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GAS UTILITIES
(Transport and Distribution Systems)

SEPTEMBER 1963

In September 1963 field gathering systems and processing plants delivered to gas utilities 61,543,115 Mcf. of natural gas. The transport systems accounted for 4,720,859 Mcf. from fields and 42,215,524 Mcf. from processing plants, while the distribution systems received 8,209,324 Mcf. and 6,397,408 Mcf. respectively; natural gas received from storage was 7,112 Mcf. The total supply of gas utilities totalled 62,369,423 Mcf. and was 1.3 per cent higher than in September 1962. Of the total supply, 26,377,900 Mcf. were sold to ultimate customers in Canada, an increase of 2.7 per cent, while exports totalled 27,125,032 Mcf., a decrease of 6.7 per cent from last year. The difference between gas supply and deliveries was accounted for by losses including cyclical billing adjustments, line pack changes and deliveries to storage. Transport systems delivered 18,332,801 Mcf. to distribution systems, an increase of 13.8 per cent over the previous year. For the twelve-month period ended September 1963 exports totalled 374,113,941 Mcf., while net deliveries amounted to 819,567,171 Mcf.

The transport systems which represent virtually all of the major "intercity" movements of natural gas had traffic amounting to 46.4 billion commodity (Mcf.) miles during September 1963 compared with 40.5 billion for 1962. Ton-miles totalled 1,058 million for September 1963. The daily average deliveries of gas utilities amounted to 1.9 million Mcf.

Alberta natural gas utility receipts totalled 50.7 billion cubic feet; of this 18.7 per cent was sold to ultimate customers in Alberta, 16.0 per cent in Ontario, 4.4 per cent in Quebec, 1.9 per cent in Saskatchewan, 1.2 per cent in Manitoba and 1.1 per cent in British Columbia. In Table 3 deliveries of natural gas are considered as terminating and receipts from storage as originating in the province where the storage is located.

Revenue for the natural gas utilities for the month was \$23,107,136 and for manufactured and liquefied petroleum gases systems \$149,743, giving a combined Gas Utilities total of \$23,256,879.

This report has revisions in concept to bring it into line with the practice of industry, as well as several revisions by respondents to adopt the new concepts. All gas volumes are now given in cubic feet measured at 14.73 p.s.i.a. and 60°F; that is, without adjustments to a common B.T.U. base. Gas sales and exports in cubic feet containing 1,000 B.T.U.'s at 14.73 p.s.i.a. and 60°F are given separately in Tables 4 and 5 in the companion publication "Sales of Manufactured and Natural Gas", Catalogue number 45-005. As a result of these changes it has been necessary to revise certain of the 1962 figures, particularly exports, to enable more meaningful comparisons. Unfortunately, there is no precise comparison of residential, commercial and industrial sales although the reported sales volumes are believed to be within 1 to 2 per cent of what volumes would have been under the revised concepts.

Residential sales and a substantial portion of the smaller commercial sales are for the most part "displacement meter" sales and adjustments to a common base are only close approximations; industrial and larger commercial sales are for the most part "orifice meter" sales which are easily adjusted to the common base. All sales are reported on a billing month basis, consequently "Line losses and unaccounted for" include a cyclical billing adjustment.

Industry Division

December 1963
8506-503

TABLE 1. Receipts and Disposition of Natural Gas Utilities by Province

September 1963

No.		New Brunswick	Quebec ^F	Ontario
			Mcf.	
	<u>Receipts</u>			
1	By transport systems:			
1a	Fields	-	-	-
1b	Processing plants	-	-	-
2	By distribution systems:			
2a	Fields	7,435	-	946,837
2b	Processing plants	-	-	-
3	Total (1 + 2)	7,435	-	946,837
4	Imports	-	-	807,181
5	Other receipts	-	-	-
6	Total net receipts (3 + 4 + 5)	7,435	-	1,754,018
7	Received from storage	-	-	-
9	Total supply of gas utilities (6 + 7)	7,435	-	1,754,018
	Transfers from:			
11	Other provinces	-	2,305,234	16,050,943
12	Distribution to transport (primary)	-	-	2,037,161
13	Other gas utilities	-	2,305,234	17,535,775
19	Total gross receipts (9 + 11 + 12 + 13) ...	7,435	4,610,468	37,377,897
	<u>Disposition</u>			
	Sales:			
20	Residential	3,777	330,629	1,517,292
21	Industrial	-	1,794,919	6,937,893
22	Commercial	1,500	109,212	1,269,921
30	Total sales (20 + 21 + 22)	5,277	2,234,760	9,725,106
31	Exports	-	-	140,456
32	Other deliveries	-	-	6
33	Total net deliveries (30 + 31 + 32)	5,277	2,234,760	9,865,568
34	Delivered to storage	-	-	3,778,566
35	Line pack fluctuation	-	- 2,763	107,839
36	Gas used in system	-	-	582,145
37	Line losses and unaccounted for	2,158	73,237	1,165,609
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	7,435	2,305,234	15,499,727
	Transfers to:			
40	Other provinces	-	-	2,305,234
41	Distribution by transport (primary)	-	2,305,234	11,798,192
42	Other gas utilities	-	-	7,774,744
49	Total disposition (39 + 40 + 41 + 42)	7,435	4,610,468	37,377,897

^F Revised figures.

TABLE 1. Receipts and Disposition of Natural Gas Utilities by Province

September 1963

Manitoba	Saskatchewan	Alberta	British Columbia	Canada	September ^r 1962		No.
						Canada	
Mcf.							
-	-	4,373,715	347,144	4,720,859	)	45,057,881	1a
-	-	34,814,915	7,400,609	42,215,524			1b
-	423,824	6,826,285	4,943	8,209,324	)	15,331,696	2a
-	1,711,896	4,668,604	16,908	6,397,408			2b
-	2,135,720	50,683,519	7,769,604	61,543,115		60,389,577	3
-	-	2,300	-	809,481		862,403	4
75	-	9,640	-	9,715		-	5
75	2,135,720	50,695,459	7,769,604	62,362,311		61,251,980	6
-	4,614	2,498	-	7,112		299,578	7
75	2,140,334	50,697,957	7,769,604	62,369,423		61,551,558	9
22,102,247	23,333,067	-	15,065,463	...		...	11
-	551,109	1,266,998	-	3,855,268	)	25,927,711	12
1,061,766	1,156,225	2,814,889	1,952,683	26,826,572			13
23,164,088	27,180,735	54,779,844	24,787,750	93,051,263		87,479,269	19
197,426	270,207	1,078,043	387,624	3,784,998		4,209,337	20
614,635	1,736,930	7,483,418	1,310,492	19,878,287		18,684,736	21
147,950	111,633	910,208	164,191	2,714,615		2,796,375	22
960,011	2,118,770	9,471,669	1,862,307	26,377,900		25,690,448	30
4,651,912	-	1,807,282	20,525,382	27,125,032		29,064,338	31
-	-	61,057	-	61,063		18,695	32
5,611,923	2,118,770	11,340,008	22,387,689	53,563,995		54,773,481	33
-	373,557	218,236	-	4,370,359		2,494,828	34
23,961	64,915	- 69,373	101,950	226,529		100,957	35
263,302	552,761	37,577	156,070	1,591,855		1,243,689	36
152,193	261,151	772,979	189,358	2,616,685		2,912,964	37
6,051,379	3,371,154	12,299,427	22,835,067	62,369,423		61,525,919	39
16,050,943	22,102,247	38,398,530	-	...		...	40
1,061,766	1,156,225	91,764	1,919,620	18,332,801		16,113,116	41
-	551,109	3,990,123	33,063	12,349,039		9,840,234	42
23,164,088	27,180,735	54,779,844	24,787,750	93,051,263		87,479,269	49

TABLE 2. Receipts and Disposition of Natural Gas Utilities by Month, Canada, 1963

No.		January	February	March	April	May
				Mcf.		
	<u>Receipts</u>					
1	By transport systems:					
1a	Fields	6,490,502	5,665,269	5,185,435	4,817,434	3,969,236
1b	Processing plants	53,448,663	45,922,308	50,341,692	45,448,449	44,410,120
2	By distribution systems:					
2a	Fields	20,099,614	15,790,009	14,239,942	11,394,674	9,779,643
2b	Processing plants	6,544,092	6,772,147	7,614,165	6,155,868	6,333,738
3	Total (1 + 2)	86,582,871	74,149,733	77,381,234	67,816,425	64,492,737
4	Imports	213,784	166,149	987,966	1,124,916	875,595
5	Other receipts	82,482	40,522	1,002	441	17,726
6	Total net receipts (3 + 4 + 5)	86,879,137	74,356,404	78,370,202	68,941,782	65,386,058
7	Received from storage	8,536,394	5,486,862	2,646,935	773,968	152,844
9	Total supply of gas utilities (6 + 7)	95,415,531	79,843,266	81,017,137	69,715,750	65,538,902
	Transfers from:					
11	Other provinces .....	...	...	...	...	...
12	Distribution to transport (primary)	4,275,301	4,737,209	3,624,455	2,988,816	3,874,610
13	Other gas utilities	43,342,270	38,021,384	35,730,383	30,669,258	28,038,503
19	Total gross receipts (9 + 11 + 12 + 13) ...	143,033,102	122,601,859	120,371,975	103,373,824	97,452,015
	<u>Disposition</u>					
	Sales:					
20	Residential	24,487,687	24,217,941	19,618,195	13,908,773	9,552,827
21	Industrial	18,626,804	17,246,726	19,446,709	19,890,248	20,520,937
22	Commercial	10,897,541	10,826,176	8,844,584	6,530,644	4,534,231
30	Total sales (20 + 21 + 22)	54,012,032	52,290,843	47,909,488	40,329,665	34,607,995
31	Exports	34,608,544	29,721,885	32,520,099	29,464,060	28,532,280
32	Other deliveries	88,879	65,370	68,550	59,194	56,316
33	Total net deliveries (30 + 31 + 32)	88,709,455	82,078,098	80,498,137	69,852,919	63,196,591
34	Delivered to storage	607,009	363,974	680,971	1,548,765	3,327,458
35	Line pack fluctuation	168,468	- 110,881	254,266	- 188,432	- 72,489
36	Gas used in system	2,125,732	1,883,954	1,922,048	1,572,385	1,508,466
37	Line losses and unaccounted for	3,804,867	- 4,371,879	- 2,338,285	- 3,069,887	- 2,421,124
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	95,415,531	79,843,266	81,017,137	69,715,750	65,538,902
	Transfers to:					
40	Other provinces .....	...	...	...	...	...
41	Distribution by transport (primary)	34,377,018	29,710,223	27,422,291	22,906,425	21,685,393
42	Other gas utilities	13,240,553	13,048,370	11,932,547	10,751,649	10,227,720
49	Total disposition (39 + 40 + 41 + 42)	143,033,102	122,601,859	120,371,975	103,373,824	97,452,015

* Revised figures.

TABLE 2. Receipts and Disposition of Natural Gas Utilities by Month, Canada, 1963

June	July	August	September	October	November	December	Year to date		No.
							1963 ^F	1962 ^F	
Mcf.									
3,545,883 40,807,081	3,917,797 41,167,577	4,473,601 40,752,094	4,720,859 42,215,524				42,786,016 404,513,508	) 412,432,284	1a 1b
7,666,185 6,227,544	6,927,079 5,813,608	7,467,238 6,023,038	8,209,324 6,397,408				101,573,708 57,881,608	) 153,814,035	2a 2b
58,246,693	57,826,061	58,715,971	61,543,115				606,754,840	566,246,319	3
828,262 4,042	867,400 10,081	859,313 9,846	809,481 9,715				6,732,866 175,857	5,350,249 36,846	4 5
59,078,997	58,703,542	59,585,130	62,362,311				613,663,563	571,633,414	6
39,489	-	2,264	7,112				17,645,868	15,063,796	7
59,118,486	58,703,542	59,587,394	62,369,423				631,309,431	586,697,210	9
4,400,065 24,171,023	5,105,874 24,539,783	4,764,739 25,111,177	3,855,268 26,826,572				37,626,337 276,450,353	) 266,811,084	11 12 13
87,689,574	88,349,199	89,463,310	93,051,263				945,386,121	853,508,294	19
5,602,252 19,736,318 2,786,605	3,477,050 19,157,302 1,886,996	3,035,356 19,932,618 1,869,999	3,784,998 19,878,287 2,714,615				107,685,079 174,435,949 50,891,391	101,517,124 159,080,932 47,889,804	20 21 22
28,125,175	24,521,348	24,837,973	26,377,900				333,012,419	308,487,860	30
26,118,308 52,586	26,871,216 50,623	26,295,124 55,297	27,125,032 61,063				261,256,548 557,878	248,484,296 432,234	31 32
54,296,069	51,443,187	51,188,394	53,563,995				594,826,845	557,404,390	33
5,491,294 - 159,822 1,475,841 - 1,984,896	6,290,164 - 266,566 1,521,333 - 284,576	5,316,723 231,302 1,531,913 1,319,062	4,370,359 226,529 1,591,855 2,616,685				27,996,717 82,375 15,133,527 - 6,730,033	24,450,130 - 137,518 12,272,741 - 7,465,983	34 35 36 37
59,118,486	58,703,542	59,587,394	62,369,423				631,309,431	586,523,760	39
16,947,007 11,624,081	16,385,216 13,260,441	16,936,705 12,939,211	18,332,801 12,349,039				204,703,079 109,373,611	168,834,965 98,149,569	40 41 42
87,689,574	88,349,199	89,463,310	93,051,263				945,386,121	853,508,294	49

TABLE 3. Receipts and Disposition of Natural Gas by Source

September 1963

No.		New Brunswick	Ontario	Saskatchewan	Alberta	British Columbia	Imports from U.S.A.	Total	
		Mcf.							
	<u>Receipts</u>								
1	By transport systems:								
1a	Fields	-	-	-	4,373,715	347,144	...	4,720,859	
1b	Processing plants	-	-	-	34,814,915	7,400,609	...	42,215,524	
2	By distribution systems:								
2a	Fields	7,435	946,837	423,824	6,826,285	4,943	...	8,209,324	
2b	Processing plants	-	-	1,711,896	4,668,604	16,908	...	6,397,408	
3	Total (1 + 2)	7,435	946,837	2,135,720	50,683,519	7,769,604	...	61,543,115	
4	Imports .....	...	...	...	...	...	809,481	809,481
5	Other receipts	-	-	-	9,715	-	...	9,715	
6	Total net receipts (3 + 4 + 5)	7,435	946,837	2,135,720	50,693,234	7,769,604	809,481	62,362,311	
7	Received from storage	-	-	4,614	2,498	-	...	7,112	
9	Total supply of gas utilities (6 + 7)	7,435	946,837	2,140,334	50,695,732	7,769,604	809,481	62,369,423	
	<u>Disposition</u>								
	Sales:								
23	British Columbia	-	-	-	545,280	1,317,027	-	1,862,307	
24	Alberta	-	-	-	9,469,369	-	2,300	9,471,669	
25	Saskatchewan	-	-	1,156,503	962,267	-	-	2,118,770	
26	Manitoba	-	-	357,151	602,860	-	-	960,011	
27	Ontario	-	811,803	-	8,106,122	-	807,181	9,725,106	
28	Quebec	-	-	-	2,234,760	-	-	2,234,760	
29	New Brunswick	5,277	-	-	-	-	-	5,277	
30	Total sales (23 + 24 + 25 + 26 + 27 + 28 + 29)	5,277	811,803	1,513,654	21,920,658	1,317,027	809,481	26,377,900	
31	Exports	-	-	-	20,979,084	6,145,948	...	27,125,032	
32	Other deliveries	-	-	-	61,063	-	...	61,063	
33	Total net deliveries (30 + 31 + 32)	5,277	811,803	1,513,654	42,960,805	7,462,975	809,481	53,563,995	
34	Delivered to storage	-	-	373,557	3,996,802	-	-	4,370,359	
35	Line pack fluctuation	-	-	32,967	102,735	90,827	-	226,529	
36	Gas used in system	-	43,085	26,156	1,432,794	89,820	-	1,591,855	
37	Line losses and unaccounted for	2,158	91,949	194,000	2,202,596	125,982	-	2,616,685	
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	7,435	946,837	2,140,334	50,695,732	7,769,604	809,481	62,369,423	

TABLE 4. Operating Statistics; Natural Gas Utilities

September 1963

	Natural gas transport systems	Natural gas distribution systems	Total natural gas utilities
Daily sendouts (Mcf.):			
September 1963:			
Daily average	1,515,261	879,263	1,931,145
Maximum(1)	1,819,835	...	...
Minimum(1)	1,329,799	...	...
Exports maximum(1)	987,532	...	987,532
September 1962 ^r :			
Daily average	1,505,915	856,348	1,908,944
Maximum(1)	1,921,493	...	...
Minimum(1)	1,274,410	...	...
Year to date 1963:			
Daily average	1,706,812	1,219,826	2,281,405
Maximum(1)	2,627,885	...	...
Minimum(1)	1,130,725	...	...
Commodity miles:			
Mcf. miles (thousands)	46,418,378	..	..
Ton-miles (millions)	1,058	..	..
Line pack:			
Beginning of month (Mcf.)	6,166,508	..	..
End of month (Mcf.)	6,356,978	..	..
Operating revenues	(\$16,050,435	(\$14,600,436	(\$23,107,136(2)

(1) Non-coincident.

(2) Interindustry revenues eliminated.

.. Figures not available.

... Figures not appropriate or not applicable.

^r Revised figures.

TABLE 5. Manufactured and Liquefied Petroleum Gases Utilities

Receipts and Disposition

September 1963

	Manufactured	Liquefied petroleum gases
	Mcf.	
Gas receipts	45,653	106,231
Deliveries to ultimate customers	46,205	88,038
Line pack fluctuations	-	- 221
Gas used in system	221	782
Metering difference, line losses, cyclical billing adjustments and unaccounted for	- 773	17,632
Total disposition	45,653	106,231
Daily average sendout	1,540	2,935
Revenues	(\$42,352	(\$107,391



TABLE 6. Exports and Imports to and from the United States
September 1963

Customs port	Exports	Imports
	Mcf.	
Cornwall, Ontario	140,456	-
Ojibway, Ontario	-	807,181
Emerson, Manitoba	4,651,912	-
Coutts, Alberta	129	2,300
Aden, Alberta	906,187	-
Carway, Alberta	900,966	-
Kingsgate, British Columbia	12,286,322	-
Huntingdon, British Columbia	8,239,060	-
Canada	27,125,032	809,481