

OIL AND GAS EXPLORATION AND DEVELOPMENT ACTIVITY IN ONTARIO IN 2000

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INTRODUCTION

Buoyed by elevated world oil prices and rising natural gas prices in North America, oil and gas drilling activity increased significantly throughout North America including Ontario. In the year 2000 there were a reported 109 wells drilled in Ontario. This is a greater than 50 % increase over the 69 wells reported to be drilled in 1999. The early onset of a cold winter and short term supply shortage concerns in 2000 appears to have spurred interest in drilling for natural gas in Ontario. The value of production set a record in 2000. Ontario producers received \$65.6 million for oil produced in 2000, compared to \$44 million the previous year. The value of the natural gas production in 2000 is estimated to be \$100.2 million compared to \$61.7 million in 1999.

EXPLORATION ACTIVITY

A total of 121 licences to drill and operate new wells were issued by the Ministry of Natural Resources in 2000, compared to 112 in 1999. At the time of writing drilling was reported to be complete at 109 wells consisting of 42 exploratory wells, 56 development wells, and 11 in other classes ("service"). The 2000 exploratory drilling resulted in 11 wells reported as gas producers and 5 wells reported as oil producers (Table 1). An additional 2 wells encountered hydrocarbons and were undergoing evaluation at the time of writing. Development drilling resulted in 18 wells reported to be oil producers and 20 as gas producers, with 5 wells undergoing evaluation.

Drilling was reported to be complete at 11 exploratory wells and 19 development wells testing Ordovician targets in 1999. Three of the Ordovician exploratory wells were reported to be completed as oil producers. One of these wells was a new pool discovery; Talisman #2 (Horiz. #1) Mersea 5-20-A. The Ordovician development drilling resulted in 14 new oil producers with an additional 3 wells undergoing further evaluation. All of these successful wells were horizontal wells.

Only one exploratory well was drilled to test Cambrian targets in 2000. CGC/Raider #83, Blandford 4-XIII was reported to have encountered a show of natural gas and was suspended pending evaluation. There were no Cambrian development wells drilled.

There were 20 exploratory tests of Silurian Guelph-Salina targets in 2000 of which six were completed as oil or gas wells. 748160 Ontario Inc.#1, Chatham 6-15-XII was completed as an oil producer in a new pool discovery. Petrofind #3, Moore 4-VII was a new pool gas discovery. Manti No.1 Sombra 7-A-XI was a new pool oil discovery. Range et al Moore 5-10-VIII was reported to be new pool gas discovery. Talisman (Horiz. #1) Lake Erie 221-F-1 was reported to be a potential gas producer in an exploratory extension of the Morpeth gas pool. Range et al No.2 Sombra 8-27-XII was a successful new pool gas discovery. Four additional wells were undergoing evaluation at the time of writing. There were 16 development tests of Silurian Guelph-Salina targets in 2000. Nine of these wells were completed as gas producers and four were undergoing testing at the time of writing.

There were 4 exploratory and 12 development tests of Lower Silurian sandstone targets in 2000. All four exploratory wells were completed as gas producers in exploratory extensions of known gas fields in Gainsborough and South Walsingham townships. All 12 development wells were also completed as gas producers.

There were 9 development and 6 exploratory tests of Devonian targets in 2000. In exploratory drilling Rubicon et al #7 Harwich 18-IV was reported to be a new pool gas discovery. Two other wells were undergoing further evaluation with 3 wells plugged and abandoned.

Eleven wells in other classes were drilled in 2000. Union Gas Limited drilled 8 natural gas storage wells in 2000. Six wells were completed in the newly designated Mandaumin gas storage pool, one in the Sarnia 5-3-II (Bluewater) storage pool, and one in the Oil City storage pool. These wells are used for injection and withdrawal of natural gas from the storage pools. General Chemical completed two salt solution mining wells in 2000 on their solution-mining site in the Amherstburg area, and Sifto Canada Inc. completed one salt solution mining well at their mining site in Goderich.

Preliminary figures indicate that Ontario producers reported(as of March/01) 230,574 cubic metres of crude oil (1.5 million barrels) produced in 2000; valued at \$65.6 million. This represents a 4 percent volume decrease from the previous year and nearly a 50 percent increase in value. In 1999 production totalled 239,915 cubic metres valued at \$44 million.

Preliminary figures indicate that Ontario producers reported(as of March/01) 405,738 10^3m^3 of natural gas (14.3 Bcf) produced in 2000; valued at \$100.2 million. This represents a 4 percent volume decrease from the previous year and a 62 percent increase in value. In 1999 production totalled 423,230 cubic metres valued at \$61.7 million.

Table 1. Successful exploratory wells in southwestern Ontario, 2000. See Figure 1 for well locations.

Map #	Latitude	Longitude	Well Name	Target	Depth (m)	Results	TD Date
1	42-33-59	82-14-15	748160 Ontario Inc.#10,Chatham 6-15-XII	SAL	505.5	OP/ACT	1/5/2000
2	42-42-45	80-28-33	Metalore #89,Walsingham N. 7-22-VII	CLI	404.2	GP/ACT	1/17/2000
3	42-50-11	82-15-49	Petrofind #3,Moore 7-4-VII	SAL	702.0	GP/SUS	1/17/2000
4	42-42-24	82-28-18	Manti No.1,Sombra 7-A-XI	SAL	738.0	GP/SUS	1/31/2000
5	42-42-56	82-16-03	Range et al No.2,Sombra 8-27-XII	SAL	663.7	GP/ACT	2/27/2000
6	42-02-53	82-33-55	Talisman (Horiz. # 2),Mersea 7-237-STR	ORD	2024.2	OP/ACT	4/4/2000
7	42-00-23	82-30-03	Talisman #2 (Horiz.#1),Mersea 5-20-A	ORD	2009.0	OP/ACT	6/10/2000
8	42-04-23	82-25-16	Talisman (Horiz.#1) West,Lake Erie 289-A-4	SAL	1020.8	GS/POT	7/5/2000
9	42-13-33	81-29-18	Talisman (Horiz.#1)West, Lake Erie 221-F-1	SAL	788.0	GP/POT	9/1/2000
10	43-00-04	79-31-12	Founder #26,Gainsborough 53-9-I	CLI	157.6	GP/ACT	9/19/2000
11	43-00-45	79-31-04	Founder #20, Gainsborough 2-10-I	CLI	169.8	GP/ACT	10/4/2000
12	42-19-31	82-04-13	Rubicon et al #7,Harwich 9-18-IV	DEV	122.5	GP/ACT	10/25/2000
13	42-51-14	82-18-22	Range et al Moore No. 1, Moore 5-10-VIII	SAL	740.0	GP/POT	11/8/2000
14	43-00-27	79-31-04	Founder #22,Gainsborough 6-10-I	CLI	184.2	GP/ACT	11/9/2000
15	42-00-28	82-31-23	Talisman (Horiz. #1),Mersea 8-17-B	ORD	2402.0	OS/POT	11/10/2000
16	42-04-29	82-34-51	Talisman No. 2 (Hor. #1),Mersea 1-241-NTR	ORD	2004.0	OP/ACT	11/28/2000

Figure 1. Successful exploratory wells in Ontario in 2000.

