

FORTY-FIFTH ANNUAL REPORT
OF THE
ONTARIO DEPARTMENT OF MINES
1936
PART V



PROVINCE OF ONTARIO
DEPARTMENT OF MINES

HON. PAUL LEDUC, *Minister of Mines*

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FORTY-FIFTH ANNUAL REPORT
OF THE
ONTARIO DEPARTMENT OF MINES

BEING

VOL. XLV, PART V, 1936

Natural Gas in 1935, by R. B. Harkness - - - 1-74

Petroleum in 1935, by R. B. Harkness - - - 75-79

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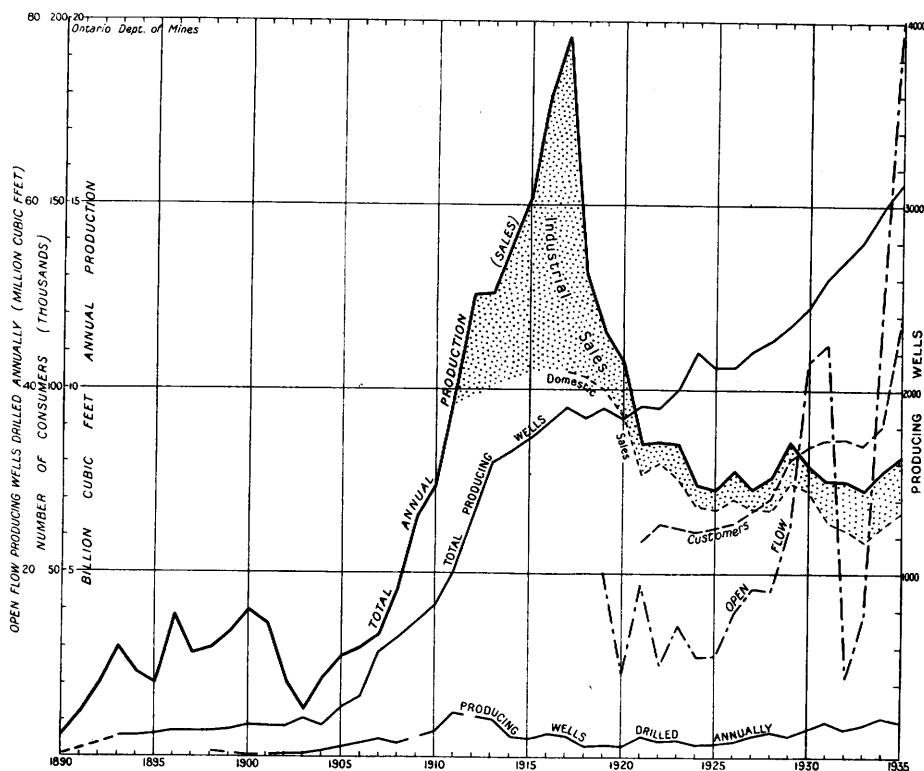
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NATURAL GAS IN 1935

By R. B. Harkness

General

Again the consumption of natural gas in Ontario shows a substantial increase, being 8,185,825 million cubic feet in 1935, as against 7,682,851 million cubic feet in 1934, with a value of \$4,938,004, as against \$4,741,368. This increase was apparently due entirely to an increase in the number of customers, the total now being 119,457, as against 89,990 in 1934, or an increase of over 27 per cent.



Graph of the natural gas industry in Ontario for the past forty-five years.

It will be noted in Table II and in the graph above that these consumers are using a smaller amount each year. The general improvement in appliances has accounted for a certain reduction in the per customer consumption, but the sudden drop in 1935 is difficult to explain, unless, as in London, the increase in consumers throughout the gas-using municipalities came at the end of the year.

The 27 per cent. increase in customers will cause a heavy draught on the reserves in the old gas fields; but fortunately the available supply, as reflected in the open flow of new wells, has shown a large increase in the past two years, 1935 being well above any year on record. It would have been better if this open flow had come from a greater number of new wells, for even with this excellent showing it is evident that exploratory work must be carried on still more vigorously in the future.

In the year 1935 two producing wells were drilled in Dereham township, Oxford county, and they may be considered as a new discovery, although the results obtained leave much to be desired if the discovery is to develop into a



A section of the Union Gas Company's 10-inch pipe line from the Dawn gas field to London. This pipe has been coated with a rust-resisting material and is now ready to be lowered into the trench.

gas field of importance. The gas is sour gas (high in hydrogen sulphide, and similar to a discovery referred to last year¹), which renders it unfit for domestic consumption in an area where only sweet gas is distributed. It remains for further development to indicate whether there is a sufficient volume to demand a purification plant in this area.

Exploratory drilling was carried out in Bruce county with indifferent results and in Beverly township, Wentworth county, with negative results. In Chatham township, Kent county, development work is still going forward, but so far with negative results. Further extensions were made to the Declute field in Raleigh township, the Dover field has been extended in Raleigh township, and extensions were made to the Bayham gas field.

¹Ont. Dept. Mines, Vol. XLIV, pt. 5, 1935, p. 11.

TABLE I—NATURAL GAS PRODUCTION BY FIELDS, 1932-1935

County	Field	1932	1933	1934	1935
		M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.
Essex.....	Kingsville.....	4,506,072	4,201,704	4,093,186	4,161,186
Kent.....	Tilbury.....				
	Dover.....	275,958	252,694	363,344	935,446
Lambton.....	Dawn.....	170,671	265,061	517,009	411,944
	Oil Springs.....				
Elgin.....	Bayham.....	45,708	45,968	51,483	116,118
Norfolk.....	Norfolk.....	365,638	346,621	354,274	472,993
Lincoln.....	Lincoln.....				
Haldimand.....	Haldimand.....	1,453,864	1,524,251	1,801,160	1,576,323
Wentworth.....	Wentworth.....				
Brant.....	Onondaga.....	140,612	121,578	109,486	120,461
Bruce.....	Amabel.....	500	500	500	400
Welland.....	Welland.....	351,616	333,619	318,409	290,119
Wells in surface drift.	Howard and Sarnia..	15,515	14,663	14,000	14,000
Private wells.....		60,000	60,000	60,000	60,000
Total produced.....		7,386,154	7,166,659	7,682,851	8,158,825
Value.....		\$4,719,297	\$4,523,084	\$4,741,368	\$4,938,084
Imported mixed gas.....		M cu. ft. 111,727	M cu. ft. 97,075	M cu. ft. 102,667	M cu. ft. 98,848
Total distributed.....		7,497,881	7,263,734	7,785,518	8,257,673

TABLE II—DOMESTIC CONSUMPTION OF NATURAL GAS, CAPITAL INVESTED, AND WAGES PAID, 1921-1935

Year	Retail rate, cents per M cu. ft.	No. of pay consumers	Total quantity used	Quantity used per consumer	Capital invested in all natural gas operations ¹	No. of men employed	Wages paid
			M cu. ft.	M cu. ft.			
1921.....	47	58,609	5,937,316	101.3	\$17,328,757	632	\$592,606
1922.....	47	63,229	6,028,947	95.3	17,769,664	692	539,072
1923.....	50	62,352	6,210,459	99.6	25,570,972	603	633,365
1924.....	55	61,100	5,933,595	97.1	24,781,723	727	639,167
1925.....	56	62,338	5,300,424	85.6	26,111,387	692	625,826
1926.....	57	63,695	5,595,521	87.8	30,500,874	860	842,305
1927.....	60	66,818	5,210,315	78	31,987,879	1,123	1,148,339
1928.....	60	70,259	5,699,553	71.2	36,601,828	1,209	1,497,999
1929.....	58	80,991	6,336,873	78.2	35,162,736	1,323	1,529,367
1930.....	64	84,135	6,332,519	75.2	36,162,268	1,328	1,545,648
1931.....	62	86,050	5,607,744	65.1	42,921,142	1,241	1,383,286
1932.....	63	86,631	5,409,154	62.2	45,982,719	893	1,059,643
1933.....	63	84,933	5,102,340	60	51,766,592	958	958,336
1934.....	62	89,990	5,262,631	58.5	41,934,395	931	1,010,979
1935.....	60	118,719	5,553,902	46.8-52 ²	42,975,846	1,273	1,219,520

¹This includes capital invested in drilling, producing, and distributing.

²See page 4.

Analysis of Gas Consumption

Tables III and IV give in detail the analysis of natural gas consumption in all the gas-consuming municipalities in Ontario during 1935. Similar tables have been published since 1921, and these enable a comparison to be made of the quantity of gas used at varying rates over a period of fifteen years.

In general, the steady improvement in the efficiency of appliances and the introduction of automatic appliances has reduced the consumption of natural

gas per consumer, but seasonal changes of temperature and wind velocity, as well as the variation in the price of competitive fuels, has a very considerable effect on the annual quantity of gas used in the homes of Ontario.

An error in the reported number of consumers in the Border Cities in 1934 has been corrected in Table II, and a corresponding correction in the quantity used per consumer shows that there was a decrease from the year before, instead of an increase as indicated in the report of last year. Two numbers are given under quantity used per consumer for the year 1935, the smaller one (46.8) is the average for the figures as given in the table, but as 14,674 consumers in the city of London used gas only in the last three months of the year, the average is not accurate; the second figure (52) is a calculation with the London consumers omitted.

In addition to the capital invested by operating companies in the natural gas industry, as shown in Table II, the consumers have invested in equipment of all kinds at a low valuation \$7,000,000, an investment that is increasing annually.

The rates for natural gas in Ontario, as indicated in the right-hand column of Tables III and IV by letters of the alphabet, are given in detail below. This will afford a much better basis of comparison than the maximum and minimum rates previously shown in these tables. These rates are net rates, but in some cases there is an additional charge for meter rental. Meter rental is either fixed by agreement between the company and the municipality, or by the company under the Public Utilities Act, R.S.O. 1927, Chapter 249, Section 46 (2). It should be noted that further steps in some of the rates in favour of large commercial users have been omitted, strictly domestic rates only being given.

NATURAL GAS RATES, 1935

Classification letter	Season, company, or locality	Classification according to amounts of gas used	Net rate and seasonal discount
A		Up to 10M cu. ft. Over 10M cu. ft.	85c. per M cu. ft. 60c. per M cu. ft.
B	October to April.	Up to 10M cu. ft. From 10M to 20M cu. ft. Over 20M cu. ft.	55c. per M cu. ft. 60c. per M cu. ft. 70c. per M cu. ft.
	May to September. ....	.....	80c. per M cu. ft.
C	October to April.	Up to 10M cu. ft. From 10M to 20M cu. ft. Over 20M cu. ft.	50c. per M cu. ft. 55c. per M cu. ft. 65c. per M cu. ft.
	May to September. ....	.....	75c. per M cu. ft.
D	October to April.	Up to 10M cu. ft. From 10M to 20M cu. ft. Over 20M cu. ft.	40c. per M cu. ft. 45c. per M cu. ft. 55c. per M cu. ft.
	May to September. ....	.....	65c. per M cu. ft.
E	October to April.	Up to 10M cu. ft. From 10M to 20M cu. ft. Over 20M cu. ft.	60c. per M cu. ft. 65c. per M cu. ft. 55c. per M cu. ft.
	May to September. ....	.....	85c. per M cu. ft.
F	Where imported mixed gas is used. City of Niagara Falls.	Less than 1M cu. ft. From 1M to 10M cu. ft. Over 10M cu. ft.	\$1.50 \$1.00 per M cu. ft. \$1.30 per M cu. ft.
		Over 10M cu. ft.	Additional charge for duty \$1.00 per M cu. ft.

NATURAL GAS RATES, 1935—Continued

Classification letter	Season, company, or locality	Classification according to amounts of gas used	Net rate and seasonal discount
G		Minimum bill..... Up to 10M cu. ft..... From 10M to 25M cu. ft..... Over 25M cu. ft.....	80c. 80c. per M cu. ft. 65c. per M cu. ft. 55c. per M cu. ft.
H		Up to 5M cu. ft..... From 5M to 10M cu. ft..... Over 10M cu. ft.....	\$1.00 per M cu. ft. 90c. per M cu. ft. 60c. per M cu. ft.
I		Up to 5M cu. ft..... From 5M to 10M cu. ft..... From 10M to 15M cu. ft..... From 15M to 25M cu. ft..... Over 25M cu. ft.....	\$1.00 per M cu. ft. 90c. per M cu. ft. 80c. per M cu. ft. 70c. per M cu. ft. 60c. per M cu. ft.
J	October to April, discount } May to September, discount }	Up to 200 cu. ft..... From 200 cu. ft. to 5M cu. ft.. From 5M cu. ft. to 10M cu. ft.. Over 10M cu. ft..... On bills under \$5.00..... On bills between \$5.00 and \$10.00 On bills under \$5.00.....	40c. per hundred cu. ft. 70c. per M cu. ft. 60c. per M cu. ft. 45c. per M cu. ft. 15 per cent. 10 per cent. 10 per cent.
K	October to April, discount } May to September, discount }	Up to 200 cu. ft..... From 200 cu. ft. to 5M cu. ft.. From 5M cu. ft. to 10M cu. ft.. Over 10M cu. ft..... On bills under \$5.00..... On bills between \$5.00 and \$10.00 On bills under \$5.00.....	40c per hundred cu. ft. 75c. per M cu. ft. 65c. per M cu. ft. 50c. per M cu. ft. 15 per cent. 10 per cent. 10 per cent.
L	Fonthill-Ridgeville Gas Co. } Dominion Natural Gas Co. }	First 400 cu. ft., minimum charge Over 400 cu. ft.....	85c. 75c. per M cu. ft. 75c. per M cu. ft.
M	Saltfleet township.....	Up to 15M cu. ft..... Over 15M cu. ft..... Minimum bill.....	75c. per M cu. ft. 55c. per M cu. ft. 75c.
N		Up to 1M cu. ft..... From 1M to 10M cu. ft..... From 10M to 25M cu. ft..... Over 25M cu. ft.....	\$1.00 per M cu. ft. 80c. per M cu. ft. 65c. per M cu. ft. 55c. per M cu. ft.
O	Port Colborne..... Summer residents.....	Up to 5M cu. ft..... Over 5M cu. ft..... Over 10M cu. ft.....	80c. per M cu. ft. 70c. per M cu. ft. 55c. per M cu. ft. \$2.00 per M cu. ft.
P		200 cu. ft. or less..... Over 200 cu. ft.....	\$1.00 60c. per M cu. ft.
R	May to October..... } November to April..... }	Up to 10M cu. ft..... Over 10M cu. ft..... Up to 10M cu. ft..... Over 10M cu. ft.....	70c. per M cu. ft. 55c. per M cu. ft. 65c. per M cu. ft. 55c. per M cu. ft.
S		Up to 5M cu. ft..... From 5M cu. ft. to 10M cu. ft.. Over 10M cu. ft.....	\$1.00 per M cu. ft. 90c. per M cu. ft. 60c. per M cu. ft.

TABLE III—GAS CONSUMPTION IN TOWNS AND CITIES, 1935

Town or city	Population	No. of consumers		Quantity consumed			Distance from gas field miles	Net rate per M cu. ft.
		Pay	Free	Pay M cu. ft.	Free M cu. ft.	Industrial M. cu. ft.		
Alvinston.....	650	198	1	10,761	4	484	20	A
Aylmer.....	1,990	680	....	26,535	.....	.....	16	70c.
Bartonville.....	602	128	....	5,850	.....	.....	19	60c.
Belle River.....	719	146	....	10,337	.....	563	29	B
Belmont.....	317	117	....	3,508	.....	.....	9	\$1.00
Binbrook.....	100	14	1	216	300	.....	1	50c.
Blenheim.....	1,702	583	1	52,734	140	4,002	20	C
Bothwell.....	685	136	1	9,306	14	.....	14	A
Brantford.....	30,611	4,584	2	212,161	1,231	12,423	140	G
Brigden.....	433	160	....	8,452	.....	278	30	B
Burlington.....	3,562	283	....	26,095	.....	.....	48	H
Cainsville.....	324	100	....	4,411	.....	.....	4	G
Caledonia.....	1,475	495	....	35,857	.....	18,054	7	60c.
Canfield.....	166	60	....	4,238	.....	.....	1	60c.
Cayuga.....	693	215	1	18,361	86	286	6	60c.
Chatham.....	16,140	4,033	3	374,162	4,215	17,749	22	J
Coatsworth.....	101	23	1	1,314	53	101	4	D
Comber.....	506	136	....	13,045	.....	3,546	19	C
Cottam.....	425	73	2	5,648	156	103	35	60c.
Courtland.....	348	46	....	2,663	.....	111	3	60c.
Courtright.....	338	106	1	5,861	75	609	53	C
Crystal Beach.....	529	176	....	2,816	.....	.....	1	F
Delhi.....	1,269	424	....	29,578	.....	387	4	60c.
Dorchester.....	403	116	1	6,749	89	.....	95	E
Dresden and Tupperville	1,469	484	2	41,449	143	759	38	C
Dundas.....	5,032	1,127	2	53,834	29	5,154	172	70c. (M.B. ¹) \$1.00)
Dunnville.....	3,632	994	3	90,690	422	11,100	7	60c.
Dutton.....	798	237	3	19,058	251	732	52	B
Echo Place.....	732	73	....	3,336	.....	.....	5	G
Eden.....	76	28	....	1,384	.....	.....	11	60c.
Essex.....	1,786	458	1	38,072	151	2,251	33	B
Fairground.....	75	15	....	454	.....	.....	1	60c.
Fenwick.....	328	96	....	5,754	.....	.....	18	75c.
Fingal.....	169	29	....	2,105	.....	.....	71	B
Fisherville.....	162	47	....	3,388	.....	57	2	50c.
Florence.....	184	66	....	3,500	.....	.....	5	J
Fonthill.....	872	254	....	6,786	.....	.....	25	L
Fort Erie.....	5,366	1,380	2	53,184	1,615	.....	8	F
Galt.....	14,057	2,227	1	89,502	19	7,994	147	G
Grimsby.....	.....	275	....	8,198	.....	.....	10	85c.
Grimsby Beach.....	1,952	60	....	2,082	.....	.....	11	85c.
Hagersville.....	1,355	409	....	29,424	.....	.....	14	60c.
Hamilton.....	153,504	10,236	3	360,703	1,038	583,607	47	M
Hepworth.....	380	5	2	100	300	.....	1	75c.
Hespeler.....	2,798	340	....	16,543	.....	1,152	155	N
Highgate.....	343	107	2	8,503	472	.....	32	R
Ingersoll.....	5,104	1,016	2	45,547	279	2,541	100	G
Inwood.....	250	83	....	3,752	.....	.....	14	A
Jarvis.....	531	202	....	16,191	.....	.....	9	60c.
Kingsville.....	2,354	633	1	58,573	202	125	30	55c.
Lake Shore.....	.....	290	....	4,340	.....	.....	16	F
Lambeth.....	172	118	....	8,690	.....	.....	85	K
Leamington.....	5,004	1,412	....	134,486	.....	7,193	20	55c.
London.....	73,880	14,674	3	145,735	438	8,950	55	K
Lynedoch.....	175	40	....	2,919	.....	.....	2	60c.
Merlin.....	190	144	2	11,002	1,604	1,437	2	D
Merritton.....	2,490	456	....	14,955	.....	3,472	35	75c.
Nelles Corners.....	86	7	....	812	.....	.....	1	60c.
Niagara Falls.....	18,193	3,360	....	98,824	.....	17,333	11	F

TABLE III—GAS CONSUMPTION IN TOWNS AND CITIES, 1935—Continued

Town or city	Popu- lation	No. of consumers		Quantity consumed			Dist- ance from gas field miles	Net rate per M cu. ft.
		Pay	Free	Pay M cu. ft.	Free M cu. ft.	Industrial M. cu. ft.		
Oil Springs.....	462	125	.....	7,156	.....	.....	2	R
Paris.....	4,300	888	2	41,640	175	7,787	129	G
Petrolia.....	2,715	771	1	69,563	388	1,214	60	B
Port Burwell.....	423	239	1	10,185	42	.....	3	60c.
Port Colborne and Humberstone.....	7,860	1,842	4	79,701	319	300	5	O
Port Dover.....	1,692	570	.....	41,907	.....	329	1	60c.
Port Rowan.....	692	237	.....	12,606	.....	.....	1	60c.
Preston.....	6,290	911	1	37,869	83	2,704	151	G
Ridgetown.....	1,914	635	4	55,979	1,964	1,714	28	C
Ridgeway.....	1,100	227	.....	12,258	.....	.....	1	F
Rodney.....	750	232	1	15,581	100	377	40	B
St. Anns.....	120	24	.....	865	.....	.....	7	85c.
St. Catharines.....	26,400	5,322	1	219,209	485	31,634	35	70c.
St. George.....	510	123	.....	3,993	.....	.....	148	80c.
St. Williams.....	270	106	.....	4,830	.....	485	1	60c.
Sarnia and Pt. Edward	18,956	5,160	1	307,011	1,688	32,660	55	B
Selkirk.....	196	138	1	9,393	82	.....	1	60c.
Shedden.....	235	89	.....	5,861	.....	366	63	B
Simcoe.....	5,200	1,821	2	172,583	892	11,901	20	60c.
Smithville.....	570	174	.....	7,158	.....	.....	6	75c.
Sombra and Port Lambton.....	420	155	.....	9,805	.....	156	45	C
Stevensville.....	420	30	.....	1,650	.....	.....	1	F
Straffordville.....	255	92	.....	6,351	.....	308	6	60c.
Thamesville.....	765	239	2	15,666	33	2,329	13	J
Thorold.....	4,950	1,049	.....	35,896	.....	765	35	75c.
Tilbury.....	1,900	547	2	43,926	626	3,883	14	C
Tillsonburg.....	3,380	1,095	1	80,903	459	94,048	16	63c.
Vienna.....	225	87	1	4,118	77	.....	1	60c.
Vittoria.....	205	78	.....	4,121	.....	.....	3	60c.
Wallaceburg.....	4,460	1,176	1	93,932	337	368,655	19	C
Wallacetown.....	143	45	1	3,200	36	548	60	B
Waterdown.....	900	21	.....	1,163	.....	.....	45	I
Waterford.....	1,213	182	.....	10,671	.....	146	30	P
Welland.....	10,600	2,898	6	80,017	847	3,160	3	F
West Lorne.....	775	161	1	11,001	128	348	49	B
Wheatley.....	755	224	.....	16,336	.....	148	12	C
Windsor (Border Cities)	114,391	19,169	3	1,105,496	7,107	254,897	45	K
Woodstock.....	11,007	2,072	3	96,433	215	3,337	110	G
Wyoming.....	505	145	1	8,747	6	.....	65	A
Total.....	.....	110,204	85	4,999,313	29,415	1,536,752	.....	.....

¹M.B.—Minimum monthly bill.

TABLE IV—GAS CONSUMPTION IN TOWNSHIPS, 1935

County and township	Population	No. of consumers		Quantity consumed, M cu. ft.			Net rate per M cu. ft.
		Pay	Free	Pay	Free	Industrial	
ESSEX:							
Gosfield North	2,164	107	2	6,868	213	178	60c.
Gosfield South	2,311	503		34,960		35,674	60c.
Maidstone	2,976	71	7	5,454	1,436		B
Mersea	4,929	365	2	27,160	706	15,766	60c.
Rochester	2,260	193	7	13,530	1,226		B
Sandwich East	5,376	10	1	765	359		B
Sandwich South	2,066	111	2	7,992	790		B
Tilbury North	1,920	33		2,367		1,444	C
Tilbury West	1,554	18	1	1,298	168		C
LAMBTON:							
Brooke	2,217	24		470			A
Dawn	2,160	84	3	4,374	574	1,322	D
Enniskillen	2,725	134		5,684		465	B
Moore	2,873	328		17,599		3,090	B
Plympton	2,681	6		431			B
Sarnia	3,156		7		2,001		B
Sombra	2,746	57		3,007		390	B
KENT:							
Camden	2,152	18		624			C
Chatham	5,832	80		4,964		603	C
Dover	3,906	419	1	35,446	156	6,291	D
Harwich	5,010	443	10	32,493	3,827	246	C
Howard	2,813	155	3	12,460	691		C
Orford	1,718	21	2	2,619	214		C
Raleigh	4,230	601	28	48,949	6,914	1,237	D
Romney	1,456	70	40	4,498	11,848		D
Tilbury East	3,406	236	72	17,387	21,560	1,740	D
Zone	859	18		650			J
ELGIN:							
Aldbrough	2,708	19	1	733	394		B
Bayham	3,265	74	18	3,047	3,122	391	60c.
Dunwich	2,357	54		3,055			B
Malahide	2,714	46	3	1,473	303		70c.
Southwold	2,397	109	2	6,506	131	201	B
Yarmouth	5,030	38		686			A
MIDDLESEX:							
North Dorchester	2,932	13		744			E
Westminster	6,730	225		22,484			K
NORFOLK:							
Charlotteville	2,978	13	5	886	1,012		60c.
Middleton	2,493	48	2	3,354	397		60c.
North Walsingham	2,118	7	1	690	195		60c.
South Walsingham	1,711	21	4	1,685	626		60c.
Townsend	2,968	30		2,710			60c.
Windham	3,618	2	3	196	599		60c.
Woodhouse	2,308	175	10	15,270	1,491		60c.
BRANT:							
Brantford	7,336	45		2,105			G
Burford	3,697	3		141			G
Onondaga	964	44	9	2,467	1,250		70c.
South Dumfries	2,523	18		710			80c. (M.B. 150c.)
Tuscarora	2,654	6		524			25c.
OXFORD:							
East Oxford	1,957	6		267			80c. (M.B. 50c.)
West Oxford	1,796	56		2,214			G

TABLE IV—GAS CONSUMPTION IN TOWNSHIPS, 1935—*Continued*

County and township	Popu- lation	No. of consumers		Quantity consumed, M cu. ft.			Net rate per M cu. ft.
		Pay	Free	Pay	Free	Indus- trial	
HALDIMAND:							
Canborough.....	840	94	41	5,587	7,230	220	60c.
Dunn.....	805	138	10	6,248	868	.....	60c.
Moulton.....	1,590	160	13	6,415	1,959	.....	60c.
North Cayuga.....	1,282	47	11	3,672	2,283	.....	60c.
Oneida.....	1,301	66	8	3,494	1,379	.....	60c.
Rainham.....	1,608	160	26	8,192	4,222	1,224	60c.
Seneca.....	1,590	146	35	9,498	6,379	.....	60c.
Sherbrooke.....	350	25	7	2,271	762	.....	60c.
South Cayuga.....	580	56	11	2,189	2,853	.....	60c.
Walpole.....	3,145	333	55	19,353	8,550	69	60c.
LINCOLN:							
Caistor.....	1,260	57	5	2,188	370	155	60c.
Gainsborough.....	2,090	68	7	1,593	470	.....	60c.
Grantham.....	5,010	9	.....	522	.....	.....	75c.
Louth.....	2,905	10	.....	590	.....	.....	75c.
WELLAND:							
Bertie.....	4,175	174	59	9,336	9,006	.....	F
Crowland.....	5,082	55	16	2,093	1,822	.....	F
Humberstone.....	2,370	269	29	12,389	4,334	.....	F
Pelham.....	2,690	61	1	3,538	84	.....	L
Stamford.....	8,020	85	4	4,505	604	.....	F
Wainfleet.....	2,720	230	19	4,104	3,325	.....	60c.
Willoughby.....	905	28	25	1,512	3,750	.....	F
WENTWORTH:							
Ancaster.....	3,606	157	.....	16,573	.....	.....	70c. (M.B. \$1.00)
Barton.....	1,840	266	.....	27,237	.....	.....	60c.
Binbrook.....	1,080	96	21	6,405	3,716	413	60c.
East Flamborough.....	3,705	50	.....	3,060	.....	.....	S
Glanford.....	1,265	130	4	10,587	1,062	511	60c.
Saltfleet.....	4,837	318	.....	14,997	.....	.....	M (M.B. 75c.)
WATERLOO:							
North Dumfries.....	2,361	57	.....	2,149	.....	.....	80c. (M.B. 50c.)
Waterloo.....	7,591	13	.....	296	.....	.....	G
Total.....	.....	8,515	653	554,589	127,231	71,630	.....

¹M.B.—Minimum monthly bill.

SUMMARY

Total distribution to customers.....	M cu. ft. 7,318,930
Used by companies for all purposes.....	51,091
Used by private well-owners.....	74,000
Leakage in transmission lines.....	446,159
Leakage in distribution plants.....	352,062
Leakage in rural lines.....	15,431

Total amount of gas distributed..... 8,257,673

Gas Wells and Their Production

In Table V is given a summary of all the phases of the production of natural gas; much of this will be seen in comparison with previous years in the graph on page 1, in which the annual increase in the total of natural gas wells and the open flow of new wells drilled are shown, as far as records are available.

TABLE V—GAS WELLS AND THEIR PRODUCTION, 1935

County	Township	No. of wells producing	No. of wells abandoned	Wells drilled			Production M cu. ft.	Rock pressure, lbs. per sq. in.	Acres under lease	Rental paid
				No. dry	No. producing	Open flow M cu. ft.				
Essex	Gosfield South	26			3	185	150	881	\$446	
	Mersea	3					250			
Kent	Chatham									
	Raleigh	44	1		2	36,000	556	52,911	150,911	
	Romney	141	1				206			
	Tilbury East	154			1	15	206			
	Dover	22			2	24,779	825	11,426		
Lambton	Dawn	23					654	18,512		
	Emiskillen	4					240	1,000		
	Moore							4,000		
	Sarnia	13					70	5,000		
							1,144			
Middlesex	Mosa	3					570			
	North Dorchester	3		1			50			
Oxford	Dereham	2			2	450	465			
Elgin	Bayham	47			9	6,917	600	116,118		
	Malahide	1	1				210			
Norfolk	Charlottesville	13					218			
	Houghton	4	1				395			
	Middleton	48			2	2,235	600			
	North Walsingham	9	1				315			
	South Walsingham	17	1		2	112	350	472,993		
	Townsend	2					240			
	Windham	10					214			
	Woodhouse	64		2	5	253	241			

Haldimand.....	199	2	13	324	91	300,406	112,458
Canborough.....	51	9	.....	1	37	.....	196	.....	
Dunn.....	127	8	.....	4	135	.....	122	.....	
Moulton.....	197	2	.....	21	1,012	.....	195	.....	
North Cayuga.....	74	2	.....	15	679	.....	120	.....	
Oneida.....	291	5	.....	16	847	.....	233	.....	
Rainham.....	186	3	.....	13	600	.....	90	.....	
Seneca.....	17	1	.....	.....	.....	.....	230	.....	
Sherbrooke.....	55	2	.....	1	8	.....	148	.....	
South Cayuga.....	375	2	.....	50	4,838	.....	251	.....	
Walpole.....	.....	.....	.....	.....	.....	.....	.....	.....
Wentworth.....	1	.....	.....	.....	.....	.....	40	.....	
Ancaster.....	.....	1	.....	.....	.....	.....	.....	.....
Beverly.....	53	.....	.....	.....	.....	.....	72	.....	
Binbrook.....	13	.....	.....	2	60	.....	58	.....	
Glanford.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln.....	64	1	.....	4	196	.....	69	.....	
Caistor.....	15	2	.....	1	37	.....	106	.....	
Gainsborough.....	.....	.....	.....	.....	.....	.....	.....	.....
Welland.....	99	1	.....	1	8	.....	110	.....	
Bertie.....	26	3	.....	.....	.....	.....	150	.....	
Crowland.....	57	3	.....	.....	.....	.....	58	.....	
Humberstone.....	28	1	.....	2	70	.....	57	.....	
Wainfleet.....	43	2	.....	1	5	.....	210	.....	
Willoughby.....	.....	.....	.....	.....	.....	.....	.....	.....
Brant.....	45	1	.....	5	112	.....	82	.....	
Onondaga.....	78	4	.....	6	376	.....	90	.....	
Tuscarora.....	.....	.....	.....	.....	.....	.....	.....	.....
Bruce.....	5	.....	.....	3	80	.....	100	.....	
Anabel.....	.....	.....	.....	.....	.....	.....	.....	.....
Grey.....	1	.....	.....	1	30	.....	.....	.....
Keppel.....	.....	.....	.....	.....	.....	.....	.....	.....
Peel.....	5	.....	.....	.....	.....	.....	.....	.....
Caledon.....	.....	.....	.....	.....	.....	.....	.....	.....
Surface wells.....	69	.....	.....	.....	.....	.....	.....	.....
Howard.....	.....	.....	.....	.....	.....	.....	.....	.....
Private wells ²	300	.....	.....	.....	.....	.....	.....	.....
Total.....	3,127	48	88	196	80,400	8,158,825	440,686	\$264,495		

¹This gas is not metered and therefore must be estimated. The wells are owned privately, and the gas is used for domestic purposes.

²Principally in Haldimand, Norfolk, and Welland counties.

³Estimated.

A comparison of this table with that for 1934 shows the extraordinary results obtained from two wells in the Declute field in Raleigh township. The Dover field is second in average open flow; 2 dry wells to 10 producing wells were drilled in 1935, as compared with 7 dry wells and 1 producing well in 1929, at which time practically all drilling in this field stopped. The tracing of the trend of the Dover fault in the past two years has been the cause of the great increase in producing wells in 1935.

In the Eden field in Bayham township excellent results have been obtained; 9 wells were drilled, none of which were dry. The average open flow is very high for this area, as is the rock pressure, and the field shows considerable promise.

In Middleton township, Norfolk county, two wells at comparatively shallow depth show a very high average open flow, but unfortunately they are not useful for domestic purposes, on account of the high hydrogen sulphide content of the gas; of necessity the total output is being diverted to industrial use.

In Haldimand county and in the adjacent counties, there were fewer wells drilled than in 1934, but the open flow compares favourably with that of last year. It will be found of interest to compare the average open flow of new wells in the different parts of Haldimand county. The rule appears to be that the deeper wells have a higher rock pressure and open flow than the shallower wells in the same formation. The gradation of open flows can be easily followed by referring to this table.

The Haldimand field shows the greatest increase in dry holes. This is to be expected, for since 1929, 1,052 producing wells and 362 dry holes, a total of 1,414 wells, have been drilled within the limits of this old gas field, which includes the adjacent portions of Brant, Wentworth, Lincoln, and Welland counties. If each well were drilled on 25 acres, which is a low estimate, the number of wells would represent 35,350 acres drilled, of which 26,300 acres is productive. Should drilling continue at the present rate, it must extend beyond the limits of the present field.

Fifty-four drilling rigs were in operation in 1935; they drilled 88 dry holes, with a total footage of 84,601 feet, and 201 producing wells, with a total footage of 194,930 feet; in all, 279,531 feet, or 6,320 feet more than in 1934. The acreage under lease shows a decline of about 11,000 acres, but the rental paid shows an increase of \$12,846.

Drilling contractors in the natural gas fields of Ontario have an investment of \$294,623 and employ 184 men, to whom they pay \$129,611 in wages. These figures are included in Table II.

Gas Wells Drilled in 1935

The total number of gas wells drilled, both dry and producing, is only seven less than in 1934, but the proportion of dry holes in 1935 is considerably higher, 31 per cent. in 1935 as against 26 per cent. in 1934. It is to be expected that the proportion of dry holes will increase as the more favourable locations within the gas fields are drilled, and with the absence of new locations within the gas field must come more exploratory drilling.

The greatest activity in drilling is still centred in Walpole township, Haldimand county, although drilling activity has fallen off slightly in 1935. Other centres of activity are in Dover and Raleigh townships, Kent county; Bayham township, Elgin county; and Dawn township, Lambton county, where the success met with last year caused considerable interest.

Exploratory work has been carried out in Norfolk county, in Houghton and South Walsingham townships; in Oxford county, where two producing wells

were drilled in Dereham township, the gas, which is of the sulphur variety, coming from the Guelph formation, as in the sulphur-gas wells in Middleton township referred to in last year's report¹; and in Chatham township, Kent county, where exploratory drilling has been carried on for the past two years with indifferent success.

Additions and Improvements

City of London

The city of London had been served with manufactured gas from 1854, when the coal-gas plant was built, to September, 1935. The City Gas Company was purchased by the Union Gas Company of Canada, Limited, and in August, 1935, they began laying a 10-inch gas transmission line from the Dawn gas field



Welding the section of the pipe line to London that is to be laid under the Thames river.

to the city limits of London, a distance of about 55 miles, where it connected with the mains of the City Gas Company. The pipe line was laid about $2\frac{1}{2}$ feet underground, and the lengths were connected together with "Dresser couplings." The Sydenham and Thames rivers were crossed, but did not present any serious engineering difficulties.

On September 23, natural gas was introduced into the distribution plant, and at the same time about 300 specially trained men began work on a carefully prepared plan of converting the appliances in use from 530 B.t.u. manufactured gas to 1,045 B.t.u. natural gas, taking the city section by section. The work consisted mainly of changing the spuds and pilot-lights and adjusting the air-shutters of the burners. Natural gas requires about ten parts air mixed with the gas as against about five parts air with manufactured gas; in order to use the same burners the opening in the spud should be reduced about 50 per cent. and the air part opened slightly. This change occupied about two weeks' time.

¹Ont. Dept. Mines, Vol. XLIV, pt. 5, 1935, p. 11.

Demonstration in the use of natural gas had been carried on in different parts of the city for some weeks prior to the change-over, in order to familiarize the public with the proper adjustments of appliances, particularly the proper flame length and its relation to complete combustion. At the same time the gas company inspected every appliance and put it in fit condition to use natural gas; vents and flues were installed where none existed. The result was that the change-over was completed with only one fatality, and this resulted from a water heater installed by some incompetent person without the knowledge of the gas company.

Tilbury Gas Field

The Southern Ontario Gas Company, Limited, completed the necessary changes in their system in the Tilbury gas field for bringing raw gas to their



LAYING THE LONDON PIPE LINE

After all the lengths of pipe are welded together a plug is put in each end and the section is rolled into the river and floated into position.

purification plant at Glenwood. These included duplication of the 8-inch pressure field lines and the installation of additional compressor capacity. The sulphur content of the raw gas, which is 350 grams per cubic foot, is reduced in the purification plant to approximately 15 grams per cubic foot¹ before it is passed into the transmission lines for distribution. Prior to 1935, unpurified gas was supplied by the Southern Ontario Gas Company, in Romney, Mersea, and Gosfield townships; the consumers in Mersea and Gosfield had been accustomed to a sulphuretted hydrogen gas since 1890, when the old Leamington field supplied this area, and while consumers in the counties east of Kent complained bitterly of this evil-smelling gas, those to the west had become so familiar with the odour that they made no objection. The one great objection to the use of "sulphur" gas is its corrosive action on copper and brass. Most water heaters have copper coils, and the latest stoves and furnaces are equipped with brass

¹Ont. Dept. Mines, Vol. XXXIV, pt. 5, 1925, pp. 7, 8.

fittings; in order to make these available to customers it became necessary to purify the gas. The citizens of these townships, including the towns of Leamington and Kingsville, may now enjoy modern gas-burning equipment heretofore denied them.

The Southern Ontario Gas Company exercised their rights in Yarmouth township, obtained the year before, and laid four miles of 4-inch high pressure pipe line to the suburbs of the city of St. Thomas in Yarmouth township, where a distribution plant was installed and these residents supplied with natural gas. A long section of the Southern Ontario Company's transmission lines in Dunwich township was repaired.

The Dominion Natural Gas Company, Limited, report having carried out leakage surveys in Port Dover, St. Catharines, Dunnville, Wheatley, Merritton, Dundas, and Simcoe, and along their transmission lines.



LAYING THE LONDON PIPE LINE

A gang of men at each end pull the pipe into place in the ditch and then connect each end to the pipe line with Dresser couplings.

Small extensions have been made in many distribution plants to supply the growing population of towns, and this is reflected in the general increase of gas consumers in the province.

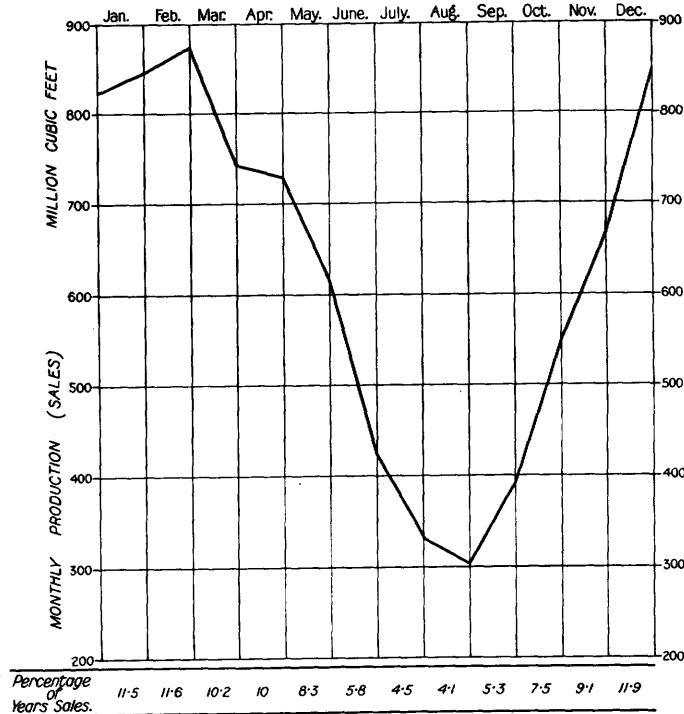
Monthly Demand for Natural Gas

Within the past five years the number of small companies producing natural gas for sale to distributing companies has increased enormously; very few of these are managed by men experienced in natural gas production, and scarcely any by men with knowledge of gas distribution and the fluctuation in daily and monthly demand.

Most transmission pipe lines in Ontario are 8 and 10 inches in diameter. The longest line, from the Tilbury gas field to Hamilton, is 12 inches in diameter for a little less than half of its length. A pressure is maintained on these pipe lines that will deliver a given quantity of gas to the various markets at a pre-determined pressure at that market. Most distribution plants are so designed that a pressure of 20 pounds per square inch at the regulators in the distribution plant will give a sufficient supply and pressure to each consumer. If this pressure falls below the minimum, the service is impaired. As regulators in the distribu-

tion plant maintain an even pressure at the consumer's appliance of from 4 to 6 ounces per square inch, raising the pressure on the transmission line above the minimum does not benefit anyone, and would only result in an unnecessary increase in the leakage on the transmission line.

The responsibility for delivering sufficient gas to maintain a pressure of 20 pounds per square inch in the distribution plant rests with the superintendent in the gas field. In winter he must be prepared to increase and in summer to curtail deliveries. The above graph shows this monthly variation. It is impractical to show the daily fluctuations in the demand for gas; but everyone is familiar with the sudden changes in temperature, as between a warm day



Load curve of natural gas distributed in 1935.

followed by a cold, windy night, that cause a sudden demand for more and more gas. Under such circumstances, no matter whether it is night or day or how thick may be the blizzard, the men in the gas field must find their way to perhaps one hundred gas wells and open them into the gas line to supply the sudden demand. In natural gas practice, there is no excuse to offer the public should the supply of gas fail to meet the demand. It is the responsibility of the gas companies to have a sufficient reserve at all times, and it is therefore evident that some wells must always be held in reserve. If all wells must be turned on to meet a "peak" demand, it is a warning to the distributing company that they are facing a shortage of gas and that steps must be taken immediately to find new sources of supply.

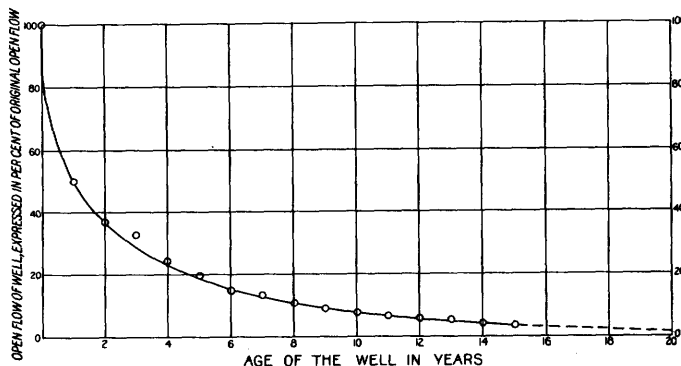
The table below indicates the relation between open flow, rock pressure, and delivery from an average well into a pipe line against winter maximum and summer minimum pressures, as shown. These are actual figures for the year

1935 and differ slightly from those of other years. It is the writer's opinion, however, that these are representative figures and reflect average conditions, with the exception of Lambton county, where the Dawn gas field is shut in most of the year, which is the cause of the low delivery.

DAILY DELIVERIES FROM GAS WELLS, 1935

County	No. of wells measured	Average rock pressure	Average open flow per day	Pro-duction per day per well	Percentage open flow delivered to pipe line	Field line pressure
		lbs. per sq. in.	cu. ft.	cu. ft.	per cent.	lbs. per sq. in.
Kent.....	352	223	390,000	39,650	10	50 to 125
Lambton.....	43	418	1,656,000	26,256	1.5	50 to 200
Elgin.....	43	234	100,000	7,400	7.5	50 to 75
Norfolk.....	166	260	36,000	2,850	8	50 to 75
Greater Haldimand.....	1,707	170	21,800	2,515	11.5	50 to 100
Brant.....	101	95	12,400	3,268	26	10 to 30

It would appear that approximately 10 per cent. of the daily open flow of a well in an old gas field is delivered into the pipe line carrying from 75 to 100 pounds pressure. The controlling feature in the delivery of gas from a well to a pipe line is the differential between the rock pressure and the pipe line pressure. Next in importance is the open flow. No matter how great the open flow of a



THE RELATION OF THE OPEN FLOW OF A GAS WELL TO THE YEARS THAT IT IS OPERATED

This graph has been compiled from the actual records of over 500 wells in the Haldimand gas field. It may be taken to represent to some extent the decline in production of an average natural gas well. (Copied from chart by H. R. Davis, Buffalo.)

gas well may be, it will deliver nothing into the pipe line unless the pressure of gas in the rock (rock pressure) is greater than the pressure of gas in the transmission line.

A study of the daily deliveries and the graph of monthly sales (production), will give some information as to the delivery that might be expected from a well answering the specifications in the table; by applying the percentages that the month's sales bear to the year's sales (see bottom of the graph), the average daily sales for any month may be approximated.

The question most often asked by investors in natural gas and inexperienced operators is, "How many years will a well continue to produce gas?" This question cannot be answered definitely. The thickness of the gas sand (producing horizon), the porosity, the ratio of rock pressure to pipe-line pressure, the open flow, and water encroachment, are all variables that affect the life of a well. Excessive cost of operation may make one well unprofitable, while a well with an equal delivery and a low operating cost may be kept in operation years longer. The table of daily deliveries on page 17 would indicate that a gas well in the Haldimand field, where $11\frac{1}{2}$ per cent. of the open flow is delivered into the pipe line, must last much longer than a well in the Brant county (Onondaga) gas field, where 26 per cent. of the open flow is delivered. In addition a well with an initial open flow so small that it is on the borderline between a profitable or unprofitable well, would soon pass into the ranks of unprofitable wells; but, as in the case of the table of daily deliveries, the results shown in the graph on page 17 are averages for the Haldimand gas field. A well at about the half-way point in its life, having an open flow of 21,800 cubic feet per day, should approximate the deliveries shown in this table.

Another matter that is not made clear to the investor in small natural gas projects is that the money he receives each year is not only the return on his investment (interest) but also the return of his investment (amortization). A commercial well must produce enough gas to repay the capital invested in the gas well and to pay a rate of interest commensurate with the risk involved. The ratio of dry holes to producing wells in 1935 is 88 to 196. Interest rates are about $4\frac{1}{2}$ per cent. on sound securities, and applying this ratio gives a rate of about 10 per cent. on investments in natural gas ventures where production only is involved. This is probably a loose calculation as it is based on the numbers of wells and not the profits obtained from these producing wells as against losses in dry holes; on such a basis, this rate would undoubtedly be less. With regard to amortization: After ten years the cost of operation and repairs is likely to increase and incidental expenses to multiply; it has consequently been found expedient to return the money, or amortize the cost of wells in from five to six years.

There are not sufficient wells where the production is metered independently to compare the annual production with the decline in open flow. The only complete record of a gas field over any considerable number of years is in the Tilbury gas field, and for the years the record was published¹ extraordinary conditions in the gas field² nullified the results for purposes of such a comparison; but in general there is a parallelism between the decline in annual open flow and production, and good management would dictate that book-keeping should be brought into line with existing conditions.

Leakage

Leakage has again increased and is undoubtedly much too high in distributing plants and on transmission lines. Tables VI, VII, and VIII show the progressive reduction of leakage from 1922 to about 1932, and the increase from 1932 to 1935. As stated in the report of last year,³ this increase in leakage appears to have followed a decrease in the number of employees; it is hoped that the increase in employees in 1935 will be reflected in a decrease in leakage in the year 1936.

¹Ont. Dept. Mines, Vol. XXXIII, pt. 5, 1924, pp. 26, 27.

²Ont. Dept. Mines, Vol. XXXV, pt. 5, 1926, p. 2, paragraph 3; Vol. XXXVI, pt. 4, 1927, p. 2, paragraph 2.

³Ont. Dept. Mines, Vol. XLIV, pt. 5, 1935, p. 13.

Of the places mentioned in last year's report, an improvement is noted in all but Dunnville, Sarnia, and Simcoe; in these the leakage has increased. Increases in leakage are also noted in Galt and South London.

TABLE VI—LEAKAGE IN DISTRIBUTION PLANTS IN ONTARIO, 1922-1935

Year	No. of plants	Equivalent miles of 3-inch pipe	Leakage		No. of consumers	Leakage per consumer	Average pressure, ounces per sq. in.	Percentage of leakage
			Actual	Allowable				
			M cu. ft.	M cu. ft.		cu. ft.		
1922.....	17	461.87	251,845	92,374	24,839	10,139	5.31	11.41
1923.....	17	478.33	172,953	95,666	23,445	7,375	5.3	8.39
1924.....	31	734.53	226,758	146,906	36,099	6,281	5.65	6.15
1925.....	32	804.3	544,260	160,860	39,701	13,709	5.19	12.73
1926.....	37	808.39	305,921	161,778	40,190	7,611	5.35	7.13
1927.....	39	840.87	333,141	168,174	44,150	7,545	4.84	8.15
1928.....	42	873.97	346,717	174,794	47,428	7,310	4.9	7.53
1929.....	42	912.28	369,360	182,456	54,801	6,740	4.66	7.11
1930.....	48	1,247.84	288,367	249,568	54,372	5,304	4.71	5.62
1931.....	42	753.96	197,876	150,792	40,185	7,325	4.5	6.76
1932.....	42	1,347.05	267,439	269,410	55,439	7,810	4.5	6.18
1933.....	48	1,248.84	228,045	249,768	54,850	7,397	4.6	6.13
1934.....	47	1,259.47	349,673	251,894	55,963	6,250	4.5	8
1935.....	47	1,483.34	352,062	296,668	76,693	5,790	4.5	7.93

TABLE VII—LEAKAGE IN TRANSMISSION LINES IN ONTARIO, 1922-1935

Year	No. of lines	Size of pipe lines	Equivalent miles of 3-inch pipe	Actual leakage	Average pressure on pipe lines	Percentage of leakage
				M cu. ft.	lbs. per sq. in.	
1922.....	6	.....	1,396.2	955,746	.....	16.6
1925.....	7	6- to 12-inch	1,397.4	432,728	12-120	8.17
1926.....	8	4- to 12-inch	1,402.1	534,324	5-120	8.01
1927.....	8	4- to 12-inch	1,403.3	573,144	12-120	10.45
1928.....	7	4- to 18-inch	1,519.04	394,805	25-100	6.86
1929.....	7	4- to 18-inch	1,589.63	578,962	25-100	8.78
1930.....	7	4- to 18-inch	1,700.19	413,619	25-100	7.09
1931.....	7	4- to 18-inch	1,692.64	323,509	25-100	6.21
1932.....	7	6- to 18-inch	1,720.05	240,509	25-80	4.49
1933.....	8	6- to 18-inch	1,752.05	274,367	20-80	5.35
1934.....	8	6- to 18-inch	1,752.05	368,738	20-80	6.76
1935.....	8	4- to 18-inch	1,684.25	446,159	20-80	8.3

TABLE VIII—LEAKAGE ON RURAL LINES IN ONTARIO, 1922-1935

Year	No. of townships	No. of lines	Equivalent feet of 3-inch pipe	Leakage		No. of consumers	Leakage per consumer	Percentage of leakage
				Actual	Allowable			
				M cu. ft.	M cu. ft.		cu. ft.	
1922.....	6	24	68,276	11,346	2,586	239	47,472	30.6
1923.....	11	102	585,655	69,476	22,184	2,114	32,864	14.33
1924.....	12	91	680,620	80,739	25,780	2,155	37,465	20.50
1925.....	14	81	502,631	64,285	19,039	1,748	36,776	23.03
1926.....	14	90	420,284	41,482	15,920	2,071	20,030	14.14
1927.....	15	90	558,295	51,692	21,147	2,275	22,721	17.98
1928.....	14	86	560,605	33,954	21,235	2,171	15,639	11.65
1929.....	11	76	545,486	17,313	20,663	1,886	9,180	7.09
1930.....	12	74	546,918	15,881	20,717	2,124	7,476	6.97
1931.....	14	.....	574,831	13,530	21,774	2,116	9,588	6.66
1932.....	13	.....	551,154	9,106	20,876	1,981	9,272	4.96
1933.....	14	.....	553,936	10,824	20,981	2,016	8,158	6.1
1934.....	14	.....	487,454	16,347	18,459	1,666	8,928	10.98
1935.....	14	.....	555,725	15,431	21,046	1,885	8,186	9.81

TABLE IX—LEAKAGE IN DISTRIBUTION PLANTS, 1935

Cities and towns	Company	Equivalent miles of 3-inch pipe in distribution plants	Volume received M cu. ft.	Volume delivered M cu. ft.	Leakage for year		Average No. of consumers	Leakage per consumer cu. ft.	Pressure distribution plants, ounces per sq. in.
					Actual M cu. ft.	Allowable M cu. ft.			
Belle River	Union Gas Co.	4.41	11,880	10,899	981	882	146	6,719	6
Belmont	Ontario Salt Co.	6	4,929	3,508	1,421	1,200	117	12,145	6
Blenheim	Union Gas Co.	12.95	85,078	84,063	1,015	2,590	584	1,721	5
Brantford	Dom. Nat. Gas Co.	94.25	244,669	229,212	15,457	18,850	4,586	3,372	4
Brigden	Union Gas Co.	3.88	9,676	8,740	936	776	160	5,850	5
Cairnsville	Dom. Nat. Gas Co.	5.57	8,662	7,746	916	1,114	173	5,295	4
Chatham	Union Gas Co.	81.34	408,533	396,118	12,415	16,268	4,036	3,076	5
Comber	Union Gas Co.	3.51	16,759	16,588	171	702	136	1,258	5
Corunna	Union Gas Co.	5.33	9,139	8,854	285	1,066	252	1,131	6
Courtright	Union Gas Co.	3.86	7,227	6,535	692	772	107	6,467	5
Dorchester	South. Ont. Gas Co.	2.86	8,943	7,620	1,323	572	117	11,308	4
Dresden	Union Gas Co.	12.28	44,685	42,351	2,334	2,456	486	4,802	5
Dundas	Dom. Nat. Gas Co.	12.68	64,681	58,981	5,700	2,536	1,129	5,048	4
Dunnville	Dom. Nat. Gas Co.	13.87	99,758	90,422	9,336	2,774	997	9,364	4
Essex	Union Gas Co.	11.53	59,192	58,473	719	2,306	459	1,566	5
Fenwick	Dom. Nat. Gas Co.	1.51	6,686	5,907	779	302	96	8,114	4
Fonthill	Fonthill Gas Co.	5.33	8,507	6,786	1,721	1,066	254	6,775	5
Galt	Dom. Nat. Gas Co.	34.14	106,947	96,892	10,055	6,828	2,228	4,513	4
Hagersville	Dom. Nat. Gas Co.	7.38	32,180	29,424	2,756	1,476	409	6,738	4
Ingersoll	Dom. Nat. Gas Co.	20.82	48,788	46,565	2,223	4,164	1,018	2,183	4
Kingsville	South. Ont. Gas Co.	13.49	64,963	61,275	3,688	2,698	634	5,817	4
Leamington	Leamington Corp.	25.47	166,824	141,679	25,145	5,094	1,412	17,808	8
London	City Gas Co.	207.36	184,973	155,123	29,850	41,472	14,674	2,034	6
Merlin	Union Gas Co.	2.58	14,512	14,043	469	516	146	3,212	4
Mt. Hamilton	Dom. Nat. Gas Co.	22.91	51,502	46,379	5,123	4,582	2,500	2,049	4
Paris	Dom. Nat. Gas Co.	14.92	48,485	44,365	4,120	2,984	890	4,629	4
Petrolia	Union Gas Co.	16.36	82,910	71,166	11,744	3,272	772	15,212	6
Port Burwell	Dom. Nat. Gas Co.	3.84	7,179	5,803	1,376	768	240	5,733	4
Port Lambton	Union Gas Co.	2.02	4,480	3,916	564	404	72	7,833	5
Ridgetown	Union Gas Co.	17.88	65,773	60,357	5,416	3,576	639	8,475	5
St. Catharines	Dom. Nat. Gas Co.	59.16	341,627	310,449	31,178	11,832	5,323	5,877	4
St. George	Dom. Nat. Gas Co.	2.11	4,222	3,992	230	422	123	1,850	4
Sarnia	Union Gas Co.	91.73	357,315	322,616	34,699	18,346	5,161	6,723	5
Shedden-Fingal	South. Ont. Gas Co.	6.11	10,221	8,322	1,899	1,222	118	16,093	4

Simcoe.....	29.69	204,070	188,815	15,255	5,938	1,823	8,368	4
Sombra.....	2.62	6,788	6,043	745	524	83	8,976	5
South London.....	8.87	23,568	18,925	4,643	1,774	224	20,727	4
Straffordville.....	1.39	7,678	6,780	898	278	92	9,761	4
Thorold.....	13.37	42,804	39,310	3,494	2,674	1,049	3,330	4
Tilbury.....	9.23	49,387	48,442	945	1,846	549	1,721	5
Tillsonburg.....	23.49	89,510	83,990	5,520	4,698	1,096	5,036	4
Vienna.....	1.04	1,545	1,343	202	208	88	2,295	4
Wallaceburg.....	25.12	105,997	99,640	6,357	5,024	1,177	5,401	6
West Hamilton.....	3.81	8,619	8,086	533	762	247	2,158	4
Wheatley.....	3.46	17,646	16,479	1,167	692	224	5,209	4
Windsor (Border Cities).....	483.36	1,431,453	1,357,916	73,537	96,672	19,169	3,836	4
Woodstock.....	48.45	111,974	99,944	12,030	9,690	2,075	5,797	4
Total.....	1,483.34	4,792,944	4,440,882	352,062	296,668	78,090	.....	.....

TABLE X—LEAKAGE IN TRANSMISSION LINES, 1935

Transmission lines	Size of pipe line	Equivalent miles of 3-in. pipe	Volume received	Volume delivered	Actual leakage	Average pressure on pipe lines
Dundas to Hamilton.....	6-inch	8.08	M cu. ft. 135,240	M cu. ft. 135,232	M cu. ft. 8	lbs. per sq. in. 20
Gas field to Sarnia and Petrolia.....	6-, 8-, 10-, 12-inch	380.57	1,653,970	1,581,414	72,556	40-80
Leamington to Hamilton.....	8-, 10-, 12-inch	710.05	1,629,562	1,359,744	269,818	75
Gas field to Windsor.....	8-, 10-, 12-, 18-inch	356.7	1,629,909	1,591,750	38,159	30-80
Gas field to Ridgetown.....	6-, 8-inch	81.56	226,359	197,838	28,521	25-80
Gas field to Bothwell.....	4-, 6-inch	32	36,575	35,072	1,503	30-50
Gas field to Hamilton.....	8-inch	58.28	136,272	123,750	12,522	30-50
Dunnville to St. Catharines.....	8-inch	57.01	384,898	361,826	23,072	50
Total.....	.....	1,684.25	5,832,785	5,386,626	446,159	.....

TABLE XI—LEAKAGE ON RURAL LINES, 1935

Township	Equivalent feet of 3-inch pipe in all rural lines	Volume received M cu. ft.	Volume delivered M cu. ft.	Leakage for year		Average No. of consumers	Leakage per consumer cu. ft.	Average pressure on pipe lines	
				Actual M cu. ft.	Allowable M cu. ft.			Low pressure ozs.	High pressure lbs.
Chatham	4,656	2,543	2,340	203	176	39	5,205	6	3
Dawn	13,581	2,760	2,663	97	514	28	3,464	8	.....
Dover	102,857	32,311	29,767	2,544	3,896	330	7,709	6	9
Enniskillen	10,173	2,415	2,219	196	385	40	4,900	5	.....
Harwich	102,851	30,293	26,765	3,528	3,895	438	8,055	6	5
Howard	18,905	7,085	6,529	556	716	88	6,318	6	3
Moore	11,214	2,103	2,065	38	425	56	678	6	.....
Raleigh	144,391	37,593	34,735	2,858	5,469	374	7,641	6	6
Raleigh (Blake system)	32,319	6,027	3,551	2,476	1,224	87	28,459	4	.....
Rochester	34,983	13,573	13,027	546	1,325	142	3,845	5	12
Sandwich, East	2,386	738	643	95	90	13	7,308	6	5
Sandwich, South	21,799	7,120	6,797	323	825	60	5,383	6	6
Sombra	2,052	577	475	102	78	10	10,200	6	.....
Tilbury, East	53,558	27,716	25,847	1,869	2,028	180	10,383	6	7
Total	555,725	172,854	157,423	15,431	21,046	1,885	.....	.....	.....

Licenses Issued in 1935

The Natural Gas Conservation Act, R.S.O., 1927, The Well Drillers' Act, R.S.O., 1927, and the Regulations made under these Acts require that the several operations carried out shall be done under license. Tables XII to XVI show a list of those to whom licenses were issued during 1935.

The licenses required under the above Acts and the cost of each are as follows:

To Lease and Prospect for Natural Gas.....	\$5.00
To Drill or Bore for Natural Gas or Oil.....	5.00
To Produce Natural Gas.....	10.00
To Distribute Natural Gas.....	10.00
To Operate Natural Gas Pipe-Lines.....	10.00

TABLE XII—OPERATORS LICENSED TO LEASE AND PROSPECT FOR NATURAL GAS, 1935

License No.	Name	Address
778	Acme Gas and Oil Co., Ltd.....	Toronto, Ont.
822	Adams, L. W.....	Espanola, Ont.
811	Aetna Oil Co., Ltd.....	Windsor, Ont.
773	Ajax Oil and Gas Co., Ltd.....	Toronto, Ont.
807	Benner, K. W.....	Fisherville, Ont.
823	Bryson, George.....	Petrolia, Ont.
798	Carrothers, Irwin.....	Kerwood, Ont.
806	Colbert, Norman C.....	Hagersville, Ont.
751	Coste, L. A.....	Chatham, Ont.
812	Craft, Fred W.....	Detroit, Mich.
791	Daly, C. A.....	Tupperville, Ont.
781	Domestic Gas Syndicate.....	Toronto, Ont.
756	Dominion Natural Gas Co., Ltd.....	Buffalo, N.Y.
816	Draymond, Francis R.....	Chatham, Ont.
808	Dufferin Natural Gas Syndicate.....	Shelburne, Ont.
803	Elliot, George A.....	Toronto, Ont.
790	Fisher, C. W.....	Chatham, Ont.
800	Fitzpatrick, P. H.....	Detroit, Mich.
809	Gardiner, Alex.....	Sarnia, Ont.
782	Gaul, Henry J.....	Stratford, Ont.
760	Gray, Ira.....	Merlin, Ont.
766	Grimsby Natural Gas Co., Ltd.....	Grimsby, Ont.
769	Haldimand Natural Gas Syndicate.....	Stevensville, Ont.
762	Heal, A. A.....	Petrolia, Ont.
786	High Grade Natural Gas Co., Ltd.....	Chatham, Ont.
755	Holmes, A. B.....	Toronto, Ont.
779	Hoover, A. E.....	Selkirk, Ont.
759	Howard, W. C.....	Leamington, Ont.
771	House, Charles C.....	Stevensville, Ont.
804	Hulse, J. W.....	Buffalo, N.Y.
824	Jansen, H.....	Buffalo, N.Y.
758	James, F. L.....	Toronto, Ont.
761	Jaspersen, Bon.....	Kingsville, Ont.
813	Lewis, James R.....	Williamsville, N.Y.
805	Liley and Winkler.....	Detroit, Mich.
765	Lymburner Bros. and Webber.....	Dunnville, Ont.
820	Marshant, F.....	Newbury, Ont.
810	Massey, Harold.....	Windsor, Ont.
814	Massey Oil and Gas Co., Ltd.,.....	Windsor, Ont.
819	McCarter, Charles S.....	Jarvis, Ont.
774	McCutcheon, Thomas J.....	Dunnville, Ont.
879	McGuigan, Virgil G.....	Cedar Springs, Ont.
794	McKillop, Wm.....	Hepworth, Ont.
785	Medina Natural Gas Co., Ltd.....	Chatham, Ont.

TABLE XII—OPERATORS LICENSED TO LEASE AND PROSPECT FOR
NATURAL GAS, 1935—Continued

License No.	Name	Address
754	Neath, Charles	Chatham, Ont.
821	Nichols, N. J.	Strathroy, Ont.
780	Patterson, W. C.	Jamestown, N. Y.
796	Patterson, F. L.	Detroit, Mich.
871	Perdue, Jack	Chatham, Ont.
776	Rawlings, George H.	Chatham, Ont.
777	Reicheld, Fred W.	Jarvis, Ont.
775	Reicheld, O. E.	Fisherville, Ont.
783	River Valley Natural Gas Syndicate	Toronto, Ont.
793	Roberts, J. R.	Windsor, Ont.
795	Rockton Oil and Gas Syndicate	Dundas, Ont.
802	Rodgers, Alex.	Tillsonburg, Ont.
752	Sadler, L.	Chatham, Ont.
801	Savage, Louis	Detroit, Mich.
772	Schollenberger, Christian	Wallacetown, Ont.
797	Schollenberger, Theresa	Wallacetown, Ont.
753	Scullard, Fred B.	Chatham, Ont.
815	Sibbitt, Robert A.	Ottawa, Ont.
767	Smith, E. W.	Toronto, Ont.
788	Smith, Harry B.	Windsor, Ont.
789	Smith, Luke	Oakville, Ont.
757	Smith, Robert H.	Lowbanks, Ont.
784	Stanley, W. E.	Toronto, Ont.
817	Stewart, Elgin Russell	Jarvis, Ont.
764	Sullivan, George F.	Sarnia, Ont.
799	Waller, C. W.	Toronto, Ont.
770	Welland County Gas Syndicate	Stevensville, Ont.
818	Wood, D. H.	Port Huron, Mich.
768	Woodhouse, Henry	Toronto, Ont.

TABLE XIII—OPERATORS LICENSED TO DRILL OR BORE FOR
NATURAL GAS, 1935

License No.	Name	Address
663	Ajax Oil and Gas Co., Ltd.	Toronto, Ont.
669	Allen, A. J.	Dunnville, Ont.
648	British Petroleum Co., Ltd.	Hamilton, Ont.
610	Culver, W. H., Jr.	Dunnville, Ont.
611	Culver, W. H., Jr.	Dunnville, Ont.
612	Culver, W. H., Jr.	Dunnville, Ont.
683	Cole, W. J.	Petrolia, Ont.
613	Dawson, Ralph	Merlin, Ont.
677	Demaray, Clarence	Kerwood, Ont.
740	Emerson, Harry L.	Dunnville, Ont.
679	Gough, N. E.	Toronto, Ont.
658	Gregory, Geo. F.	Petrolia, Ont.
659	Gregory, Geo. F.	Petrolia, Ont.
617	Heal, Andrew A.	Petrolia, Ont.
650	High Grade Natural Gas Co., Ltd.	Chatham, Ont.
652	Hockley Valley Oil Co., Ltd.	Windsor, Ont.
608	Holmes, A. B.	Toronto, Ont.
645	Hoover, A. E.	Selkirk, Ont.
646	Hoover, A. E.	Selkirk, Ont.
647	Hoover, A. E.	Selkirk, Ont.
682	Hoover, A. E.	Selkirk, Ont.

TABLE XIII—OPERATORS LICENSED TO DRILL OR BORE FOR
NATURAL GAS, 1935—Continued

License No.	Name	Address
633	House, Charles C.	Stevensville, Ont.
665	Howlett, Fred W., and Sons	Petrolia, Ont.
661	Hussey, W. J.	Petrolia, Ont.
639	Jackson, Percy L.	Dunnville, Ont.
640	Jackson, Percy L.	Dunnville, Ont.
641	Jackson, Percy L.	Dunnville, Ont.
642	Jackson, Percy L.	Dunnville, Ont.
643	Jackson, Percy L.	Dunnville, Ont.
644	Jackson, Percy L.	Dunnville, Ont.
616	Jasperson, Bon.	Kingsville, Ont.
670	Kells, Ernest E.	Petrolia, Ont.
637	Kiser Bros.	Chatham, Ont.
638	Kiser Bros.	Chatham, Ont.
629	Lauer, D. G.	Tillsonburg, Ont.
630	Lauer, D. G.	Tillsonburg, Ont.
673	Lewis, James R.	Williamsville, Ont.
738	Lincoln Gas Co., Ltd.	Toronto, Ont.
624	Lymburner Bros. and Webber	Dunnville, Ont.
680	Marshant, F.	Newbury, Ont.
631	McCutcheon, Thomas J.	Dunnville, Ont.
632	McCutcheon, Thomas J.	Dunnville, Ont.
678	McCutcheon, Thomas J.	Dunnville, Ont.
676	McGaffey, Roy	Bothwell, Ont.
625	McKechnie, S.	Dunnville, Ont.
626	McKechnie, S.	Dunnville, Ont.
627	McKechnie, S.	Dunnville, Ont.
628	McKechnie, S.	Dunnville, Ont.
651	McKillop, Wm.	Hepworth, Ont.
744	McLister, J. J.	Dunnville, Ont.
671	McMaster, R., and Son.	Echo Place, Ont.
657	McNinch, S. E.	Canborough, Ont.
681	McRitchie, J. A.	Bothwell, Ont.
605	Nicholls, Jack	Pelee Island, Ont.
606	Pelee Island Petroleum Syndicate, Inc.	Detroit, Mich.
666	Pelee Island Petroleum Syndicate, Inc.	Detroit, Mich.
609	Perkins, J. E.	Dunnville, Ont.
742	Port Colborne-Welland Natural Gas and Oil Co., Ltd.	Port Colborne, Ont.
672	Rawson, W. J.	Petrolia, Ont.
675	Ricker, Arthur	Canborough, Ont.
660	Rockton Oil and Gas Syndicate	Dundas, Ont.
674	Sibbitt, Robert A.	Ottawa, Ont.
653	Simpson, C. A.	Simcoe, Ont.
615	Smith, Robert H.	Lowbanks, Ont.
662	Stewart, Elgin	Jarvis, Ont.
634	Stover, F. H., and Son	Chatham, Ont.
635	Stover, F. H., and Son	Chatham, Ont.
607	Stubble, H. H.	Merlin, Ont.
664	Stubble, H. H.	Merlin, Ont.
748	Sundy, Basil K.	Tillsonburg, Ont.
604	Union Gas Company of Canada, Ltd.	Chatham, Ont.
649	Walker, Geoffrey C.	Port Franks, Ont.
614	Walter Gas Syndicate	Buffalo, N. Y.
667	Wardell, Jacob L.	Cayuga, Ont.
621	Willits, G. E. and D. E.	Bothwell, Ont.
622	Willits, G. E. and D. E.	Bothwell, Ont.
623	Willits, G. E. and D. E.	Bothwell, Ont.
636	Wright, David	Sarnia, Ont.

TABLE XIV—OPERATORS LICENSED TO PRODUCE NATURAL GAS, 1935

License No.	Name	Address
774	Acme Gas and Oil Co., Ltd.	Toronto, Ont.
765	Ajax Oil and Gas Co., Ltd.	Toronto, Ont.
925	Aloka Oil Co., Ltd.	Toronto, Ont.
751	Amity Gas and Oil Co., Ltd.	Lowbanks, Ont.
786	Aragain Gold and Natural Gas Syndicate	Toronto, Ont.
789	Beacon Natural Gas Syndicate	Waterloo, Ont.
770	Broadway Gas Syndicate	Jarvis, Ont.
906	Buck, C. S.	Port Rowan, Ont.
801	Burchell Natural Gas Syndicate	Brussels, Ont.
743	Canadian Natural Gas Syndicate	Simcoe, Ont.
899	Canfield Gas Syndicate	Detroit, Mich.
736	Canfield Natural Gas Co., Ltd.	Canfield, Ont.
787	Central Pipe Line Co., Ltd.	Chatham, Ont.
760	Central Seneca Gas Syndicate	Cayuga, Ont.
779	Colonial Natural Gas and Oil Co., Ltd.	Hamilton, Ont.
889	Columbia Natural Gas and Oil Co., Ltd.	Hamilton, Ont.
781	Continental Gas Corporation, Ltd.	Toronto, Ont.
742	Dawson, Ralph	Merlin, Ont.
928	Delhi Gas Syndicate	Cayuga, Ont.
778	Domestic Gas Syndicate	Toronto, Ont.
741	Dominion Natural Gas Co., Ltd.	Buffalo, N.Y.
875	Emerald Gas Syndicate	Toronto, Ont.
877	Emerson, Harry L.	Dunnville, Ont.
795	Empire Natural Gas, Ltd.	Toronto, Ont.
887	Erie Gas, Ltd.	Toronto, Ont.
914	Esmond Avery and Associates Syndicate	Detroit, Mich.
879	Fisherville Gas Co.	Fisherville, Ont.
908	Firelite Gas and Oil Co., Ltd.	Toronto, Ont.
935	Gasfinders and Producers, Ltd.	Toronto, Ont.
800	Gas Producers Syndicate	Chatham, Ont.
754	Gifford, Arthur, and Son	Cayuga, Ont.
897	Glenny, Daniel	Dunnville, Ont.
737	Grand River Gas and Oil Syndicate	Canfield, Ont.
869	Grand River Natural Gas and Oil Syndicate	Cayuga, Ont.
755	Grimsby Natural Gas Co., Ltd.	Grimsby, Ont.
757	Haldimand Gas Syndicate	Cayuga, Ont.
762	Haldimand Natural Gas Syndicate	Stevensville, Ont.
916	Hartzell, Stone, Thurber, Hartzell and Avery, Minnicog Gas Co.	Detroit, Mich.
788	Highbank Oil, Ltd.	Chatham, Ont.
748	Hope Gas Syndicate	St. Catharines, Ont.
764	House and Harris	Stevensville, Ont.
799	Ideal Gas Syndicate	Fisherville, Ont.
775	Industrial Natural Gas Co., Ltd.	Port Robinson, Ont.
747	Jasperson, Bon.	Kingsville, Ont.
863	Kelly Gas and Oil Syndicate	Toronto, Ont.
932	Knight, J. W.	Detroit, Mich.
933	Ladd, C. H.	Detroit, Mich.
753	Lincoln Gas Co., Ltd.	Toronto, Ont.
834	Lindsay, W. B., Estate	Edmonton, Alta.
752	Lymburner Bros. and Webber	Dunnville, Ont.
885	Lynn Valley Gas and Oil, Ltd.	Waterloo, Ont.
929	McKechnie and Hussey	Dunnville, Ont.
867	Melrose Gas and Oil Syndicate	Toronto, Ont.
803	Middleton-Norfolk Gas Co., Ltd.	Stratford, Ont.
749	Midwal Oil and Gas Co., Ltd.	Fisherville, Ont.
883	Mohawk Gas and Oil Syndicate	Hamilton, Ont.
847	Monarch Gas and Oil Syndicate	Fisherville, Ont.
912	Mutual Natural Gas Syndicate	Toronto, Ont.
895	National Gas Syndicate	Dunnville, Ont.
791	Niagara Natural Gas Co., Ltd.	Buffalo, N.Y.
871	Niece, Hosea, and Son	Lowbanks, Ont.
768	Norhal Gas and Oil, Ltd.	Hamilton, Ont.
734	North Cayuga Gas Syndicate	North Cayuga, Ont.
910	Nottawa Oil and Gas Co., Ltd.	Toronto, Ont.

TABLE XIV—OPERATORS LICENSED TO PRODUCE NATURAL GAS, 1935—*Continued*

License No.	Name	Address
900	Olga Gas, Ltd.	Toronto, Ont.
776	Patterson, W. C.	Jamestown, N. Y.
738	Petrol Oil and Gas Co., Ltd.	Toronto, Ont.
893	Port Colborne-Welland Natural Gas and Oil Co., Ltd.	Port Colborne, Ont.
931	Premier Oils, Ltd.	Toronto, Ont.
904	Prairie Gas and Oil Co., Ltd.	Toronto, Ont.
756	Provincial Natural Gas and Fuel Co. of Ontario, Ltd.	Fort Erie North, Ont.
758	Rainham Gas Syndicate	Cayuga, Ont.
769	Reicheld, Fred W.	Jarvis, Ont.
918	Ricker, Arthur	Canborough, Ont.
861	Riley, J. V.	Simcoe, Ont.
773	Rowe, E. P.	Toronto, Ont.
750	Salina Gas Co., Ltd.	Chatham, Ont.
923	Sarnia Oil and Gas Co., Ltd.	Sarnia, Ont.
761	Selected Natural Gas and Oil Syndicate	Toronto, Ont.
882	Security Oil and Gas Co., Ltd.	Windsor, Ont.
767	Sherbrooke Gas Syndicate	Lowbanks, Ont.
745	Smith, Robert H.	Lowbanks, Ont.
746	Southern Ontario Gas Co., Ltd.	Buffalo, N. Y.
855	Springvale Gas and Oil Co., Ltd.	Hagersville, Ont.
771	Standard Gas and Oil Syndicate	Fisherville, Ont.
884	Sterling Gas Co., Ltd.	Guelph, Ont.
739	Stevensville Natural Gas and Fuel Co.	Stevensville, Ont.
802	Stewart, Elgin Russell	Jarvis, Ont.
880	Stover and Rawlings	Chatham, Ont.
920	Stromwell Syndicate	Tillsonburg, Ont.
766	Superior Gas Syndicate	Fisherville, Ont.
772	Sweets Corners Gas Syndicate	Fisherville, Ont.
891	Tillsonburg Natural Gas and Oil Co., Ltd.	Toronto, Ont.
735	Union Gas Co. of Canada, Ltd.	Chatham, Ont.
902	Vacuum Gas and Oil Co., Ltd.	Toronto, Ont.
759	Walpole Gas Syndicate	Cayuga, Ont.
763	Welland County Gas Syndicate	Stevensville, Ont.
865	Western Ontario Natural Gas Co., Ltd.	Dunville, Ont.
744	Walter Gas Syndicate, Ltd.	Buffalo, N. Y.
740	Yager, J. J.	Selkirk, Ont.
796	York Natural Gas Syndicate	Toronto, Ont.

TABLE XV—OPERATORS LICENSED TO DISTRIBUTE NATURAL GAS, 1935

License No.	Name	Address
466	Brantford Gas Co.	Buffalo, N. Y.
464	Canfield Natural Gas Co., Ltd.	Canfield, Ont.
474	Central Pipe Line Co., Ltd.	Chatham, Ont.
465	Dominion Natural Gas Co., Ltd.	Buffalo, N. Y.
491	Fisherville Gas Co.	Fisherville, Ont.
487	Fonthill-Ridgeville Gas Co., Ltd.	Portland, Ind.
497	Leamington, Town of	Leamington, Ont.
472	Lincoln Gas Co., Ltd.	Toronto, Ont.
467	Manufacturers Natural Gas Co., Ltd.	Buffalo, N. Y.
469	Oil Springs Oil and Gas Co., Ltd.	Oil Springs, Ont.
492	Port Colborne-Welland Natural Gas and Oil Co., Ltd.	Port Colborne, Ont.
471	Provincial Natural Gas and Fuel Co. of Ontario, Ltd.	Fort Erie North, Ont.
470	Southern Ontario Gas Co., Ltd.	Buffalo, N. Y.
494	Springvale Gas and Oil Co., Ltd.	Hagersville, Ont.
468	United Gas and Fuel Co. of Hamilton, Ltd.	Hamilton, Ont.
462	Union Gas Co. of Canada, Ltd.	Chatham, Ont.
463	Windsor Gas Co., Ltd.	Windsor, Ont.

TABLE XVI—OPERATORS LICENSED TO OPERATE PIPE LINES, 1935

License No.	Name	Address
102	Central Pipe Line Co., Ltd.	Chatham, Ont.
100	Dominion Natural Gas Co., Ltd.	Buffalo, N.Y.
101	Southern Ontario Gas Co., Ltd.	Buffalo, N.Y.
99	Union Gas Co. of Canada, Ltd.	Chatham, Ont.

Logs of Wells

The logs of oil and gas wells drilled in Ontario in 1935, as given by the drillers, are shown on the pages following. It will be noted that the production of gas wells is not given. This decision is the result of protests from several companies who were doing exploratory work and who felt that the publication of the results of this work would adversely affect them. All information concerning water and gas horizons are given, which should be sufficient to indicate the sources of oil and gas to those familiar with the gas fields of the province.

Samples of drill-cuttings from representative wells throughout the province are available to the public.

ABBREVIATIONS

B.F.	Broken front.
Con.	Concession.
E.	East.
E. $\frac{1}{2}$.	East half.
E. $\frac{1}{4}$.	East quarter.
E.D.	East division.
E.F.C.	East of Fairchild Creek.
E.S.C.R.	East of Stoney Creek Road.
F.C.	Front concession.
N.	North.
N. $\frac{1}{2}$.	North half.
N.E.	Northeast.
N.E. $\frac{1}{2}$.	Northeast half.
N.E. $\frac{1}{4}$.	Northeast quarter.
N.F.R.	North of Forks Road.
N.R.	Niagara River Survey.
N.T.R.	North of Talbot Road.
N.W.	Northwest.
N.W. $\frac{1}{4}$.	Northwest quarter.
Pt.	Part.
R.R.	River range.
S.	South.
S. $\frac{1}{2}$.	South half.
S.E. $\frac{1}{2}$.	Southeast half.
S.E. $\frac{1}{4}$.	Southeast quarter.
S.F.R.	South of Forks Road.
S.R.R.	South of River Range.
S.T.R.	South of Talbot Road.
S.W. $\frac{1}{4}$.	Southwest quarter.
Tp.	Township.
W. $\frac{1}{2}$.	West half.
W.F.C.	West of Fairchild creek.

Brant County

DARROCH AND YOUNG

H. Hamilton No. 1, lot 18, con. III, W.F.C.,
Onondaga tp.

Completed June 18, 1935.

Producing gas well.
Rock pressure: 146 lbs.

Formation	Thickness, ft.
Surface	111
Shale	39
Niagara	256
Shale	46
Clinton	24
Red Medina	35
Grey shale	65
White Medina	10
Red shale	22

Total depth..... 608

Gas at 456 and 583 feet.

Fresh water at 100 and 114 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

A. Allen No. 1, lot 23, con. III, E.F.C., Onondaga tp.

Completed June 27, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	51
Lime and shale	33
Niagara	264
Rochester shale	25
Clinton	31
Red Medina	22
Grey shale	52
White Medina	12
Red shale	35

Total depth..... 525

Fresh water at 48 feet; sulphur water at 165 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

J. Douglas and Son No. 2, lot 81, R.R., Onondaga tp.

Completed January 5, 1935.

Producing gas well.
Rock pressure: 185 lbs.

Formation	Thickness, ft.
Surface	63
Lime and shale	47
Niagara	270
Rochester shale	21
Clinton	35
Red Medina	27
Grey shale	45
White Medina	12
Red shale	74

Total depth..... 594

Gas at 519 feet.

Fresh water at 60 feet; sulphur water at 120 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

J. Douglas and Son No. 3, lot 79, R.R., Onondaga tp.

Completed June 5, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	53
Lime and shale	42
Niagara	249
Rochester shale	25
Clinton	31
Red Medina	25
Grey shale	50
White Medina	12
Red shale	3

Total depth..... 490

Fresh water at 50 feet; sulphur water at 130 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

J. A. Douglas No. 2, lot 77, R.R., Onondaga tp.

Completed July 19, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	61
Lime and shale	44
Niagara	261
Rochester shale	38
Clinton	28
Red Medina	22
Grey shale	52
White Medina	12
Red shale	3

Total depth..... 521

Fresh water at 65 feet; sulphur water at 350 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

W. Douglas No. 1, lot 75, R.R., Onondaga tp.

Completed August 22, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	62
Lime and shale	53
Niagara	240
Rochester shale	57
Clinton	27
Red Medina	27
Grey shale	50
White Medina	12
Red shale	4

Total depth..... 532

Fresh water at 60 feet; sulphur water at 115 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

W. A. Douglas No. 1, lot 76, R.R., Onondaga tp.

Completed August 3, 1935.

Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	61
Lime and shale	44
Niagara	256
Rochester shale	39
Clinton	30
Red Medina	26
Grey shale	52
White Medina	13
Red shale	75

Total depth..... 596

Gas at 405 and 518 feet.

Fresh water at 48 and 60 feet; sulphur water at 210 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
Co., LTD.

O. Ferris No. 1, lot 82, R.R., Onondaga tp.

Completed October 8, 1935.

Producing gas well.
Rock pressure: 185 lbs.

Formation	Thickness, ft.
Surface	30
Lime and shale	50
Niagara	240
Rochester shale	55
Clinton	31
Red Medina	26
Grey shale	52
White Medina	11
Red shale	70

Total depth..... 565

Gas at 495 feet.

Fresh water at 70 feet; sulphur water at 180 feet.

PORT COLBORNE-WELLAND NATURAL GAS AND OIL
CO., LTD.

G. Vanderlip No. 1, lot 64, R.R., Onondaga tp.
Completed September 20, 1935.
Dry hole.

Formation	Thickness, ft.
Surface.....	75
Lime and shale.....	20
Niagara.....	240
Rochester shale.....	47
Clinton.....	27
Red Medina.....	23
Grey shale.....	58
White Medina.....	8
Red shale.....	3
Total depth.....	501

AJAX OIL AND GAS CO., LTD.

L. Bomberry No. 1, lot 18, con. VI, Tuscarora tp.
Completed June 29, 1935.
Producing gas well.
Rock pressure: 182 lbs.

Formation	Thickness, ft.
Surface.....	39
Salina.....	49
Guelph and Niagara.....	290
Rochester.....	53
Clinton.....	33
Red Medina.....	18
Cabot Head.....	60
White Medina.....	10
Red shale.....	50
Total depth.....	602

Gas at 433, 548, and 550 feet.
Fresh water at 48 feet; sulphur water at 76 feet.

AJAX OIL AND GAS CO., LTD.

L. Bomberry No. 2, lot 18, con. VI, Tuscarora tp.
Completed July 26, 1935.
Producing gas well.
Rock pressure: 174 lbs.

Formation	Thickness, ft.
Surface.....	39
Salina.....	39
Guelph and Niagara.....	292
Rochester.....	50
Clinton.....	31
Red Medina.....	19
Cabot Head.....	61
White Medina.....	10
Red shale.....	50
Total depth.....	591

Gas at 422, 536, and 540 feet.
Sulphur water at 73 feet.

AJAX OIL AND GAS CO., LTD.

S. and R. Bomberry No. 3, lot 20, con. VI,
Tuscarora tp.
Completed August 23, 1935.
Producing gas well.
Rock pressure: 180 lbs.

Formation	Thickness, ft.
Surface.....	50
Salina.....	60
Guelph and Niagara.....	265
Rochester.....	50
Clinton.....	31
Red Medina.....	22
Cabot Head.....	56
White Medina.....	10
Red shale.....	1
Total depth.....	545

Gas at 427, 455, and 543 feet.
Sulphur water at 84 feet.

AJAX OIL AND GAS CO., LTD.

E. Franklin and G. Doxtater No. 1, lot 15, con. VI,
Tuscarora tp.

Completed September 23, 1935.
Producing gas well.
Rock pressure: 221 lbs.

Formation	Thickness, ft.
Surface.....	55
Salina.....	33
Guelph and Niagara.....	292
Rochester.....	51
Clinton.....	29
Red Medina.....	22
Cabot Head.....	60
White Medina.....	12
Red shale.....	50
Total depth.....	604

Gas at 433, 452, 543, and 550 feet.
Fresh water at 47 feet; sulphur water at 74 feet.

AJAX OIL AND GAS CO., LTD.

E. Franklin and G. Doxtater No. 2, lot 15, con. VI,
Tuscarora tp.

Completed October 19, 1935.
Producing gas well.
Rock pressure: 220 lbs.

Formation	Thickness, ft.
Surface.....	42
Salina.....	47
Guelph and Niagara.....	289
Rochester.....	50
Clinton.....	30
Red Medina.....	16
Cabot Head.....	66
White Medina.....	12
Red shale.....	50
Total depth.....	602

Gas at 430, 448, 541, and 546 feet.
Sulphur water at 87 feet.

PETROL OIL AND GAS CO., LTD.

F. Loft No. 1, lot 1, con. VI, Tuscarora tp.

Completed December 28, 1935.
Producing gas well.
Rock pressure: 225 lbs.

Formation	Thickness, ft.
Surface.....	54
Salina.....	126
Guelph and Niagara.....	246
Rochester.....	53
Clinton.....	13
Red Medina.....	35
Cabot Head.....	58
White Medina.....	10
Queenston.....	50
Total depth.....	645

Gas at 485 and 590 feet.
Sulphur water at 210 feet.

Bruce County

NOTTAWA OIL AND GAS CO., LTD.

Binns No. 1, lot 1, con. IX, Amabel tp.

Completed November 1, 1935.
Producing gas well.

Formation	Thickness, ft.
Sand.....	21
Brown lime.....	124
White lime.....	47
Green shale.....	12
Red shale.....	61
Blue shale.....	47
Lime.....	39
Blue shale.....	19
Red shale.....	160
Hudson.....	477
Utica.....	37
Trenton.....	635
Potsdam.....	3
Basil sandy beds.....	35
Total depth.....	1,725

Gas at 1,423 and 1,430 feet.

NOTTAWA OIL AND GAS CO., LTD.
G. Cuspsky No. 1, lot 1, con. IX, Amabel tp.
Completed June 1, 1935.
Producing gas well.

Formation	Thickness, ft.
Sand	11
Brown lime	49
White and brown lime	80
White lime	50
Green shale	15
Red shale	55
Blue shale	50
Lime	40
Red and blue shale	178
Hudson	487
Utica	47
Trenton	445

Total depth..... 1,487
Gas at 1,407, 1,412, and 1,422 feet.

NOTTAWA OIL AND GAS CO., LTD.
P. Doubt No. 1, lot 6, con. VIII, Amabel tp.
Completed November 16, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	40
Dolomite	45
Brown lime	37
White lime	114
Green shale	10
Red shale	50
Blue shale	55
Brown lime	26
Red and green shale	55
Red and blue shale	158
Hudson shale	475
Utica formation	27
Trenton lime	605
Potsdam	22
Broken granite	9

Total depth..... 1,728
Fresh water at 40 feet.

NOTTAWA OIL AND GAS CO., LTD.
J. Goetz No. 1, lot 1, con. IX, Amabel tp.
Completed August, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	16
Brown lime	124
White lime	55
Green shale	16
Red shale	47
Blue shale	60
Lime	32
Blue shale	30
Red and blue shale	148
Hudson	490
Utica	34
Trenton	398

Total depth..... 1,450
Gas at 1,426 feet.

NOTTAWA OIL AND GAS CO., LTD.
Hillis No. 1, lot 4, con. VII, Amabel tp.
Completed October 19, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	31
Hard lime	41
Brown lime	93
White lime	50
Green shale	12
Red shale	47
Blue shale	66
White lime	45
Red and blue shale	155
Hudson	470
Utica	52
Trenton	414

Total depth..... 1,476
Show of gas at 1,435 feet.

NOTTAWA OIL AND GAS CO., LTD.
R. Kinch No. 1, lot 6, con. IX, Amabel tp.
Completed August 23, 1935.
Dry hole.

Formation	Thickness, ft.
Sand	3
Top lime	205
Green shale	14
Red shale	35
Blue shale	63
Brown lime	20
Red shale	65
Blue shale	65
Grey shale	70
Hudson	475
Utica	35
Trenton	382

Total depth..... 1,432
Fresh water at 55, 125, and 190 feet.

NOTTAWA OIL AND GAS CO., LTD.
C. W. Sinclair No. 1, lot 3, con. IX, Amabel tp.
Completed November 7, 1935.
Producing gas well.
Rock pressure: 150 lbs.

Formation	Thickness, ft.
Sand	21
Top lime	192
Green shale	14
Red shale	43
Blue shale	60
Brown lime	44
Blue shale	21
Red shale	68
Grey shale	75
Hudson	475
Utica	33
Trenton	394

Total depth..... 1,440
Gas at 1,409 feet.
Fresh water at 70 feet.

Carleton County

R. A. SIBBITT
Davidson No. 1, lot 9, con. II, Gloucester tp.
Completed October 2, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	62
Grey dolomite (Beekmantown)	188
Light-grey sandstone	40
Grey sandstone (Potsdam)	180
Pre-Cambrian feldspar and mica schist	20

Total depth..... 490
Fresh water at 52, 79, and 245 feet.

Elgin County

DARKE, VASS, ET AL
J. McIntyre No. 1, lot 2, B.F., Aldborough tp.
Completed March 22, 1935.
Small producing oil well.

Formation	Thickness, ft.
Clay	68
Hardpan	144
Soap	7
Lime	11
Soap	18
Dark lime	6
Hard soap	3
Brown lime	1½
Grey lime	171½

Total depth..... 420
Oil at 224, 273, 345 to 355, 385 to 390, and 408 to 410 feet.

DARKE, VASS, ET AL

J. McIntyre No. 2, lot 2, B.F., Aldborough tp.
Completed May 28, 1935.
Well plugged and abandoned.

Formation	Thickness, ft.
Gravel	8
Clay	14
Hardpan	152
Lime	11
Soap	20
Dark lime	9
Grey lime	186
Total depth	405

Trace of oil at 235 to 240, 250 to 260, and 300 to 330 feet.

CANADIAN NATURAL GAS SYNDICATE

S. Williams No. 1, lot 25, N. ½, con. VIII, Bayham tp.
Completed July 31, 1935.
Producing gas well.
Rock pressure: 560 lbs.

Formation	Thickness, ft.
Surface	223
Lime and shale	175
Flint	130
Lime and shale	388
Niagara	312
Shale	51
Clinton	35
Red Medina	10
Shale	30
Total depth	1,354

Gas at 1,298 feet.
Sulphur water at 225 feet.

CANADIAN NATURAL GAS SYNDICATE

C. E. Wilson No. 2, lot 23, con. VIII, Bayham tp.
Completed December 16, 1935.
Producing gas well.
Rock pressure: 600 lbs.

Formation	Thickness, ft.
Surface	251
Lime and shale	188
Flint	125
Lime and shale	372
Guelph lime	40
Niagara lime	267
Rochester shale	49
Clinton sand	27
Red Medina sand	12
Blue shale	29
Total depth	1,360

Gas at 1,325, 1,329, 1,337, and 1,330 feet.
Fresh water at 259 feet; sulphur water at 976 feet.

CANFIELD NATURAL GAS SYNDICATE

C. E. Wilson No. 1, lot 23, con. VIII, Bayham tp.
Completed October 26, 1935.
Producing gas well.
Rock pressure: 600 lbs.

Formation	Thickness, ft.
Surface	20
Sand and gravel	228
Lime and shale	187
Flint	125
Lime and shale	372
Guelph lime	43
Niagara lime	270
Rochester shale	50
Clinton sand	27
Red Medina sand	7
Red shale	20
Total depth	1,349

Gas at 1,313, 1,317, 1,319, and 1,322 feet.
Fresh water at 300 feet; sulphur water at 980 feet.

R. L. PATTINSON

N. H. Gray No. 2, lot 27, con. IX, Bayham tp.
Completed October 25, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	91
Clay	67
Brown lime	178
Flint	96
Brown lime	49
Slate, lime, and gypsum	100
Grey lime	65
Lime and gypsum	210
Niagara lime	7
Total depth	863

Sulphur water at 856 feet.
Show of gas at 163, 856, and 863 feet.

R. L. PATTINSON

S. Williams No. 2, lot 25, con. VIII, Bayham tp.
Completed December 14, 1935.
Producing gas well.
Rock pressure: 560 lbs.

Formation	Thickness, ft.
Surface	170
Clay	30
Gravel	20
Grey lime	14
Brown lime	185
Flint	100
Brown lime	80
Lime and gypsum	345
Niagara	285
Shale	50
Clinton	13
Thorold sand	19
Red shale	32
Total depth	1,344

Gas at 1,298, 1,303, 1,308, and 1,312 feet.
Fresh water at 140 feet; sulphur water at 330 feet.

E. P. ROWE

L. Alton No. 1, lot 26, con. VIII, Bayham tp.
Completed April 8, 1935.
Producing gas well.
Rock pressure: 560 lbs.

Formation	Thickness, ft.
Clay	30
Quicksand	150
Clay	30
Gravel	12
Brown lime	178
Flint	120
Brown lime	60
Shale and gypsum	355
Niagara	295
Shale	50
Clinton	15
Thorold sand	10
Red shale	25
Total depth	1,330

Gas at 1,295 feet.
Fresh water at 215 feet; sulphur water at 360 and 960 feet.

E. P. ROWE

L. Alton No. 2, lot 26, con. VIII, Bayham tp.
Completed March 25, 1935.
Producing gas well.
Rock pressure: 550 lbs.

Formation	Thickness, ft.
Quicksand	185
Clay	10
Gravel	10
Brown lime	190
Flint	125
Brown lime	40
Lime and gypsum	165
Lime, shale, and gypsum	191
Niagara	296
Blue shale	55
Clinton	19
Thorold sand	10
Red Medina	10
Blue shale	15

Total depth..... 1,321

Gas at 1,286 to 1,296 feet.
Sulphur gas at 350 and 940 feet.
Show of oil at 360 feet.
Fresh water at 205 feet; sulphur water at 345 and 916 feet.

E. P. ROWE

J. Ball No. 1, lot 26, S. 1/2, con. VIII, Bayham tp.
Completed June 15, 1935.
Producing gas well.
Rock pressure: 580 lbs.

Formation	Thickness, ft.
Surface	118
Grey lime	62
Brown lime	110
Flint	105
Grey lime	45
Lime, shale, and gypsum	115
Brown and blue lime	283
Niagara	286
Blue shale	55
Clinton	15
Thorold sand	20
Red Medina	15
Blue shale	15

Total depth..... 1,244

Gas at 1,194 feet.
Sulphur water at 120 feet.

E. P. ROWE

A. C. Wilson No. 2, lot 27, con. VIII, Bayham tp.
Completed February 9, 1935.
Producing gas well.
Rock pressure: 590 lbs.

Formation	Thickness, ft.
Quicksand	100
Clay	15
Gravel	21
Grey lime	74
Brown lime	105
Flint	100
Brown lime	135
Shale and gypsum	291
Niagara	299
Blue shale	48
Clinton lime	19
Thorold sand	10
Red Medina	14
Blue shale	15

Total depth..... 1,246

Gas at 1,207 to 1,217 feet; sulphur gas at 1,002 feet.
Sulphur water at 205 feet.

LAKESIDE OIL AND GAS CO., LTD.

C. Schollenberger No. 1, lot 8, con. IX, Dunwich tp
Completed April 24, 1935.
Dry hole.

Formation	Thickness, ft.
Sand	60
Clay	68
Gravel	4
Hardpan	28
Gravel	10
Sand	10
Hardpan	70
Upper soap	30
Middle lime	20
Lower soap	35
Dark streak	5
Lower dark lime	130
Lower light lime	45
Sand	10

Total depth..... 525

Fresh water at 150 feet.

LAKESIDE OIL AND GAS CO., LTD.

C. Schollenberger No. 2, lot 8, con. IX, Dunwich tp.
Completed May 2, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	6
Boulders	2
Mild hardpan	37
Stiff hardpan	25
Gravel	38
Hardpan	48
Upper soapstone	65
Middle lime	15
Lower soapstone	17
Dark streak	2
Lower lime	12

Total depth..... 267

LAKESIDE OIL AND GAS CO., LTD.

C. Schollenberger No. 3, lot 8, con. X, Dunwich tp.
Completed May 15, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	50
Hardpan	25
Gravel	10
Hardpan	110
Gravel	10
Hardpan	30
Upper soapstone	10
Middle lime	15
Lower soap	16
Dark streak	4
Lower lime	25

Total depth..... 305

Essex County

BON JASPERSON

S. E. Ferris No. 1, lot 8, con. I, Gosfield South tp.
Completed November 8, 1935.
Producing gas well.
Rock pressure: 325 lbs.

Formation	Thickness, ft.
Quicksand	45
Brown lime	220
Grey lime	10
Hard brown and grey lime	130
Grey lime and gypsum	10
Grey lime	15
Hard brown lime	30
Grey lime	90
Hard brown lime	135
Grey and brown lime	135
Hard brown and grey lime	60
Grey and brown lime	15
Hard brown lime	17
White lime	2

Total depth..... 914

Gas at 610, 810, 820, and 898 feet.
Mineral water at 45 feet.

BON JASPERSON

A. J. Gunning No. 1, lot 9, N.E. pt., con. I, E.D.,
Gosfield South tp.

Completed April 27, 1935.

Producing gas well.

Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	125
Brown lime	335
Grey lime and gypsum	17
Grey lime	478
Total depth	955

Gas at 665, 715, 862, 865, 870, 875, 920, and 931 feet.
Fresh water at 126 feet; mineral water at 225 and 375 feet; salt water at 955 feet.

BON JASPERSON

A. Simmers Estate No. 1, lot 8, con. I,
Gosfield South tp.

Completed August 10, 1935.

Producing gas well.

Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	55
No samples kept	375
Hard grey and brown lime	20
Medium grey lime	110
Hard brown and grey lime	120
Medium grey lime	10
Hard brown lime	5
Medium grey and brown lime	135
Hard brown and grey lime	45
Hard brown and white lime	20
Medium grey and brown lime	28
Total depth	923

Gas at 640, 828, and 920 feet.
Fresh water at 55 feet.

Grey County

NOTTAWA OIL AND GAS CO., LTD.

A. Barfoot No. 1, lot 11, con. VII, Keppel tp.

Completed March, 1935.

Producing gas well.

Formation	Thickness, ft.
Surface	11
Brown lime	79
White lime	66
Green shale	14
Red shale	58
Blue shale	60
Blue lime	38
Red shale	136
Hudson formation	490
Utica	56
Trenton formation	621
Potsdam	8
Total depth	1,517

Gas at 1,358 and 1,378 feet.
Salt water at 1,609 feet.

NOTTAWA OIL AND GAS CO., LTD.

A. Cunningham No. 1, Village of Hepworth, Keppel tp.

Completed June 25, 1935.

Dry hole.

Formation	Thickness, ft.
Sand	21
Top lime	191
Green shale	14
Red shale	43
Blue shale	60
Brown lime	44
Blue shale	21
Red shale	68
Grey shale	70
Hudson	477
Utica	33
Trenton	480
Total depth	1,522

Haldimand County

BEN NATURAL GAS CO., LTD.

S. Bartlett No. 1, lot 9, con. II, Canborough tp.

Completed August 9, 1935.

Producing gas well.

Rock pressure: 90 lbs.

Formation	Thickness, ft.
Surface	73
Shale	120
Niagara	200
Grey lime	18
Rochester shale	18
Clinton	31
Red Medina	37
Grey shale	60
White Medina	10
Red shale	20
Total depth	587

Gas at 460 and 567 feet.
Fresh water at 76 feet.

BEN NATURAL GAS CO., LTD.

S. Bartlett No. 2, lot 9, con. II, Canborough tp.

Completed August 29, 1935.

Producing gas well.

Rock pressure: 100 lbs.

Formation	Thickness, ft.
Surface	58
Shale	119
Niagara	200
Grey lime	15
Rochester shale	28
Clinton	35
Red Medina	35
Grey shale	60
White Medina	14
Red shale	20
Total depth	584

Gas at 564 feet.
Fresh water at 62 feet.

BEN NATURAL GAS CO., LTD.

J. Calvert No. 1, lot 10, N.E. 1/2, con. II,
Canborough tp.

Completed September 24, 1935.

Producing gas well.

Rock pressure: 90 lbs.

Formation	Thickness, ft.
Surface	57
Shale	119
Niagara	200
Grey lime	15
Rochester shale	28
Clinton	35
Red Medina	35
Grey shale	60
White Medina	14
Red shale	20
Total depth	583

Gas at 420 to 440 and 550 to 560 feet.

BEN NATURAL GAS CO., LTD.

A. Swayzie No. 1, lot 9, con. II, Canborough tp.

Completed June 22, 1935.

Producing gas well.

Rock pressure: 95 lbs.

Formation	Thickness, ft.
Surface	61
Shale	124
Niagara	200
Grey lime	15
Rochester shale	23
Clinton	32
Red Medina	35
Grey shale	55
White Medina	10
Red shale	5
Total depth	560

Gas at 490 and 555 feet.
Fresh water at 64 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE
 J. N. Allen No. 1, lot 16, S. ½, con. II, Canborough tp.
 Completed April 23, 1935.
 Producing gas well.
 Rock pressure: 120 lbs.

Formation	Thickness, ft.
Surface	36
Lime and shale	122
Niagara	220
Shale	54
Clinton	27
Red Medina	40
Shale	56
White Medina	14
Red shale	35
Total depth	604

Fresh water at 36 feet; black water at 158 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE
 J. N. Allen No. 2, lot 16, con. II, Canborough tp.
 Completed May 10, 1935.
 Producing gas well.
 Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	40
Lime and shale	117
Niagara	220
Shale	57
Clinton	28
Red Medina	38
Grey shale	58
White Medina	15
Red shale	35
Total depth	608

Gas at 450 and 560 feet.
 Fresh water at 45 feet; black water at 210 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE
 J. N. Allen No. 3, lot 15, con. II, S.T.R.,
 Canborough tp.
 Completed May 29, 1935.
 Producing gas well.
 Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	55
Lime and shale	125
Niagara	210
Shale	56
Clinton	30
Red Medina	48
Grey shale	52
White Medina	14
Red shale	35
Total depth	625

Gas at 466, 496, and 588 feet.
 Fresh water at 57 feet; black water at 320 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE
 J. N. Allen No. 4, lot 16, con. II, Canborough tp.
 Completed October 2, 1935.
 Producing gas well.
 Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	41
Lime and shale	145
Niagara	200
Shale	55
Clinton	30
Red Medina	40
Grey shale	57
White Medina	12
Red shale	35
Total depth	615

Gas at 491 and 575 feet.
 Fresh water at 70 feet; sulphur water at 90 feet;
 black water at 350 feet.

COLONIAL NATURAL GAS CO., LTD.
 S. Zarebski No. 1, lot 3, con. III, Canborough tp.
 Completed August 2, 1935.
 Producing gas well.
 Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	58
Lime and shale	204
Niagara	220
Shale	57
Clinton	32
Red Medina	38
Shale	56
White Medina	14
Red shale	50
Total depth	729

Gas at 566 feet.
 Fresh water at 55 feet.

HARRY L. EMERSON
 H. L. Emerson No. 1, lots 5 and 6, con. I,
 Canborough tp.
 Completed May 27, 1935.
 Producing gas well.
 Rock pressure: 115 lbs.

Formation	Thickness, ft.
Surface	70
Lime and shale	18
Niagara	275
Shale	44
Clinton	29
Red Medina	35
Shale	49
White Medina	11
Red shale	50
Total depth	581

Sulphur water at 55 feet.

HARRY L. EMERSON
 H. L. Emerson No. 2, lots 5 and 6, con. I,
 Canborough tp.
 Completed July 3, 1935.
 Producing gas well.
 Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	82
Lime and shale	18
Niagara	273
Shale	45
Clinton	30
Red Medina	35
Shale	48
White Medina	9
Red shale	50
Total depth	590

Gas at 450 to 470 feet and 535 feet.
 Sulphur water at 60 feet.

ARTHUR RICKER
 A. Ricker No. 2, lot 10, con. I, Canborough tp.
 Completed February 20, 1935.
 Producing gas well.
 Rock pressure: 132 lbs.

Formation	Thickness, ft.
Surface	74
Lime and shale	71
Niagara	195
Rochester shale	38
Clinton	35
Red Medina	40
Grey shale	45
White Medina	10
Red shale	42
Total depth	550

Black water at 160 feet.

ARTHUR RICKER

A. Ricker No. 3, lot 9, con. I, Canborough tp.
Completed August 15, 1935.
Producing gas well.
Rock pressure: 120 lbs.

Formation	Thickness, ft.
Surface	46
Lime and shale	105
Niagara	224
Shale	50
Clinton	42
Red Medina	37
Grey shale	65
White Medina	14
Red shale	42

Total depth..... 625
Fresh water at 46 feet; black water at 165 feet.

WESTERN ONTARIO NATURAL GAS CO., LTD.

H. Hamilton No. 4, lot 9, con. II, Earl tract, Dunn tp.
Completed December 23, 1935.
Producing gas well.
Rock pressure: 370 lbs.

Formation	Thickness, ft.
Surface	9
Flint	30
Hard lime	40
Lime and shale	349
Niagara lime	225
Shale	55
Clinton	36
Red Medina	40
Grey shale	52
White Medina	17
Red shale	22

Total depth..... 875
Gas at 713, 756, and 850 feet.
Fresh water at 75 feet; salt water at 500 feet.

AMITY NATURAL GAS CO., LTD.

C. Waines No. 1, lot 8, E. pt., con. III C.,
Moulton tp.

Completed January 18, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	95
Lime and shale	117
Niagara	220
Shale	62
Clinton	33
Red Medina	37
Shale	60
White Medina	10
Red shale	2

Total depth..... 636
Sulphur water at 98 feet.

JOHN S. BROOKES

J. S. Brookes No. 1, Town of Dunnville, Moulton tp.
Completed November 13, 1935.
Producing gas well.
Rock pressure: 175 lbs.

Formation	Thickness, ft.
Surface	83
Lime and shale	270
Niagara	200
Shale	55
Clinton	32
Red Medina	35
Grey shale	62
White Medina	10
Red shale	50

Total depth..... 797
Gas at 626, 655, and 742 feet.
Fresh water at 84 feet; sulphur water at 120 feet;
black water at 400 feet.

CANADIAN NATURAL GAS SYNDICATE

H. B. Etherington No. 1, lot 20, W. ½, S.F.R.,
Moulton tp.

Completed April 30, 1935.
Producing gas well.
Rock pressure: 210 lbs.

Formation	Thickness, ft.
Surface	90
Lime and shale	180
Niagara	220
Shale	64
Clinton	30
Red Medina	35
Shale	55
White Medina	10
Red shale	50

Total depth..... 734
Gas at 606 feet.
Fresh water at 88 feet.

CANADIAN NATURAL GAS SYNDICATE

H. B. Etherington No. 2, lot 20, W. ½, S.F.R.,
Moulton tp.

Completed May 30, 1935.
Producing gas well.
Rock pressure: 280 lbs.

Formation	Thickness, ft.
Surface	88
Lime and shale	180
Niagara	220
Shale	60
Clinton	29
Red Medina	36
Shale	53
White Medina	10
Red shale	50

Total depth..... 726
Gas at 597 feet.
Fresh water at 100 feet.

CANADIAN NATURAL GAS SYNDICATE

J. Melick No. 1, lots 21 and 22, S. pt., N.F.R.,
Moulton tp.

Completed March 4, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	96
Lime and shale	184
Niagara	220
Shale	61
Clinton	30
Red Medina	34
Shale	43
White Medina	10
Red shale	50

Total depth..... 728
Gas at 608 and 676 feet.
Sulphur water at 100 feet.

CANADIAN NATURAL GAS SYNDICATE

J. Melick No. 2, lots 21 and 22, S. pt., N.F.R.,
Moulton tp.

Completed April 2, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	73
Lime and shale	187
Niagara	220
Shale	63
Clinton	30
Red Medina	37
Shale	58
White Medina	12
Red shale	1

Total depth..... 681
Sulphur water at 73 feet.

DOMESTIC NATURAL GAS SYNDICATE NO. 2

R. Root No. 1, lot 2, range I, Grand river, Moulton tp.

Completed December 27, 1935.
Producing gas well.
Rock pressure: 165 lbs.

Formation	Thickness, ft.
Surface	84
Lime and shale	231
Niagara lime	200
Blue shale	57
Clinton	31
Red Medina	33
Grey shale	61
White Medina	16
Red shale	98

Total depth..... 811

Gas at 575 and 701 feet.
Fresh water at 85 feet; sulphur water at 450 feet.

PERCY L. JACKSON

D. Gunning No. 1, lot 1, N.W. ¼, range II, Grand river, Moulton tp.

Completed June 8, 1935.
Producing gas well.
Rock pressure: 100 lbs.

Formation	Thickness, ft.
Surface	86
Brown lime	139
Shale	87
Niagara	213
Blue shale	41
Clinton	22
Red Medina	40
Grey shale	62
White Medina	12
Red shale	92

Total depth..... 794

Gas at 580 and 692 feet.
Fresh water at 85 feet; black water at 340 feet.

S. McKECHNIE

S. McKechnie No. 1, lot 21, Town of Dunnville, Moulton tp.

Completed October 4, 1935.
Producing gas well.
Rock pressure: 150 lbs.

Formation	Thickness, ft.
Surface	79
Lime and shale	232
Niagara	230
Shale	55
Clinton	28
Red Medina	42
Shale	63
White Medina	12
Red shale	50

Total depth..... 791

Gas at 600, 642, 651, 733, and 739 feet.
Fresh water at 79 and 175 feet; black water at 510 feet.

SMITH AND EHDE

M. Honsinger No. 1, lot 6, gore A, Moulton tp.

Completed September 3, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	107
Lime and shale	101
Niagara	220
Shale	57
Clinton	33
Red Medina	36
Shale	56
White Medina	14
Red shale	2

Total depth..... 626

Fresh water at 107 feet; black water at 300 feet.

SMITH AND EHDE

M. Honsinger No. 2, lot 6, gore A, Moulton tp.

Completed October 2, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	122
Lime and shale	88
Niagara	220
Shale	61
Clinton	30
Red Medina	36
Shale	55
White Medina	15
Red shale	2

Total depth..... 629

Fresh water at 122 feet; black water at 285 feet.

SMITH AND EHDE

M. Honsinger No. 3, lot 6, gore A, Moulton tp.

Completed October 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	118
Lime and shale	90
Niagara	220
Shale	60
Clinton	33
Red Medina	35
Shale	55
White Medina	15
Red shale	2

Total depth..... 628

Fresh water at 117 feet; black water at 320 feet.

SMITH AND EHDE

W. Neff No. 1, lot 7, W. ½, N.F.R. Moulton tp.

Completed November 23, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	118
Lime and shale	110
Niagara	220
Shale	65
Clinton	34
Red Medina	34
Shale	56
White Medina	12
Red shale	5

Total depth..... 654

Fresh water at 120 feet; black water at 350 feet.

SMITH AND EHDE

W. Neff No. 2, lot 7, W. ½, N.F.R., Moulton tp.

Completed December 20, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	120
Lime and shale	95
Niagara	220
Shale	61
Clinton	35
Red Medina	34
Shale	58
White Medina	12
Red shale	1

Total depth..... 636

Fresh water at 119 feet; black water at 345 feet.

STROMWELL GAS SYNDICATE

L. McCallum No. 3, lot 14, con. II, Moulton tp.
Completed October 19, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	146
Lime and shale	223
Niagara	220
Shale	42
Clinton	32
Red Medina	44
Grey shale	55
White Medina	12
Total depth	774

Fresh water at 150 feet.

CANFIELD GAS SYNDICATE

Biggam No. 1, lot 12, S. $\frac{1}{2}$, con. II, North Cayuga tp
Completed June 15, 1935.
Producing gas well.
Rock pressure: 578 lbs.

Formation	Thickness, ft.
Surface	58
Lime and shale	240
Niagara	225
Shale	55
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	15
Red shale	50
Total depth	765

Gas at 636 and 727 feet.

Fresh water at 58 feet; salt water at 430 feet.

CANFIELD GAS SYNDICATE

A. Burke No. 1, lot 14, N.W. $\frac{1}{2}$ of N. $\frac{1}{2}$, con. II,
North Cayuga tp.

Completed February 22, 1935.
Producing gas well.
Rock pressure: 270 lbs.

Formation	Thickness, ft.
Surface	49
Lime and shale	256
Niagara	225
Shale	56
Clinton	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	44
Total depth	770

Gas at 591 feet.

Fresh water at 60 feet; salt water at 400 feet.

CANFIELD GAS SYNDICATE

T. Gifford No. 1, lot 12, con. III, North Cayuga tp.
Completed September 13, 1935.
Producing gas well.
Rock pressure: 270 lbs.

Formation	Thickness, ft.
Surface	71
Lime and shale	231
Niagara	225
Shale	55
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	48
Total depth	770

Gas at 719 feet.

Fresh water at 78 feet.

CANFIELD GAS SYNDICATE

R. McDonald No. 1, lot 13, N. $\frac{1}{2}$, con. II, S.T.R.,
North Cayuga tp.

Completed May 20, 1935.
Producing gas well.
Rock pressure: 290 lbs.

Formation	Thickness, ft.
Surface	49
Lime and shale	251
Niagara	225
Shale	56
Clinton rock	30
Red Medina	40
Grey shale	51
White Medina	18
Red shale	50

Total depth 770

Gas at 586, 629, and 718 feet.

Fresh water at 60 feet; salt water at 430 feet.

CANFIELD GAS SYNDICATE

C. Morris No. 1, lot 14, S. $\frac{1}{2}$ of N.E. $\frac{1}{2}$, con. II,
North Cayuga tp.

Completed March 20, 1935.
Producing gas well.
Rock pressure: 260 lbs.

Formation	Thickness, ft.
Surface	44
Lime and shale	257
Niagara	225
Shale	56
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	48

Total depth 770

Gas at 511 feet.

Fresh water at 50 feet; salt water at 430 feet.

CANFIELD GAS SYNDICATE

M. Murphy No. 1, lot 15, N. pt., con. II, S.T.R.,
North Cayuga tp.

Completed January 29, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	57
Lime and shale	247
Niagara	225
Shale	56
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	16
Red shale	5

Total depth 728

Fresh water at 60 feet; salt water at 400 feet.

CANFIELD GAS SYNDICATE

R. Murphy No. 1, lot 12, N. $\frac{1}{2}$, con. III, S.T.R.,
North Cayuga tp.

Completed August 17, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	63
Lime and shale	240
Niagara	225
Shale	55
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	3

Total depth 726

Fresh water at 65 feet; salt water at 450 feet.

CANFIELD GAS SYNDICATE

R. Murphy No. 1, lot 13, N. $\frac{1}{4}$, con. III, S.T.R.,
North Cayuga tp.

Completed July 18, 1935.

Producing gas well.

Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	74
Lime and shale	234
Niagara	225
Shale	55
Clinton	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	42

Total depth..... 770

Gas at 593, 602, 636, and 726 feet.

Fresh water at 75 feet; salt water at 450 feet.

CANFIELD GAS SYNDICATE

W. Vickers No. 1, lot 16, N. pt., con. II,
North Cayuga tp.

Completed October 29, 1935.

Producing gas well.

Rock pressure: 270 lbs.

Formation	Thickness, ft.
Surface	66
Lime and shale	253
Niagara	225
Shale	56
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	30

Total depth..... 770

Gas at 610 to 620 and 640 to 650 feet.

Fresh water at 120 feet.

CANFIELD GAS SYNDICATE

W. Vickers No. 2, lot 16, N. pt., con. II,
North Cayuga tp.

Completed November 22, 1935.

Producing gas well.

Rock pressure: 250 lbs.

Formation	Thickness, ft.
Surface	65
Lime and shale	254
Niagara	225
Shale	56
Clinton rock	30
Red Medina	40
Grey shale	52
White Medina	18
Red shale	30

Total depth..... 770

Gas at 610 to 620 and 640 to 650 feet.

Fresh water at 85 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

J. T. Armstrong No. 1, lot 49, con. I, N.T.R.,
North Cayuga tp.

Completed November 2, 1935.

Producing gas well.

Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	4
Sandstone	10
Broken lime	27
Lime and shale	350
Niagara	225
Shale	55
Clinton	28
Red Medina	32
Shale	65
White Medina	12
Red shale	6

Total depth..... 823

Gas at 690, 700, and 713 feet.

Fresh water at 120 feet; sulphur water at 175 feet.

DOMESTIC NATURAL GAS SYNDICATE

P. McFarlin No. 1, lot 29, con. I, N.T.R.,
North Cayuga tp.

Completed October 4, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	51
Lime and shale	226
Niagara	225
Shale	55
Clinton	24
Red Medina	39
Grey shale	59
White Medina	12
Red shale	5

Total depth..... 696

Fresh water at 60 feet and 100 feet.

DOMESTIC NATURAL GAS SYNDICATE

J. Mehlenbacher No. 1, lot 28, con. I, S.T.R.,
North Cayuga tp.

Completed September 9, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	54
Lime and shale	221
Niagara	225
Shale	54
Clinton	24
Red Medina	43
Grey shale	60
White Medina	12
Red shale	1

Total depth..... 694

Fresh water at 44 and 65 feet; sulphur water at 300 feet.

DUNNVILLE DETROIT GAS SYNDICATE

T. McDonald No. 1, lot 12, N. $\frac{1}{2}$, con. II, S.T.R.,
North Cayuga tp.

Completed December 24, 1935.

Producing gas well.

Rock pressure: 260 lbs.

Formation	Thickness, ft.
Surface	62
Lime and shale	233
Niagara	225
Shale	56
Clinton	30
Red Medina	40
Grey shale	52
White Medina	19
Red shale	51

Total depth..... 768

Gas at 580 to 600, 616 to 636, and 705 to 715 feet.

Fresh water at 65 feet.

ESMOND AVERY AND ASSOCIATES

B. Carter No. 1, lot 12, S. $\frac{1}{2}$, con. I, S.T.R.,
North Cayuga tp.

Completed January 3, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	57
Lime and shale	198
Niagara	233
Shale	55
Clinton	25
Red Medina	42
Shale	60
White Medina	10
Red shale	2

Total depth..... 682

Fresh water at 60 feet.

ESMOND AVERY AND ASSOCIATES

B. Carter No. 2, lot 12, S. ½, con. I, S.T.R.,
North Cayuga tp.

Completed February 9, 1935.
Producing gas well.
Rock pressure: 220 lbs.

Formation	Thickness, ft.
Surface.....	57
Lime and shale.....	200
Niagara.....	224
Shale.....	54
Clinton.....	31
Red Medina.....	40
Shale.....	60
White Medina.....	10
Red shale.....	50
Total depth.....	726

Gas at 538, 564, and 671 feet.
Fresh water at 56 feet.

ESMOND AVERY AND ASSOCIATES

W. Haines No. 1, lot 10, N. ½, con. I, S.T.R.,
North Cayuga tp.

Completed March 5, 1935.
Producing gas well.
Rock pressure: 230 lbs.

Formation	Thickness, ft.
Surface.....	63
Lime and shale.....	190
Niagara.....	225
Shale.....	53
Clinton.....	27
Red Medina.....	43
Shale.....	60
White Medina.....	10
Red shale.....	52
Total depth.....	723

Gas at 554 and 666 feet.
Fresh water at 64 feet.

ESMOND AVERY AND ASSOCIATES

W. Haines No. 2, lot 10, N. ½, con. II, S.T.R.,
North Cayuga tp.

Completed March 26, 1935.
Dry hole.

Formation	Thickness, ft.
Surface.....	53
Lime and shale.....	202
Niagara.....	231
Shale.....	43
Clinton.....	26
Red Medina.....	42
Shale.....	60
White Medina.....	10
Red shale.....	4
Total depth.....	671

Fresh water at 50 feet.

ESMOND AVERY AND ASSOCIATES

W. Haines No. 3, lot 10, N. ½, con. II, S.T.R.,
North Cayuga tp.

Completed April 29, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface.....	59
Lime and shale.....	176
Niagara.....	225
Shale.....	49
Clinton.....	29
Red Medina.....	42
Shale.....	60
White Medina.....	10
Red shale.....	50
Total depth.....	700

Gas at 531 and 655 feet.
Fresh water at 60 feet.

GRAND RIVER NATURAL GAS SYNDICATE

C. Donnelly No. 1, lot 22, con. II, S.T.R.,
North Cayuga tp.

Completed August 13, 1935.
Producing gas well.
Rock pressure: 215 lbs.

Formation	Thickness, ft.
Surface.....	56
Lime and shale.....	258
Niagara.....	200
White lime.....	50
Rochester shale.....	33
Clinton.....	25
Red Medina.....	35
Blue shale.....	65
White Medina.....	10
Red shale.....	2
Total depth.....	734

Gas at 602 and 637 feet.
Fresh water at 60 feet.

GRAND RIVER NATURAL GAS SYNDICATE

J. Donnelly No. 2, lot 22, con. II, S.T.R.,
North Cayuga tp.

Completed September 14, 1935.
Producing gas well.
Rock pressure: 215 lbs.

Formation	Thickness, ft.
Surface.....	56
Lime and shale.....	257
Niagara.....	200
White lime.....	50
Rochester shale.....	33
Clinton.....	27
Red Medina.....	33
Blue shale.....	65
White Medina.....	10
Red shale.....	2
Total depth.....	733

Gas at 623 feet.
Fresh water at 60 feet.

GRAND RIVER NATURAL GAS SYNDICATE

T. Donnelly No. 2, lot 23, con. II, S.T.R.,
North Cayuga tp.

Completed October 27, 1935.
Producing gas well.
Rock pressure: 185 lbs.

Formation	Thickness, ft.
Surface.....	44
Lime and shale.....	259
Niagara.....	200
White lime.....	50
Shale.....	25
Clinton.....	25
Red Medina.....	33
Blue shale.....	65
White Medina.....	10
Red shale.....	27
Total depth.....	738

Gas at 586 feet.
Fresh water at 60 feet.

GRAND RIVER NATURAL GAS SYNDICATE

H. Walton No. 3, lots 15 and 16, con. III, S.R.R.,
North Cayuga tp.

Completed July 9, 1936.
Producing gas well.
Rock pressure: 250 lbs.

Formation	Thickness, ft.
Surface.....	38
Lime and shale.....	256
Niagara.....	200
White lime.....	50
Shale.....	38
Clinton.....	25
Red Medina.....	35
Blue shale.....	63
White Medina.....	10
Red shale.....	2
Total depth.....	717

Gas at 606 and 626 feet.
Fresh water at 90 feet.

PERCY L. JACKSON

A. Riley No. 1, lot 35, con. I, N.T.R.,
North Cayuga tp.

Completed June 26, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	15
Lime and shale	220
Niagara	230
Shale	55
Clinton	24
Red Medina	40
Grey shale	50
White Medina	12
Red shale	1
Total depth	647

Gas at 546, 557, and 566 feet.
Fresh water at 25 feet.

MIDFIELD NATURAL GAS CO., LTD.

J. Clarke No. 2, lot 52, N. 1/2, con. I,
North Cayuga tp.

Completed December 9, 1935.
Producing gas well.
Rock pressure: 340 lbs.

Formation	Thickness, ft.
Surface	6
Flint	12
Lime and shale	377
Niagara	225
Rochester shale	85
Clinton	23
Red Medina	27
Grey shale	59
White Medina	12
Red shale	10
Total depth	836

Gas at 709 and 736 feet.
Fresh water at 40 feet.

NORTH CAYUGA GAS SYNDICATE

J. Glenny No. 1, Huff tract, North Cayuga tp.

Completed September 28, 1935.
Producing gas well.
Rock pressure: 255 lbs.

Formation	Thickness, ft.
Surface	49
Lime and shale	247
Niagara	230
Shale	55
Clinton	27
Red Medina	40
Grey shale	50
White Medina	17
Red shale	25
Total depth	740

Gas at 590 to 600 and 608 to 648 feet.
Fresh water at 51 and 90 feet; salt water at 425 feet.

NORTH CAYUGA GAS SYNDICATE

J. Glenny No. 2, Huff tract, North Cayuga tp.

Completed October 14, 1935.
Producing gas well.
Rock pressure: 240 lbs.

Formation	Thickness, ft.
Surface	48
Lime and shale	252
Niagara	230
Shale	55
Clinton	27
Red Medina	40
Grey shale	52
White Medina	18
Red shale	25
Total depth	747

Gas at 590 to 600, 620 to 640, and 710 to 720 feet.
Fresh water at 110 feet; salt water at 425 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

G. Ridely No. 4, lot 16, con. V, Oneida tp.

Completed June 6, 1935.
Producing gas well.
Rock pressure: 160 lbs.

Formation	Thickness, ft.
Surface	10
Broken lime	20
Lime and shale	170
Niagara	223
Shale	56
Clinton	26
Red Medina	27
Shale	59
White Medina	12
Red shale	3
Total depth	606

Gas at 502 feet.
Fresh water at 35 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

G. Ridely No. 5, lot 16, con. V, Oneida tp.

Completed July 17, 1935.
Producing gas well.
Rock pressure: 160 lbs.

Formation	Thickness, ft.
Surface	28
Lime and shale	173
Niagara	228
Shale	54
Clinton	23
Red Medina	25
Shale	64
White Medina	12
Red shale	5
Total depth	612

Gas at 502 and 507 feet.
Fresh water at 35 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

G. Ridely No. 6, lot 16, con. V, Oneida tp.

Completed August 2, 1935.
Producing gas well.
Rock pressure: 155 lbs.

Formation	Thickness, ft.
Surface	42
Lime and shale	173
Niagara	225
Shale	52
Clinton	25
Red Medina	27
Shale	63
White Medina	14
Red shale	4
Total depth	625

Gas at 510 and 530 feet.
Fresh water at 60 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

E. Smelser No. 1, lot 15, con. IV, Oneida tp.

Completed September 5, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	39
Lime and shale	168
Niagara	226
Shale	56
Clinton	28
Red Medina	25
Shale	65
White Medina	12
Red shale	3
Total depth	622

Fresh water at 55 feet.

CONSOLIDATED NATURAL GAS CO., LTD.

E. Smelser No. 2, lot 15, S. pt., con. IV, Oneida tp.
Completed September 30, 1935.
Producing gas well.
Rock pressure: 155 lbs.

Formation	Thickness, ft.
Surface	39
Lime and shale	166
Niagara	226
Shale	57
Clinton	29
Red Medina	27
Shale	65
White Medina	13
Red shale	5
Total depth	627

Gas at 508 feet.
Fresh water at 46 feet.

W. H. CULVER, JR.

P. La Fortune No. 1, lot 18, con. V, Oneida tp.
Completed August 22, 1935.
Producing gas well.
Rock pressure: 245 lbs.

Formation	Thickness, ft.
Surface	40
Lime and shale	180
Niagara	233
Shale	50
Clinton	22
Red Medina	35
Grey shale	55
White Medina	10
Red shale	35
Total depth	660

Gas at 506, 510, and 517 feet.
Fresh water at 50 feet.

W. H. CULVER, JR.

P. La Fortune No. 2, lot 18, con. V, Oneida tp.
Completed September 3, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	50
Lime and shale	190
Niagara	225
Shale	50
Clinton	25
Red Medina	35
Grey shale	60
White Medina	10
Red shale	2
Total depth	647

Sulphur water at 75 feet.

W. H. CULVER, JR.

P. La Fortune No. 3, lot 18, con. V, Oneida tp.
Completed October 30, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	60
Lime and shale	140
Niagara	270
Shale	51
Clinton	23
Red Medina	20
Grey shale	65
White Medina	10
Red shale	5
Total depth	644

Sulphur water at 67 feet.

W. H. CULVER, JR.

P. La Fortune No. 4, lot 18, con. V, Oneida tp.
Completed December 9, 1935.
Producing gas well.
Rock pressure: 225 lbs.

Formation	Thickness, ft.
Surface	30
Lime and shale	176
Niagara	235
Shale	50
Clinton	20
Red Medina	35
Grey shale	65
White Medina	10
Red shale	20
Total depth	641

Gas at 499 and 620 feet.
Fresh water at 40 feet.

GASFINDERS GAS CO., LTD.

A. Hunter No. 1, lot 18, con. II, Oneida tp.
Completed April 26, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	81
Lime and shale	240
Niagara	250
Shale	50
Clinton	24
Red Medina	33
Grey shale	60
White Medina	10
Red shale	25
Total depth	773

Fresh water at 90 feet; sulphur water at 125 feet;
black water at 300 feet.

GASFINDERS GAS CO., LTD.

A. T. Lang No. 2, pt. Andross block, Oneida tp.
Completed January 31, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	38
Lime and shale	175
Niagara	200
Shale	47
Clinton	20
Red Medina	32
Grey shale	55
White Medina	12
Red shale	4
Total depth	583

Fresh water at 55 feet; sulphur water at 95 feet;
black water at 300 feet.

GASFINDERS GAS CO., LTD.

D. Smith No. 1, lot 18, con. IV, Oneida tp.
Completed February 23, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	77
Lime and shale	240
Niagara	250
Shale	50
Clinton	24
Red Medina	20
Grey shale	70
White Medina	11
Red shale	3
Total depth	745

Fresh water at 60 feet.

PERCY L. JACKSON

G. Ferguson No. 1, lot 75, R.R., Oneida tp.
Completed April 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	12
Broken lime	28
Lime and shale	200
Niagara	225
Shale	65
Clinton	25
Red Medina	40
Grey shale	50
White Medina	15
Red shale	3

Total depth..... 663
Fresh water at 38 feet.

PERCY L. JACKSON

G. Ferguson No. 2, lot 75, R.R., Oneida tp.
Completed May 23, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	25
Lime and shale	215
Niagara	210
Shale	58
Clinton	25
Red Medina	40
Grey shale	55
White Medina	12
Red shale	1

Total depth..... 641
Gas at 515 and 520 feet.
Fresh water at 40 feet; sulphur water at 150 feet.

PERCY L. JACKSON

I. Ferguson No. 1, lot 77, R.R., Oneida tp.
Completed July 25, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	42
Lime and shale	218
Niagara	215
Shale	55
Clinton	24
Red Medina	40
Grey shale	60
White Medina	14
Red shale	92

Total depth..... 760
Gas at 542 and 552 feet.
Fresh water at 60 feet.

LYNN VALLEY GAS SYNDICATE

W. Stark No. 1, lot 19, con. II, Oneida tp.
Completed January 30, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	70
Lime and shale	265
Niagara	225
Rochester shale	53
Clinton	24
Red Medina	35
Grey shale	57
White Medina	18
Red shale	3

Total depth..... 750
Fresh water at 90 feet.

LYNN VALLEY GAS SYNDICATE

W. Stark No. 2, lot 19, con. II, Oneida tp.
Completed March 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	40
Broken lime	32
Lime and shale	263
Niagara	225
Rochester shale	53
Clinton	27
Red Medina	37
Grey shale	55
White Medina	18

Total depth..... 750
Black water at 90 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

C. Gailing No. 1, lot 21, con. III, Oneida tp.
Completed December 14, 1935.
Producing gas well.
Rock pressure: 350 lbs.

Formation	Thickness, ft.
Surface	12
Hardpan	78
Lime and shale	275
Niagara	220
Shale	36
Clinton	25
Red Medina	30
Shale	64
White Medina	20
Red shale	15

Total depth..... 795
Gas at 655 and 765 feet.
Fresh water at 97 feet; black water at 200 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

J. Stark No. 1, lot 23, S. ½, con. III, Oneida tp.
Completed March 27, 1935.
Producing gas well.
Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	7
Lime and gypsum	96
Lime and shale	267
Niagara	225
Shale	53
Clinton	29
Red Medina	32
Grey shale	59
White Medina	18

Total depth..... 786
Gas at 675 feet.
Fresh water at 77 feet; black water at 136 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

R. W. Smith No. 1, lot 22, con. III, Oneida tp.
Completed January 29, 1935.
Producing gas well.
Rock pressure: 310 lbs.

Formation	Thickness, ft.
Surface	15
Broken lime	75
Lime and shale	270
Niagara	224
Shale	54
Clinton	28
Red Medina	32
Grey shale	58
White Medina	18
Red shale	35

Total depth..... 817
Gas at 668 and 780 feet.
Fresh water at 77 feet; sulphur water at 140 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

R. W. Smith No. 2, lot 21, con. III, Oneida tp.
Completed February 23, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	12
Broken lime	81
Shale and lime	272
Niagara	220
Shale	59
Clinton	27
Red Medina	40
Grey shale	55
White Medina	19

Total depth 785

Fresh water at 77 feet; black water at 140 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

R. Smith No. 3, lot 22, con. III, Oneida tp.
Completed May 11, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	6
Broken lime	91
Lime and shale	283
Niagara	225
Shale	50
Clinton	21
Red Medina	32
Grey shale	58
White Medina	18

Total depth 792

Fresh water at 93 feet; black water at 145 feet.

YORK NATURAL GAS SYNDICATE

O. Peart No. 1, pt. Anderson block, Oneida tp.
Completed July 8, 1935.
Producing gas well.
Rock pressure: 260 lbs.

Formation	Thickness, ft.
Surface	25
Lime and shale	165
Niagara	225
Shale	50
Clinton	22
Red Medina	35
Shale	55
White Medina	15
Red shale	1

Total depth 593

Gas at 487 and 492 feet.
Fresh water at 58 feet.

YORK NATURAL GAS SYNDICATE

O. Peart No. 2, pt. Anderson block, Oneida tp.
Completed July 25, 1936.
Dry hole.

Formation	Thickness, ft.
Surface	25
Lime and shale	178
Niagara	225
Shale	50
Clinton	22
Red Medina	35
Grey shale	59
White Medina	19
Red shale	1

Total depth 614

Fresh water at 60 feet.

YORK NATURAL GAS SYNDICATE

B. Pettit No. 1, pt. Anderson block, Oneida tp.
Completed September 17, 1935.
Producing gas well.
Rock pressure: 190 lbs.

Formation	Thickness, ft.
Surface	40
Lime and shale	135
Niagara	225
Shale	50
Clinton	22
Red Medina	35
Grey shale	60
White Medina	15
Red shale	40

Total depth 622

Fresh water at 50 feet.

YORK NATURAL GAS SYNDICATE

B. Pettit No. 2, pt. Anderson block, Oneida tp.
Completed September 27, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	37
Lime and shale	139
Niagara	225
Shale	50
Clinton	22
Red Medina	35
Grey shale	60
White Medina	15
Red shale	2

Total depth 585

Fresh water at 32 feet.

YORK NATURAL GAS SYNDICATE

B. Pettit No. 3, pt. Anderson block, Oneida tp.
Completed October 10, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	60
Lime and shale	135
Niagara	225
Shale	50
Clinton	28
Red Medina	35
Shale	60
White Medina	10
Red shale	2

Total depth 605

Gas at 473 to 479 feet.
Fresh water at 75 feet.

DOMESTIC NATURAL GAS SYNDICATE

I. Stadder No. 1, lot 3, con. I, Rainham tp.
Completed September 23, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	8
Broken lime	4
Flint	98
Lime and shale	398
Niagara	252
Shale	53
Clinton	27
Red Medina	45
Grey shale	62
White Medina	12
Red shale	4

Total depth 963

Fresh water at 80 feet.

DOMESTIC NATURAL GAS CO., LTD.

Wm. Stadder No. 2, lot 16, con. II, Rainham tp.
Completed November 27, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	18
Flint	42
Lime and shale	375
Niagara lime	235
Shale	57
Clinton	27
Red Medina	38
Grey shale	58
White Medina	13
Red shale	32

Total depth..... 895

Fresh water at 55 feet; sulphur water at 330 feet;
black water at 645 feet.

DOMESTIC NATURAL GAS SYNDICATE

Wm. Stadder No. 1, lot 16, con. II, Rainham tp.
Completed November 7, 1935.
Producing gas well.
Rock pressure: 325 lbs.

Formation	Thickness, ft.
Surface	16
Flint	50
Lime and shale	374
Niagara lime	230
Rochester shale	55
Clinton	30
Red Medina	40
Grey shale	55
White Medina	13
Red shale	9

Total depth..... 872

Gas at 737 and 763 feet.
Fresh water at 60 feet; black water at 220 feet;
sulphur water at 590 feet.

HALDIMAND GAS AND OIL SYNDICATE

J. Winger No. 2, lot 5, S.W. $\frac{1}{4}$, con. IV, Rainham tp.
Completed November 27, 1935.
Producing gas well.
Rock pressure: 350 lbs.

Formation	Thickness, ft.
Surface	10
Flint	100
Lime and shale	340
Niagara	210
White lime	55
Rochester shale	38
Clinton	28
Red Medina	30
Red shale	14
Grey shale	50
White Medina	18
Red shale	1

Total depth..... 894

Gas at 761, 787, and 803 feet.
Fresh water at 60 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 1, lot 1, E. $\frac{1}{2}$, con. IV, Rainham tp.
Completed July 25, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	25
Flint	94
Lime and shale	362
Niagara	236
Shale	58
Clinton	25
Red Medina	43
Shale	60
White Medina	10

Total depth..... 913

Fresh water at 83 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 2, lot 1, E. $\frac{1}{2}$, con. IV, Rainham tp.
Completed August 20, 1935.
Producing gas well.
Rock pressure: 335 lbs.

Formation	Thickness, ft.
Surface	18
Flint	101
Lime and shale	367
Niagara	230
Shale	56
Clinton	25
Red Medina	46
Shale	60
White Medina	10
Red shale	50

Total depth..... 963

Gas at 804 and 910 feet.
Fresh water at 82 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 3, lot 1, E. $\frac{1}{2}$, con. IV, Rainham tp.
Completed September 20, 1935.
Producing gas well.
Rock pressure: 350 lbs.

Formation	Thickness, ft.
Surface	19
Flint	105
Lime and shale	360
Niagara	249
Shale	64
Clinton	28
Red Medina	44
Shale	60
White Medina	10
Red shale	3

Total depth..... 942

Gas at 842 and 853 feet.
Fresh water at 70 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 4, lot 1, con. IV, Rainham tp.
Completed October 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	18
Flint	116
Lime and shale	354
Niagara	247
Shale	52
Clinton	27
Red Medina	45
Shale	60
White Medina	10
Red shale	3

Total depth..... 922

Fresh water at 65 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 5, lot 1, con. IV, Rainham tp.
Completed November 16, 1935.
Producing gas well.
Rock pressure: 330 lbs.

Formation	Thickness, ft.
Surface	8
Flint	126
Lime and shale	360
Niagara	245
Shale	56
Clinton	26
Red Medina	45
Shale	60
White Medina	10
Red shale	25

Total depth..... 962

Gas at 817 feet.
Fresh water at 85 feet.

IDEAL GAS SYNDICATE

J. Rhora No. 6, lot 1, con. IV, Rainham tp.
Completed December 24, 1935.
Producing gas well.
Rock pressure: 321 lbs.

Formation	Thickness, ft.
Surface	6
Flint	127
Lime and shale	360
Niagara	240
Shale	62
Clinton	27
Red Medina	42
Shale	60
White Medina	10
Red shale	30
Total depth	964

Gas at 805 and 929 feet.

LADD AND KNIGHT

Nafel and Best No. 1, lot 7, con. IV, Rainham tp.
Completed October 17, 1935.
Producing gas well.
Rock pressure: 365 lbs.

Formation	Thickness, ft.
Surface	18
Flint	90
Lime and shale	349
Niagara	220
Shale	63
White Medina	9
Red shale	8
Total depth	889

Fresh water at 55 feet; black water at 85 and 457 feet.

LADD AND KNIGHT

O. Reicheld No. 2, lot 6, N. ½, con. IV, Rainham tp.
Completed December 16, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	18
Flint	90
Lime and shale	357
Niagara	225
Shale	58
Clinton	28
Red Medina	45
Shale	60
White Medina	10
Red shale	5
Total depth	896

Fresh water at 52 feet; black water at 375 feet.

L. P. MYTINGER

F. Nablo No. 1, lot 7, con. IV, Rainham tp.
Completed October 9, 1935.
Producing gas well.
Rock pressure: 385 lbs.

Formation	Thickness, ft.
Surface	14
Flint	85
Lime and shale	351
Niagara	240
Shale	55
Clinton	27
Red Medina	49
Grey shale	50
White Medina	10
Red shale	10
Total depth	891

Gas at 787 and 898 feet.
Sulphur water at 78 feet.

L. P. MYTINGER

F. Nablo No. 2, lot 7, con. IV, Rainham tp.
Completed November 8, 1935.
Producing gas well.
Rock pressure: 365 lbs.

Formation	Thickness, ft.
Surface	17
Flint	85
Lime and shale	353
Niagara	240
Shale	58
Clinton	26
Red Medina	47
Grey shale	55
White Medina	10
Red shale	5
Total depth	896

Gas at 763 and 797 feet.
Sulphur water at 68 feet.

L. P. MYTINGER

F. Nablo No. 3, lot 7, con. IV, Rainham tp.
Completed December 24, 1935.
Producing gas well.
Rock pressure: 360 lbs.

Formation	Thickness, ft.
Surface	18
Flint	90
Lime and shale	352
Niagara	240
Shale	57
Clinton	27
Red Medina	47
Grey shale	53
White Medina	10
Red shale	5
Total depth	899

Gas at 773, 781, and 809 feet.
Sulphur water at 61 feet.

W. C. PATTERSON

G. Bier No. 2, lot 1, con. VII, Rainham tp.
Completed December 3, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	18
Flint	67
Shale and lime	339
Niagara	262
Shale	49
Clinton	25
Red Medina	36
Grey shale	58
White Medina	15
Red shale	1
Total depth	870

Fresh water at 33 feet; sulphur water at 425 feet.

W. C. PATTERSON

P. Bier No. 2, lot 2, con. VI, Rainham tp.
Completed September 20, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	27
Flint	57
Lime and shale	360
Niagara	264
Shale	47
Clinton	28
Red Medina	39
Shale	54
White Medina	16
Red shale	1
Total depth	893

Fresh water at 50 feet; sulphur water at 472 feet.

W. C. PATTERSON

G. Fess No. 1, lot 3, con. VI, Rainham tp.
Completed March 7, 1935.
Producing gas well.
Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	18
Flint	62
Lime and shale	356
Niagara	262
Shale	44
Clinton	24
Red Medina	40
Grey shale	56
White Medina	16
Red shale	3

Total depth..... 881
Fresh water at 40 feet; sulphur water at 440 feet.

W. C. PATTERSON

G. Fess No. 2, lot 3, con. VI, Rainham tp.
Completed April 12, 1935.
Producing gas well.
Rock pressure: 400 lbs.

Formation	Thickness, ft.
Surface	11
Flint	60
Lime and shale	369
Niagara	260
Shale	44
Clinton	27
Red Medina	40
Grey shale	56
White Medina	15
Red shale	2

Total depth..... 884
Fresh water at 36 feet; sulphur water at 437 feet.

W. C. PATTERSON

G. Fess No. 3, Lot 3, con. VI, Rainham tp.
Completed May 1, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	16
Flint	58
Lime and shale	366
Niagara	259
Shale	40
Clinton	27
Red Medina	35
Grey shale	56
White Medina	14
Red shale	1

Total depth..... 872
Fresh water at 35 feet; sulphur water at 420 feet.

W. C. PATTERSON

W. Reicheld No. 1, lot 3, con. VI, Rainham tp.
Completed June 12, 1935.
Producing gas well.
Rock pressure: 440 lbs.

Formation	Thickness, ft.
Surface	23
Flint	59
Lime and shale	356
Niagara	260
Shale	42
Clinton	30
Red Medina	37
Grey shale	57
White Medina	16
Red shale	3

Total depth..... 883
Fresh water at 40 feet; sulphur water at 432 feet.

W. C. PATTERSON

W. Reicheld No. 2, lot 3, N. ½, con. VI, Rainham tp.
Completed August 7, 1935.
Producing gas well.
Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	22
Flint	62
Lime and shale	357
Niagara	261
Shale	50
Clinton	29
Red Medina	40
Grey shale	53
White Medina	15
Red shale	2

Total depth..... 891
Gas at 776, 781, and 788 feet.
Fresh water at 47 feet; sulphur water at 463 feet.

W. C. PATTERSON

W. Reicheld No. 3, lot 3, con. VI, Rainham tp.
Completed August 29, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	12
Flint	72
Lime and shale	359
Niagara	262
Shale	50
Clinton	33
Red Medina	40
Shale	54
White Medina	15
Red shale	1

Total depth..... 898
Fresh water at 55 feet; sulphur water at 470 feet.

W. C. PATTERSON

A. Riddell No. 1, lot 3, con. VII, Rainham tp.
Completed November 1, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	31
Flint	53
Shale and lime	341
Niagara	260
Shale	46
Clinton	27
Red Medina	37
Grey shale	56
White Medina	14
Red shale	2

Total depth..... 867
Fresh water at 37 feet; sulphur water at 430 feet.

W. C. PATTERSON

G. Roth No. 1, lot 4, con. VII, Rainham tp.
Completed January 12, 1935.
Producing gas well.
Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	19
Flint	65
Lime and shale	360
Niagara	260
Shale	40
Clinton	24
Red Medina	35
Grey shale	50
White Medina	15
Red shale	1

Total depth..... 869
Fresh water at 40 feet; sulphur water at 430 feet.

W. C. PATTERSON

E. Schier No. 1, lot 4, con. VII, Rainham tp.
Completed January 31, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	16
Flint	67
Lime and shale	347
Niagara	260
Shale	40
Clinton	28
Red Medina	37
Grey shale	55
White Medina	15
Red shale	2

Total depth 757

Fresh water at 35 feet; sulphur water at 425 feet.

W. C. PATTERSON

S. Schumaker No. 1, lot 5, S.E. ½, con. VI,
Rainham tp.
Completed January 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	10
Flint	65
Lime and shale	370
Niagara	236
Shale	61
Clinton	28
Red Medina	42
Grey shale	60
White Medina	15
Red shale	5

Total depth 892

Sulphur water at 75 feet.

W. C. PATTERSON

G. Winger No. 1, lot 8, con. VI, Rainham tp.
Completed July 17, 1935.
Producing gas well.
Rock pressure: 410 lbs.

Formation	Thickness, ft.
Surface	12
Flint	73
Shale and lime	340
Niagara	258
Shale	42
Clinton	27
Red Medina	40
Grey shale	59
White Medina	24
Red shale	32

Total depth 907

Gas at 749, 754, and 870 feet.

CENTRAL SENECA GAS SYNDICATE

J. Hanson No. 6, lot 18, con. IV, E.S.C.R., Seneca tp.
Completed January 15, 1935.
Producing gas well.
Rock pressure: 100 lbs.

Formation	Thickness, ft.
Surface	79
Lime and shale	70
Niagara	215
Rochester shale	45
Clinton	27
Red Medina sand	21
Red Medina shale	18
Grey shale	51
White Medina	10
Red shale	37

Total depth 573

Gas at 429 and 530 feet.
Fresh water at 83 feet.

CENTRAL SENECA GAS SYNDICATE

E. Harrison No. 3, lot 19, N. ½, con. IV, E.S.C.R.,
Seneca tp.
Completed January 30, 1935.
Producing gas well.
Rock pressure: 90 lbs.

Formation	Thickness, ft.
Surface	75
Lime and shale	81
Niagara	216
Rochester shale	45
Clinton	22
Red Medina	19
Red shale	20
Grey shale	55
White Medina	9
Red shale	49

Total depth 591

Gas at 541 feet.
Fresh water at 78 feet.

CENTRAL SENECA GAS SYNDICATE

F. Harrison No. 1, lot 16, N. ½, con. IV, E.S.C.R.,
Seneca tp.
Completed February 27, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	68
Lime and shale	75
Niagara	221
Rochester shale	33
Clinton	24
Red Medina sand	21
Red Medina shale	16
Grey shale	61
White Medina	8
Red shale	23

Total depth 550

Show of gas at 399 and 522 feet.
Fresh water at 72 feet.

DOMESTIC NATURAL GAS SYNDICATE

W. J. Cummings No. 3, lot 16, con. IV, Seneca tp.
Completed July 18, 1935.
Producing gas well.
Rock pressure: 110 lbs.

Formation	Thickness, ft.
Surface	59
Lime and shale	80
Niagara	232
Shale	48
Clinton	30
Red Medina	40
Blue shale	70
White Medina	12
Red shale	55

Total depth 626

Gas at 440 and 564 feet.
Fresh water at 60 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Edwards No. 2, lot 15, con. III, Seneca tp.
Completed August 6, 1935.
Producing gas well.
Rock pressure: 110 lbs.

Formation	Thickness, ft.
Surface	82
Lime and shale	80
Niagara	232
Shale	54
Clinton	30
Blue shale	65
White Medina	14

Total depth 757

Gas at 580 feet.
Fresh water at 79 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 3, lots 18 and 19, con. IV, Seneca tp.
Completed February 1, 1935.
Producing gas well.
Rock pressure: 210 lbs.

Formation	Thickness, ft.
Surface	67
Lime and gypsum	70
Niagara	240
Shale	45
Clinton	26
Red Medina	38
Blue shale	70
White Medina	14
Red shale	35

Total depth..... 605
Fresh water at 67 feet; sulphur water at 215 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 4, lots 18 and 19, con. IV, Seneca tp.
Completed March 4, 1935.
Producing gas well.
Rock pressure: 210 lbs.

Formation	Thickness, ft.
Surface	78
Lime and gypsum	67
Niagara lime	240
Shale	42
Clinton	26
Red Medina	30
Blue shale	70
White Medina	15
Red shale	50

Total depth..... 618
Gas at 430 and 559 feet.
Fresh water at 79 feet; black water at 315 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 5, lots 18 and 19, con. IV, Seneca tp.
Completed April 1, 1935.
Producing gas well.
Rock pressure: 210 lbs.

Formation	Thickness, ft.
Surface	79
Lime and gypsum	67
Niagara lime	240
Shale	42
Clinton	26
Red Medina	30
Blue shale	75
White Medina	15
Red shale	53

Total depth..... 627
Gas at 448 and 571 feet.
Fresh water at 81 feet; sulphur water at 220 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 6, lots 18 and 19, con. IV, Seneca tp.
Completed April 23, 1935.
Producing gas well.
Rock pressure: 200 lbs.

Formation	Thickness, ft.
Surface	72
Lime and gypsum	68
Niagara lime	239
Shale	42
Clinton	28
Red Medina	29
Blue shale	75
White Medina	16
Red shale	55

Total depth..... 624
Gas at 441 and 563 feet.
Fresh water at 93 feet; sulphur water at 225 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 7, lots 18 and 19, con. IV, Seneca tp.
Completed August 27, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	51
Lime and gypsum	77
Niagara lime	250
Shale	50
Clinton	32
Red Medina	35
Blue shale	70
White Medina	14
Red shale	5

Total depth..... 584
Fresh water at 52 feet; sulphur water at 210 feet.

DOMESTIC NATURAL GAS SYNDICATE

R. Kerr No. 8, lots 18 and 19, con. IV, Seneca tp.
Completed September 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	69
Lime and gypsum	77
Niagara	250
Shale	50
Clinton	30
Red Medina	30
Blue shale	65
White Medina	12
Red shale	7

Total depth..... 590
Fresh water at 52 feet.

DOMESTIC NATURAL GAS SYNDICATE

H. Parker No. 1, Lot 15, S. ½, con. IV, Seneca tp.
Completed May 22, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	60
Lime and shale	80
Niagara	232
Shale	48
Clinton	20
Red Medina	43
Blue shale	70
White Medina	14
Red shale	3

Total depth..... 570
Fresh water at 70 feet; sulphur water at 280 feet.

DOMESTIC NATURAL GAS SYNDICATE

H. Parker No. 2, lot 15, S. ½, con. IV, Seneca tp.
Completed June 26, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	54
Lime and shale	74
Niagara	238
Shale	47
Clinton	28
Red Medina	38
Blue shale	78
White Medina	13
Red shale	8

Total depth..... 578
Fresh water at 57 feet; sulphur water at 260 feet.

DOMESTIC NATURAL GAS SYNDICATE

W. Tomlinson No. 1, lot 13, con. IV, Seneca tp.
Completed July 13, 1935.
Producing gas well.
Rock pressure: 110 lbs.

Formation	Thickness, ft.
Surface	57
Lime and shale	85
Niagara	214
Shale	47
Clinton	29
Red Medina	43
Blue shale	67
White Medina	11
Red shale	55

Total depth..... 608

Gas at 421, 443, and 451 feet.
Fresh water at 63 feet.

DOMESTIC NATURAL GAS SYNDICATE

W. Tomlinson No. 2, lot 13, con. IV, Seneca tp.
Completed August 5, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	60
Lime and shale	83
Niagara	220
Shale	46
Clinton	25
Red Medina	35
Blue shale	68
White Medina	14

Total depth..... 551

Fresh water at 68 feet; sulphur water at 290 feet.

NATIONAL GAS SYNDICATE

M. Shaw No. 2, lot 14, con. III, Seneca tp.
Completed January 22, 1935.
Producing gas well.
Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	76
Lime and shale	104
Niagara	230
Shale	43
Clinton	25
Red Medina	38
Grey shale	48
White Medina	17
Red shale	35

Total depth..... 616

Gas at 493, 515, and 580 feet.
Fresh water at 80 feet.

NATIONAL GAS SYNDICATE

T. Singer No. 2, lot 16, S. 1/2, con. II, Seneca tp.
Completed February 15, 1936.
Producing gas well.
Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	90
Lime and shale	89
Niagara	228
Shale	48
Clinton	29
Red Medina	40
Grey shale	55
White Medina	17
Red shale	34

Total depth..... 630

Gas at 470 and 590 feet.
Fresh water at 94 feet.

YORK NATURAL GAS SYNDICATE

H. J. and E. A. Hannah No. 1, lot 1, Young tract,
Seneca tp.
Completed May 14, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	84
Lime and shale	95
Niagara	250
Shale	50
Clinton	25
Red Medina	35
Shale	67
White Medina	15
Red shale	3

Total depth..... 625

Show of gas at 505 feet.
Fresh water at 100 feet.

YORK NATURAL GAS SYNDICATE

R. Warring No. 1, lot 1, Young tract, Seneca tp.
Completed March 30, 1935.
Producing gas well.
Rock pressure: 135 lbs.

Formation	Thickness, ft.
Surface	94
Brown lime	96
Niagara	250
Shale	50
Clinton	27
Red Medina	34
Shale	60
White Medina	15
Red shale	32

Total depth..... 658

Gas at 498 to 502, and 542 to 616 feet.
Fresh water at 100 feet.

YORK NATURAL GAS SYNDICATE

R. Warring No. 2, lot 1, Young tract, Seneca tp.
Completed April 10, 1935.
Producing gas well.
Rock pressure: 240 lbs.

Formation	Thickness, ft.
Surface	85
Brown lime	105
Niagara	250
Shale	50
Clinton	25
Red Medina	35
Shale	60
White Medina	15
Red shale	36

Total depth..... 661

Gas at 505 to 515 and 615 to 625 feet.
Fresh water at 100 feet.

YORK NATURAL GAS SYNDICATE

R. Warring No. 3, lot 1, Young tract, Seneca tp.
Completed April 26, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	93
Lime and shale	97
Niagara	250
Shale	55
Clinton	25
Red Medina	35
Shale	55
White Medina	10
Red shale	5

Total depth..... 625

Show of gas at 520 feet.
Fresh water at 100 feet.

CANFIELD GAS SYNDICATE

J. Fradenburgh No. 1, Fradenburgh tract,
South Cayuga tp.

Completed January 12, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	48
Lime and shale	259
Niagara	225
Shale	56
Clinton	27
Red Medina	40
Grey shale	53
White Medina	16
Red shale	5

Total depth 729

Fresh water at 49 feet; salt water at 400 feet.

DUFFERIN OIL AND GAS SYNDICATE

W. Wilson No. 1, lot 28, S. $\frac{1}{2}$, con. IV,
South Cayuga tp.

Completed August 30, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	14
Lime and shale	397
Niagara	201
White lime	16
Shale	69
Clinton	30
Red Medina	36
Shale	60
White Medina	18
Red shale	4

Total depth 845

Sulphur water at 65 feet.

RIVER VALLEY NATURAL GAS SYNDICATE

W. Pridmore No. 1, lot 22, con. IV,
South Cayuga tp.

Completed March 2, 1935.

Producing gas well.

Rock pressure: 165 lbs.

Formation	Thickness, ft.
Surface	19
Flint	19
Lime and shale	315
Niagara	277
Shale and lime	51
Shale	22
Clinton	32
Red Medina	37
Blue shale	59
White Medina	11
Pocket	2

Total depth 844

Gas at 733 feet.

Fresh water at 92 feet.

BEACON NATURAL GAS SYNDICATE

H. Butcher No. 2, lot 2, S.W. $\frac{1}{4}$, con. III,
Walpole tp.

Completed April 30, 1935.

Producing gas well.

Rock pressure: 420 lbs.

Formation	Thickness, ft.
Surface	47
Flint	148
Lime and shale	370
Niagara limestone	270
Shale	42
Clinton	27
Red Medina	46
Grey shale	55
White Medina	10
Red Medina	50

Total depth 1,065

Gas at 913 and 1,013 feet.

Black water at 195 feet.

BROADWAY GAS SYNDICATE

C. Bacher No. 3, lot 20, N. $\frac{1}{2}$, con. VI, Walpole tp.

Completed November 14, 1935.

Producing gas well.

Rock pressure: 400 lbs.

Formation	Thickness, ft.
Surface	25
Flint	110
Lime and shale	340
Niagara	268
Rochester shale	38
Clinton	22
Red Medina	28
Red shale	14
Grey shale	57
White Medina	8
Red shale	1

Total depth 911

Gas at 811, 817, and 825 feet.

Fresh water at 70 feet.

BROADWAY GAS SYNDICATE

G. Bartlett No. 1, lot 19, S. $\frac{1}{2}$ of N. $\frac{1}{2}$, con. VI,
Walpole tp.

Completed January 15, 1935.

Producing gas well.

Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	13
Flint	107
Lime and shale	343
Niagara	257
Rochester shale	66
Clinton	28
Red Medina sand	25
Red Medina shale	17
Grey shale	54
White Medina	12
Red shale	4

Total depth 926

Gas at 801 and 826 feet.

Fresh water at 65 feet.

BROADWAY GAS SYNDICATE

G. Bartlett No. 2, lot 19, S. $\frac{1}{2}$ of N. $\frac{1}{2}$, con. VI,
Walpole tp.

Completed September 30, 1935.

Producing gas well.

Rock pressure: 405 lbs.

Formation	Thickness, ft.
Surface	25
Flint	105
Lime and shale	350
Niagara	271
Rochester shale	37
Clinton	27
Red Medina	43
Grey shale	52
White Medina	12
Red shale	3

Total depth 925

Gas at 806, 821, 827, and 833 feet.

Fresh water at 60 feet.

BROADWAY GAS SYNDICATE

G. Bartlett No. 3, lot 19, S. $\frac{1}{2}$ of N. $\frac{1}{2}$, con. VI,
Walpole tp.

Completed October 22, 1935.

Producing gas well.

Rock pressure: 410 lbs.

Formation	Thickness, ft.
Surface	26
Flint	110
Lime and shale	344
Niagara	271
Rochester shale	36
Clinton	28
Red Medina	44
Grey shale	56
White Medina	12
Red shale	3

Total depth 930

Gas at 821 and 827 feet.

Fresh water at 45 feet.

DELHI GAS SYNDICATE

C. Buck No. 1, lot 6, S. $\frac{1}{2}$, con. IV, Walpole tp.
Completed June 4, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	23
Flint	127
Lime and shale	370
Niagara	285
Rochester shale	40
Clinton	25
Red Medina sand	26
Red Medina shale	10
Grey shale	60
White Medina	12
Red shale	3
Total depth	981

Fresh water at 110 feet.

DELHI GAS SYNDICATE

W. Craddock No. 1, lot 5, S.E. $\frac{1}{4}$, con. IV,
Walpole tp.
Completed February 18, 1935.
Producing gas well.
Rock pressure: 485 lbs.

Formation	Thickness, ft.
Surface	33
Flint	132
Lime and shale	380
Niagara	210
White lime	66
Rochester shale	29
Clinton	22
Red Medina	50
Grey shale	54
White Medina	14
Total depth	990

Gas at 890 feet.
Fresh water at 100 feet.

DELHI GAS SYNDICATE

W. Craddock No. 2, lot 5, S.E. $\frac{1}{4}$, con. IV,
Walpole tp.
Completed February 26, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	25
Flint	165
Lime and shale	355
Niagara	270
Rochester shale	48
Clinton	25
Red Medina sand	18
Red Medina shale	22
Grey shale	57
White Medina	14
Red shale	4
Total depth	1,003

Fresh water at 50 and 150 feet.

DELHI GAS SYNDICATE

W. Craddock No. 3, lot 5, S.E. $\frac{1}{4}$, con. IV,
Walpole tp.
Completed March 18, 1935.
Producing gas well.
Rock pressure: 465 lbs.

Formation	Thickness, ft.
Surface	34
Flint	131
Lime and shale	380
Niagara	210
White lime	61
Rochester shale	25
Clinton	27
Red Medina sand	45
Grey shale	54
White Medina	14
Total depth	991

Gas at 896 and 941 feet.
Fresh water at 110 feet.

DELHI GAS SYNDICATE

W. Doughty No. 1, lot 7, N.E. $\frac{1}{4}$ of N. $\frac{1}{2}$, con. IV,
Walpole tp.
Completed April 25, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	46
Flint	94
Lime and shale	375
Niagara	266
Rochester shale	54
Clinton	24
Red Medina sand	8
Red Medina shale	19
Grey shale	79
White Medina	8
Red shale	4
Total depth	977

Fresh water at 60 feet.

DOMESTIC NATURAL GAS SYNDICATE

T. McNeill No. 1, lot 5, con. VII, Walpole tp.
Completed July 16, 1935.
Producing gas well.
Rock pressure: 375 lbs.

Formation	Thickness, ft.
Surface	19
Flint	93
Lime and shale	379
Niagara	256
Shale	53
Clinton	32
Red Medina	45
Grey shale	43
White Medina	13
Red shale	37
Total depth	970

Gas at 810, 856, and 920 feet.
Fresh water at 30 feet; sulphur water at 80 feet.

DOMESTIC NATURAL GAS SYNDICATE No. 2

Wm. Sanders No. 1, lot 5, con. VII, Walpole tp.
Completed August 19, 1935.
Producing gas well.
Rock pressure: 375 lbs.

Formation	Thickness, ft.
Surface	20
Flint	74
Lime and shale	381
Niagara	285
Shale	53
Clinton	30
Red Medina	46
Grey shale	50
White Medina	12
Red shale	4
Total depth	955

Gas at 869 feet.
Fresh water at 125 feet; sulphur water at 400 feet.

DOMESTIC NATURAL GAS SYNDICATE No. 2

Wm. Sanders No. 2, lot 5, con. VII, Walpole tp.
Completed November 30, 1935.
Producing gas well.
Rock pressure: 370 lbs.

Formation	Thickness, ft.
Surface	10
Flint	74
White sand	15
Lime and shale	391
Niagara	291
Shale	36
Clinton	30
Red Medina	47
Grey shale	46
White Medina	12
Red shale	50
Total depth	1,002

Gas at 870 feet.
Oil at 945 feet.
Fresh water at 50 feet; sulphur water at 420 feet.

GASFINDERS GAS COMPANY

C. Devine No. 1, lot 13, con. VIII, Walpole tp.
Completed February 16, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	11
Flint	64
White sand	15
Lime and shale	369
Niagara	255
Guelph lime	20
Shale	51
Clinton	32
Red Medina	33
Shale	50
White Medina	12
Red shale	7
Total depth	917

Black water at 90 feet.

KELLY GAS SYNDICATE

M. Wilkins No. 2, lot 21, N. ½, con. VI,
Walpole tp.
Completed May 14, 1936.
Producing gas well.
Rock pressure: 430 lbs.

Formation	Thickness, ft.
Surface	12
Flint	98
Lime and shale	350
Niagara	262
Rochester shale	57
Clinton	24
Red Medina	35
Red shale	10
Grey shale	52
White Medina	12
Red shale	3
Total depth	915

Gas at 811, 818, and 828 feet.
Fresh water at 59 feet.

KELLY GAS SYNDICATE

G. Schweyer No. 1, lot 20, S.E. ¼, con. V,
Walpole tp.
Completed October 10, 1935.
Producing gas well.
Rock pressure: 390 lbs.

Formation	Thickness, ft.
Surface	23
Flint	104
Lime and shale	375
Niagara	242
Rochester shale	57
Clinton	23
Red Medina	28
Red shale	27
Grey shale	58
White Medina	9
Red shale	1
Total depth	937

Gas at 850 feet.
Fresh water at 59 feet.

KELLY GAS SYNDICATE

M. Wilkins No. 3, lot 21, N. ½, con. VI,
Walpole tp.
Completed June 11, 1935.
Producing gas well.
Rock pressure: 445 lbs.

Formation	Thickness, ft.
Surface	16
Flint	104
Lime and shale	346
Niagara	255
Rochester shale	61
Clinton	25
Red Medina	33
Red shale	9
Grey shale	63
White Medina	9
Red shale	3
Total depth	924

Gas at 786, 822, and 829 feet.
Fresh water at 75 feet.

KELLY GAS SYNDICATE

G. Schweyer No. 2, lot 20, S.E. ¼, con. V,
Walpole tp.
Completed November 7, 1935.
Producing gas well.
Rock pressure: 380 lbs.

Formation	Thickness, ft.
Surface	13
Flint	104
Lime and shale	385
Niagara	250
Rochester shale	58
Clinton	23
Red Medina	29
Red shale	17
Grey shale	57
White Medina	9
Red shale	4
Total depth	949

Gas at 853 feet.
Fresh water at 60 feet.

KELLY GAS SYNDICATE

M. Wilkins No. 4, lot 21, N. ½, con. VI,
Walpole tp.
Completed July 3, 1935.
Producing gas well.
Rock pressure: 460 lbs.

Formation	Thickness, ft.
Surface	18
Flint	96
Lime and shale	347
Niagara	258
Rochester shale	56
Clinton	32
Red Medina	29
Red shale	16
Grey shale	56
White Medina	3
Red shale	4
Total depth	915

Gas at 793 feet.
Fresh water at 38 feet.

KELLY GAS SYNDICATE

M. Wilkins No. 5, lot 21, N. $\frac{1}{2}$, con. VI,
Walpole tp.

Completed July 26, 1935.
Producing gas well.
Rock pressure: 415 lbs.

Formation	Thickness, ft.
Surface	21
Flint	97
Lime and shale	354
Niagara	260
Rochester shale	57
Clinton	25
Red Medina	29
Red shale	17
Grey shale	60
White Medina	4
Red shale	2
Total depth	926

Gas at 810 feet.
Fresh water at 83 feet.

KELLY GAS SYNDICATE

M. Wilkins No. 6, lot 21, N. $\frac{1}{2}$, con. VI,
Walpole tp.

Completed August 17, 1935.
Producing gas well.
Rock pressure: 400 lbs.

Formation	Thickness, ft.
Surface	13
Flint	90
Lime and shale	358
Niagara	253
Rochester shale	60
Clinton	24
Red Medina	26
Red shale	18
Grey shale	57
White Medina	7
Red shale	1
Total depth	907

Gas at 794 and 820 feet.
Fresh water at 22 feet.

LADD AND KNIGHT

W. Addison No. 1, lot 16, S.E. $\frac{1}{4}$, con. VIII,
Walpole tp.

Completed December 24, 1935.
Producing gas well.
Rock pressure: 320 lbs.

Formation	Thickness, ft.
Surface	18
Flint	90
Lime and shale	380
Niagara	200
Grey lime	35
Rochester shale	50
Clinton	28
Red Medina	39
Grey shale	55
White Medina	15
Red shale	5
Total depth	915

Sulphur water at 80 feet; black water at 220 and 500 feet.

LADD AND KNIGHT

R. Butler No. 1, lot 8, N. $\frac{1}{2}$, con. VII, Walpole tp.
Completed November 22, 1935.

Producing gas well.
Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	23
Flint	79
Lime and shale	380
Niagara	266
Shale	51
Clinton	28
Red Medina	30
Grey shale	56
White Medina	12
Red shale	5
Total depth	930

Fresh water at 65 feet; black water at 170 feet.

LADD AND KNIGHT

G. Dossar No. 1, lot 6, W. $\frac{1}{2}$, con. VIII, Walpole tp.
Completed October 17, 1935.
Producing gas well.
Rock pressure: 455 lbs.

Formation	Thickness, ft.
Surface	18
Flint	75
Lime and shale	389
Niagara	276
Shale	52
Clinton	24
Red Medina	44
Grey shale	55
White Medina	17
Red shale	50
Total depth	1,000

Gas at 818, 935, and 942 feet.
Fresh water at 62 feet.

LADD AND KNIGHT

J. Wodham No. 1, lot 5, S.W. $\frac{1}{4}$, con. VIII,
Walpole tp.

Completed September 7, 1935.
Producing gas well.
Rock pressure: 455 lbs.

Formation	Thickness, ft.
Surface	20
Flint	76
Lime and shale	389
Niagara	274
Shale	51
Clinton	30
Red Medina	46
Grey shale	42
White Medina	14
Red shale	50
Total depth	992

Gas at 860 and 935 feet.
Fresh water at 45 feet.

LYMBURNER BROS. AND WEBBER

A. Dennis No. 2, lot 24, con. IV, Walpole tp.

Completed July 1, 1935.
Producing gas well.
Rock pressure: 365 lbs.

Formation	Thickness, ft.
Surface	7
Flint	135
Lime and shale	355
Niagara	251
Shale	59
Clinton	27
Red Medina	41
Shale	60
White Medina	10
Red shale	50
Total depth	995

Gas at 900 and 951 feet.
Fresh water at 60 feet.

LYMBURNER BROS. AND WEBBER

C. Gee No. 3, lot 24, con. IV, Walpole tp.

Completed June 5, 1935.
Producing gas well.
Rock pressure: 405 lbs.

Formation	Thickness, ft.
Surface	7
Flint	126
Lime and shale	355
Niagara	253
Shale	60
Clinton	26
Red Medina	50
Shale	59
White Medina	10
Red shale	1
Total depth	947

Gas at 837 and 887 to 900 feet.
Sulphur water at 644 feet.

McCARTER AND ALLEN

C. S. McCarter No. 1, lot 3, E. ½, con. VII,
Walpole tp.

Completed November 23, 1935.
Producing gas well.
Rock pressure: 365 lbs.

Formation	Thickness, ft.
Surface	12
Flint	93
Lime and shale	368
Niagara	205
Rochester shale	20
Guelph lime	24
Shale	45
Clinton	32
Red Medina	58
Grey shale	65
White Medina	18
Red shale	102

Total depth..... 1,042

Gas at 772, 809, and 936 feet.
Fresh water at 75 feet; sulphur water at 425 feet.

MONARCH GAS SYNDICATE

F. P. House No. 4, lot 23, con. VI, Walpole tp.

Completed January 14, 1935.
Producing gas well.
Rock pressure: 435 lbs.

Formation	Thickness, ft.
Surface	9
Flint	90
Lime and shale	351
Niagara	210
White lime	55
Rochester shale	42
Clinton	24
Red Medina	47
Grey shale	50
White Medina	12
Red shale	2

Total depth..... 892

Gas at 807 feet.
Fresh water at 18 feet.

MONARCH GAS SYNDICATE

F. P. House No. 5, lot 23, con. VI, Walpole tp.

Completed September 13, 1935.
Producing gas well.
Rock pressure: 485 lbs.

Formation	Thickness, ft.
Surface	24
Flint	90
Lime and shale	353
Niagara	260
Rochester shale	46
Clinton	25
Red Medina	50
Grey shale	55
White Medina	7
Red shale	2

Total depth..... 912

Gas at 793 feet.
Fresh water at 575 feet.

OTTERVILLE NATURAL GAS SYNDICATE

A. Evans No. 1, lot 4, con. I, Walpole tp.

Completed March 2, 1935.
Producing gas well.
Rock pressure: 318 lbs.

Formation	Thickness, ft.
Surface	20
Flint	158
Shale	362
Niagara	273
Shale	50
Clinton	27
Red Medina	55
Shale	56
White Medina	12

Total depth..... 1,013

Gas at 878 and 905 feet.
Fresh water at 60 feet; black water at 100 feet.

OTTERVILLE NATURAL GAS SYNDICATE

A. B. Hoover No. 2, lot 5, con. I, Walpole tp.

Completed January 21, 1935.
Producing gas well.
Rock pressure: 312 lbs.

Formation	Thickness, ft.
Surface	9
Flint	165
Lime, gypsum, and shale	340
Niagara lime	215
Shale	53
Clinton	25
Red Medina	52
Shale	66
White Medina	12
Red shale	9

Total depth..... 1,006

Gas at 864 and 894 feet.
Fresh water at 9 feet; black water at 78 feet; sulphur water at 585 feet.

OTTERVILLE NATURAL GAS SYNDICATE

A. B. Hoover No. 3, lot 5, con. I, Walpole tp.

Completed March 12, 1935.
Producing gas well.
Rock pressure: 335 lbs.

Formation	Thickness, ft.
Surface	18
Flint	138
Lime and shale	354
Niagara	288
Shale	52
Clinton	21
Red Medina	53
Shale	68
White Medina	11
Red shale	4

Total depth..... 1,007

Gas at 921 and 995 feet.
Fresh water at 14 feet; sulphur water at 63 feet; black water at 540 feet.

W. C. PATTERSON

H. Bradley No. 1, lot 10, con. V, Walpole tp.

Completed August 12, 1935.
Producing gas well.
Rock pressure: 520 lbs.

Formation	Thickness, ft.
Surface	14
Flint	90
Lime and shale	376
Niagara	285
Shale	33
Clinton	30
Red Medina	40
Shale	57
White Medina	11
Red shale	4

Total depth..... 940

Fresh water at 80 feet; black water at 460 feet.

W. C. PATTERSON

H. Bradley No. 2, lot 10, con. V, Walpole tp.

Completed October 4, 1935.
Producing gas well.
Rock pressure: 525 lbs.

Formation	Thickness, ft.
Surface	24
Flint	114
Lime and shale	362
Niagara	280
Shale	36
Clinton	25
Red Medina	33
Shale	66
White Medina	13
Red shale	40

Total depth..... 993

Gas at 850, 856, and 948 feet.
Fresh water at 87 feet.

W. C. PATTERSON

H. Bradley No. 3, lot 10, con. V, Walpole tp.
Completed December 6, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	30
Flint	90
Lime and shale	385
Niagara	274
Shale	37
Clinton	28
Red Medina	31
Shale	60
White Medina	20
Shale	3

Total depth..... 958
Fresh water at 76 feet.

W. C. PATTERSON

J. Carpenter No. 1, lot 3, con. IV, Walpole tp.
Completed March 12, 1935.
Producing gas well.
Rock pressure: 350 lbs.

Formation	Thickness, ft.
Surface	14
Flint	150
Lime and shale	356
Niagara	278
Shale	45
Clinton	25
Red Medina	35
Grey shale	23

Total depth..... 926
Sulphur water at 70 feet.

W. C. PATTERSON

J. Carpenter No. 2, lot 3, E. ½, con. IV, Walpole tp.
Completed June 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	20
Flint	147
Lime and shale	391
Niagara	263
Shale	20
Clinton	33
Red Medina	35
Shale	55
White Medina	15
Red shale	4

Total depth..... 983
Fresh water at 54 feet.

W. C. PATTERSON

A. Evans No. 1, lot 5, con. II, Walpole tp.
Completed October 8, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	7
Flint	143
Lime and shale	354
Niagara	300
Shale	35
Clinton	27
Red Medina	35
Shale	60
White Medina	18
Red shale	5

Total depth..... 984
Fresh water at 41 feet.

W. C. PATTERSON

P. Inonson No. 1, lot 10, con. VI, Walpole tp.
Completed July 13, 1935.
Producing gas well.
Rock pressure: 415 lbs.

Formation	Thickness, ft.
Surface	26
Flint	94
Lime and shale	375
Niagara	286
Shale	32
Clinton	28
Red Medina	33
Shale	63
White Medina	15
Red shale	4

Total depth..... 956
Fresh water at 68 feet; black water at 495 feet.

W. C. PATTERSON

P. Inonson No. 2, lot 10, con. VI, Walpole tp.
Completed September 7, 1935.
Producing gas well.
Rock pressure: 475 lbs.

Formation	Thickness, ft.
Surface	20
Flint	100
Lime and shale	371
Niagara	283
Shale	36
Clinton	28
Red Medina	41
Shale	56
White Medina	16
Red shale	51

Total depth..... 1,002
Gas at 827, 846, and 944 feet.
Fresh water at 18 feet; black water at 491 feet.

W. C. PATTERSON

B. Kindry No. 2, lot 6, con. III, Walpole tp.
Completed June 19, 1935.
Producing gas well.
Rock pressure: 350 lbs.

Formation	Thickness, ft.
Surface	14
Flint	140
Lime and shale	371
Niagara	280
Shale	45
Clinton	30
Red Medina	35
Shale	60
White Medina	15
Red shale	5

Total depth..... 995
Sulphur water at 90 feet.

W. C. PATTERSON

B. Kindry No. 3, lot 6, con. III, Walpole tp.
Completed August 1, 1935.
Producing gas well.
Rock pressure: 300 lbs.

Formation	Thickness, ft.
Surface	8
Flint	142
Lime and shale	350
Niagara	300
Shale	40
Clinton	27
Red Medina	40
Shale	60
White Medina	11
Red shale	5

Total depth..... 983
Black water at 80 feet.

W. C. PATTERSON

B. Kindry No. 4, lot 6, con. III, Walpole tp.
Completed August 31, 1935.
Producing gas well.
Rock pressure: 325 lbs.

Formation	Thickness, ft.
Surface	6
Flint	142
Lime and shale	352
Niagara	300
Shale	50
Clinton	27
Red Medina	35
Shale	60
White Medina	10
Red shale	48

Total depth..... 1,030
Black water at 80 and 490 feet.

W. C. PATTERSON

E. Mackey No. 1, lot 21, con. IV, Walpole tp.
Completed January 24, 1935.
Producing gas well.
Rock pressure: 275 lbs.

Formation	Thickness, ft.
Surface	10
Flint	120
Brown lime	398
Niagara	250
Shale	40
Clinton	26
Red Medina	40
Shale	60
White Medina	17
Red shale	5

Total depth..... 966
Fresh water at 80 feet; black water at 528 feet.

W. C. PATTERSON

E. Mackey No. 2, lot 2, con. IV, Walpole tp.
Completed December 7, 1935.
Producing gas well.
Rock pressure: 275 lbs.

Formation	Thickness, ft.
Surface	12
Flint	138
Lime and shale	360
Niagara	272
Shale	40
Clinton	27
Red Medina	40
Shale	60
White Medina	12
Red shale	4

Total depth..... 965
Black water at 90 feet.

W. C. PATTERSON

E. Miller No. 1, lot 2, con. IV, Walpole tp.
Completed May 10, 1935.
Producing gas well.
Rock pressure: 320 lbs.

Formation	Thickness, ft.
Surface	32
Flint	152
Lime and shale	359
Niagara	290
Shale	25
Clinton	26
Red Medina	28
Grey shale	74
White Medina	7
Red shale	3

Total depth..... 996
Clear water at 55 feet.

W. C. PATTERSON

G. Saunders No. 1, lot 5, con. III, Walpole tp.
Completed March 16, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	30
Flint	135
Lime and shale	375
Niagara	287
Shale	27
Clinton	25
Red Medina	35
Shale	60
White Medina	16
Red shale	5

Total depth..... 995
Black water at 165 feet.

W. C. PATTERSON

G. Saunders No. 2, lot 5, con. IV, Walpole tp.
Completed May 2, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	26
Flint	130
Lime and shale	377
Niagara	278
Shale	36
Clinton	25
Red Medina	40
Shale	60
White Medina	13
Red shale	5

Total depth..... 990
Fresh water at 60 feet; sulphur water at 156 feet.

FRED REICHEL

W. Hunt No. 1, lot 3, con. V, Walpole tp.
Completed May 10, 1935.
Producing gas well.
Rock pressure: 435 lbs.

Formation	Thickness, ft.
Surface	20
Flint	160
Lime and shale	350
Niagara	265
Shale	44
Clinton	29
Red Medina	42
Grey shale	55
White Medina	10
Red shale	40

Total depth..... 1,015
Gas at 841, 851, 867, 872, and 973 feet.
Fresh water at 60 and 155 feet.

FRED REICHEL

W. Hunt No. 2, lot 3, con. V, Walpole tp.
Completed August 7, 1935.
Producing gas well.
Rock pressure: 485 lbs.

Formation	Thickness, ft.
Surface	44
Flint	150
Lime and shale	343
Niagara	264
Shale	41
Clinton	28
Red Medina	42
Grey shale	60
White Medina	10
Red shale	2

Total depth..... 984
Gas at 844, 859, and 888 feet.
Sulphur water at 140 feet.

FRED REICHELD

D. Parkinson No. 1, lot 4, con. V, Walpole tp.
Completed August 22, 1935.
Producing gas well.
Rock pressure: 500 lbs.

Formation	Thickness, ft.
Surface	29
Flint	160
Lime and shale	351
Niagara	268
Shale	40
Clinton	27
Red Medina	40
Grey shale	60
White Medina	12
Red shale	40

Total depth..... 1,027

Gas at 850, 875, 881, and 986 feet.
Fresh water at 65 feet.

FRED REICHELD

D. Parkinson No. 2, lot 4, con. V, Walpole tp.
Completed July 2, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	31
Flint	160
Lime and shale	347
Niagara	262
Shale	45
Clinton	28
Red Medina	42
Shale	55
White Medina	10
Red shale	5

Total depth..... 985

Sulphur water at 150 feet.

FRED REICHELD

F. Reicheld No. 4, lot 10, con. V, Walpole tp.
Completed January 30, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	8
Flint	135
Lime and shale	342
Niagara	260
Shale	48
Clinton	28
Red Medina	40
Grey shale	60
White Medina	13
Red shale	3

Total depth..... 937

FRED REICHELD

F. Reicheld No. 5, lot 10, con. IV, Walpole tp.
Completed September 4, 1935.
Producing gas well.
Rock pressure: 505 lbs.

Formation	Thickness, ft.
Surface	22
Flint	125
Lime and shale	343
Niagara	269
Shale	57
Clinton	27
Red Medina	38
Grey shale	55
White Medina	10
Red shale	50

Total depth..... 996

Gas at 818, 831, and 943 feet.
Fresh water at 42 feet.

FRED REICHELD

F. Saunders No. 1, lot 3, con. V, Walpole tp.
Completed June 4, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	25
Flint	160
Lime and shale	350
Niagara	261
Shale	44
Clinton	28
Red Medina	38
Grey shale	53
White Medina	10
Red shale	2

Total depth..... 971

Sulphur water at 85 feet.

SANDUSK GAS AND OIL SYNDICATE

C. Doherty No. 1, lot 13, W. ½, con. VI, Walpole tp.
Completed April 19, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	26
Flint	140
Lime and shale	321
Niagara	270
Shale	51
Clinton	27
Red Medina	42
Grey shale	55
White Medina	14
Red shale	2

Total depth..... 948

Fresh water at 57 feet; black water at 70 feet.

SANDUSK GAS AND OIL SYNDICATE

C. Doherty No. 2, lot 13, W. ½, con. VI, Walpole tp.
Completed May 22, 1935.
Producing gas well.
Rock pressure: 478 lbs.

Formation	Thickness, ft.
Surface	11
Flint	104
Lime and shale	374
Niagara	270
Shale	52
Clinton	28
Red Medina	42
Grey shale	55
White Medina	12
Red shale	3

Total depth..... 951

Gas at 831, 836, 844, and 863 feet.
Sulphur water at 72 feet.

SANDUSK GAS AND OIL SYNDICATE

C. Doherty No. 3, lot 13, W. ½, con. VI, Walpole tp.
Completed July 9, 1935.
Producing gas well.
Rock pressure: 500 lbs.

Formation	Thickness, ft.
Surface	20
Flint	107
Lime and shale	363
Niagara	285
Shale	49
Clinton	28
Red Medina	42
Grey shale	46
White Medina	14
Red shale	1

Total depth..... 955

Gas at 853 and 868 feet.
Black water at 97 feet.

SANDUSK GAS AND OIL SYNDICATE

G. Duxbury No. 1, lot 18, con. IV, Walpole tp.
 Completed September 26, 1935.
 Producing gas well.
 Rock pressure: 235 lbs.

Formation	Thickness, ft.
Flint	100
Lime and shale	344
Niagara	283
Shale	53
Clinton	29
Red Medina	43
Grey shale	55
White Medina	14
Red shale	1

Total depth 922

Gas at 816, 818, 843, 857, and 864 feet.
 Black water at 595 feet.

SANDUSK GAS AND OIL COMPANY

G. Duxbury No. 2, lot 18, con. IV, Walpole tp.
 Completed November 1, 1935.
 Dry hole.

Formation	Thickness, ft.
Surface	29
Flint	100
Lime and shale	351
Niagara	275
Shale	53
Clinton	29
Red Medina	45
Grey shale	55
White Medina	14
Red shale	2

Total depth 953

Fresh water at 32 feet.

ELGIN STEWART

A. Stewart No. 1, lot 18, con. V, Walpole tp.
 Completed April 17, 1935.
 Producing gas well.
 Rock pressure: 280 lbs.

Formation	Thickness, ft.
Surface	9
Flint	91
Salt and pepper rock	45
Shale	355
Niagara	240
Guelph lime	30
Rochester shale	60
Clinton	32
Red Medina	47
Grey shale	65
White Medina	13
Red shale	3

Total depth 980

Gas at 824 and 879 feet.
 Sulphur water at 205 feet.

WALPOLE GAS SYNDICATE

W. McBurney No. 5, lot 18, S. 1/2, con. VII, Walpole tp.
 Completed July 20, 1935.
 Producing gas well.
 Rock pressure: 395 lbs.

Formation	Thickness, ft.
Surface	10
Flint	80
Lime and shale	357
Niagara	288
Rochester shale	52
Clinton	25
Red Medina	22
Red shale	15
Grey shale	59
White Medina	14
Red shale	4

Total depth 926

Gas at 820 and 830 feet.
 Fresh water at 50 feet.

WALPOLE GAS SYNDICATE

A. Porter No. 3, lot 17, S. 1/2, con. VII, Walpole tp.
 Completed August 17, 1935.
 Producing gas well.
 Rock pressure: 400 lbs.

Formation	Thickness, ft.
Surface	12
Flint	83
Lime and shale	350
Niagara	283
Clinton	31
Red Medina	6
Red shale	34
Grey shale	51
White Medina	12
Red shale	4

Total depth 916

Gas at 798 and 808 feet.
 Fresh water at 105 feet.

WALPOLE GAS SYNDICATE

A. Porter No. 4, lot 17, S. 1/2, con. VII, Walpole tp.
 Completed September 6, 1935.
 Producing gas well.
 Rock pressure: 390 lbs.

Formation	Thickness, ft.
Surface	13
Flint	110
Lime and shale	357
Niagara	272
White lime	52
Clinton	24
Red Medina	38
Red shale	38
Grey shale	60
White Medina	12
Red shale	3

Total depth 924

Gas at 772 and 921 feet.
 Fresh water at 85 feet.

Kent County

TERRY AND SONS

Terry and Sons, No. 1, City of Chatham, Chatham tp.
 Completed May 21, 1935.
 Dry hole.

Formation	Thickness, ft.
Clay and quag	64
Black shale	31
Black, and blue and grey shale	55
Upper soap	162
Middle lime	11
Lower soap	23
Dark shell	3
Lower lime	88
Sand	23
Lime	37

Total depth 497

Show of gas at 364 feet.
 Oil at 406 feet; pumped 60 barrels and then went dry.
 Fresh water at 62 feet; salt water at 437 to 440, 445 to 460, and 470 to 475 feet.

UNION GAS CO. OF CANADA, LTD.

O. Dudley No. 1, lot 5, con. XIII, Chatham tp.
Completed November 12, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	70
Hamilton	370
Grey, and brown and grey lime	85
Blue and grey lime	10
Brown and grey lime	5
Grey and brown lime	80
Brown, and grey and brown lime	75
Dark-brown lime	70
Brown and grey lime	45
Sharp grey lime	140
Brown and grey lime	140
Blue lime and gypsum	35
Blue lime	10
Blue lime and gypsum	15
Brown lime	20
Blue lime	80
Brown, and blue and brown lime	50
Brown and grey lime	20
Blue lime	10
Brown, and brown and grey lime	55
Blue and grey lime	35
Blue and brown lime	185
Brown and brown and grey lime	105
Blue lime	5
Brown and grey lime	160
Rochester blue shale	30
Red and blue shale	90
Grey-white limestone	20

Total depth..... 2,015
Fresh water at 70 feet; sulphur water at 515 feet.

AJAX OIL AND GAS CO., LTD.

H. Sterling No. 1, lot 1, E. ½ of W. ½, con. IV,
Dover East tp.

Completed April 9, 1935.
Producing gas well.
Rock pressure: 870 lbs.

Formation	Thickness, ft.
Surface	75
Hamilton shale	198
Lime	540
Sharp lime	90
Grey and brown lime	597
Salt	35
Brown and grey lime	390
White lime	45
Rochester shale	20
Red Medina	55
Grey shale	30
Lime and shells	4
Manitoulin dolomite	71
Red and grey shale	250
Grey shale and shells	90
Grey shale	270
Brown shale	144
Shells	6
Black shale	10
Trenton lime	210

Total depth..... 3,130
Gas at 3,038, 3,047, 3,063, 3,082 to 3,086, 3,100 to
3,110, and 3,115 to 3,120 feet.
Fresh water at 40 feet; salt water at 415 to 440 and
1,045 feet; brown water at 2,960 feet.

AJAX OIL AND GAS CO., LTD.

J. Antaya No. 2, lot 1, con. III, Dover East tp.
Completed November 9, 1935.
Producing gas well.
Rock pressure: 665 lbs.

Formation	Thickness, ft.
Surface	75
Soap	115
Soap and lime	87
Middle lime	18
Grey lime	185
Light-brown lime	15
Brown lime	325
Grey lime	10
Brown lime	286
Grey lime	109
Brown lime	155
Blue lime	75
Brown lime	40
Brown lime and salt	40
Brown lime	320
White lime	105
Blue shale	30
Red and blue shale	120
Blue shale	10
White Medina	40
Red shale	165
Blue shale	390
Brown shale	189
Trenton	205

Total depth..... 3,109
Gas at 2,940, 2,949, 2,972, 2,980, and 2,985 feet.
Water at 440 and 715 feet; salt water at 1,920, 3,023
to 3,237, and 3,109 feet.

CENTRAL PIPE LINE CO., LTD.

J. Sterling No. 1, lot 1, con. IV, Dover East tp.
Completed February 14, 1935.
Producing gas well.
Rock pressure: 810 lbs.

Formation	Thickness, ft.
Surface	76
Hamilton	201
Lime	485
Hard lime	325
Grey lime	493
Brown lime	63
Grey lime	110
Brown lime	111
Grey lime	128
Red Medina	26
Red shale	22
Grey shale	30
Lime and shale	46
Hard and sharp grey lime	56
Queenston	110
Lime shells and shale	182
Grey shale	220
Utica	241

Total depth..... 3,025
Gas at 2,989 feet.
Sulphur water at 433 feet.

CENTRAL PIPE LINE CO., LTD.

J. Sterling No. 2, lot 1, con. III, Dover East tp.
Completed August 27, 1935.
Producing gas well.
Rock pressure: 810 lbs.

Formation	Thickness, ft.
Surface	76
Hamilton	209
Lime	740
Brown lime	19
Lime	457
Salt and lime	48
Lime	419
Blue shale	23
Grey lime	5
Grey lime and grey shale	6
Red shale	13
Red Medina	29
Blue and red shale	12
Blue shale	14
Blue and red shale	38
Blue shale	14
White Medina	45
Queenston	137
Blue shale	156
Hard grey lime	75
Grey shale and shells	51
Blue shale	129
Utica	195
Trenton	159

Total depth..... 3,069

Gas at 2,940, 3,000, 3,015, 3,045, and 3,064 feet.
Fresh water at 68 and 478 to 571 feet; salt water
at 612, 853, 1,025 to 1,088, and 1,774 to 2,916
feet.

KNIGHT, DOBIE, STOVER, AND RAWLINGS

P. Jubenville No. 3, lot 3, F.C., Dover East tp.
Completed May 1, 1935.
Producing gas well.
Rock pressure: 1,175 lbs.

Formation	Thickness, ft.
Surface	87
Hamilton shale and lime	158
Top of Onondaga, 245 feet.	
Bottom of Niagara, 1,850 feet.	
Top of Trenton, 2,780 feet.	
Shaley band at 380 feet in Trenton	5
Trenton lime	38
Total depth, 3,203 feet.	

Gas at 2,886 to 2,890, 2,905 to 2,911, and 2,911 to
2,917 feet.
Sulphur water at 400 and 700 to 1,050 feet; salt
water at 1,525 feet.

LADD AND KNIGHT

J. Antaya No. 1, lot 1, con. IV, Dover East tp.
Completed June 15, 1935.
Producing gas well.
Rock pressure: 810 lbs.

Formation	Thickness, ft.
Surface	76
Hamilton	211
Big lime	229
Brown lime	44
Lime	26
Sharp grey lime	154
Grey-brown lime	986
Blue shale	25
Clinton	10
Red Medina	10
Blue and red shale	113
White Medina	40
Blue and red shale	278
Blue lime	18
Blue shale	323
Utica	117
Trenton	395

Total depth..... 3,309

Gas at 3,023 feet.
Sulphur water at 445 feet; salt water at 790 feet.

MIDWAL OIL AND GAS CO., LTD., ET AL.

C. Peltier No. 1, lot 5, con. III, Dover East tp.
Completed August 1, 1935.
Producing gas well.
Rock pressure: Not taken.

Formation	Thickness, ft.
Surface	79
Hamilton	228
Onondaga lime	113
Hard brown and grey lime	315
Brown and grey lime	264
Brown lime and gypsum	61
Grey and brown lime	55
Blue lime	70
Brown lime	140
Grey and brown lime	110
Brown lime	185
Grey and brown lime	9
Brown lime	156
Brown and grey lime	75
Rochester blue shale	28
Clinton	34
Cabot Head	84
Manitoulin dolomite	45
Red shale	611
Utica blue shale	143
Trenton lime	410
Blue shale	5
Trenton lime	45

Total depth..... 3,265

Gas at 1,549, 1,574, 1,610, and 3,240 feet.
Fresh water at 79 feet; sulphur water at 437 and
452 feet; salt water at 1,620 feet.

PRAIRIE GAS AND OIL CO., LTD.

M. Stephens No. 2, lot 2, con. III, Dover East tp.
Completed January 21, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	102
Hamilton shale and lime	148
Onondaga	175
Brown lime	275
Gritty brown lime	220
Brown lime	115
Blue and grey lime	430
Salt	30
Salt and lime shells	20
Brown and grey lime	265
Niagara lime	140 ¹
Red and blue shale	35
Red and grey shale	60
Blue shale	343
Hard shell	12
Blue shale	305 ¹
Brown and black shale	176
Trenton lime	379
Shale and lime	2
Trenton lime	494
Potsdam sandstone	5

Total depth..... 3,731

Show of gas at 3,581 feet.
¹The log is not reliable between 1,920 and 2,675 feet.

PRAIRIE GAS AND OIL CO., LTD.

M. Stephens No. 3, lot 2, con. III, Dover East tp.
Completed April 18, 1935.
Producing gas and oil well.

Formation	Thickness, ft.
Surface	75
Hamilton shale and lime	190
Onondaga	120
White lime	175
Gypsum	2
White lime	38
Brown lime	360
Brown and blue lime	690
Niagara	305
Rochester	25
Red shale	125
White Medina	45
Queenston	270
Blue shale	385
Utica	102
Trenton	374
Blue shale	11
Total depth	3,292

Gas at 2,940, 3,085, 3,112, and 3,277 feet.
Oil at 3,280 to 3,292 feet.
Fresh water at 42 feet.

E. P. ROWE

V. Duphette No. 1, lot 2, W. ½, con. IV,
Dover East tp.
Completed September 21, 1935.
Producing gas and oil well.
Rock pressure: 825 lbs.

Formation	Thickness, ft.
Clay	65
Gravel	8
Soap	157
Middle lime	20
Soap	35
Guelph lime	65
Lime	1,285
Niagara lime	325
Blue shale	30
Clinton	4
Red shale	56
Light-grey shale	20
Grey shale	30
White Medina	150
Red shale	10
Pink shale	50
Brown shale	150
Pink shale	210
Brown shale	230
Trenton lime	375
Total depth	3,275

Gas at 3,023, 3,050, 3,090, 3,095, and 3,100 feet.
Oil at 3,100 feet.
Fresh water at 70 feet; salt water at 560, 735, and 3,262 feet.

PRAIRIE GAS AND OIL CO., LTD.

M. Stephens No. 4, lot 2, con. III, Dover East tp.
Completed August 16, 1935.
Producing gas well.
Rock pressure: 850 lbs.

Formation	Thickness, ft.
Surface	89
Hamilton shale and lime	191
Onondaga lime	140
Detroit River, Salina, and Guelph:	
Sharp sand	80
Brown and grey lime	1,140
Niagara	315
Rochester shale	30
Clinton	4
Cabot Head	116
Manitoulin dolomite	48
Queenston and Hudson River:	
Red and pink shale	147
Brown shale	150
Blue shale	325
Utica brown shale	117
Trenton	382
Blue shale	4
Trenton	37
Total depth	3,315

Fresh water at 85 feet; black water at 435 feet;
brackish water at 1,925 feet.
Gas at 3,029 feet.

CENTRAL PIPE LINE CO., LTD.

G. Jubenville No. 4, lot 1, con. II, Dover West tp.
Completed December 20, 1935.
Producing gas well.

Formation	Thickness, ft.
Surface	83
Lime and soap	222
Brown lime	132
Lime	125
Lime and gypsum	11
Lime	247
Sharp lime	122
Lime	1,049
Lime and blue shale	36
Red shale	29
Blue shale	46
Shale and shell	33
Lime	12
White Medina	41
Red shale	142
Blue shale	124
Blue shells	18
Lime shells	36
Blue shale	282
Brown shale	107
Brown lime and shale	3
Trenton	514
Total depth	3,414

Gas at 2,950, 2,985, 3,062, and 3,161 to 3,172 feet.
Show of oil at 3,342 feet.
Fresh water at 75 and 169 feet; sulphur water at 200
and 255 feet; salt water at 304 and 1,933 feet.

F. W. KEHLET

J. Downie No. 1, lot 26, W. ½, con. XIV, Orford tp.
Completed March 16, 1935.
Dry hole.

Formation	Thickness, ft.
Sand.....	10
Clay.....	57
Hardpan and stones.....	114
Top rock.....	7
Soap.....	37
Dark shell.....	9
Soap streak.....	1
Lower lime.....	178
Water sand.....	2

Total depth..... 445

Show of gas at 317 to 322 feet.
Salt water at 445 feet.

F. W. KEHLET

J. Ross No. 1, lot 23, con. XV, Orford tp.
Completed February 10, 1935.
Producing oil well.

Formation	Thickness, ft.
Sand.....	10
Clay.....	60
Hardpan and boulders.....	80
Pipe clay.....	10
Soapstone.....	43
Dark streak and soap.....	7
Lower lime.....	125
Brown lime.....	7
Light lime.....	13

Total depth..... 415

Oil at 294 to 300, 332 to 351, and 395 to 400 feet.
Fresh water at 205, 263, and 395 feet.

L. G. KURTZ

H. Bloom No. 1, lot 26, con. XIV, Orford tp.
Completed March 28, 1935.
Small producing oil well.

Formation	Thickness, ft.
Sand.....	4
Clay.....	54
Hardpan and boulders.....	96
Soapstone.....	91
Dark streak.....	6
Lower lime.....	185

Total depth..... 436

Oil at 165, 245 to 251, and 321 to 328 feet.
Salt water at 421 feet.

L. G. KURTZ

H. Bloom No. 2, lot 26, con. XIV, Orford tp.
Completed April 12, 1935.
Dry hole.

Formation	Thickness, ft.
Sand.....	5
Clay.....	55
Hardpan.....	90
Upper soap.....	62
Middle lime.....	8
Lower soap.....	25
Dark streak.....	5
Lower lime.....	185

Total depth..... 435

Small show of oil at 318 to 324 feet.
Salt water at 425 feet.

L. G. KURTZ

H. Bloom No. 3, lot 26, con. XIV, Orford tp.
Completed April 26, 1935.
Small producing oil well.

Formation	Thickness, ft.
Sand.....	5
Clay.....	60
Hardpan and gravel.....	86
Upper soap.....	60
Middle lime.....	11
Lower soap.....	19
Dark streak.....	9
Lower lime.....	152

Total depth..... 402

Small flow of oil at 275 to 280 feet; mud and oil at 315 feet.
Fresh water at 100 feet.

L. G. KURTZ

H. Bloom No. 4, lot 26, con. XIV, Orford tp.
Completed July 6, 1935.
Small producing oil well.

Formation	Thickness, ft.
Sand.....	12
Clay.....	53
Hardpan and gravel.....	70
Upper soap.....	77
Middle lime.....	10
Lower soap.....	24
Dark streak.....	5
Lower lime.....	183
Water sand.....	4

Total depth..... 438

Show of gas at 155 and 282 feet.
Water at 384 to 406 feet.

GAS PRODUCERS SYNDICATE

G. L. Pardo No. 3, lot 140, N.T.R., Raleigh tp.
Completed February 24, 1935.
Producing gas well.
Rock pressure: 675 lbs.

Formation	Thickness, ft.
Surface.....	190
Soap.....	135
Grey lime.....	60
Brown lime.....	175
Brown and white lime.....	135
Grey lime.....	23
Brown and white lime.....	42
Grey lime.....	65
Brown lime.....	155
Gypsum and lime.....	20
Blue lime.....	5
Brown lime.....	25
Blue and brown lime.....	310
Salt.....	30
Brown lime.....	67
Brown and grey lime.....	101

Total depth..... 1,538

Gas at 1,400, 1,406, 1,411 to 1,414, 1,455, 1,460, 1,476, 1,489, 1,502, 1,510, and 1,539 feet.
Sulphur water at 535 feet; sulphur and salt water at 585 and 796 feet.

J. PERDUE

Sullivan No. 1, lot 1, con. I, Raleigh tp.
Completed August 17, 1935.
Dry hole.

Formation	Thickness, ft.
Surface.....	90
Upper soap.....	10
Lime.....	6
Soap.....	28
Middle lime.....	14
Lower soap.....	32
Dark streak.....	3
Lower lime.....	147
Sand.....	4

Total depth..... 334

Small show of oil at 185 feet.
Salt water at 330 feet.

E. P. ROWE

L. Bruette No. 1, lot 5, con. I, Raleigh tp.
Completed October 1, 1935.
Producing oil well.

Formation	Thickness, ft.
Surface	80
Lime shell	5
Soap	155
Middle lime	15
Soap	29
Grey lime	10
Light-brown lime	127
Sharp grey lime	29
White lime	10
Sharp grey lime	10
Grey lime	75
Lime and gypsum	195
Sharp brown lime	165
Lime and gypsum	515
Salt	65
Brown lime	45
Shale and lime	130
Brown lime	210
Grey lime	37
Blue shale	26
Clinton lime	2
Red shale	31
Blue shale	74
White Medina	60
Red shale	150
Blue shale	400
Brown shale	208
Trenton lime	392
Blue shale	4
Trenton lime	32

Total depth..... 3,286
Show of oil at 445 feet; oil at 3,261 feet.
Fresh water at 80 feet; black water at 450, 465, and 1,670 feet.

UNION GAS CO. OF CANADA, LTD.
J. D. Benedict No. 1, lot 140, N.T.R., Raleigh tp.
Completed February 18, 1935.
Producing gas well.
Rock pressure: 665 lbs.

Formation	Thickness, ft.
Surface	175
Hamilton shale and lime	140
Grey lime	245
Light-brown lime	10
Dark-brown and black lime	10
Light-brown lime	20
Sharp grey lime	220
Grey and brown lime	145
Grey lime and gypsum	10
Brown, and blue and brown lime	185
Blue lime	40
Blue, and brown and blue lime	50
Salt	35
Brown lime	115
Grey lime	40

Total depth..... 1,540
Gas at 1,403, 1,410, 1,418, and 1,497 to 1,540 feet.
Sulphur water at 550, 585, and 790 feet.

UNION GAS CO. OF CANADA, LTD.

J. Clayton No. 2, lot 17, con. XV, Raleigh tp.
Completed November 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	223
Hamilton shale and lime	73
Brown and grey lime	334
Sharp grey lime	210
Grey and brown lime	155
Blue lime	5
Grey lime	60
Blue lime	100
Brown, and brown and blue lime	70
Brown lime	60
Grey and blue lime	70
Blue and brown lime	45
Brown lime	50
Grey lime	157

Total depth..... 1,612
Gas at 1,430 feet; show of gas at 1,530 feet.
Sulphur water at 470 feet; salt water at 1,585 and 1,612 feet.

UNION GAS COMPANY OF CANADA, LTD.

S. W. Russell No. 1, lot 17, con. XIII, Raleigh tp.
Completed June 20, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	175
Hamilton shale and lime	132
Grey lime	243
Brown lime	50
Grey lime	30
Sharp grey lime	200
Grey lime	90
Brown lime	90
Grey and brown lime	95
Blue lime	75
Brown and grey lime	50
Blue and brown lime	25
Brown lime	60
Blue, and blue and brown lime	115
Grey and brown lime	195
Brown lime	155
Grey lime	40

Total depth..... 1,820
Show of gas at 1,515 feet.
Sulphur water at 335, 555, and 585 feet; salt water at 1,590 and 1,750 feet.

UNION GAS COMPANY OF CANADA, LTD.

S. W. Russell No. 2, lot 18, con. XIV, Raleigh tp.
Completed September 4, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	170
Hamilton shale and lime	103
Grey lime	237
Brown lime	70
Sharp grey lime	195
Brown lime	55
Grey lime	80
Grey lime and gypsum	45
Blue, and blue and grey lime	100
Brown, and blue and brown lime	250
Salt	130
Brown lime	75
Grey lime	60
Brown lime	25
Grey lime	10
Brown lime	215
Grey lime	18

Total depth..... 1,838
Show of gas at 285, 1,085, 1,105, and 1,605 feet.
Sulphur water at 420, 440, and 740 feet; salt water at 1,650 and 1,838 feet.

LADD AND ZEIGEN

Jones No. 1, lot 169, N.T.R., Tilbury East tp.
Completed January 30, 1935.
Producing gas well.
Rock pressure: 240 lbs.

Formation	Thickness, ft.
Surface	146
Soapstone	76
Shell	3
Soapstone	56
Grey lime	254
Brown lime	22
Grey lime and gypsum	18
Sharp lime	110
Brown lime	18
Grey lime and gypsum	48
Grey lime	58
Grey lime and gypsum	120
Brown lime	6
Grey lime	12
Brown lime and gypsum	12
Brown lime	41
Grey lime and gypsum	15
Brown lime	45
Grey lime	80
Grey lime and gypsum	15
Grey lime	65
Brown lime	45
Brown lime and gypsum	24
Brown lime	23
Grey lime	49
Brown lime	30
Grey lime	10

Total depth 1,401
Gas at 1,220 and 1,322 feet.
Fresh water at 135 feet; black water at 665 feet; salt water at 1,361, 1,391, and 1,401 feet.

JACK PERDUE

R. C. Church No. 1, lot 1, R.R., Tilbury East tp.
Completed August 26, 1935.
Dry hole.

Formation	Thickness, ft.
Loam	5
Quag	35
Mild hardpan	51
Sand	5
Upper soap	53
Middle lime	12
Lower soap	37
Lower lime	81
Total depth	279

Fresh water at 91 feet; salt water at 275 feet.

CHRYSLER AND LULLER

Humphrey No. 1, lot 8, con. V, Zone tp.
Completed December 18, 1935.
Dry hole.

Formation	Thickness, ft.
Sand	15
Quag	10
Clay	33
Hardpan	2
Black shale	87
Top lime	40
Upper soap	145
Middle lime	10
Lower soap	18
Dark streak	2
Lower lime	133
Sharp sand	3
Total depth	498

Show of gas at 71 feet.
Fresh water at 68 feet; salt water at 498 feet.

J. VONBERG

H. Brewer No. 1, lot 19, con. VIII, Zone tp.
Completed December 12, 1935.
Small producing oil well.

Formation	Thickness, ft.
Top sand	17
Clay	38
Gravel	146
Dark streak	3
Soapstone	2
Soft lime	7
Grey hard lime	77
Dark lime	77
Light lime	18
Total depth	385

Oil at 213 and 367 to 385 feet.
Fresh water at 55 feet; salt water at 290 feet.

C. R. WALKER

Buchanan No. 1, lot 8, con. VI, Zone tp.
Completed September 17, 1935.
Dry hole.

Formation	Thickness, ft.
Sand	21
Quag	5
Clay	36
Hardpan	26
Black shale	34
Top lime	40
Upper soap	149
Middle lime	9
Lower soap	22
Dark streak	3
Lower lime	130
Sharp sand	10
Total depth	485

Fresh water at 120 feet; salt water at 378 feet.

LADD AND ZEIGEN

Mifflin No. 2, lot 7, con. XIV, Tilbury East tp.
Completed July 23, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	125
Top lime	5
Shale	9
Upper soap	68
Middle lime	8
Lower soap	63
Lower lime	127
Brown lime	33
Grey lime	57
Brown lime	105
Grey lime	27
Sharp lime	119
Grey lime	42
Brown lime	37
Grey lime	23
Brown lime	6
Grey lime	96
Lime and gypsum	61
Brown lime	6
Grey and brown lime	6
Lime and gypsum	39
Brown lime	47
Lime and gypsum	51
Grey lime	80
Brown lime	40
Grey lime	60
Brown lime	25
Grey lime	18

Total depth 1,303
Gas at 1,282 and 1,403 feet.
Fresh water at 126 feet; salt water at 435 feet; black water at 635 feet.

G. E. AND D. E. WILLITS

Corlet No. 1, lot 9, con. III, Zone tp.

Completed July 31, 1935.

Dry hole.

Formation	Thickness, ft.
Sand	10
Quag	5
Clay	40
Hardpan	32
Black shale	53
Top lime	38
Upper soap	137
Middle lime	10
Lower soap	20
Dark streak	5
Lower lime	70

Total depth..... 420

Fresh water at 65 feet.

G. E. AND D. E. WILLITS

R. Jones No. 1, lot 5, con. V, Zone tp.

Completed September 10, 1935.

Dry hole.

Formation	Thickness, ft.
Sand	12
Clay	33
Hardpan	120
Upper soap	30
Middle lime	12
Lower soap	23
Dark streak	9
Soap streak	3
Lower lime	158

Total depth..... 400

Small show of oil at 235 feet.

Salt water at 255 feet.

G. E. AND D. E. WILLITS

Lutz No. 1, lot 14, R.R., Zone tp.

Completed June 24, 1935.

Small producing oil well.

Formation	Thickness, ft.
Sand	18
Clay	44
Hardpan and gravel	103
Soap	46
Dark streak	10
Lower lime	164
Oil rock	27

Total depth..... 412

Oil at 190 to 194, 220 to 225, 231 to 236, 290 to 295,
310 to 315, and 385 to 395 feet.

G. E. AND D. E. WILLITS

M. Mercer No. 1, lot 4, con. V, Zone tp.

Completed September 28, 1935.

Dry hole.

Formation	Thickness, ft.
Sand	15
Clay	21
Hardpan	139
Upper soap	49
Middle lime	8
Lower soap	24
Dark streak	3
Lower lime	137
Sharp lime	14
Sand	6

Total depth..... 420

Show of gas at 36 feet.

Salt water at 414 feet.

Lambton County

GEORGE SULLIVAN ET AL.

Lot 9, con. C, Kettle Point Indian Reservation.

Bosanquet tp.

Completed May 24, 1935.

Small show of gas.

Formation	Thickness, ft.
Surface	9
Huron shale	12
Hamilton shale	365
Dark streak	4
Ondondaga lime	113

Total depth..... 503

Show of gas at 390 and 453 feet.

Salt water at 34 feet, dark salt water at 501 feet.

BROOKEFIELD OIL AND GAS CO., LTD.

F. Atcheson No. 3, lot 23, con. XIII, Brooke tp.

Completed February, 1935.

Dry hole.

Formation	Thickness, ft.
Clay	57
Hardpan	3
Black shale	22
Blue shale	5
Lime and soap	98
Soap	115
Middle lime	20
Lower soap	32
Big lime	82

Total depth..... 434

Show of gas at 400 to 405 feet.

Show of oil at 352 to 354 and 365 to 372 feet.

Fresh water at 57 to 60 feet; salt water at 432 feet.

BROOKEFIELD OIL AND GAS CO., LTD.

T. Scott No. 1, lot 22, con. XIII, Brooke tp.

Completed March 15, 1935.

Small producing oil well.

Formation	Thickness, ft.
Clay	61
Black shale	27
Top rock	3
Grey shale	74
Top soap	130
Middle lime	23
Lower soap	26
Big lime	117

Total depth..... 461

Oil at 416 to 418, 422, and 454 to 457 feet.

EMPIRE GOLD CO., LTD.

R. Powell No. 1, lot 25, con. XIII, Brooke tp.

Completed March 1935.

Dry hole.

Formation	Thickness, ft.
Surface	55
Black shale	25
Grey lime and soap	85
Soap	135
Lime	18
Lower soap	33
Lower lime	54

Total depth..... 405

Show of oil at 354 feet.

Fresh water at 55 feet; salt water at 405 feet.

GUBB AND RUSSELL

F. Braithwaite No. 2, lot 9, con. II, Brooke tp.
Completed September 21, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	52
Top rock	80
Upper soap	132
Middle lime	21
Lower soap	25
Big lime	90

Total depth..... 400

Fresh water at 52 feet; salt water at 400 feet.

GUBB AND RUSSELL

F. Braithwaite No. 3, lot 9, con. II, Brooke tp.
Completed October 8, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	52
Black shale	13
Top rock	70
Upper soap	139
Middle lime	10
Lower soap	32
Big lime	40

Total depth..... 365

Fresh water at 58 feet.

GUBB AND RUSSELL

H. Wilcox No. 1, lot 10, pt. of W. 1/2, con. II,
Brooke tp.

Completed May 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	58
Top rock	73
Soapstone	134
Middle lime	19
Lower soap	27
Big lime	145

Total depth..... 456

Fresh water at 57 feet; salt water at 456 feet.

LILBY AND WINKLER

W. Cambell No. 1, lot 8, con. II, Brooke tp.

Completed May 22, 1935.
Producing oil well.

Formation	Thickness, ft.
Surface	58
Top rock	71
Top soap	135
Middle lime	21
Lower soap	27
Big lime	88

Total depth..... 400

Oil at 332 feet.
Fresh water at 59 feet.

LILBY AND WINKLER

W. Cambell No. 2, lot 8, con. II, Brooke tp.

Completed June 19, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	59
Black shale	16
Top rock	15
Top soap	136
Middle lime	21
Lower soap	27
Big lime	37

Total depth..... 351

Fresh water at 58 feet.

SCIENTIFIC OIL AND GAS SYNDICATE

R. Serson No. 2, lot 27, con. XII, Brooke tp.

Completed October 8, 1935.
Producing gas well.
Small show of oil.

Formation	Thickness, ft.
Surface clay	52
Hardpan	13
Black shale	11
Grey shale	7
Lime	4
Lime and soap	43
Hard grey lime	10
Lime and soap	18
Hard grey lime	3
Soap	125
Soapy lime	4
Middle lime	25
Lower soap	23
Dark lime	8
Lower lime	107

Total depth..... 453

Gas at 160 feet.
Show of oil at 401 and 452 feet.
Fresh water at 55 feet; salt water at 401 to 452 feet;
black water at 453 feet.

BERT WILSON

J. Lewis No. 2, lot 27, con. XII, Brooke tp.

Completed April 13, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	30
Sand	30
Gravel	15
Grey shale	5
Top rock	80
Top soap	128
Middle lime	26
Lower soap	19
Grey lime	12
Big lime	120

Total depth..... 465

Salt water at 150 feet.

LEO WILSON ET AL.

R. Serson No. 1, lot 27, con. XII, Brooke tp.

Completed March 22, 1935.
Producing gas well.
Small oil yield.

Formation	Thickness, ft.
Clay	52
Black gravel	16
Grey shale	27
Soap	30
Hard lime	3
Soap	22
Lime	4
Soap	133
Middle lime	21
Soap	21
Dark lime	8
Big lime	128

Total depth..... 475

Gas at 95 feet.
Oil at 348 feet.
Sulphur water at 68 to 80 feet; brackish water at 400 to 405 feet; dark salt water at 450 to 475 feet.

GUBB AND RUSSELL

W. T. Weese No. 1, lot 22, N. ½, con. III, Dawn tp.
Completed December 9, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	62
Black shale	298
Top rock	55
Top soap	130
Middle lime	13
Lower soap	42
Onondaga	365
Hard grey lime	105
Hard brown and grey lime	80
Total depth	1,150

Fresh water at 62 feet; sulphur water at 725 feet.

ERNEST KELLS

E. Kells No. 1, Town of Petrolia, Enniskillen tp.
Completed August 30, 1936.
Producing oil well.

Formation	Thickness, ft.
Surface	94
Limestone	50
Upper soap	120
Limestone	16
Lower soap	45
Limestone	139
Total depth	464

Oil at 266, 280, 338, and 460 feet.
Fresh water at 93, 338, and 390 feet.

OLGA GAS AND OIL CO., LTD.

J. H. Coleman No. 1, lot 18, con. VI, Euphemia tp.
Completed August, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	50
Top rock	22
Soap and shell	142
Middle lime	11
Lower soap	20
Dark streak	7
Soap	3
Lower lime	159
Total depth	414

Show of oil at 348 feet.
Fresh water at 50 feet; salt water at 348 feet.

OLGA GAS AND OIL CO., LTD.

D. Ferguson No. 1, lot 19, con. VI, Euphemia tp.
Completed September, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	60
Hardpan	9
Top rock	32
Soap	99
Shell	4
Soap	38
Middle lime	11
Lower soap	20
Dark streak	5
Soap	1
Lower lime	59
Total depth	338

Show of oil at 287 feet.

OLGA GAS AND OIL CO., LTD.

C. McDonald No. 1, lot 17, con. VIII, Euphemia tp.
Completed July, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	78
Top rock	24
Soapstone and shell	70
Hard soap	38
Shell	6
Soap	22
Middle lime	15
Lower soap	19
Dark streak	5
Soap	1
Lower lime	119
Sandstone	4
Total depth	401

Show of oil and gas at 295 feet.
Fresh water at 79 feet; salt water at 397 to 401 feet.

F. L. PATTERSON ET AL.

A. Bruce No. 1, lot 4, con. IX, Moore tp.
Completed April 17, 1935.
Small producing oil well.

Formation	Thickness, ft.
Surface	145
Top rock	47
Top soap	133
Middle lime	12
Lower soap	45
Lower lime	392
Total depth	465

Oil at 392, 400, and 420 feet.
Fresh water at 172 feet.

F. L. PATTERSON ET AL.

A. Bruce No. 2, lot 4, con. IX, Moore tp.
Completed April 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	152
Top rock	63
Top soap	115
Middle lime	12
Lower soap	43
Lower lime	70
Total depth	455

Show of oil at 395 and 410 feet.
Fresh water at 171 feet.

F. L. PATTERSON ET AL.

A. Glover No. 1, lot 4, con. X, Moore tp.
Completed May 11, 1935.
Small producing oil well.

Formation	Thickness, ft.
Surface	145
Hardpan	5
Top rock	62
Top soap	120
Middle lime	13
Lower soap	50
Lower lime	69
Total depth	464

Oil at 422 feet.
Fresh water at 176 feet.

ALEXANDER GARDINER

D. McDonald No. 1, lot 5, W. 1/2, con. I,
Plympton tp.

Completed July 24, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	163
Top rock	50
Top soap	140
Middle lime	15
Lower soap	45
Lower lime	72

Total depth 485

Fresh water at 167 feet.

F. L. MERRITT ET AL.

A. J. Garnon No. 1, lot 26, con. XIV, Plympton tp.

Completed July 13, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	73
Hardpan	3
Black shale	45
Top rock	84
Hard soap	30
Lime	10
Top soap	130
Middle lime	4
Lower soap	66
Lower lime	88

Total depth 533

Fresh water at 73 to 80 feet.
Black salty water at 531 to 533 feet.

WM. P. REDDICK

W. P. Reddick No. 1, lot 4, E. 1/4, con. II,
Plympton tp.

Completed August 28, 1935.
Small producing gas well.

Formation	Thickness, ft.
Brown clay	10
Blue clay	144
Top rock	40
Middle lime	15
Lower soap	50
Lower lime	55

Total depth 470

Gas at 435 and 460 feet.
Oil at 464 feet, but not pumped.

BERT WILSON, G. SULLIVAN, ET AL.

J. Cooper No. 1, lot 17, S. 1/2 of W. 1/2, con. III N,
Warwick tp.

Completed January 5, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	56
Gravel	2
Hamilton lime	68
Lime and soap	34
Lime	23
Soap	17
Lime	12
Soap	68
Lime	10
Soap	25
Lime	5
Soap	22
Middle lime	16
Lower soap	40
Onondaga lime	114

Total depth 512

Show of oil at 435 to 440, 495 to 500, and 505 to 510 feet.
Sulphur water at 64 feet.

BERT WILSON, G. SULLIVAN, ET AL.

W. Hall No. 1, lot 23, con. III N., Warwick tp.

Completed February 1, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	67
Hamilton lime	50
Soap	8
Lime	35
Grey shale	21
Lime	14
Soap	85
Lime	2
Soap	8
Lime	15
Soap	15
Lime	23
Soap	17
Lime	10
Soap	10
Onondaga lime	110

Total depth 500

Show of oil at 400 to 405, 435 to 437, and 470 to 475 feet.

Sulphur water at 70 to 80 feet.

Lincoln County

LINCOLN GAS CO., LTD.

M. Lymburner No. 2, lot 1, con. III, Caistor tp.

Completed April 2, 1935.

Producing gas well.
Rock pressure: 130 lbs.

Formation	Thickness, ft.
Surface	73
Lime and shale	24
Niagara	220
Shale	37
Clinton	35
Red Medina	40
Shale	60
White Medina	10
Red shale	50

Total depth 549

Gas at 400 and 495 feet.

LINCOLN GAS CO., LTD.

Neigarth No. 1, lot 1, con. III, Caistor tp.

Completed February 21, 1935.

Producing gas well.
Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	72
Lime and shale	25
Niagara	220
Shale	37
Clinton	26
Red Medina	39
Shale	60
White Medina	10
Red shale	50

Total depth 539

Gas at 397 and 489 feet.

LINCOLN GAS CO., LTD.

Neigarth No. 2, lot 1, con. III, Caistor tp.

Completed September 10, 1935.

Producing gas well.
Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	77
Lime and shale	25
Niagara	208
Shale	35
Clinton	38
Red Medina	40
Shale	60
White Medina	10
Red shale	50

Total depth 543

Gas at 488 feet.
Sulphur water at 40 feet.

LINCOLN GAS CO., LTD.

Neigarth No. 3, lot 1, con. III, Caistor tp.

Completed October 20, 1935.

Producing gas well.

Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	65
Lime and shale	15
Niagara	205
Shale	53
Clinton	28
Red Medina	29
Shale	57
White Medina	18
Red shale	50

Total depth..... 520

Gas at 358, 390, and 465 feet.

Sulphur water at 15 feet.

LINCOLN GAS CO., LTD.

L. Vaughn No. 1, lot 5, S. ½, con. I,
Gainsborough tp.

Completed November 27, 1935.

Producing gas well.

Rock pressure: 125 lbs.

Formation	Thickness, ft.
Surface	80
Lime and shale	25
Niagara	203
Shale	47
Clinton	27
Red Medina	32
Shale	54
White Medina	15
Red shale	50

Total depth..... 533

Gas at 360 to 370 and 470 to 475 feet.

Sulphur water at 50 feet.

Middlesex County

J. H. GAUL

H. Anderson No. 1, lot 24, con. I,
North Dorchester tp.

Completed July 22, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	158
Grey lime	42
Grey and brown lime	200
Brown lime and gypsum	50
Grey lime	170
Grey and brown lime	75
Blue shale	105
Lime and gypsum	25
Hard brown lime	195
Grey lime and gypsum	30
Brown lime	50
Guelph lime	27
Niagara lime	203
Blue shale	48
Clinton sand	10
Blue shale	17

Total depth..... 1,405

Gas at 1,055 and 1,102 feet; gas blew down rapidly.
Fresh water at 30 and 200 feet; sulphur water at
680 feet.

IRWIN CARROTHERS AND C. DEMARAY

W. L. McDonald No. 1, lot 11, con. V, Metcalfe tp.

Completed July 8, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	110
Petrolia (upper soap)	118
Widder (middle lime)	21
Olentangy (lower soap)	20
Dark hard lime	5
Mud vein	2
Onondaga (lower lime)	

Total depth..... 276

Fresh water at 85 to 90 feet.

CLARENCE DEMARAY

Wm. McIntyre No. 1, lot 11, con. IV, Metcalfe tp.

Completed October 30, 1935.

Dry hole.

Formation	Thickness, ft.
Clay	110
Sand	3
Hardpan	23
Soap	102
Middle lime	25
Lower soap	20
Lime	98

Total depth..... 391

Fresh water at 113 feet; black water at 385 feet.

FRED W. CRAFT

M. Armstrong No. 1, lot 17, con. IV, Mosa tp.

Completed January 19, 1935.

Dry hole.

Formation	Thickness, ft.
Sand	8
Clay	67
Hardpan and gravel	60
Upper soap	115
Middle lime	12
Lower soap	17
Dark streak	7
Lower lime	104
White sharp lime	15
Dark lime	28

Total depth..... 433

Fresh water at 80 feet; salt water at 428 feet.

DOMINION PETROLEUM CO., LTD.

J. Walker No. 19, lot 6, N. ½, con. VI, Mosa tp.

Completed November 1, 1935.

Dry hole.

Formation	Thickness, ft.
Drift	77
Hardpan	3
Soap	82
Lime	5
Soap	45
Lime	15
Shale	23
Lime (mostly dolomite)	150

Total depth..... 400

Fresh water at 77 and 140 feet.

L. P. MYTINGER ET AL.

H. Gould No. 3, lot 13, con. II, Mosa tp.

Completed October 1, 1935.

Small producing oil well.

Formation	Thickness, ft.
Clay	70
Broken formation	45
Soap	140
Middle lime	20
Lower soap	19
Lower lime	106

Total depth..... 400

Oil at 315 and 355 feet.

Fresh water at 60 feet; salt water at 355 feet.

SLOAN AND ZOOK

N. Gillies No. 1, lot 6, con. VII, Mosa tp.
Completed October 30, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	20
Quag	10
Clay	25
Sand	20
Hardpan	10
Upper soap	142
Middle lime	15
Lower soap	23
Dark streak	3
Lower lime	117
Grey and brown lime	6
Light-grey lime	9
Total depth	400

SLOAN AND ZOOK

P. McTavish No. 1, lot 6, con. VII, Mosa tp.
Completed November 15, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	30
Quag	37
Hardpan	22
Top rock	45
Upper soap	153
Middle lime	10
Lower soap	27
Dark streak	16
Lower lime	98
Total depth	439

Fresh water at 30 and 130 feet.

SLOAN AND ZOOK

D. J. Mitchell No. 1, lot 7, con. V, Mosa tp.
Completed November 25, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	75
Hardpan	10
Top rock	20
Upper soap	144
Middle lime	15
Lower soap	20
Dark streak	4
Lower lime	125
Sharp lime	10
Total depth	423

Fresh water at 75 feet.

BERT WILSON ET AL.

D. McIntyre No. 1, lot 1, con. XI, Mosa tp.
Completed November 15, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	22
Grey shale	26
Black shale	47
Lime and shale	55
Soap	10
Lime	8
Soap	134
Middle lime	18
Soap	24
Dark lime	6
Grey lime	15
Total depth	465

Fresh water at 16 feet; salt water at 462 feet.

Norfolk County

MIDDLETON NORFOLK GAS CO., LTD.
V. McDonald No. 2, lot 5, con. III, N.T.R.,
Middleton tp.

Completed February 23, 1935.
Producing gas well.
Rock pressure: 365 lbs.

Formation	Thickness, ft.
Surface	201
Lime and shale	167
Flint	122
Brown lime and shale	408
Niagara	5

Total depth 903

Gas at 900 feet.
Sulphur water at 900 feet.

MIDWAL OIL AND GAS CO., LTD.

W. Kelly No. 1, lot 2, S. pt., con. III, N.T.R.,
Middleton tp.

Completed March 21, 1935.
Dry hole.

Formation	Thickness, ft.
Clay	60
Quicksand	100
Clay and hardpan	34
Grey lime	110
Flint	125
Shale	175
Brown lime	286
Niagara lime	317
Blue shale	45
Clinton	28
Red Medina	2

Total depth 1,282

Sulphur gas at 915 feet.
Fresh water at 65 feet; sulphur water at 200 feet.

E. P. ROWS

C. D. Coyle No. 3, lot 4, N.W. pt., con. II, N.T.R.,
Middleton tp.

Completed February 6, 1935.
Producing gas well.
Rock pressure: 550 lbs.

Formation	Thickness, ft.
Quicksand	140
Clay and gravel	38
Brown lime	145
Flint	125
Shale and gypsum	430
Niagara	295
Blue shale	55
Clinton lime	23
Pink shale	2
Thorold sand	4
Red Medina	15
Blue shale	10

Total depth 1,282

Gas at 1,253 and 1,257 feet.
Fresh water at 165 feet; sulphur water at 245 feet.

EMPIRE NATURAL GAS, LTD.

M. and A. Hazen No. 1, lot 16, con. I,
South Walsingham tp.

Completed April 30, 1935.
Producing gas well.
Rock pressure: 400 lbs.

Formation	Thickness, ft.
Surface	305
Lime and shale	170
Flint	135
Lime and shale	345
Niagara	279
Shale	56
Clinton	34
Red Medina	17
Shale	28

Total depth 1,369

Gas at 1,303 feet.
Fresh water at 300 feet.

EMPIRE NATURAL GAS, LTD.

C. Leighfield No. 1, lot 12, con. B,
South Walsingham tp.

Completed November 22, 1935.

Producing gas well.

Rock pressure: 600 lbs.

Formation	Thickness, ft.
Surface	298
Lime and shale	177
Flint	125
Lime and shale	370
Niagara	268
Shale	65
Clinton	28
Red Medina	22
Grey shale	40

Total depth..... 1,393

Gas at 1,310 and 1,348 feet.

Sulphur water at 300 feet.

EMPIRE NATURAL GAS, LTD.

H. Mudford No. 2, lot 17, con. I,
South Walsingham tp.

Completed February 24, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	305
Lime and shale	170
Flint	130
Lime and shale	365
Niagara	276
Shale	52
Clinton	27
Red Medina	10
Grey shale	104
White Medina	15
Red shale	4

Total depth..... 1,458

Fresh water at 305 feet.

ALOKA OIL CO., LTD.

F. Smith No. 1, lot 6, con. III, Woodhouse tp.

Completed April 26, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	47
Limestone	25
Flint	140
Brown lime	38
Lime and shale	354
Niagara lime	280
Blue shale	57
Clinton	35
Red Medina	17
Blue shale	90
White lime	15
Red shale	4

Total depth..... 1,104

Show of gas at 978 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE

N. Brown No. 1, lot 22, con. VI, Woodhouse tp.

Completed July 12, 1935.

Dry hole.

Formation	Thickness, ft.
Surface	42
Flint	130
Lime and shale	427
Niagara	225
Shale	53
Clinton	32
Red Medina	30
Grey shale	58
White Medina	12
Red shale	3

Total depth..... 1,012

Fresh water at 78 feet; black water at 647 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE

W. Ferris No. 1, lot 20, S. ½, con. VI, Woodhouse tp.

Completed June 21, 1935.

Producing gas well.

Rock pressure: 500 lbs.

Formation	Thickness, ft.
Surface	10
Flint	160
Lime and shale	420
Niagara	210
Shale	47
Clinton	17
Red Medina	45
Grey shale	60
White Medina	15
Red shale	25

Total depth..... 1,009

Gas at 859, 879, and 979 feet.

Sulphur water at 60 and 300 feet; black water at 400 feet.

BURCHELL GAS AND OIL SYNDICATE

W. Ferris No. 2, lot 22, con. VI, Woodhouse tp.

Completed July 25, 1935.

Producing gas well.

Rock pressure: 500 lbs.

Formation	Thickness, ft.
Surface	31
Flint	160
Lime and shale	380
Niagara	210
Shale	59
Clinton	38
Red Medina	32
Grey shale	55
White Medina	12
Red shale	27

Total depth..... 1,004

Gas at 900 feet.

Fresh water at 60 feet; sulphur water at 160 feet;
black water at 400 feet.

BURCHELL NATURAL GAS AND OIL SYNDICATE

W. Ferris No. 3, lot 22, con. VI, Woodhouse tp.

Completed September 2, 1935.

Producing gas well.

Rock pressure: 500 lbs.

Formation	Thickness, ft.
Surface	24
Flint	160
Lime and shale	350
Niagara	250
Shale	50
Clinton	32
Red Medina	38
Grey shale	50
White Medina	12
Red shale	3

Total depth..... 969

Fresh water at 60 feet; sulphur water at 90 feet;
black water at 500 feet.

WALTER GAS SYNDICATE

C. Blow No. 2, lot 12, con. VI, Woodhouse tp.

Completed March 2, 1935.

Producing gas well.

Rock pressure: 385 lbs.

Formation	Thickness, ft.
Surface	65
Flint	110
Lime and shale	385
Niagara	320
Rochester shale	33
Clinton	28
Red Medina	25
Blue shale	65
White Medina	11
Red shale	12

Total depth..... 1,054

Gas at 922 and 941 feet.

Sulphur water at 143 feet.

WALTER GAS SYNDICATE

J. Walker No. 1, lot 12, con. VI, Woodhouse tp.
 Completed November 11, 1935.
 Producing gas well.
 Rock pressure: 385 lbs.

Formation	Thickness, ft.
Surface	57
Flint	105
Lime and shale	388
Niagara lime	319
Rochester shale	41
Clinton sand	34
Red Medina	16
Blue shale	66
White Medina	9
Red shale	2

Total depth..... 1,037
 Gas at 914 and 960 feet.
 Fresh water at 72 feet, sulphur water at 143 feet.

Oxford County

ALOKA OIL AND GAS CO., LTD.

C. C. Hawkins No. 1, lot 23, N.W. ¼, con. X II
 Dereham tp.

Completed September 13, 1935.
 Producing gas well.
 Rock pressure: 450 lbs.

Formation	Thickness, ft.
Surface	166
Lime and shale	24
Brown and grey lime	110
Lime and shale	85
Flint	35
Brown and grey lime	65
Lime and shale	45
Shale and gypsum	160
Lime and shale	20
Brown lime	55
Shale	30
Lime and shale	45
Brown lime	10
Lime and shale	40
Guelph	15

Total depth..... 905
 Sulphur water at 166 feet.

ALOKA OIL AND GAS CO., LTD.

C. C. Hawkins No. 2, lot 23, con. XII,
 Dereham tp.

Completed December 6, 1935.
 Producing gas well.
 Rock pressure: 465 lbs.

Formation	Thickness, ft.
Surface	164
Lime and shale	21
Brown lime	55
Grey lime	45
Brown lime	15
Lime and shale	80
Flint	70
Brown lime	30
Lime and shale	50
Shale and gypsum	170
Lime and shale	55
Shale	30
Lime and shale	50
Brown lime	10
Lime and shale	45
Grey lime	27

Total depth..... 917
 Gas at 900 to 915 feet.
 Sulphur water at 168 and 430 feet.

Welland County

HALDIMAND NATURAL GAS SYNDICATE

W. Reinhart No. 1, lot 3, N. ½, con. II, N.R.,
 Bertie tp.

Completed September 10, 1935.
 Producing gas well.
 Rock pressure: 75 lbs.

Formation	Thickness, ft.
Surface	106
Salina	214
Guelph and Niagara	210
Rochester	100
Clinton	32
Red Medina	75
Manitoulin	10
White Medina	30
Queenston	45

Total depth..... 822
 Gas at 712 and 760 feet.
 Fresh water at 35 feet.

WELLAND COUNTY GAS SYNDICATE

J. G. Morninstar No. 1, lot 16, con. VIII, N.R.,
 Bertie tp.

Completed August 15, 1935.
 Dry hole.

Formation	Thickness, ft.
Surface	16
Salina	210
Guelph and Niagara	220
Rochester	108
Clinton	32
Red Medina	65
Manitoulin	27
White Medina	25
Queenston	5

Total depth..... 708

WESTERN ONTARIO NATURAL GAS CO., LTD.

J. Lampman No. 1, lot 38, con. VI, Wainfleet tp.

Completed September 3, 1935.
 Producing gas well.
 Rock pressure: 235 lbs.

Formation	Thickness, ft.
Surface	114
Lime and shale	79
Niagara	225
Shale	55
Clinton	30
Red Medina	40
Grey shale	48
White Medina	17
Red shale	24

Total depth..... 632
 Gas at 596 to 606 feet.
 Fresh water at 115 feet; salt water at 210 feet.

WESTERN ONTARIO NATURAL GAS CO., LTD.

W. Ricker No. 1, lot 37, N. ½, con. VI,
 Wainfleet tp.

Completed September 30, 1935.
 Dry hole.

Formation	Thickness, ft.
Surface	114
Lime and shale	53
Niagara	225
Shale	55
Clinton	29
Red Medina	40
Grey shale	52
White Medina	17
Red shale	15

Total depth..... 600
 Fresh water at 115 feet; salt water at 190 feet.

WESTERN ONTARIO NATURAL GAS CO., LTD.
P. Shefley No. 1, lot 39, con. V, Wainfleet tp.
Completed August 10, 1935.
Producing gas well.
Rock pressure: 235 lbs.

Formation	Thickness, ft.
Surface	121
Lime and shale	79
Niagara	225
Shale	60
Clinton	30
Red Medina	45
Grey shale	53
White Medina	17
Red shale	10

Total depth..... 640

Gas at 616 and 638 feet.
Fresh water at 122 feet; salt water at 215 feet.

MINING CLAIMS MART

G. Ortt No. 1, lot 1, con. IV, Willoughby tp.
Completed June 22, 1935.
Producing gas well.
Rock pressure: 165 lbs.

Formation	Thickness, ft.
Surface	50
Lime and shale	163
Niagara	215
Shale	60
Clinton	36
Red Medina	74
Shale	20
White Medina	15
Red shale	50

Total depth..... 683

Gas at 548 feet.
Fresh water at 60 feet.

F. A. SCHWEGLER

F. A. Schwegler No. 1, lot 15, B.F., N.R.,
Willoughby tp.
Completed June 4, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	22
Salina	191
Guelph and Niagara	210
Rochester	97
Clinton	32
Red Medina	70
Manitoulin	20
White Medina	23

Total depth..... 665

Fresh water at 35 feet.

F. A. SCHWEGLER

F. A. Schwegler No. 2, lot 15, B.F., N.R.,
Willoughby tp.
Completed July 20, 1935.
Dry hole.

Formation	Thickness, ft.
Surface	16
Salina	210
Guelph and Niagara	220
Rochester	108
Clinton	32
Red Medina	65

Formation—Continued	
Manitoulin and White Medina	52
Queenston	6

Total depth..... 709
Fresh water at 40 feet.

Wentworth County

C. A. HEWITT

C. A. Hewitt No. 1, lot 31, con. IX, Binbrook tp.
Completed October 25, 1935.
Producing gas well.
Rock pressure: 70 lbs.

Formation	Thickness, ft.
Surface	47
Lime and gypsum	12
Niagara lime	243
Shale	30
Clinton	28
Red Medina	43
Blue shale	60
White Medina	12
Red shale	40

Total depth..... 515

Gas at 470 feet.
Fresh water at 50 feet.

SECURITY OIL AND GAS CO., LTD.

Logan No. 1, lot 15, con. VIII, Glanford tp.
Completed August 14, 1935.
Producing gas well.
Rock pressure: 50 lbs.

Formation	Thickness, ft.
Surface	55
Lime and shale	25
Niagara	228
Lime and shale	48
Clinton	22
Blue shale	24
Red Medina	10
Shale	26
White Medina	14
Red shale	48

Total depth..... 500

Gas at 446 feet.
Fresh water at 60 feet; sulphur water at 221 feet.

SECURITY OIL AND GAS CO., LTD.

Logan No. 2, lot 15, con. VIII, Glanford tp.
Completed September 10, 1935.
Producing gas well.
Rock pressure: 50 lbs.

Formation	Thickness, ft.
Surface	45
Lime and shale	35
Niagara	228
Lime and shale	48
Clinton	24
Blue shale	24
Red Medina	10
Shale	27
White Medina	15
Red shale	48

Total depth..... 504

Gas at 450 feet.
Fresh water at 80 feet; sulphur water at 221 feet.

PETROLEUM IN 1935

By R. B. Harkness

General

The year 1935 is the fifth consecutive year of increase in crude oil production in Ontario. The total increase over the lowest year (1930) is 32 per cent., and there has been only one new discovery. The production for 1935 is 165,040 barrels, an increase of 23,655 barrels over 1934. To equal this year's production it is necessary to go back fourteen years, at which time there were 1,400 more producing wells than at present, the price for oil at the refinery was \$2.67, and the Dominion Government paid a bounty of 52½ cents per barrel, a total of \$1.09½ above to-day's prices.

The greatest increase is in the Bothwell field where, without increasing the production area but simply by opening old wells shut down and abandoned possibly thirty years ago, the production has been brought back to the level of 1911-12. Two new fields have been brought into production since these years, the Dover and the Dawn; but the chief increase came in the old fields that had been in operation from fifty to seventy years.

Undoubtedly the psychological effect of falling price was one of the main reasons for the annual decline in production. In 1921 the price of steel pipe was at its peak and the price of oil had dropped about \$1.25 per barrel; operators felt that they could not afford to buy new pipe and fittings at such prices in the face of a falling market. The fields were very old, and on the basis of the history of all oil fields seemed due for abandonment. Old wells had been patched up by using equipment from still older wells, and naturally water troubles increased; it required all the knowledge and courage of the then Inspector of Oil Wells, John Scott, to ferret out the source of the many troubles and insist on repairs being made. This was made more difficult on account of the many absentee owners. However, he and the more courageous operators kept the fields alive; those who lost courage sold out to others. Many of these purchasers were young men who had returned after having had a world-wide experience, and who applied their knowledge to good effect. About this time the electric motor superseded the gasoline and natural gas engine. The old-type gas engine was subject to many troubles both night and day, and particularly in winter, whereas the electric motor is dependable at all times. As the price of steel pipe declined, replacements increased. It had been practically a universal practice to pump groups of wells on a property into one central tank; the new operators who measured individual wells discovered that many were not producing enough oil to pay for the cost of pumping; these were abandoned. No doubt as this practice increases, many more unprofitable wells will be abandoned.

Following the success obtained in the Michigan oil fields of pumping hydrochloric acid into oil wells where the oil horizon was limestone and thereby enlarging the many channels by which the oil reached the bottom of the well, some tests of this method were made in Petrolia and Oil Springs but without complete success, chiefly owing to the faulty equipment, particularly casing packers, which are mostly "home-made" and designed to resist pressure only from above. These failed to retain the pressure exerted on the acid, and it was found impossible to force the acid into the rock. Some benefit resulted in the thorough cleaning of the limestone walls of the well, much of the accumulated paraffin, scale, and other sediment always present in old oil wells being removed.

The work mentioned in last year's report¹ of cleaning out and recasing, and in some cases redrilling, old wells in the Bothwell field was continued in 1935 with remarkable success. Practically the whole area, which was opened up after the discovery of oil on the Thames by Lick in 1865 but which has lain idle for many years, has been treated in this manner.

Activity in Brooke township has ceased, following the disappointing results from the wells, which had a high initial production. From a total of 36 wells, representing an estimated investment of \$50,000 in wells and equipment, a total of 2,063 barrels of oil was produced, having a value of \$4,371.

Activity in the Dover field extended across the Thames river into Raleigh township, where a well was drilled that had an initial production of 20 barrels per day. This well has a very small quantity of gas, which is not sufficient to make the oil flow to the surface. Although the well is in Raleigh township, it has been included in the Dover field, since it is actually an extension of that field and not of the old Raleigh field, which lies six miles to the south. This well and two others produced over 13,000 barrels.

Not all of the Dawn oil wells are operated continuously; some of them produce gas as well as oil, and the oil production for the year depends on the continuity of operation. The increase and decrease in annual production does not in any way indicate additional producing wells or failure of the present wells.

Fourteen drilling rigs, described as "shallow-well rigs," were in use during the year, representing a capital investment of \$30,200. These drilled a total footage of 29,612 feet. The employees numbered 23, and they received \$11,950 in wages. These figures are included in the totals for the crude petroleum industry shown at the bottom of Table I.

TABLE I—OIL PRODUCED IN ONTARIO BY FIELDS, 1927-1935

Field	1928	1929	1930	1931	1932	1933	1934	1935
	bbls.	bbls.	bbls.	bbls.	bbls.	bbls.	bbls.	bbls.
Petrolia and Ennis-killen.....	60,547	56,284	55,130	57,515	58,871	57,298	57,938	59,282
Oil Springs.....	35,653	30,737	29,160	30,792	31,438	31,343	29,863	31,646
Moore tp.....	2,148	1,230	1,576	3,739	3,272	2,192	2,963	3,263
Sarnia tp.....	1,221	749	1,149	1,466	1,227	2,181	825	870
Plympton tp.....	371	315	296	296	274	211	202	237
Bothwell.....	24,255	23,236	21,176	18,024	19,460	22,935	32,133	34,715
Tilbury East tp....	736	138	149					
Dover tp.....	773	715	457	891	453	763	558	13,117
Raleigh tp.....						239	264	195
Onondaga tp.....	186	243	231	34	543	946	601	431
Mosa tp.....	7,268	6,851	7,166	8,517	8,429	8,168	9,031	8,788
Thamesville.....	1,006	427	447	462	534	847	614	428
Euphemia tp.....				121	496	510	189	(¹)
Dunwich tp.....		148	365	507	285	346	283	408
Brooke tp.....		52					1,941	122
Dawn tp.....					5,061	8,079	3,980	11,538
Total.....	134,164	121,125	117,302	122,364	130,343	136,058	141,385	165,040
Value.....	\$249,981	\$253,678	\$235,746	\$219,993	\$247,468	\$253,486	\$299,874	\$346,156
Average price.	\$1.86	\$2.09	\$2.00	\$1.80	\$1.89	\$1.86	\$2.12	\$2.10

¹Included in Dawn township.

The capital employed in producing crude petroleum is \$1,040,436; the number of employees, 221; and the wages paid, \$127,862. This information is furnished by the Dominion Bureau of Statistics, Ottawa.

¹Ont. Dept. Mines, Vol. XLIV, pt. 5, 1935, p. 67.

TABLE II—OIL WELLS AND THEIR PRODUCTION, 1935

Field	Wells			Wells drilled		Production ¹		Gain or loss in 1935	
	Operating	Not operating	Abandoned	Producing	Dry	bbls.	gals.	Gain	Loss
Petrolia and Enniskillen...	736	768	11	1	.....	59,281	20	1,344	.....
Oil Springs.....	876	148	3	.....	.....	31,646	17	1,784	.....
Moore tp.....	55	39	1	.....	3	3,263	31	301	.....
Sarnia tp.....	72	31	.....	.....	.....	870	19	45	.....
Plympton tp.....	24	8	.....	1	3	236	32	35	.....
Bothwell.....	220	70	5	6	9	34,714	17	2,582	.....
Dover tp.....	2	.....	.....	.....	.....	13,117	1	12,559	.....
Raleigh tp.....	1	6	.....	1	1	195	.....	.....	69
Onondaga.....	13	23	1	.....	.....	430	26	.....	170
Mosa.....	89	41	3	2	5	8,787	22	.....	243
Thamesville.....	2	22	.....	.....	.....	428	5	.....	186
Euphemia and Dawn tps..	13	112	.....	.....	3	11,537	24	7,368	.....
Dunwich tp.....	3	96	.....	.....	3	408	3	125	.....
Brooke tp.....	3	11	7	1	10	122	11	.....	1,819
Tilbury East tp.....	.....	1	.....	.....	1	.....	.....	.....	.....
Bosanquet tp.....	.....	2	.....	.....	1	.....	.....	.....	.....
Nottawasaga tp.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Other fields.....	.....	.....	.....	.....	28	.....	.....	.....	.....
Total.....	2,109	1,378	32	12	47	165,040	18	26,143	2,487
								Net gain 23,655	

¹Production figures from the Imperial Oil Company.

²Two in Metcalfe, 1 in Mono, 1 in Nassagaweya, 2 in Warwick, 1 in Gloucester, and 1 in the city of Chatham.

Petroleum Refining

Seven petroleum refineries were in operation in Ontario in 1935, as listed below:—

PETROLEUM REFINERIES, 1935

Company	Location of refinery	Head office address
British American Oil Co., Ltd....	Foot of Cherry St., Toronto...	Royal Bank Bldg., Toronto.
Burlington Refineries, Ltd.....	Burlington St. E., Hamilton...	70 Brant St., Hamilton.
Canadian Oil Companies, Ltd....	Petrolia.....	12 Strachan Ave., Toronto.
Goodrich Refining Co., Ltd.....	Scarborough.....	3509 Danforth Ave., Toronto.
Imperial Oil Refineries, Ltd.....	Sarnia.....	Sarnia.
Lloyds Refinery.....	Port Credit.....	Port Credit.
McCull-Fontenac Oil Co., Ltd....	Foot of Cherry St., Toronto...	Royal Bank Bldg., Montreal, Que.

The total capacity of these refineries is 39,900 barrels.

A comparison of refining operations over a 6-year period is given in Table III. The figures in this table, together with those in Table IV, represent the consumption of petroleum products in Ontario, as nearly as it can be arrived at. Along the eastern and western boundaries of Ontario, there is some interprovincial trade, viz. imports from Montreal and exports to Manitoba. It is not known where the balance of trade lies, but it will not be sufficient to seriously affect the total.

A comparison of the past five years shows that conditions are gradually coming back towards the peak years of 1930 and 1931. The increase in the production of cracked gasoline is very marked.

TABLE III—PETROLEUM REFINING OPERATIONS, 1930-1935¹

Schedule	Unit of measure	1930	1931	1932	1933	1934	1935
Imported crude distilled...	Gallons ² ... Value.....	343,372,124 \$23,273,547	364,871,253 \$17,035,028	327,524,704 \$19,197,691	314,058,338 \$14,904,715	307,717,332 \$16,110,251	331,461,390 \$16,624,472
Imported crude oil distilled not in its natural state...	Gallons..... Value.....	..... .....	..... .....	1,669,675 \$51,092	14,815,049 \$966,409	27,871,946 \$1,723,943	1,629,805 \$140,091
Canadian crude distilled...	Gallons..... Value.....	3,944,969 \$264,008	4,382,806 \$261,334	4,704,609 \$290,752	4,823,639 \$299,793	4,289,702 \$274,888	6,321,891 \$408,366
Percentage of total.....	.....	1.13	1.19	1.43	1.45	1.26	1.87
Total value of crude...	.....	\$23,537,555	\$17,296,362	\$19,539,535	\$16,170,917	\$18,109,082	\$17,172,929
PRODUCTS							
Gasoline:							
Straight run.....	Gallons..... Selling value	97,806,121 \$12,334,586	95,934,920 \$9,886,611	61,297,731 \$6,378,577	89,429,293 \$7,793,607	81,307,756 \$6,231,050	85,698,897 \$6,439,916
By cracking process.....	Gallons..... Selling value	84,496,056 \$11,066,369	100,120,768 \$10,544,926	109,519,770 \$10,673,010	70,519,864 \$5,736,708	71,949,582 \$4,754,529	93,901,122 \$6,745,372
Kerosene.....	Gallons..... Selling value	17,973,730 \$1,980,546	14,656,833 \$1,397,607	18,666,252 \$1,736,164	26,499,830 \$2,022,408	14,208,236 \$1,109,504	10,424,545 \$814,344
Lubricating oil.....	Gallons..... Selling value	16,451,717 \$2,756,579	13,963,545 \$2,445,410	14,187,555 \$3,476,341	16,299,872 \$2,854,787	17,638,490 \$3,695,083	16,785,539 \$3,342,280
Engine distillate and naphtha	Gallons..... Selling value	4,272,751 \$504,206	3,652,973 \$327,717	6,098,784 \$573,585	8,384,517 \$490,728	6,636,041 \$340,237	12,570,944 \$736,449
Gas oil.....	Gallons..... Selling value	..... 80,742,218 \$3,792,757	..... 101,370,904 \$3,627,041	..... 85,233,170 \$3,550,598	..... (37,860,532 \$1,874,878	..... 50,461,106 \$2,795,217	..... 42,526,709 \$1,742,684
Fuel oils.....	Gallons..... Selling value	..... .....	..... .....	..... .....	55,394,540 \$2,112,522	58,918,615 \$2,716,951	55,133,960 \$2,416,004
Tar.....	Gallons..... Selling value	101,750 \$8,140	902,000 \$9,020	..... .....	..... .....	130,641 \$49,977	12,132,400 \$48,529
Grease.....	Pounds..... Selling value	13,468,964 \$268,509	8,814,022 \$171,036	8,751,758 \$492,339	8,342,446 \$357,316	8,571,927 \$509,271	9,898,844 \$459,595
Paraffin wax and candles...	Pounds..... Selling value	10,153,924 \$453,601	10,097,478 \$368,686	9,196,156 \$417,366	8,978,068 \$355,323	10,656,115 \$476,928	11,237,665 \$434,921
Petroleum coke.....	Short tons.. Value.....	56,946 \$316,180	54,223 \$285,051	62,836 \$328,067	62,601 \$344,686	49,011 \$268,821	53,845 \$320,004
Still gas.....	M cu. ft.. Value.....	1,551,334 \$421,500	2,128,739 \$505,156	1,942,741 \$410,222	1,574,451 \$306,984	1,498,379 \$281,524	2,122,091 \$468,765
Asphalt.....	Gallons..... Selling value	6,029,624 \$285,460	8,778,452 \$318,005	6,885,142 \$555,654	6,494,707 \$524,532	7,946,775 \$712,468	6,977,781 \$600,229
Miscellaneous.....	Value.....	\$291,404	\$219,900	\$222,545	\$50,498	\$56,971	\$95,350
Total value of refined products.....	.....	\$34,479,837	\$30,106,166	\$28,814,438	\$24,824,977	\$23,998,621	\$24,664,342
Employees.....	Average No. Wages paid.	2,449 \$3,760,870	1,984 \$2,840,794	1,937 \$2,764,208	2,036 \$2,752,718	2,047 \$2,637,213	2,012 \$2,970,360
Capital invested.....	.....	\$26,761,273	\$25,282,459	\$25,732,687	\$22,947,812	\$23,579,481	\$21,367,847

¹Information furnished by the Dominion Bureau of Statistics, Ottawa.

²Gallons refer to Imperial gallons.

³Of this, 8,567,840 Imperial gallons, valued at \$452,774, was sold as engine and tractor fuel.

Petroleum Imported into Ontario

Table IV gives a comparative statement of imports of crude and refined petroleum for the past two years. There is a 13 per cent. gain in the crude petroleum imported and a 20 per cent. loss in gallonage of refined petroleum imported. This loss is distributed through all products except lubricating oil, which shows an increase. A comparison of this table with Table II shows a healthy growth in the refining industry in Ontario.

TABLE IV—PETROLEUM AND REFINED PRODUCTS IMPORTED IN 1934 AND 1935

Import	1934		1935	
	Imperial gallons	Value	Imperial gallons	Value
CRUDE PETROLEUM:				
Petroleum, 0.790 specific gravity or heavier, for refining.....	244,801,477	\$7,498,528	281,043,063	\$8,747,729
REFINED PETROLEUM:				
For use in concentrating ores.....	12,580	\$7,108	11,699	\$7,229
Gasoline lighter than 0.669 specific gravity (casing head).....	5,973,610	259,232	3,486,281	195,037
Gasoline lighter than 0.8235 specific gravity.....	4,400,803	358,682	2,981,688	257,556
Gas oils, other than naphtha and gasoline, between 0.8235 and 0.775 specific gravity.....	114,807	6,680	6,522	446
Kerosene and illuminating oils.....	1,027,834	58,162	651,106	40,903
Fuel oil, 0.8235 specific gravity and heavier.....	1,294,661	64,805	887,666	53,941
Engine distillate lighter than 0.8235 specific gravity.....	17,014	1,531	39,236	3,368
Lubricating oils, consisting wholly or in part of petroleum, costing less than 25 cents a gallon.....	3,244,580	446,492	5,024,000	684,371
Lubricating oils, all other.....	1,539,299	545,508	1,228,315	509,367
All other oils.....	237,401	67,412	362,654	79,864
Total.....	17,862,598	\$1,815,612	14,679,167	\$1,832,082
PETROLEUM PRODUCTS:				
Axle grease..... lbs.	2,020,461	\$85,122	2,414,844	\$104,275
Vaseline, toilet and medicinal petroleum.....		128,501		134,296
Paraffin wax..... lbs.	682,259	37,779	867,461	40,300
Paraffin wax candles..... lbs.	104,939	21,525	137,442	25,026
Other petroleum products lighter than 0.8235 specific gravity..... gals.	1,631,722	120,936	1,408,600	118,808
Total.....		\$393,863		\$422,705
Total value.....		\$9,708,003		\$11,002,516
Total net value of petroleum and refined products imported¹.....		\$9,708,003		\$11,002,516
Duty paid on the above, calculated on the existing tariff schedule.....		474,213		462,703
Sales tax at 6 per cent.....		610,933		689,513
Freight, approximately.....		805,000		900,000
Total value delivered in Ontario...		\$11,598,149		\$13,054,732

¹These statistics are furnished through the courtesy of the Department of Customs and Excise.

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