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GAS UTILITIES
(Transport and Distribution Systems)

APRIL 1969

During April field gathering systems and processing plants delivered to gas utilities 133,905,591 Mcf. of natural gas. The transport systems accounted for 109,963,110 Mcf. and the distributions systems 23,942,481 Mcf. Natural gas imported from the U.S.A. was 4,254,464 Mcf. and the volume recovered from storage was 1,118,968 Mcf. The disposition of gas utilities supply is shown in the following table.

Disposition	Volume	% of total supply	% increase over April 1968	Revenue	% of total revenue
	'000 Mcf.			\$'000	
Ultimate customers	76,328	54.8	16.9	50,259	77.4
Exports	55,915	40.1	15.5	14,689	22.6
Other uses and adjustments	7,159	5.1	...	...	...
Totals	139,402	100.0	17.4	64,948	100.0

... Figures not appropriate or applicable.

Transport system traffic which represents virtually all of the major "intercity" movements of natural gas, amounted to 86.3 billion commodity (Mcf.) miles (1,968 million ton miles) during April compared with 75.4 billion (Mcf.) miles (1,719 million ton miles) last year. The daily average deliveries of gas utilities amounted to 4.5 million Mcf.

Alberta natural gas utilities receipts totalled 107.1 billion cubic feet; of this 17.4 per cent was sold to ultimate customers in Alberta, 24.4 per cent in Ontario, 3.9 per cent in Quebec, 2.8 per cent in Saskatchewan, 1.1 per cent in British Columbia and 4.3 per cent in Manitoba. Exports accounted for 39.8 per cent and the remaining 6.3 per cent was other deliveries, deliveries to storage, line pack changes, gas used in systems and line losses and unaccounted for.

In Table 3 "gas received from storage" is considered as having originated in the province where the storage is located and "gas delivered to storage" as a terminal delivery by the originating province.

There was an overall increase in distributor sales and revenues during April compared to the same month for the previous year. Details are contained in the following table.

Sales Category	Sales	% of total sales	% increase over April 1968	Revenue	% of sales revenue	Number of customers
	'000 Mcf.			\$'000		
Residential	22,156	29.0	11.3	23,434	46.6	1,607
Industrial	37,972	49.8	17.2	15,131	30.1	12
Commercial	16,200	21.2	24.5	11,694	23.3	159
Totals	76,328	100.0	16.9	50,259	100.0	1,778

All gas volumes in Tables 1-7 and Table 11 are given in thousand cubic feet measured at 14.73 p.s.i.a. at 60°F; that is, without adjustment to a common B.T.U. base. Gas sales, exports and imports containing 1,000 B.T.U.'s per cubic foot are given separately in Tables 8-10.

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 cyclical billing adjustments.

A companion publication "Crude Petroleum and Natural Gas Production", Catalogue No. 26-006 gives a comprehensive review of the Supply and Disposition of Natural Gas.

Manufacturing and Primary Industries Division

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

April 1969

No.		New Brunswick	Quebec	Ontario
			Mcf.	
<u>Receipts</u>				
1	<u>By transport systems</u>			
la	Fields	-	-	-
lb	Processing plants	-	-	-
2	<u>By distribution systems</u>			
2a	Fields	8,655	11,680	507,749
2b	Processing plants	-	-	525,641
3	Total (1 + 2)	8,655	11,680	1,033,390
4	Imports	-	-	4,246,965
5	Other receipts(1)	-	-	-
6	Total net receipts (3 + 4 + 5)	8,655	11,680	5,280,355
7	Received from storage	-	-	1,033,862
9	Total supply of gas utilities (6 + 7)	8,655	11,680	6,314,217
<u>Transfers from</u>				
11	Other provinces	-	4,326,031	36,004,274
12	Distribution to transport (primary)	-	-	630,275
13	Other gas utilities	-	3,930,613	35,775,236
19	Total gross receipts (9 + 11 + 12 + 13) ...	8,655	8,268,324	78,724,002
<u>Disposition</u>				
<u>Sales</u>				
20	Residential	3,842	1,092,553	10,072,089
21	Industrial	-	2,608,514	15,882,640
22	Commercial	2,818	533,431	7,208,067
30	Total sales (20 + 21 + 22)	6,660	4,234,498	33,162,796
31	Exports	-	163,406	482,217
32	Other deliveries	-	-	1,729
33	Total net deliveries (30 + 31 + 32)	6,660	4,397,904	33,646,742
34	Delivered to storage	-	-	6,214,852
35	Line pack fluctuation	-	1,863	5,240
36	Gas used in system	1,995	10,459	2,710,732
37	Line losses and unaccounted for	-	- 72,515	- 4,585,106
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	8,655	4,337,711	37,992,460
<u>Transfers to</u>				
40	Other provinces	-	-	4,326,031
41	Distribution by transport (primary)	-	3,922,239	31,958,069
42	Other gas utilities	-	8,374	4,447,442
49	Total disposition (39 + 40 + 41 + 42)	8,655	8,268,324	78,724,002

(1) Includes peak shaving and enrichment.

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

April 1969

Manitoba	Saskatchewan	Alberta	British Columbia	Canada	April 1968	No.
					Canada	
Mcf.						
-	-	8,271,874 79,667,618	474,560 21,549,058	8,746,434 101,216,676	6,786,420 78,847,295	1a 1b
-	1,874,733 1,970,920	9,940,729 9,037,764	64,610	12,343,546 11,598,935	10,280,402 13,100,441	2a 2b
-	3,845,653	106,917,985	22,088,228	133,905,591	109,014,558	3
116,247	-	7,499 6,305	- 79	4,254,464 122,631	8,023,099 50,491	4 5
116,247	3,845,653	106,931,789	22,088,307	138,282,686	117,088,148	6
-	58,198	26,908	-	1,118,968	1,699,586	7
116,247	3,903,851	106,958,697	22,088,307	139,401,654	118,787,734	9
31,992,351	56,110,951 2,235,034 3,289,987	- 1,759,459 5,556,354	28,726,257 70,297 8,268,964	4,695,065 59,257,520	7,876,540 46,414,522	11 12 13
55,398,585	64,686,202	114,274,510	59,153,825	203,354,239	173,078,796	19
1,803,212 1,337,602 1,454,348	2,278,391 3,708,109 1,349,325	4,714,377 9,849,379 4,049,452	2,191,149 4,585,593 1,603,026	22,155,613 37,971,837 16,200,467	19,197,119 33,105,949 13,013,115	20 21 22
4,595,162	7,335,825	18,613,208	8,379,768	76,327,917	65,316,183	30
11,576,108	- 54,699	3,155,633 328,184	40,537,556 -	55,914,920 384,612	48,402,731 258,805	31 32
16,171,270	7,390,524	22,097,025	48,917,324	132,627,449	113,977,719	33
- 477,945 651,163 - 1,196,054	1,333,406 230,299 1,084,761 - 2,016,539	777,580 - 74,901 937,648 - 1,615,863	- 16,219 1,736,047 177,412	8,325,838 624,227 7,132,805 - 9,308,665	5,296,028 - 226,267 4,958,274 - 5,218,020	34 35 36 37
16,104,324	8,022,451	22,121,489	50,814,564	139,401,654	118,787,734	39
36,004,274 3,289,987	51,992,351 2,436,366 2,235,034	84,837,208 1,175,654 6,140,159	- 296,665 8,042,596	43,078,980 20,873,605	41,092,001 13,199,061	40 41 42
55,398,585	64,686,202	114,274,510	59,153,825	203,354,239	173,078,796	49

TABLE 2. Receipts and Disposition of Natural Gas Utilities by Month, Canada, 1969

No.		January	February	March	April	May
					Mcf.	
<u>Receipts</u>						
<u>1 By transport systems</u>						
1a	Fields	10,645,974	9,370,792	10,004,935	8,746,434	
1b	Processing plants	103,471,100	98,866,494	106,477,068	101,216,676	
<u>2 By distribution systems</u>						
2a	Fields	23,816,813	17,573,872	16,238,711	12,343,546	
2b	Processing plants	15,630,395	13,274,977	13,998,555	11,598,935	
3	Total (1 + 2)	153,564,282	139,086,135	146,719,269	133,905,591	
4	Imports	2,968,411	2,852,203	4,201,424	4,254,464	
5	Other receipts(1)	304,789	117,525	121,651	122,631	
6	Total net receipts (3 + 4 + 5)	156,837,482	142,055,863	151,042,344	138,282,686	
7	Received from storage	17,417,972	10,028,714	6,752,190	1,118,968	
9	Total supply of gas utilities (6 + 7)	174,255,454	152,084,577	157,794,534	139,401,654	
<u>Transfers from</u>						
11	Other provinces .....	...	...	...	...
12	Distribution to transport (primary)	5,983,105	5,504,292	5,454,353	4,695,065	
13	Other gas utilities	71,983,013	64,050,999	68,712,721	59,257,520	
19	Total gross receipts (9 + 11 + 12 + 13) ...	252,221,572	221,639,868	231,961,608	203,354,239	
<u>Disposition</u>						
<u>Sales</u>						
20	Residential	41,725,382	35,851,699	29,424,197	22,155,613	
21	Industrial	37,311,788	35,327,155	38,571,351	37,971,837	
22	Commercial	26,478,302	24,182,583	20,187,396	16,200,467	
30	Total sales (20 + 21 + 22)	105,515,472	95,361,437	88,182,944	76,327,917	
31	Exports	58,033,790	53,393,931	56,607,382	55,914,920	
32	Other deliveries	1,459,750	1,585,935	1,370,907	384,612	
33	Total net deliveries (30 + 31 + 32)	165,009,012	150,341,303	146,161,233	132,627,449	
34	Delivered to storage	695,411	1,054,029	1,669,249	8,325,838	
35	Line pack fluctuation	~ 647,899	520,208	41,319	624,227	
36	Gas used in system	7,388,026	7,262,667	7,989,697	7,132,805	
37	Line losses and unaccounted for	1,810,904	~ 7,093,630	1,933,036	~ 9,308,665	
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	174,255,454	152,084,577	157,794,534	139,401,654	
<u>Transfers to</u>						
40	Other provinces .....	...	...	...	...
41	Distribution by transport (primary)	53,908,468	49,457,245	35,968,526	43,078,980	
42	Other gas utilities	24,057,650	20,098,046	38,198,548	20,873,605	
49	Total disposition (39 + 40 + 41 + 42)	252,221,572	221,639,868	231,961,608	203,354,239	

(1) Includes peak shaving and enrichment.
... Figures not appropriate or not applicable.

TABLE 2. Receipts and Disposition of Natural Gas Utilities by Month, Canada, 1969

June	July	August	September	October	November	December	Year to date		No.
							1969	1968	
Mcf.									
							38,768,135 410,031,338	29,246,870 345,197,760	1a 1b
							69,972,942 54,502,862	52,740,053 56,940,704	2a 2b
							573,275,277	484,125,387	3
							14,276,502 666,596	29,907,981 289,433	4 5
							588,218,375	514,322,801	6
							35,317,844	34,317,098	7
							623,536,219	548,639,899	9
							11
							21,636,815 264,004,253	29,794,370 218,545,574	12 13
							909,177,287	796,979,843	19
							129,156,891 149,182,131 87,048,748	115,824,141 132,856,932 71,595,604	20 21 22
							365,387,770	320,276,677	30
							223,950,023 4,801,204	202,287,266 2,643,109	31 32
							594,138,997	525,207,052	33
							11,744,527 537,855 29,773,195 - 12,658,355	8,299,818 1,002,244 21,939,012 - 7,808,227	34 35 36 37
							623,536,219	548,639,899	39
							40
							182,413,219 103,227,849	175,160,449 73,179,495	41 42
							909,177,287	796,979,843	49

TABLE 3. Receipts and Disposition of Natural Gas by Source

April 1969

No.		New Brunswick	Quebec	Ontario	Saskatchewan	Alberta	British Columbia	Imports from U.S.A.	Total
Mcf.									
<u>Receipts</u>									
1	<u>By transport systems</u>								
1a	Fields	-	-	-	-	8,271,874	474,560	-	8,746,434
1b	Processing plants	-	-	-	-	79,667,618	21,549,058	-	101,216,676
2	<u>By distribution systems</u>								
2a	Fields	8,655	11,680	507,749	1,874,733	9,940,729	-	-	12,343,546
2b	Processing plants	-	-	525,641	1,970,920	9,037,764	64,610	-	11,598,935
3	Total (1 + 2)	8,655	11,680	1,033,390	3,845,653	106,917,985	22,088,228	-	133,905,591
4	Imports	-	-	-	-	-	-	4,254,464	4,254,464
5	Other receipts(1)	-	-	-	-	122,552	79	-	122,631
6	Total net receipts (3 + 4 + 5)	8,655	11,680	1,033,390	3,845,653	107,040,537	22,088,307	4,254,464	138,282,686
7	Received from storage	-	-	1,033,862	58,198	26,908	-	-	1,118,968
9	Total supply of gas utilities (6 + 7)	8,655	11,680	2,067,252	3,903,851	107,067,445	22,088,307	4,254,464	139,401,654
<u>Disposition</u>									
	<u>Sales</u>								
23	British Columbia	-	-	-	-	1,208,621	7,171,147	-	8,379,768
24	Alberta	-	-	-	-	18,605,205	-	8,003	18,613,208
25	Saskatchewan	-	-	-	4,361,712	2,974,113	-	-	7,335,825
26	Manitoba	-	-	-	-	4,595,162	-	-	4,595,162
27	Ontario	-	-	2,746,179	-	26,169,652	-	4,246,965	33,162,796
28	Quebec	-	11,680	-	-	4,222,818	-	-	4,234,498
29	New Brunswick	6,660	-	-	-	-	-	-	6,660
30	Total sales (23 + 24 + 25 + 26 + 27 + 28 + 29)	6,660	11,680	2,746,179	4,361,712	57,775,571	7,171,147	4,254,968	76,327,917
31	Exports	-	-	-	-	42,568,716	13,346,204	-	55,914,920
32	Other deliveries	-	-	-	-	384,612	-	-	384,612
33	Total net deliveries (30 + 31 + 32)	6,660	11,680	2,746,179	4,361,712	100,728,899	20,517,351	4,254,968	132,627,449
34	Delivered to storage	-	-	-	1,333,406	6,992,432	-	-	8,325,838
35	Line pack fluctuation	-	-	-	213,269	439,274	- 28,316	-	624,227
36	Gas used in system	1,995	-	49,782	8,171	5,578,313	1,494,544	-	7,132,805
37	Line losses and unaccounted for	-	-	728,709	-2,012,707	- 6,671,473	104,728	- 504	- 9,308,665
39	Total demand on gas utilities (33 + 34 + 35 + 36 + 37)	8,655	11,680	2,067,252	3,903,851	107,067,445	22,088,307	4,254,464	139,401,654

(1) Includes peak shaving and enrichment.

... Figures not appropriate or not applicable.

TABLE 4. Operating Statistics: Natural Gas Utilities

April 1969

	Natural gas transport systems	Natural gas distribution systems	Total natural gas utilities
<u>Daily sendouts (Mcf.)</u>			
April 1969			
Daily average	3,299,797	2,544,264	4,498,443
Maximum(1)	3,919,269	...	...
Minimum(1)	3,195,683	...	...
Exports maximum(1)	1,915,406	...	...
April 1968			
Daily average	2,983,157	2,177,172	3,958,767
Maximum(1)	3,346,767	...	...
Minimum(1)	2,663,949	...	...
Year to date 1969			
Daily average	3,345,154	3,044,898	5,049,029
Maximum(1)	4,008,770	...	...
Minimum(1)	3,195,683	...	...
<u>Commodity miles</u>			
Mcf. miles (thousands)	86,326,857	..	..
Ton-miles (millions)	1,968	..	..
<u>Line pack</u>			
Beginning of month (Mcf.)	8,690,818	..	..
End of month (Mcf.)	8,603,863	..	..
Operating revenues	(\$)	50,259,088	..

(1) Non-coincident.

.. Figures not available.

... Figures not appropriate or not applicable.

TABLE 5. Manufactured and Liquefied Petroleum Gases Utilities

Receipts and Disposition

April 1969

	Manufactured	Liquefied petroleum gases
	Mcf.	
Gas receipts	50,243	89,545
Deliveries to ultimate customers	46,777	88,584
Line pack fluctuations	-	271
Gas used in system	-	549
Metering difference, line losses, cyclical billing adjustments and unaccounted for	3,466	141
Total disposition	50,243	89,545
Daily average sendout	1,675	2,985
Revenues	(\$)	30,431
		139,734

TABLE 6. Sales of Natural Gas

No.		April 1969			
		Customers		Gas sold	Revenue
		Space heating	Total		
No.		No.		Mcf.	\$
<u>Residential</u>					
1	New Brunswick	130	1,743	3,842	12,603
2	Quebec	102,252	202,702	1,092,553	2,001,039
3	Ontario	577,250	707,293	10,072,089	12,138,092
4	Manitoba	106,022	108,300	1,803,212	1,535,503
5	Saskatchewan	119,819	122,243	2,278,391	1,733,290
6	Alberta	263,010	265,562	4,714,377	2,571,116
7	British Columbia	181,003	199,082	2,191,149	3,442,048
8	Canada	1,349,486	1,606,925	22,155,613	23,433,691
<u>Industrial</u>					
9	New Brunswick	-	-	-	-
10	Quebec	2,157	2,608,514	1,368,066	
11	Ontario	8,388	15,882,640	8,992,156	
12	Manitoba	299	1,337,602	399,501	
13	Saskatchewan	631	3,708,109	1,087,152	
14	Alberta	540	9,849,379	1,823,748	
15	British Columbia	295	4,585,593	1,460,392	
16	Canada	12,310	37,971,837	15,131,015	
17	Firm	11,694	30,710,783	12,349,565	
18	Interruptible	616	7,261,053	2,781,450	
<u>Commercial</u>					
19	New Brunswick	66	2,818	5,832	
20	Quebec	10,383	533,431	598,326	
21	Ontario	65,493	7,208,067	6,253,116	
22	Manitoba	10,520	1,454,348	980,692	
23	Saskatchewan	16,971	1,349,325	780,758	
24	Alberta	30,231	4,049,452	1,577,450	
25	British Columbia	25,816	1,603,026	1,498,208	
26	Canada	159,480	16,200,467	11,694,382	
<u>Total sales</u>					
27	New Brunswick	1,809	6,660	18,435	
28	Quebec	215,242	4,234,498	3,967,431	
29	Ontario	781,174	33,162,796	27,383,364	
30	Manitoba	119,119	4,595,162	2,915,696	
31	Saskatchewan	139,845	7,335,825	3,601,200	
32	Alberta	296,333	18,613,208	5,972,314	
33	British Columbia	225,193	8,379,768	6,400,648	
34	Canada	1,778,715	76,327,917	50,259,088	

... Figures not appropriate or not applicable.

TABLE 7. Pipeline Sales of Liquefied Petroleum Gases and Manufactured Gas

No.		April 1969			
		Liquefied petroleum gases			Revenue
		Customers	Gas sold		
No.		No.	Mcf.		\$
1	Residential	11,199	42,650	78,137	
2	Industrial	8	583	773	
3	Commercial	2,235	45,351	60,824	
4	Total	13,442	88,584	139,734	

TABLE 6. Sales of Natural Gas

April 1969		April 1968				No.	
Sales per customer	Revenue per Mcf.	Customers		Gas sold	Revenue		
		Space heating	Total				
Mcf.	\$	No.		Mcf.	\$		
2.2	3.28	130	1,893	3,693	12,577	1	
5.4	1.83	94,311	203,426	1,376,578	2,241,796	2	
14.2	1.21	548,835	679,572	8,523,601	10,426,254	3	
16.7	0.85	100,025	102,541	1,635,202	1,455,604	4	
18.6	0.76	112,175	117,654	1,979,243	1,473,898	5	
17.8	0.55	249,697	252,373	4,455,562	2,408,411	6	
11.0	1.57	169,866	190,466	1,931,534	2,812,305	7	
13.8	1.06	1,275,039	1,547,925	19,905,413	20,830,845	8	
1,209	0.52		2,241	1,336,681	419,460	9	
1,893	0.57		7,444	12,583,284	7,106,214	10	
4,473	0.30		295	1,680,918	481,858	11	
5,877	0.29		608	4,542,000	1,038,404	12	
18,240	0.19		563	8,154,241	1,557,992	13	
15,544	0.32		274	4,099,531	1,706,783	14	
3,085	0.40		11,425	32,396,655	12,310,711	15	
42.6	2.07		10,258	20,832,108	8,625,581	17	
51.4	1.12		1,167	11,564,547	3,685,130	18	
110.1	0.87						
138.2	0.67						
79.5	0.58						
134.0	0.39						
62.1	0.93						
101.6	0.72						
3.7	2.77		1,953	5,959	17,357	27	
19.7	0.93		215,882	3,230,666	3,288,931	28	
42.5	0.83		747,706	26,130,428	21,940,199	29	
33.7	0.63		112,083	4,530,778	2,792,737	30	
52.5	0.49		134,361	7,656,798	3,137,737	31	
62.8	0.32		281,215	16,389,170	5,409,291	32	
37.2	0.76		215,359	7,371,384	6,069,196	33	
42.9	0.66		1,708,559	65,315,183	42,655,448	34	

TABLE 7. Pipeline Sales of Liquefied Petroleum Gases and Manufactured Gas

April 1969				No.	
Manufactured gas			\$		
Customers	Gas sold	Revenue			
No.	Mcf.				
1,566	7,223	8,935		1	
19	30,634	10,923		2	
470	8,920	10,573		3	
2,055	46,777	30,431		4	

TABLE 8. Sales of Natural Gas in Mcf. with a Heat Content of 1,000 B.T.U. per Cubic Foot

	April 1969				Mcf.
	Residential	Industrial	Commercial	Total	
<u>Sales</u>					
New Brunswick	4,635	-	3,400	8,035	
Quebec	1,112,875	2,650,245	543,005	4,306,125	
Ontario	10,732,079	16,049,657	7,250,581	34,032,317	
Manitoba	1,821,918	1,348,201	1,470,825	4,640,944	
Saskatchewan	2,290,761	3,728,242	1,356,651	7,375,654	
Alberta	4,968,820	10,251,306	4,295,646	19,515,772	
British Columbia	2,288,584	4,787,255	1,673,227	8,749,066	
Canada	23,219,672	38,814,906	16,593,335	78,627,913	

TABLE 9. Exports and Imports of Natural Gas at 1,000 B.T.U.

	April 1969						Year to date total
	Quebec	Ontario	Manitoba	Alberta	British Columbia	Total	
	Mcf.						
Exports	165,694	488,968	11,772,902	3,216,470	42,469,326	58,113,360	232,620,100
Imports	-	4,284,823	-	7,499	-	4,292,322	14,450,807

TABLE 10. Pipeline Sales of Liquefied Petroleum Gases and Manufactured Gas at 1,000 B.T.U.

	April 1969		Mcf.
	Liquefied petroleum gases	Manufactured gas	
Totals	79,893	22,628	

TABLE 11. Exports and imports to and from the United States

April 1969

Province and customs port	Exports	Imports
	Mcf.	
Quebec - Phillipsburg	163,406	-
Ontario - Cornwall	482,217	-
Niagara Falls	-	2,624,665
Ojibway	-	1,622,300
Total Ontario	482,217	4,246,965
Manitoba - Emerson	11,576,108	-
Alberta - Aden	1,396,082	-
Carway	1,759,487	-
Coutts	64	7,499
Total Alberta	3,155,633	7,499
British Columbia - Kingsgate - U.S.A. District V South(1)	21,766,895	-
Other U.S.A.	4,050,546	-
Huntingdon	14,720,115	-
Total British Columbia	40,537,556	-
Canada - April 1969	55,914,920	4,254,464
1968	48,402,731	8,023,099
Year to date - 1969	223,950,023	14,276,502
1968	202,287,266	29,907,981
Value - April 1969	(\$)	1,888,097
1968	(\$)	5,208,146

(1) California, Nevada, Arizona.

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