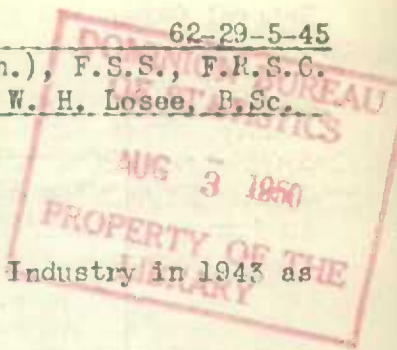


26-D-29

62-29-5-45

Dominion Statistician: S. A. Cudmore, M.A. (Oxon.), F.S.S., F.R.S.C.
Chief Mining, Metallurgical and Chemical Branch: W. H. Losee, B.Sc.

Historical File



THE NATURAL GAS INDUSTRY IN CANADA, 1943

The Bureau of Mines, Ottawa, reviewed the Natural Gas Industry in 1943 as follows:

"Natural gas has been found in most of the provinces of Canada. It is produced commercially in abundance in Alberta and Ontario, and in smaller quantities in New Brunswick, Saskatchewan and Quebec.

"In Alberta, most of the production comes from the Turner Valley field, which supplies fuel for the field itself, and feeds the pipe line to the cities and districts of Calgary and Lethbridge. It has been unnecessary to drill gas wells in this field for some years, and production is now largely derived from the petroleum wells, in which the gas plays a vital role in the production of petroleum. The 'gas/oil ratio' of many of these oil wells, particularly in the southern part of the field, where effective measures of conservation began to be applied comparatively late in their life, has risen so much that in some cases the wells have had to be re-classified as gas wells, thus, augmenting the reserve gas. Production of gas still remained considerably in excess of consumption, although the waste was further reduced about 12 per cent. The experiment in re-cycling of gas, using Foundation well as the input well, was continued throughout the year, the wells drawn upon being mainly Frontier and Prairie. The amount so returned to the limestone, 116,728 m.c.f., was not included in the production. No information is available as to the results achieved in this experiment.

"The Edmonton area is supplied from the gas field at Viking about 80 miles southeast of the city, supplemented by the field at Kinsella farther east, discovered in 1929 but first connected by an extension of the pipe line in the fall of 1940. Kinsella is now the principal source; seven wells were drilled and production there was nearly three times the volume of gas produced at Viking. In December six wells were producing at Viking and fourteen at Kinsella.

"In December, 34 wells were producing in the Medicine Hat area and 12 in the Redcliff area. Two wells were drilled at Medicine Hat and production increased about 10 per cent. At Vermilion, consumption increased 50 per cent, at Wainwright about two per cent; the former draws its supply from the field of the same name, the latter from Fabyan. Among other producers the more important were Foremost and Brooks.

"A small production, 1500 m.c.f., was recorded in the Northwest Territories. In Saskatchewan, the eastern part of the Lloydminster field supplies the town of Lloydminster. In the Kamsack area fifteen shallow wells were drilled, ten of the earlier wells are connected to the town and six more remained unconnected. These wells are mostly around 200 feet in depth and yield from 15 to 250 m.c.f. at a closed-in pressure of 36 lbs. Throughout the province geophysical and geological work was again active with a view to the discovery of both gas and petroleum. Decisive results from a number of deep tests have not yet been obtained.

"In Ontario, although no striking new development occurred, a small new area of Guelph gas was brought into production in Zone township. Drilling continued in Haldimand county, where a number of small producers were obtained, particularly in Walpole, Oneida, and North and South Cayuga townships, as well as

in Norfolk county, notably in Woodhouse and Townsend townships, and in Welland county, where Bertie township was the main producer. The test in Lake Erie about 5,900 feet off shore from Romney township got gas from the Lower Salina and Upper Guelph in an attempt to extend Tilbury East field. The deep test to the Trenton in Romney township was unsuccessful, as were also several wells in South Norwich and Westminster townships.

"In Quebec, natural gas is produced in small quantities at several shallow wells along the St. Lawrence River and is used locally.

"In New Brunswick, the Stoney Creek field continued to supply Moncton and Hillsborough and certain localities in Albert and Westmorland counties with natural gas. Six new wells were drilled and one was deepened. Flush production of the new wells amounted to 3,730 m.c.f."

Table 1 - PRODUCTION OF NATURAL GAS IN CANADA, BY PROVINCES, 1942 and 1943

Province	1942		1943	
	M cu.ft.	Value	M cu.ft.	Value
New Brunswick	619,380	299,688	675,029	327,787
Ontario	10,476,770	6,809,901	7,914,408	6,543,913
Manitoba .....	...	...	...	...
Saskatchewan	117,124	45,585	116,201	45,568
Alberta	34,482,585	6,146,146	35,569,078	6,241,815
Northwest Territories	1,500	335	1,500	335
CANADA	45,697,359	13,301,655	44,276,216	13,159,418

Table 2 - NATURAL GAS PRODUCTION IN ONTARIO, BY FIELDS, 1942 and 1943

County	Field	1942	1943
		M cu.ft.	M cu.ft.
Essex	Kingsville	32,419	28,732
	(Tilbury, Romney and Raleigh)	2,528,029	2,445,565
	(Declute	824,325	475,567
Kent	(Dover	310,261	220,133
	(Chatham	1,127,281	313,231
Lambton	(Dawn	1,526,149	1,092,293
	(Oil Springs .....	...	9,779
Middlesex	Mosa .....	...	...
	(South Norwich .....	...	3,730
Oxford	(Brownsville (x)	77,905	51,718
Elgin	Bayham	118,257	7,082
	(Bayham	868,299	87,091
Elgin	(Malakide	431,926	240,399
	Norfolk .....	...	...
Lincoln	Lincoln	2,124,122	2,470,967
Haldimand	Haldimand .....	...	...
Wentworth	Wentworth	288,663	296,016
Welland	Welland	145,134	98,105
	Onondaga, Brantford and Tuscarora .....	...	...
Prince Edward	Fallowell	14,000	14,000
Wells in surface drift	Harwich and Howard Tps. ...	60,000	60,000
Private wells .....	.....	10,476,770	7,914,408
TOTAL PRODUCED		10,476,770	7,914,408

(x) Dereham Tp. -- 58,782 M cu.ft.; Bayham Tp. -- 19,123 M cu.ft. 1942
(x) Dereham Tp. -- 36,710 M cu.ft.; Bayham Tp. -- 15,008 M cu.ft. 1943

Natural Gas

Table 3 - PRODUCTION OF NATURAL GAS IN CANADA, BY MONTHS, 1942 and 1943

Month	New Brunswick	Ontario	Saskatchewan	Alberta	CANADA
	M cu.ft.	M cu.ft.	M cu.ft.	M cu.ft.	M cu.ft.
<u>1942</u>					
January	78,394	1,476,794	15,441	3,824,436	5,395,065
February	69,596	1,360,428	16,053	3,421,694	4,867,771
March	61,534	1,247,777	11,023	3,334,127	4,654,461
April	59,847	1,032,425	10,595	2,723,218	3,826,085
May	52,204	796,150	5,015	2,349,200	3,202,569
June	38,143	588,178	4,807	1,827,174	2,458,302
July	30,120	476,156	3,456	1,808,406	2,318,638 (x)
August	27,315	510,820	3,644	1,846,965	2,389,244 (x)
September	31,205	592,285	6,020	2,370,421	3,000,431 (x)
October	42,906	650,643	8,535	2,861,719	3,563,803
November	57,631	765,957	13,757	3,805,321	4,642,666
December	70,485	979,157	18,778	4,309,904	5,378,324
TOTAL	619,380	10,476,770	117,124	34,482,585	45,697,359
<u>1943</u>					
January	86,943	943,546	19,196	4,461,798	5,511,483
February	70,969	849,597	16,010	3,581,742	4,518,318
March	65,532	892,105	15,978	4,078,951	5,052,566
April	69,544	823,368	8,341	2,782,318	3,683,571
May	59,957	652,410	6,239	2,416,741	3,135,347
June	47,745	451,038	4,583	2,026,296	2,529,662
July	36,537	354,884	3,058	1,912,885	2,307,864 (x)
August	31,172	354,719	3,125	1,938,721	2,328,237 (x)
September	33,877	441,508	5,392	2,248,020	2,729,297 (x)
October	46,071	540,748	8,388	2,828,115	3,423,322
November	56,513	757,249	10,654	3,356,408	4,180,824
December	70,169	853,236	15,237	3,937,083	4,875,725
TOTAL	675,029	7,914,408	116,201	35,569,078	44,276,216

(x) Includes production from Fort Norman, Northwest Territories.

Table 4 - CAPITAL EMPLOYED IN THE NATURAL GAS INDUSTRY IN CANADA, BY PROVINCES, 1942 and 1943

	Ontario	Alberta	CANADA (x)
	\$	\$	\$
<u>1942</u>			
Capital Employed as Represented by:			
Cost of land, buildings, plant, machinery and tools	43,953,488	25,644,329	71,032,694
Cost of supplies and stock on hand..	839,411	342,640	1,202,091
Cash, trading and operating accounts and bills receivable	7,447,188	2,926,010	10,535,817
TOTAL	52,240,087	28,912,979	82,768,602
<u>1943</u>			
Capital Employed as Represented by:			
Cost of land, buildings, plant, machinery and tools	43,502,716	25,754,405	70,474,231
Cost of supplies and stock on hand..	666,682	324,924	1,016,070
Cash, trading and operating accounts and bills receivable	9,096,292	3,165,150	12,472,862
TOTAL	53,265,690	29,244,479	83,963,163

(x) Includes data for New Brunswick and Saskatchewan.



Natural Gas

Table 5 - EMPLOYERS, SALARIES AND WAGES IN THE NATURAL GAS INDUSTRY IN CANADA, BY PROVINCES, 1942 and 1943

Province	Average Number of Employees			Salaries and Wages			
	Salaried Employees		Total	TOTAL	Salaries	Wages	TOTAL
	Male	Female	Wage-earners				
				\$	\$		\$
<u>1942</u>							
New Brunswick	11	11	71	93	40,610	104,901	145,511
Ontario	548	155	626	1,329	1,078,481	727,295	1,805,776
Saskatchewan.	3	1	...	4	4,500	...	4,500
Alberta	243	60	211	514	573,068	297,956	871,024
CANADA ...	805	227	908	1,940	1,696,659	1,130,152	2,826,811
<u>1943</u>							
New Brunswick	10	11	64	85	38,678	93,940	132,618
Ontario	520	142	533	1,195	1,077,628	656,540	1,734,168
Saskatchewan.	5	1	...	6	5,500	...	5,500
Alberta	234	60	302	596	606,512	367,716	974,228
CANADA ...	769	214	899	1,882	1,728,318	1,118,196	2,846,514

Table 6 - NATURAL GAS PIPELINE MILEAGE IN CANADA, 1942 and 1943

Province	Actual Miles of Mains				Miles of Equivalent 3" Mains			
	Gathering and transmission		Distribution		Gathering and transmission		Distribution	
	1942	1943	1942	1943	1942	1943	1942	1943
New Brunswick	20	20	65	65	36	36	73	73
Ontario	2,286	2,316	2,541	2,550	3,884	3,886	2,771	2,745
Saskatchewan.	...	...	6	6	...	...	4	4
Alberta	676	697	621	628	2,195	2,261	1,168	1,178
CANADA ...	2,982	3,033	3,233	3,229	6,115	5,183	4,016	4,000

Table 7 - SALES OF MANUFACTURED AND NATURAL GAS IN CANADA, 1942 and 1943

	1942			1943		
	Number of customers	Quantity sold M cu.ft.	Revenue from sales \$	Number of customers	Quantity sold M cu.ft.	Revenue from sales \$
	<u>MANUFACTURED GAS</u>					
Domestic	462,498	9,592,040	11,194,590	473,992	10,711,654	12,297,425
House heating.	5,451	991,228	537,457	5,289	1,267,416	695,936
Industrial ...	2,752	4,958,969	2,625,448	3,138	5,543,653	3,091,942
Commercial ...	27,470	3,260,988	2,935,028	26,789	3,492,052	3,106,550
Miscellaneous.	147	111,172	104,597	115	69,471	65,929
TOTAL	498,318	18,914,397	17,397,120	509,323	21,084,246	19,257,782
<u>NATURAL GAS</u>						
Domestic	178,853	15,833,766	7,926,591	182,650	14,480,386	7,048,029
Industrial ...	1,119	6,621,553	1,674,333	1,150	7,589,289	1,970,650
Commercial ...	10,610	6,124,803	1,705,283	10,684	7,035,941	1,892,627
Miscellaneous.	492	974,299	54,524	509	564,635	41,297
TOTAL	191,054	29,554,421	11,360,731	194,973	29,670,251	10,952,603
TOTAL--ALL GAS.	689,372	48,468,818	28,757,851	704,296	50,754,497	30,210,385