523,826	4,047,765
March	67,298	1,184,070	50	9,840	1,944,099	3,205,357
April	59,887	970,049	50	6,512	1,917,026	2,953,524
May	50,177	602,529	50	4,614	1,486,372	2,143,742
June	37,305	505, 549	50	1,670	1,185,754	1,730,328
July	26,472	430,628	50	1,887	1,136,218	(b)1,595,755
August	22,061	474,426	50	2,880	1,271,891	(b)1,771,808 (b)1,932,791
September	29,314	606,226 752,359	50 50	2,347 7,757	1,721,816	2,523,472
October	41,490 43,970	1,048,986	50	10,362	2,278,593	3,381,961
November	57,123	1,363,974	50	13,895	2,657,409	4,092,451
TOTAL	577,492	10,952,806	600	90,285	21,822,108	33, 444, 791
(a) Estimate			And the second named in column 2 is not a second named in column 2	THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.	the state of the same of the s	

Table 4-PRINCIPAL STATISTICS OF THE NATURAL GAS INDUSTRY IN CANADA, 1936,1937 and 1938.

	1936	1937	1938
Number of firms	227	218	218
Capital employed\$	77,666,568	75,611,107	79,143,830
Number of employees - On salary	797	787	808
On wages	1,278	1,241	1,158
Total	2,075	2,028	1,966
Salaries and wages - Salaries \$	1,137,506	1,142,020	1,152,029
Wages\$	1,319,412	1,346,105	1,354,092
Total \$	2,456,918	2,488,125	2,506,121
Cost of fuel and electricity \$	77,658	75,690	67,725
Selling value of products \$	10,762,243	11,674,802	11,587,450

Table 5 - NATURAL GAS PIPELINE MILEAGE IN CANADA, 1937 and 1938.

	ACTUAL MILES OF MAIN				MILES OF EQUIVALENT 3" MAINS			
	Gatheri Transmi	-	LII ST.TI DUT.ION		Gathering and Transmission		Distribution	
	1937	1938	1937	1938	1937	1938	1937	1938
New Brunswick	20	20	60	61	41	58	64	54
Ontario	2,136	2,151	2,101	1,896	3,709	3,719	2,311	2,073
Saskatchewan	200	9 2 2	7	7	3 0 N	0 2 9	6	6
Alberta	608	620	556	560	1,950	1,984	957	965
CANADA	2,764	2,791	2,724	2,524	5,700	5,761	3,338	3,098

Table 6 PRICES OF NATURAL FUEL GAS USED FOR DOMESTIC CONSUMPTION IN SPECIFIED CITIES IN CANADA, 1913, 1937 and 1938.

(Prepared in the Internal Trade Branch)

Net price per 1,000 cu.ft. (exclusive of meter rent or other service charges) (Where double quotations are shown, the first figure is the regular rate, and the second figure is the summer rate; single quotations apply to the end of the year)

second figure is the summer rate; single	quotations apply	to the end o	i the year)
	1913	1937	1938
	\$	\$	\$
ew Brunswick	m a	20	50
Moneton	. 38	50	. 50
Ontario			
Brantford	. 30	۷80	.80
Chatham	. 25	1.36	1.36
Galt	andi	.80	.80
London	~	1.40	1.40
Niagara Falls	.40	1.00	1.00
Port Colborne	-	.80	.80
St. Catharines	.70	. 75	.75
Sarnia	。30	.55	. 55
		.80	.80
Welland	。28	1.00	1.00
Windsor	. 30	1.40	1.40
Woodstock	,35	.80	.80
Alberta -			
Calgary	٥ 30	. 33	333
Edmonton	-	. 38	. 38
Medicine Hat	.135	.237	.237

MANUFACTURED GAS

Table 7-SALES OF MANUFACTURED GAS, NUMBER OF CUSTOMERS and MILEAGE OF PIPE LINES, 1938.

Areas	No. of custom-	No. of active	GAS	SALES _	Mileage of pipe	Approximate population served by
	ers	meters	M cu. ft.	. ft. \$		mains
Eastern provinces	190,979	218,790		5,574,211	984	1,608,600
Ontario	220,068 64,690	211,893	, ,	7,457,070 1,969,861	1,893 841	1,260,000
TOTAL	475.737	500.373	15,198,068	15,001,142	3,718	3,374,600

Table 8 - GENERAL RATES FOR MANUFACTURED GAS IN CANADIAN TOWNS AND CITIES, 1938.

Towns or Cities		APPROXIMATE (GENERAL RATE
lowus or or grees	Per M cu.ft. Gross	Discount	Service charge
	\$		
Halifax, N.S.	2.00 - 1.10	10 cents per M	1.00 per month for pre- payment meters.
Saint John, NaBa	1.80 1.45	10 cents per M	60 cents per month.
Quebec, P.Q.	1,66 0.90	10 per cent	940
Sherbrooke, P.Q.	1.35 1.00	10 per cent	(x)
Montreal, P.Q.	1.17 - 0.50	10 per cent	14 to 55 cents per meter per month
Barrie, Onto	2,00	10 per cent	75 cents per month.
Belleville, Onto	1.60 - 1.00	10 cents penalty	50 cents per month.
Brockville, Onto	1.50	10 per cent	(x)
Guelph, Onto	0.65 - 0.40	10 per cent penalty	(x)
Kingston, Onto	1.20 - 0.90	10 per cent	(x)
Toronto, Ont.	0.90 - 0.52	(x)	(x)
Cobourg, Ont.	2.20 - 1.65	10 per cent	55 cents per month.
Oshawa, Ont.	2.00 - 0.60	(x)	(x)
Whitby, Ont	1.50 - 1.05	10 cents penalty	(x)
Bowmanville, Onto	1.50 1.05	10 cents penalty	(x)
Peterborough, Ont.	1.45 - 1.00	10 per cent	45 cents per month.
Kitchener, Ont.	0.95 - 0.75	(x)	(x)
Waterloo, Ont.	1.20 (net)	(x)	(x)
Ottawa, Onto	1.36 - 1.00	10 cents per M	50 cents per month.
Port Hope, Ont.	2.50 - 2.00	(x)	\$1.20 per year.
Owen Sound Ont.	1,25 - 1,10	10 per cent	19 cents per month meter
Stratford, Onto	1.72 - 1.11	10 per cent	25 cents per month.
Hamilton, Ont.	0.80 - 0.40	5 to 15 cents per M	(x)
Sault Ste. Marie, Ont.	1.70 - 0.50	(x)	(x)
Brandon, Man.	2.10 - 1.39	10 per cent penalty	(x)
	3 70 0 05	10 per cent discount	
Winnipeg. Man.	1.30 0.95	10 cents per M	TERRESIDE TOTAL
Nelson, B. C. Vancouver, B. C.	2.25 - 1.25 1.25 - 1.15 (net)	25 cents per M (x)	(x)
New Westminster, B.C.			
Burnaby, B. C. Victoria, B. C.)Vancouver 1.75 - 0.45	(x) 25 c	ents per month meter rent

⁽x) Not mentioned on report.

FIRMS OPERATING IN THE NATURAL GAS INDUSTRY IN CANADA, 1938.

NOTE - (a) Drilling only.

(b) Distributing only.

- (c) Producing wells drilled in 1938 no output reported.
- (d) Dry wells drilled in 1938.
- (e) Drilling and producing.

(f) Pipe line company.

(g) Using or selling gas from absorption plant.

NAME

ADDRESS

LOCATION-FIELD

NEW BRUNSWICK -

(b) Moncton Electricity & Gas Co., Ltd., 700 Main St., Moncton New Brunswick Gas & Oilfields, Ltd., P.O. Box 194, Moncton

Stony Creek.

ONTARIO -

Acme Gas & Oil Co., Ltd.

Adams Truemer Co.

- (e) Ajax Oil & Gas Co., Ltd.
- (a) Allen, A. J..
 Aloka Oil Co., Ltd.
 Amity Gas Co.
 Avery, Esmond & Company

Barnhart, Mrs. E.
Beacon Natural Gas Syndicate
Beer, Geo.
Benn, A. S.
Bertie Gas Co.

Binbrook Gas Co. Broadway Gas Syndicate Brownsville Nelson Gas Syndicate

Buck, C. S. Port Rowan
Burchell Natural Gas & Oil Syndicate 1111 Canada Permanent
Bldg. Toronto.

Canada Cement Co. Ltd.,
Canadian Natural Gas Syndicate
Canadian Penn Grade Producers
Canby, B. F.
Canfield Gas Syndicate

Canfield Natural Gas Co., Ltd., Cartwright, S. E.

Central Pipe Line Co. Ltd.,

Suite 1602, 330 Bay Street, Toronto

c/o Hotel Belvidere,London 85 Richmond St.W.,Toronto

Dunnville
57 Queen St.W., Toronto
Lowbanks
5172 St. Jean Ave.,
Detroit, Mich., U.S.A.
Stevensville
112 Locust St., Kitchener
Binbrook
Hagersville
Fisherville

Binbrook
Jarvis
Capitol Park Building
Detroit, Mich. U.S.A.
Port Rowan
e 1111 Canada Permanent
Bldg., Toronto.

Port Colborne
Simcoe
44 George St., Brantford
Wainfleet
703 Capitol Park Bldg.,
Detroit, Mich., U.S.A.
Canfield
1972 Penobscot Bldg.,
Detroit, Mich., U.S.A.
Chatham

Cayuga

Middleton.
Dereham
Dover, Middleton,
Raleigh and
Tuscarora.

Dereham. Moulton.

Bertie
Walpole
Binbrook.
Walpole.
Bertie and
(c) Willoughby
Binbrook.
Walpole

Cayuga North

Bayham Walsingham South.

Canboro, Raleigh, and Woodhouse. Wainfleet. Bayham & Moulton. Onondaga. Wainfleet

Cayuga North.

Walpole.
Bayham, Dereham,
Houghton,
Malahide and
Middleton.
Seneca.

Central Seneca Gas Syndicate

(b) City Gas Company of London Colbert, M.A. Coleman, J.A.

> Colonial Natural Gas and Oil Co. Columbia Natural Gas & Oil Co.Ltd., Comins, H.M. Connor & McKechnie Continental Gas Corp. Ltd.,

Coronation Gas Syndicate (e) Culver, W.H. Estate

Dawson, Ralph Dean Gas Syndicate

Delhi Gas Syndicate Dereham Gas and Oil Co.

Domestic Natural Gas Syndicate

Dominion Natural Gas Co., Ltd.

215 Dundas St., London Welland Junction Wellandport

Stoney Creek 575 Pigott Bldg., Hamilton Flint, Mich., U.S.A. Aylmer Goderich

Stevensville Dunnville

Merlin Tillsonburg

Cayuga 80 Richaond St.W., Toronto

36 Toronto St., Toronto

518 Jackson Bldg., Buffalo, N.Y., U.S.A.

Walpole. Gainsboro and Wainfleet. Canboro and Moulton. Dunn. Rainham. Bayham. Binbrook and Walpole. Bertie. Moulton and Oneida. Tilbury East (c) Bayham and Middleton. Windham. Oneida, Rainham Walpole and Walsingham South. Moulton, Rainham, Seneca & Walpole. Bayham, Binbrook, Caistor, Canboro, Cayuga, (North and South),

Charlotteville,
Dunn, Glanford,
Houghton, Humberstone, Middleton,
Moulton, Oneida,
Onondaga, Rainham,
Seneca, Sherbrooke,
Townsend, Wainfleet,
Walpole, Walsingham (North and
South) Windham and

Cayuga North.
Sherbrooke.
Moulton, and
Woodhouse.
Oneida.
Canboro and Moulton.
Wainfleet
Walpole and
Walsingham South.

Woodhouse.

Woodhouse.

Rainham.

Raleigh. Rainham. Cayuga South.

Dunnville-Detroit Gas Syndicate

East Side Gas Co.
Economy Natural Gas Syndicate

Emerald Gas Syndicate

(e) Emerson, H.L.

(c) Emerson, Lloyd
Empire Natural Gas Ltd.,

Erie Gas Limited

(a) Evans, H.
Fisherville Gas Co.
Gas Producers Syndicate

Gazzo Natural Gas Limited Gifford, A., & Son

Capitol Park Bldg., Detroit, Mich., U.S.A. Lowbanks Stratford

100 Adelaide St.W., Toronto Dunnville Wainfleet 25 King St. W., Toronto

c/o The Premier Trust Co., 15 Richmond St.W., Toronto Brownsville Fisherville 703 Capitol Park Bldg., Detroit, Mich., U.S.A. 45 Regal Road, Toronto Cayuga

(e) Glenny, D.

Grand River Gas & Oil Syndicate

(a) Gregory, Geo. F., & Son Grimsby Natural Gas Co. Ltd.

> Haldimand Gas Syndicate Haldimand Natural Gas Syndicate Highbank Oil Limited

(a) High Grade Natural Gas Co. Hill, A.W. Holmes, A.B. and Rodgers, A.L.

(a) Hoover, A.E. Hope Gas Company

(e) House, Charles C.

(a) Hussey, W.J. Ideal Gas Syndicate

(e) Jackson, Percy L.

Jackson and Graff Syndicate

Jasperson, Bon Kelly Gas & Oil Syndicate

(e) Kidd, L.W. Kindy, Dog & Sons

(a) Kiser Bros. Ladd & Kabana

Ladd & Knight

Ladd-Knight-Medina Company

Ladd and Zeigen

Lake Erie Gas Syndicate

(a) Lauer, D.G.

(b) Leamington, Town of Lincoln Gas Co. Ltd.,

Lindsay, William B., Estate of

Lomac Gas and Oil Company (e) Lymburner Bros. & Webber

Lynn Valley Gas Syndicate (b) Manufacturers Natural Gas Co. Ltd.

(c) May-Gold Gas Company

(a) McCutcheon, Thos. J. and T.O.

(e) McKechnie, S. McKechnie & Hussey McKillop, Wm.

(a) McNinch, S.E. Melrose Gas Company Middleton-Norfold Gas Co., Ltd. Dunnville Canfield Petrolia Grimsby

Cayuga Stevensville Chatham Chatham Coatsworth Tillsonburg Selkirk

43 Ontario St., St. Catharines

Stevensville Petrolia

Fisherville Dunnville

Dunnville

Kingsville 15 Drayton Ave., Toronto

181 Strathearn Rd., Toronto Bayham and Dereham. Selkirk Hicks Bldg., Chatham 1957 Penobscot Bldg.,

Detroit, Mich., U.S.A. 1957 Penobscot Bldg., Detroit. Mich., U.S.A. 1957 Penobscot Bldg.,

Detroit, Mich., U.S.A. 1957 Penobscot Bldg., Detroit, Mich., U.S.A.

57 Queen St. W., Toronto Tillsonburg Leanington

10 Adelaide St. E., Toronto

Canada Permanent Bldg., Edmonton, Alberta.

745 Talbot St., St. Thomas Bayham.

Dunnville

Kitchener 518 Jackson Bldg.,

Buffalo, N.Y., U.S.A. Canboro

Dunnville Dunnville Dunnville Dunnville

Canboro 911 Kent Bldg., Toronto 52 Young St., Stratford Canboro. Cayuga North.

Caistor and (c) Gainsboro. Rainham.

Bertie. Raleigh.

Tilbury East.

Bayham.

Moulton. Bertie.

(d) Dunn and Rainham. Canboro, Moulton and Onondaga. Crowland, (c) (d)

Wainfleet and (d) Willoughby. Gosfield South.

Rainham and Walpole.

Rainham.

Tilbury East.

Walpole.

Dover.

Tilbury East. Rainham.

Caistor, Canboro and Gainsboro. Canboro, Rainham and Walpole.

Moulton, Rainham and Walpole.

Oneida.

Marysburgh.

Walpole. Canboro. Walpole.

Oneida. Middleton.

Midfield Gas Corp.,

Midwal Oil & Gas Co., Ltd.

Minnicog Gas Company

Mohawk Gas & Oil Syndicate, Ltd.

Monarch Gas & Oil Syndicate (a) Nagle, E. National Gas Syndicate Nelles Corners Gas Company

> New Eden Natural Gas Co. Ltd., New Tillsonburg Oil & Gas Co. Ltd., Niagara Natural Gas Co. Ltd., Niece. Elmond Norhal Gas and Oil, Ltd.,

North Cayuga Gas Syndicate

North Shore Gas Co. Nottawa Oil & Gas Co. Ltd.,

- (b) Oil Springs Oil & Gas Co., Ltd.,
- (d) Olga Gas and Oil Co.
- (b) Ontario Salt Co. (J.R. Robert) Otter River Gas Corp.
- (b)(f)Oxford Pipe Line Co. Ltd.,
 - (c) Palmer, J. Patterson, W.C., Gas Co. Ltd.,
 - (a) Perkins, J.E. Petrol Oil & Gas Co., Ltd.

Pine Ridge Gas Co.,

Port Colborne-Welland Gas Co.,

Povac Gas Syndicate

(e) Prairie Gas & Oil Co., Ltd., Provincial Gas Co. Ltd.,

> Rainham Gas Syndicate Reicheld, Gas Syndicate Reid-Adams Co.

Rich Gas Co.

1108 Victory Bldg., Toronto

22 King St. W., Toronto

5172 St. Jean Ave.. Detroit, Mich., U.S.A. 421 Main St.E., Hamilton

Fisherville Stevensville Dunnville Hagersville

Simcoe 26 Adelaide St. W., Toronto 72 East Main St., Welland Lowbanks 812 Canada Permanent Bldg., Toronto 1673 Beacon St., Brookline, Mass., U.S.A. Selkirk 17 Queen St. E., Toronto

Oil Springs 320 Bay Street, Toronto 1428 Erie St. E., Windsor 18 Toronto St., Toronto Dunnville Wainfleet Box 914, Jamestown, N.Y., U.S.A.

Dunnville 414 Bay St., Toronto

Dunnville

Port Colborne

Tillsonburg

350 Bay St., Toronto Fort Erie North

Cayuga Jarvis 105 Dundas St., London

18 Lola Road, Toronto

Cayuga North. and Oneida. Cayuga South, Middleton and Walsingham North.

Cayuga North. Canboro, Oneida and Walpole. Walpole.

Seneca. Cayuga North and Rainham. Bayham. Middleton. Moulton. Sherbrooke.

Walpole.

Cayuga North. Rainham. (c) Onondaga, Rainham, Wainfleet and Walpole.

Orford.

Middleton.

Wainfleet. Bayham, Cayuga North, Crowland, Dereham, Dunn, Humberstone, Rainham, Walpole and Willoughby.

Dover, Oneida, Onondaga and Tuscarora. Dereham and (d) Yarmouth. Oneida, Onondaga and Seneca. Canboro and (c) Mersea. Dover. Bertie, Crowland, Humberstone and Willoughby. Rainham and Seneca. Walpole.

(d) Bayha, Dereham, (d) Malahide and (d) Nissouri West.

Moulton.

Ricker, Arthur Riley, J.V.

River Valley Natural Gas Syndicate
Romney Oil & Gas Co.

Rossmore Exploration, Ltd.

- (e) Roth, Frank & Harvey
 - (e) Rowe, E.P.

Salina Gas Co., Ltd. Sandusk Gas Syndicate Sarnia Oil & Gas Co.

Security Oil and Gas Co., Ltd. Shelton, S.F. Shepherd, E. Sherk, John M. Smith, Armand M.

(e) Smith and Ehde (e)(d)Smith, H.B.

Southern Ontario Gas Co. Ltd.

Springvale Gas & Oil Co., Ltd. Standard Gas & Oil Syndicate

Sterling Gas Co. Ltd. 7 Quebec St.W. Stevensville Natural Gas & Fuel Co. Stevensville

- (e) Stewart and Stewart
- (e) Stover, F. H. and Associates

Stromwell Syndicate

(a) Stubble, H.H.
Sundy Gas Co.
Superior Gas Syndicate
Sweets Corners Gas Syndicate
Tanner, F.O.

Treleaven, A.
Turkey Point Co.
Union Gas Co. of Canada, Ltd.,

Canboro

17 Queen St. E., Toronto 18 Toronto St., Toronto

80 Richmond St.W., Toronto

Dunnville 350 Bay St., Toronto

47 Sixth St., Chatham Fisherville 204 Atlas Bldg., Toronto

1428 Erie St., Windsor York Dunnville Stevensville Aylmer

Lowbanks
373 Oak Ave., Windsor
518 Jackson Bldg.,
Buffalo, N.Y., U.S.A.

Hagersville Fisherville

7 Quebec St.W., Guelph Stevensville Jarvis

c/o Draper Dobie Co.,
330 Bay St., Toronto.
Tillsonburg
207 Pattison Ave., Chatham
Dunnville
Fisherville
Fisherville
General Motors Bldg.,
Detroit, Mich., U.S.A.
98 Central Ave., London
Simcoe
52 Fifth Ave., Chatham

Canboro. Moulton. Oneida. Romney, and Wainfleet. Cayuga N. and Oneida. Bertie. Bayham, Dover, Middleton and Raleigh. Tilbury East. Walpole. Enniskillen and Sarnia. Seneca. Seneca. Canboro. Bertie. Bayham and (d) Dereham. Moulton. Malden Mersea, Raleigh, Romney and Tilbury East. Walpole. Rainham and Walpole. Walpole. Bertie.

Canboro. Rainham. Rainham. Cayuga North and Oneida. Dereham. Charlotteville. Canboro, Cayuga North, Cayuga South, Dawn, Dover, (d) Deleware, (d) Dorchester S.. Dunn, (d) Dunwich, (d) Euphemia, (d)

Malahide, Rainham, Raleigh, Romney, Seneca, Southwold,

(c)Rainham and

Walpole.

Dover and

Raleigh. Moulton.

Union Gas Co. of Canada, Ltd. (concluded)

(b) United Gas & Fuel Co. of Hamilton, Vacuum Gas & Oil Co. Ltd.,

Victoria Gas Co.

(d) Volcanic Gas and Oil Co., Ltd.

Walpole Gas Syndicate (e) Walter Gas Syndicate, Ltd.

> Welland County Gas Syndicate Western Ontario Natural Gas Co. Ltd. Dunnville

(a) Willits, G.E.

York Natural Gas Syndicate

SASKATCHEWAN

Colony Oil & Gas Co., Ltd. Lloydminster Gas Co. Ltd.

(a) Northern Royalties, Ltd. (a) Oil and Gas Association

(a) Oil and Gas Development Co.

ALBERTA

Agriculture, Department of

Alberta Clay Products Co. Barsac Royalties, Ltd.

(b) Bow Island, Town of

(g) British American Oil Co. Ltd.,

British Dominion Oil & Development Corp. Ltd., Brown Oil Corp. Ltd.

Calgary Power Co. Ltd.

Canadian Maple Leaf Royalties, Ltd. Canadian Pacific Railway Co. Canadian Western Natural Gas, Light, Heat & Power Co., Ltd. Canadian Western Power & Fuel Company Ltd. Carleton Royalties, Ltd.

Century Royalties, Ltd. Coronation Royalties, Ltd.

Dina Oil & Refining Co., Ltd.

52 Fifth Ave. Chatham

82-84 King St.E., Hamilton

350 Bay Street, Toronto Dunnville

510 Royal Bank Bldg.,

Toronto, Cayuga

Sun Life Bldg , Hamilton

Stevensville

Bothwell.

25 King St. W., Toronto

Lloydminster Lloydminster Yorkton Riverhurst

Vera

910 McCallum Hill Bldg.,

Regina, Sask. Medicine Hat

Toronto General Trust Bldg. Calgary

Bow Island

Royal Bank Bldg. Toronto, Onto

208 Dominion Bank Bldg.

Calgary

232 Lougheed Bldg.,

Calgary

Insurance Exchange Bldg.,

Calgary

1 Central Bldg., Calgary

Medicine Hat

215 Sixth Ave. W., Calgary

Redcliff

304 Foothills Bldg., Calgary

3004-4th St. W. Calgary 902 Lancaster Bldg.,

Calgary

Lloydminster, Sask.

Tilbury East and (c)(d) Walpole.

Middleton.

Rainham and Walpole. Blanchard, Nissouri

(East and West) Walpole.

Middleton, Townsend and Woodhouse.

Bertie.

Bayham, Canboro, Cayuga North, Dereham, Dunn and

Sherbrooke.

Oneida and Seneca.

Lloydminster. Lloydminster.

Kamsack. Riverhurst.

Atlee Medicine Hat.

Turner Valley.

Turner Valley.

Turner Valley.

Bassano.

Highwood Sinclair, Medicine Hat

Brooks.

Redcliff.

Turner Valley. Turner Valley.

Turner Valley. Dina.

ALBERTA - con.

Dominion Glass Co. Ltd.

East Crest Oil Co., Ltd. Firestone Petroleums, Ltd.

Foothills Oil & Gas Co. Ltd.,
Foundation Petroleums, Ltd.
Frontier Royalties, Ltd.

(g) Gas and Oil Products
Globe Royalties, Ltd.

Gold Standard Oils, Ltd. Granville Oils, Ltd.

Gunderson Brick & Coal Co. Ltd. Hargal Oils Ltd.

Highwood Sarcee Oils, Ltd.
Hidson's Bay Oil & Gas Co. Ltd.
Hylo Oils Ltd.,
Inter-City Royalties, Ltd.
Maple Leaf Milling Co. Ltd.
Maple Leaf Oil Co. Ltd.

Medicine Hat Brick & Tile Co. Ltd.
Medicine Hat, City of
Mercury Oils, Ltd.,
Mill City Petroleums, Ltd.
Miracle Oils, Ltd.
Model Oils Ltd.
Model Spooner Syndicate
Monarch Royalties, Ltd.
Northwestern Utilities Ltd.
Ogilvie Flour Mills Co. Ltd.
Oil investors, Ltd.
(g) Oilwell Machine Co.

O'Neil, W.N. Company, Ltd.

Prairie Royalties, Ltd. Range Oil & Gas Co., Ltd.

Redcliff Premier Brick Co. Ltd.
Redcliff Pressed Brick Co.
Renfrew Royalty Co. Ltd.
Reward Spooner Model
Royal Crest Petroleums, Ltd.,
Royalite Oil Co., Ltd.
Share Royalties Ltd.

Southwest Petroleum Co. Ltd.

Spooner Oils Ltd.
Spy Hill Royalties, Ltd.

1111 Beaver Hall Hill, Turner Valley. Montreal, P.Q. 409 Maclean Block, Calgary Turner Valley. 902 Lancaster Bldg., Turner Valley. Calgary 606 Second St. W., Calgary Turner Valley. 902 Lancaster Bldg., Calgary Turner Valley. 902 Lancaster Bldg., Calgary Turner Valley. 300 Lancaster Bldg., Calgary 401 Leeson-Lineham Block, Turner Valley. Calgary Wainwright Wainwright. 638 Columbia St., New Westminster Turner Valley. Redcliff Redcliff. 301 Bank of Nova Scotia Bldg., Vancouver, B.C. Wainwright. 614 Lancaster Bldg., Calgary Turner Valley. 79 Main St., Winnipeg, Man. Viking. 118-7th Ave., West, Calgary Turner Valley. Turner Valley. 232 Lougheed Bldg., Calgary Medicine Hat. Medicine Hat 708 Stock Exchange Bldg., Vancouver, B. C. Fabyan Medicine Hat Medicine Hat. Medicine Hat Medicine Hat. 300 Lancaster Bldg. Calgary Turner Valley. 300 Lancaster Bldg., Calgary Turner Valley. 300 Lancaster Bldg., Calgary Turner Valley. 201 Lancaster Bldg Calgary Turner Valley. 717 Lancaster Bldg., Calgary Turner Valley. 902 Lancaster Bldg., Calgary Turner Valley 10124 - 104th St., Edmonton Viking. Medicine Hat. Medicine Hat 1005 - 9th Ave. E., Calgary Turner Valley. Turner Valley c/o Toronto General Trusts, Pender & Seymour St., Red Coulee. Vancouver, B.C. 902 Lancaster Bldg . Calgary Turner Valley. 101 Canadian Bank of Border. Commerce Bldg., Calgary Redcliff. Redcliff Redcliff. Recliff Turner Valley. 1005 - 9th Ave. E. 717 Lancaster Bldg., Calgary Turner Valley. 232 Lougheed Bldg., Calgary Turner Valley. 606 Second St. W., Calgary Turner Valley. 61 Canada Life Bldg., Calgary Turner Valley. 606 - 2nd Street W., Turner Valley. Calgary 717 Lancaster Bldg, Calgary Turner Valley. 902 Lancaster Bldg., Calgary Turner Valley.

ALBERTA - conc.

Sterling Royalties, Ltd.

Suffield, Village of Sunburst Oil Co., Ltd.

Sundance Royalties, Ltd.

Vanalta Limited

(b) Wainwright Gas Co. Ltd.

Westflank Oil Co., Ltd.

West Turner Petroleums, Ltd.

Wetaskiwin, City of

304 Foothills Bldg., Calgary

Suffield

31 Canada Life Bldg.,

Calgary

902 Lancaster Bldg.,

Calgary

Granville Island,

Vancouver, B. C.

36 Dominion Bank Bldg.,

Edmonton

902 Lancaster Bldg.,

Calgary

703 Hall Bldg.,

Vancouver, B. C.

Wetaskiwin

Turner Valley. Suffield.

Turner Valley.

Turner Valley.

Red Coulee.

Turner Valley.

Turner Valley. Wetaskiwin.

NORTHWEST TERRITORIES --

Northwest Co. Ltd.

606 Second Street West, Calgary, Alberta

Fort Norman.

