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Oil and Gas Extraction

2004



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Statistics Canada
Manufacturing, Construction and Energy Division

Oil and Gas Extraction

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User information

Symbols

The following standard symbols are used in Statistics Canada publications:

- . not available for any reference period
- .. not available for a specific reference period
- ... not applicable
- 0 true zero or a value rounded to zero
- 0^s value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the *Statistics Act*
- E use with caution
- F too unreliable to be published

Note to users

Due to resource limitations, capital and operating expenditures estimates shown in text table 1, table 1, and table 3 are compiled from the largest operators. These businesses are believed to account for 98% of the total economic activity of the industry.

Acknowledgements

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Highlights

- The value of marketable production from crude oil, natural gas and natural gas liquids rose 11.5% during the year, from a total of \$76.5 billion in 2003 to a new high of \$85.3 billion in 2004.
- After rising by a record 36% last year, total well completions in 2004 were 24,874, up 6.5%.
- Capital expenditures in the conventional sector rose by 12.6% in 2004 to reach \$26.8 billion, reflecting generally higher prices for all commodities.
- In Canada's oil sands region, the continuing development of non-conventional resources, through in-situ, mining and upgraders, increased overall capital expenditures by 25% to \$6.2 billion, after a drop to \$5.0 billion in 2003.

Analysis

Volumes — Tables 7 and 8

During 2004, the marketable production of crude oil and equivalent in Canada increased by 3.2%, to 149.4 million cubic metres from 144.8 million cubic metres. The production of non conventional crude oil (synthetic and crude bitumen) continued to increase as it has done for the past several years, supplementing and replacing conventional crude from older fields. Production of crude bitumen rose to 30.9 million cubic metres in 2004, an increase of 23.3% over the 25 million cubic metres produced in 2003. The production of marketable natural gas rose slightly by half a percentage point, to 167.4 billion cubic metres from 166.5 billion cubic metres in 2003.

Exports of Canadian natural gas to the U.S. increased 2.5% to 104 billion cubic metres, after a decline of 5.8% in 2003.

Exports of crude oil and equivalent to the U.S. again increased in 2004, rising by 4.5% to 93.2 million cubic metres from 89.1 million cubic metres in 2003.

Demand by Canadian refineries for domestically produced crude oil and equivalent increased by 5.4% during 2004, to 56.1 million cubic metres from 53.2 million cubic metres in 2003. Crude oil imports increased 3.1% during the year, rising to 54.3 million cubic metres from 52.7 million cubic metres in 2003.

Domestic sales of natural gas (including direct sales) fell by 1.2% in 2004, declining to 72 billion cubic metres from 72.9 billion cubic metres in 2003. Natural gas imports rose 12.2% in 2004, to go from 9.7 billion cubic metres to 10.9 billion cubic metres.

Values — Tables 4 and 5

In 2004, the total value of marketable production of hydrocarbons (including synthetic crude oil, natural gas, natural gas liquids, and elemental sulphur) rose by 11.4% to \$85.3 billion from \$76.5 billion in 2003. World prices for all crude oil and natural gas commodities were on the upswing during the year.

The value of crude oil and condensate (including pentanes plus) increased by 20.9% to \$40.6 billion compared to \$33.6 billion in 2003 and natural gas rose to \$38.1 billion from \$37 billion last year. The value of natural gas processing plant products (propane, butane and ethane) increased by 9.8% to \$6.3 billion from \$5.7 billion, and elemental sulphur (from natural gas) increased to \$207.5 million from last year's level of \$152.6 million (an increase of 36%).

The Province of Alberta continued to dominate the overall value of marketable production in 2004, accounting for 74.3%, or \$63.4 billion of the total \$85.3 billion.

Expenditures — Conventional sector — Table 3

Operating expenditures (classified here as expenditures relating to field and well operations, natural gas processing and re-processing plant operations, taxes (excluding income taxes), other operating expenditures and royalties) increased by 20.5% in 2004, to \$22.3 billion from \$20.5 billion in 2003. This year, royalty payments accounted for 53.1%, field and well operations 37.5%, natural gas processing plants 7.4%, and taxes 2%.

The capital expenditures (classified as expenditures relating to geological and geophysical operations, exploration drilling, land acquisition and rentals, development drilling, production facilities, enhanced recovery and pressure maintenance, natural gas plants and other) increased in 2004 to \$26.8 billion from \$23.8 billion in 2003. Exploration

expenditures fell by 1.7% and development spending rose by 18.4%, for an overall increase of 12.5% in capital spending this year compared to 2003.

The above expenditures exclude the non-conventional regions of Alberta and Saskatchewan containing the heavy oils and oilsands. These locations require very high inputs of capital necessary to extract the oil. See Text Table 1 for expenditure details relating to this sector.

Drilling — Table 2

There was an increase in the total number of well completions (oil, gas, dry and others) during 2004, rising by 6.5% to 24,874 wells from 23,363 completions recorded in 2003. Exploratory drilling rose by 8.7% during the year to 5,515 completions from 5,074 wells, and development drilling increased by 7.2% to 16,475 wells from 15,372 completions. During 2004, the number of successful oil wells completed fell to 4,526 wells compared to 4,845 completions last year, and successful gas well completions increased by 16.8% to 15,126 wells compared to 12,951 gas wells completed last year.

Reserves — Table 6 and 2

Remaining established reserves of conventional crude oil and equivalent (excluding oilsands and bitumen) increased slightly by year end 2004 to 762,495,000 cubic metres from 749,911,000 cubic metres in 2003. The reserves replacement, or gross additions, amounted to roughly 114% of the volume of crude and equivalent produced during 2004. At this current rate of production, Canada's reserves of conventional crude oil and equivalent have an estimated economic life (reserves life index) of 8.4 years, up slightly over 2003 due to the current production level.

Synthetic crude oil and developed bitumen reserves are currently estimated to be 1,172,103,000 cubic metres, an increase of 1.8% over 2003. The reserves replacement (gross additions versus production) amounted to 136%, and its reserves life index stands at 20.5 years, down from 2003.

Marketable natural gas established reserves decreased slightly to 1,593 billion cubic metres from 1,594 billion cubic metres in the previous year. The volume of gross additions, by development drilling, replacing the production amounted to 99%. Based upon the amount of remaining established reserves and at the current level of production, the economic life of these reserves remains at 9.1 years, a marginal decrease over 2003. Non-conventional natural gas prospects, such as coal bed methane and tight sands gas, continue to be extensive as field research heightens.

Text table 1
Non-conventional oil sector expenditures

	In-situ	Mining	Upgraders	Total non-conventional expenditures 2004	Cumulative 1947 to 2004
millions of dollars					
Capital expenditures Including land acquisition and retention costs, exploratory and delineation drilling, research and development, fixed installations, machinery and equipment, housing and pollution control equipment	1,985.7	4,105.1	92.3	6,183.1	47,714.7
Operating costs Including taxes, royalties, administration expense, other operating expenses	982.8	3,811.0	316.0	5,109.8	54,174.9
Total expenditures	2,968.5	7,916.1	408.3	11,292.9	101,889.6

Text table 2
Developed non-conventional oil reserves, 2004

	Mining – Integrated synthetic crude oil	In-situ bitumen
thousands of cubic metres		
Remaining reserves at 31st of December 2003	828,441	322,999
Gross additions in 2004	47,338	30,406
Reserves at 31 st of December 2003 plus 2004 gross additions	875,779	353,405
Less 2004 net production ¹	34,544	22,537
Remaining reserves at 31st of December 2004	841,235	330,868
Net change in reserves during 2004	12,794	7,869

1. Preliminary estimate.

Source(s): Canadian Association of Petroleum Producers.

Text table 3
Value added, non-conventional oil sector¹, 2004

	Value of marketable production	Cost of fuel, electricity, materials and supplies	Value added – Producing activity
millions of dollars			
Canada	14,947.1	..	..

1. Represents synthetic crude and crude bitumen producers.

Text table 4
Royalty allocation

	2004	2003	2002	2001	2000	1999
	millions of dollars					
Total royalties, Canada ¹	11,824.9	10,503.0	7,968.0	12,106.3	11,129.3	5,059.0
Federal crown royalties	24.1	30.0	21.8	42.9	18.9	9.3
Provincial crown royalties	10,152.7	9,008.2	6,642.9	9,628.3	8,854.8	3,990.1
Non-crown royalties and other	1,648.1	1,464.8	1,303.3	2,435.1	2,255.6	1,059.6

1. Net applicable incentive credits; excludes synthetic crude oil royalties.

Related products

Selected publications from Statistics Canada

45-004-X	The Supply and Disposition of Refined Petroleum Products in Canada
55-201-X	Pipeline Transportation of Crude Oil and Refined Petroleum Products
57-003-X	Report on Energy Supply-demand in Canada
57-205-X	Natural Gas Transportation and Distribution
57-601-X	Energy Statistics Handbook

Selected CANSIM tables from Statistics Canada

153-0001	Value of established natural gas reserves, annual
153-0002	Value of established crude oil reserves, annual
153-0013	Established crude oil reserves, annual
153-0014	Established natural gas reserves, annual

Selected surveys from Statistics Canada

2178	Oil and Gas Extraction
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Statistical tables

Table 1
Principal statistics,¹ oil and gas extraction, conventional sector

	Establishments	Producing activity			
		Cost of electricity	Cost of materials and supplies and fuel	Value of marketable production	Value added
	number	thousands of dollars			
1993	626	477,458	1,464,121	19,058,705	17,117,126
1994	671	513,980	1,547,755	21,871,403	19,809,668
1995	728	545,102	1,596,515	20,817,680	18,676,063
1996	703	584,824	1,672,073	26,707,674	24,450,777
1997	711	..	..	27,183,922	..
1998	761	..	..	22,628,989	..
1999	756	..	..	30,632,888	..
2000	738	..	..	55,967,429	..
2001	709	..	..	56,272,820	..
2002	697	..	..	48,513,608	..
2003					
Newfoundland and Labrador	0	..	..	0	..
Prince Edward Island	1	..	..	0	..
Nova Scotia	3	..	..	0	..
New Brunswick	4	..	..	0	..
Quebec	5	..	..	0	..
Ontario	14	..	..	129,680	..
Manitoba	19	..	..	159,902	..
Saskatchewan	155	..	..	6,474,009	..
Alberta	310	..	..	45,131,722	..
British Columbia	106	..	..	6,449,471	..
Nunavut	0	..	..	0	..
Northwest Territories	20	..	..	515,037	..
Yukon	4	..	..	48,087	..
Arctic Islands	0	..	..	0	..
Offshore					
Newfoundland and Labrador	12	..	..	5,030,215	..
Nova Scotia	17	..	..	1,398,234	..
West	0	..	..	0	..
Total	670	..	..	65,336,357	..
2004					
Newfoundland and Labrador	3	..	..	0	..
Prince Edward Island	2	..	..	0	..
Nova Scotia	3	..	..	0	..
New Brunswick	5	..	..	0	..
Quebec	5	..	..	0	..
Ontario	14	..	..	133,692	..
Manitoba	18	..	..	195,637	..
Saskatchewan	153	..	..	7,274,982	..
Alberta	322	..	..	48,414,048	..
British Columbia	96	..	..	6,788,032	..
Nunavut	0	..	..	0	..
Northwest Territories	22	..	..	517,823	..
Yukon	4	..	..	33,945	..
Arctic Islands	0	..	..	0	..
Offshore					
Newfoundland and Labrador	11	..	..	5,651,960	..
Nova Scotia	16	..	..	1,305,184	..
West	0	..	..	0	..
Total	674	..	..	70,315,303	..
Percentage change					
2004/2003	0.6	..	..	7.6	..
2003/2002	-5.5	..	..	16.1	..

1. Excludes establishments engaged in the non-conventional sector. See text table 2.

Table 2
Drilling completions

	Oil				Gas			
	2003		2004		2003		2004	
	number	metres	number	metres	number	metres	number	metres
Canada								
Exploratory wells ¹	570	715,274	633	795,730	2,622	2,853,918	3,249	3,972,339
Development wells	3,295	4,328,228	3,177	4,124,165	10,329	8,670,210	11,877	10,883,369
Other ²	980	1,035,075	716	831,726	0	0	0	0
Total	4,845	6,078,577	4,526	5,751,621	12,951	11,524,128	15,126	14,855,708
Eastern Canada								
Exploratory wells ¹	2	4,454	2	763	16	14,007	27	16,545
Development wells	18	71,051	13	49,801	24	23,202	58	40,011
Other ²	0	0	0	0	0	0	0	0
Total	20	75,505	15	50,564	40	37,209	85	56,556
Offshore Newfoundland								
Exploratory wells ¹	1	3,460	0	0	0	0	0	0
Development wells	14	63,459	9	43 809	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	15	66,919	9	43 809	0	0	0	0
Offshore Nova Scotia								
Exploratory wells ¹	0	0	0	0	2	7,302	0	0
Development wells	0	0	0	0	3	10,749	1	5,315
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	5	18,051	1	5,315
Newfoundland and Labrador								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Prince Edward Island								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Nova Scotia								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
New Brunswick								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	1	3,260	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	3,260	0	0
Quebec								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Ontario								
Exploratory wells ¹	1	994	2	763	14	6,705	27	16,545
Development wells	4	7,592	4	5,992	20	9,193	57	34,696
Other ²	0	0	0	0	0	0	0	0
Total	5	8,586	6	6,755	34	15,898	84	51,241
Western Canada								
Exploratory wells ¹	568	710,820	631	794,967	2,606	2,839,911	3,222	3,955,794
Development wells	3,277	4,257,177	3,164	4,074,364	10,305	8,647,008	11,819	10,843,358
Other ²	980	1,035,075	716	831,726	0	0	0	0
Total	4,825	6,003,072	4,511	5,701,057	12,911	11,486,919	15,041	14,799,152

See footnotes at the end of the table.

Table 2 – continued

Drilling completions

	Oil				Gas			
	2003	2003	2004	2004	2003	2003	2004	2004
	number	metres	number	metres	number	metres	number	metres
Manitoba								
Exploratory wells ¹	14	13,135	13	13,050	0	0	0	0
Development wells	69	70,445	101	102,013	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	83	83,580	114	115,063	0	0	0	0
Saskatchewan								
Exploratory wells ¹	284	262,152	313	301,134	748	476,973	592	409,207
Development wells	1,339	1,484,812	1,440	1,679,165	1,539	896,659	1,395	822,495
Other ²	0	0	0	0	0	0	0	0
Total	1,623	1,746,964	1,753	1,980,299	2,287	1,373,632	1,987	1,231,702
Alberta								
Exploratory wells ¹	253	410,701	296	469,974	1,627	1,929,388	2,380	3,153,395
Development wells	1,789	2,585,722	1,551	2,197,585	8,315	6,889,706	9,896	9,069,622
Other ²	980	1,035,075	716	831,726	0	0	0	0
Total	3,022	4,031,498	2,563	3,499,285	9,942	8,819,094	12,276	12,223,017
British Columbia								
Exploratory wells ¹	16	23,250	8	7,745	227	423,522	245	380,621
Development wells	75	108,439	72	95,601	446	847,939	527	949,589
Other ²	0	0	0	0	0	0	0	0
Total	91	131,689	80	103,346	673	1,271,461	772	1,330,210
Northwest Territories								
Exploratory wells ¹	1	1,582	1	3,064	4	10,028	5	12,571
Development wells	5	7,759	0	0	5	12,704	1	1,652
Other ²	0	0	0	0	0	0	0	0
Total	6	9,341	1	3,064	9	22,732	6	14,223

See footnotes at the end of the table.

Table 2 – continued
Drilling completions

	Abandoned and suspended				Total			
	2003		2004		2003		2004	
	number	metres	number	metres	number	metres	number	metres
Canada								
Exploratory wells ¹	1,882	2,714,574	1,633	2,216,223	5,074	6,283,766	5,515	6,984,292
Development wells	1,748	2,455,009	1,421	1,749,690	15,372	15,453,447	16,475	16,757,224
Other ²	20	11,923	128	173,151	2,917	1,797,727	2,884	1,658,154
Total	3,650	5,181,506	3,182	4,139,064	23,363	23,534,940	24,874	25,399,670
Eastern Canada								
Exploratory wells ¹	30	46,786	10	26,040	48	65,247	39	43,348
Development wells	35	27,817	5	7,086	77	122,070	76	96,898
Other ²	0	0	0	0	12	23,675	22	48,085
Total	65	74,603	15	33,126	137	210,992	137	188,331
Offshore Newfoundland								
Exploratory wells ¹	2	6,726	0	0	3	10,186	0	0
Development wells	0	0	0	0	14	63,459	9	43,809
Other ²	0	0	0	0	7	21,584	11	41,581
Total	2	6,726	0	0	24	95,229	20	85,390
Offshore Nova Scotia								
Exploratory wells ¹	4	21,235	4	19,974	6	28,537	4	19,974
Development wells	1	4,116	0	0	4	14,865	1	5,315
Other ²	0	0	0	0	0	0	0	0
Total	5	25,351	4	19,974	10	43,402	5	25,289
Newfoundland and Labrador								
Exploratory wells ¹	1	500	0	0	1	500	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	1	500	0	0	1	500	0	0
Prince Edward Island								
Exploratory wells ¹	2	3,206	0	0	2	3,206	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	2	3,206	0	0	2	3,206	0	0
Nova Scotia								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
New Brunswick								
Exploratory wells ¹	1	1,100	1	2,560	1	1,100	1	2,560
Development wells	0	0	0	0	1	3,260	0	0
Other ²	0	0	0	0	0	0	0	0
Total	1	1,100	1	2,560	2	4,360	1	2,560
Quebec								
Exploratory wells ¹	0	0	0	0	0	0	0	0
Development wells	0	0	0	0	0	0	0	0
Other ²	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Ontario								
Exploratory wells ¹	20	14,019	5	3,506	35	21,718	34	20,814
Development wells	34	23,701	5	7,086	58	40,486	66	47,774
Other ²	0	0	0	0	5	2,091	11	6,504
Total	54	37,720	10	10,592	98	64,295	111	75,092
Western Canada								
Exploratory wells ¹	1,852	2,667,788	1,623	2,190,183	5,026	6,218,519	5,476	6,940,944
Development wells	1,713	2,427,192	1,416	1,742,604	15,295	15,331,377	16,399	16,660,326
Other ²	20	11,923	128	173,151	2,905	1,774,052	2,862	1,610,069
Total	3,585	5,106,903	3,167	4,105,938	23,226	23,323,948	24,737	25,211,339

See footnotes at the end of the table.

Table 2 – continued
Drilling completions

	Abandoned and suspended				Total			
	2003	2003	2004	2004	2003	2003	2004	2004
	number	metres	number	metres	number	metres	number	metres
Manitoba								
Exploratory wells ¹	6	5,241	12	11,027	20	18,376	25	24,077
Development wells	7	6,372	7	7,130	76	76,817	108	109,143
Other ²	0	0	0	0	10	9,086	0	0
Total	13	11,613	19	18,157	106	104,279	133	133,220
Saskatchewan								
Exploratory wells ¹	114	115,148	127	130,226	1,146	854,273	1,032	840,567
Development wells	60	59,073	196	185,562	2,938	2,440,544	3,031	2,687,222
Other ²	0	0	0	0	95	115,101	41	48,842
Total	174	174,221	323	315,788	4,179	3,409,918	4,104	3,576,631
Alberta								
Exploratory wells ¹	1,617	2,326,793	1,349	1,804,462	3,497	4,666,882	4,025	5,427,831
Development wells	1,503	2,109,246	1,072	1,281,788	11,607	11,584,674	12,519	12,548,995
Other ²	20	11,923	128	173,151	2,769	1,604,246	2,821	1,561,227
Total	3,140	4,447,962	2,549	3,259,401	17,873	17,855,802	19,365	19,538,053
British Columbia								
Exploratory wells ¹	112	212,244	126	224,258	355	659,016	379	612,624
Development wells	125	219,549	139	265,189	646	1,175,927	738	1,310,379
Other ²	0	0	0	0	31	45,619	0	0
Total	237	431,793	265	489,447	1,032	1,880,562	1,117	1,923,003
Northwest Territories								
Exploratory wells ¹	3	8,362	9	20,210	8	19,972	15	35,845
Development wells	18	32,952	2	2,935	28	53,415	3	4,587
Other ²	0	0	0	0	0	0	0	0
Total	21	41,314	11	23,145	36	73,387	18	40,432

1. Includes new field wildcats, new pool wildcats, deeper pool tests, shallower pool tests and outposts.

2. Includes stratigraphic tests, project wells, bitumen wells, miscellaneous and service wells.

Source(s): Canadian Association of Petroleum Producers.

Table 3-1

Net cash expenditures of the conventional petroleum industry — Net cash expenditures of the conventional petroleum industry, 2003

	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta
thousands of dollars									
Exploration									
Geological and geophysical operations	0	550	0	1,420	9,648	1,616	730	65,685	638,627
Drilling	0	1,345	2,245	1,505	4,727	18,801	15,508	288,566	2,153,961
Land acquisitions and rentals ¹	0	0	103	0	1,341	2,642	880	203,415	1,303,934
Total	0	1,895	2,348	2,925	15,716	23,059	17,118	557,666	4,096,522
Development									
Drilling	0	0	0	0	0	22,414	38,379	870,578	6,890,704
Production facilities ²	0	0	0	1,482	0	8,565	13,429	454,640	3,839,576
Enhanced recovery and pressure maintenance	0	0	0	0	0	0	0	31,518	80,072
Natural gas plants	0	0	0	2,680	0	92	0	30,723	440,598
Non-production facilities	0	0	0	0	0	343	16	17,524	152,914
Total	0	0	0	4,162	0	31,414	51,824	1,404,983	11,403,864
Operating									
Field and well operations	0	0	0	288	78	15,779	24,107	1,284,277	5,409,801
Natural gas processing plants	0	0	0	100	0	27,394	0	52,328	1,186,166
Taxes (excluding income tax)	0	0	0	0	0	580	3,122	67,442	284,324
Other operating expenses	0	0	0	0	0	0	0	0	0
Total	0	0	0	388	78	43,753	27,229	1,404,047	6,880,291
Royalties ³	0	0	0	204	0	20,012	22,651	1,121,534	7,757,800
Total expenditures	0	1,895	2,348	7,679	15,794	118,238	118,822	4,488,230	30,138,477
	British Columbia	Nunavut	Northwest Territories	Yukon	Arctic Islands	Offshore			Canada
						New- foundland	Hudson Bay	Nova Scotia	
thousands of dollars									
Exploration									
Geological and geophysical operations	200,275	0	35,577	1,255	0	62,244	0	88,394	1,106,021
Drilling	640,379	0	112,691	30	0	167,695	0	192,079	3,599,532
Land acquisitions and rentals ¹	689,327	0	800	10	0	3,613	0	2,051	2,208,116
Total	1,529,981	0	149,068	1,295	0	233,552	0	282,524	6,913,669
Development									
Drilling	1,388,063	0	34,140	452	0	442,062	0	195,423	9,882,215
Production facilities ²	657,402	0	51,634	388	0	666,155	0	292,484	5,985,755
Enhanced recovery and pressure maintenance	230	0	0	0	0	17,100	0	0	128,920
Natural gas plants	205,980	0	32,171	0	0	0	0	35,757	748,001
Non-production facilities	4,902	0	2,830	0	0	0	0	779	179,308
Total	2,256,577	0	120,775	840	0	1,125,317	0	524,443	16,924,199
Operating									
Field and well operations	763,961	0	52,394	5,807	0	375,342	0	121,390	8,053,224
Natural gas processing plants	214,318	0	4,848	2,497	0	0	0	42,817	1,530,468
Taxes (excluding income tax)	25,826	0	2,062	163	0	250	0	1,603	385,372
Other operating expenses	0	0	0	0	0	0	0	0	0
Total	1,004,105	0	59,304	8,467	0	375,592	0	165,810	9,969,064
Royalties ³	1,413,347	0	25,453	4,548	0	114,702	0	22,668	10,502,919
Total expenditures	6,204,010	0	354,600	15,150	0	1,849,163	0	995,445	44,309,851

1. Includes bonuses, legal fees, filing fees, producing and non-producing acreage retention costs, bonuses paid for acquisition of freeholders' mineral rights, relevant land department salaries and overhead.

2. Includes tangible well and lease equipment and pipelines and related facilities.

3. Net of applicable incentive credits; excludes synthetic crude oil royalties.

Table 3-2

Net cash expenditures of the conventional petroleum industry — Net cash expenditures of the conventional petroleum industry, 2004

	Newfoundland and Labrador	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta
thousands of dollars									
Exploration									
Geological and geophysical operations	40	2,480	152	564	834	1,943	1,670	46,847	632,179
Drilling	400	0	974	6,307	1,694	18,240	14,084	300,257	2,784,855
Land acquisitions and rentals ¹	450	44	22	2	237	3,016	2,077	90,929	1,211,500
Total	890	2,524	1,148	6,873	2,765	23,199	17,831	438,033	4,628,534
Development									
Drilling	0	0	0	0	0	28,556	49,195	1,009,804	8,376,416
Production facilities ²	0	0	0	180	0	9,590	15,217	464,242	4,667,708
Enhanced recovery and pressure maintenance	0	0	0	0	0	74	0	35,531	141,474
Natural gas plants	0	0	0	0	0	0	0	27,884	542,995
Non-production facilities	0	74	0	0	0	28	36	6,360	178,037
Total	0	74	0	180	0	38,248	64,448	1,543,821	13,906,630
Operating									
Field and well operations	0	0	0	424	59	14,757	24,430	1,324,724	5,629,410
Natural gas processing plants	0	0	0	100	0	27,188	0	57,289	1,273,554
Taxes (excluding income tax)	0	0	0	0	3	328	2,484	54,829	340,553
Other operating expenses	0	0	0	0	0	0	0	0	0
Total	0	0	0	524	62	42,273	26,914	1,436,842	7,243,517
Royalties ³	0	0	0	382	0	19,119	26,546	1,221,661	8,789,900
Total expenditures	890	2,598	1,148	7,959	2,827	122,839	135,739	4,640,357	34,568,581
	British Columbia	Nunavut	Northwest Territories	Yukon	Arctic Islands	Offshore			Canada
						New- foundland	Hudson Bay	Nova Scotia	
thousands of dollars									
Exploration									
Geological and geophysical operations	239,083	0	39,835	499	0	41,661	0	33,676	1,041,463
Drilling	640,282	0	139,169	93	0	3,315	0	173,994	4,083,664
Land acquisitions and rentals ¹	290,100	0	17,304	11	0	10,630	0	42,054	1,668,376
Total	1,169,465	0	196,308	603	0	55,606	0	249,724	6,793,503
Development									
Drilling	1,701,635	0	19,991	14,022	0	598,600	0	93,878	11,892,097
Production facilities ²	828,722	0	78,893	291	0	531,238	0	302,686	6,898,767
Enhanced recovery and pressure maintenance	238	0	0	0	0	51,923	0	0	229,240
Natural gas plants	177,172	0	28,083	0	0	0	0	32,116	808,250
Non-production facilities	20,197	0	1,476	0	0	129	0	0	206,337
Total	2,727,964	0	128,443	14,313	0	1,181,890	0	428,680	20,034,691
Operating									
Field and well operations	842,586	0	53,196	3,453	0	350,799	0	108,072	8,351,910
Natural gas processing plants	238,902	0	4,177	1,836	0	0	0	40,553	1,643,599
Taxes (excluding income tax)	36,471	0	1,802	94	0	214	0	5,012	441,790
Other operating expenses	0	0	0	0	0	0	0	0	0
Total	1,117,959	0	59,175	5,383	0	351,013	0	153,637	10,437,299
Royalties ³	1,507,621	0	20,629	3,521	0	208,079	0	27,364	11,824,822
Total expenditures	6,523,009	0	404,555	23,820	0	1,796,588	0	859,405	49,090,315

1. Includes bonuses, legal fees, filing fees, producing and non-producing acreage retention costs, bonuses paid for acquisition of freeholders' mineral rights, relevant land department salaries and overhead.

2. Includes tangible well and lease equipment and pipelines and related facilities.

3. Net of applicable incentive credits; excludes synthetic crude oil royalties.

Table 4
Marketable production and values

	2001	2002	2003	2004
	thousands of cubic metres			
Crude oil	79,935.6	83,900.4	84,690.0	81,759.8
Synthetic crude oil	20,260.6	25,494.6	25,028.8	26,927.3
Crude bitumen	17,953.9	17,481.6	25,029.0	30,854.7
Condensate	1,134.8	1,196.9	1,180.8	1,134.9
Pentanes plus	9,665.6	8,896.3	8,884.6	8,739.4
Propane	10,165.4	8,811.5	9,123.8	9,019.6
Butanes	6,065.3	5,119.3	5,477.0	5,380.5
Ethane	13,090.5	14,932.8	14,838.9	15,661.6
	millions of cubic metres			
Natural gas	171,387.8	172,197.2	166,457.2	167,359.8
	thousands of metric tonnes			
Elemental sulphur	7,835.5	7,384.9	6,764.9	7,486.2
	thousands of dollars			
Crude oil	15,153,811	18,157,229	19,561,409	22,142,365
Synthetic crude oil	4,995,003	6,455,743	6,777,342	8,655,781
Crude bitumen	1,873,762	2,763,700	4,396,607	6,291,273
Condensate	287,533	298,315	322,928	380,381
Pentanes plus	2,601,844	2,281,093	2,552,213	3,252,858
Propane	1,930,190	1,151,165	1,860,994	1,996,729
Butanes	1,152,061	892,098	1,277,861	1,483,143
Ethane	1,493,032	1,951,418	2,563,782	2,781,028
Natural gas	33,677,530	23,719,717	37,044,588	38,071,294
Elemental sulphur	-23,181	62,573	152,582	207,505
Total value	63,141,585	57,733,051	76,510,306	85,262,357

Table 5-1
Commodity data, oil and gas extraction — Net production withdrawals

	Canada	Offshore Newfoundland	Offshore Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories
thousands of cubic metres											
Crude oil											
2004	81,759.8	18,249.2	0.0	0.0	155.1	637.4	24,575.2	34,888.5	2,019.0	0.0	1,235.4
2003	84,690.0	19,550.0	0.0	0.0	195.2	633.0	24,331.4	36,527.9	2,168.2	0.0	1,284.3
Synthetic crude oil											
2004	26,927.3	0.0	0.0	0.0	0.0	0.0	0.0	26,927.3	0.0	0.0	0.0
2003	25,028.8	0.0	0.0	0.0	0.0	0.0	0.0	25,028.8	0.0	0.0	0.0
Crude bitumen											
2004	30,854.7	0.0	0.0	0.0	0.0	0.0	0.0	30,854.7	0.0	0.0	0.0
2003	25,029.0	0.0	0.0	0.0	0.0	0.0	0.0	25,029.0	0.0	0.0	0.0
Condensate											
2004	1,134.9	0.0	463.2	0.0	0.0	0.0	0.0	502.0	169.7	0.0	0.0
2003	1,180.8	0.0	549.3	0.0	0.0	0.0	0.0	486.8	144.7	0.0	0.0
Pentanes plus											
2004	8,739.4	0.0	0.0	0.0	0.0	0.0	28.2	8,099.9	520.0	0.0	91.3
2003	8,884.6	0.0	0.0	0.0	0.0	0.0	29.0	8,238.9	526.7	0.0	90.0
Propane											
2004	9,019.6	0.0	185.1	0.0	0.0	0.0	44.7	8,397.4	392.4	0.0	0.0
2003	9,123.8	0.0	239.7	0.0	0.0	0.0	41.4	8,469.6	373.1	0.0	0.0
Butanes											
2004	5,380.5	0.0	133.5	0.0	0.0	0.0	23.6	4,904.5	318.9	0.0	0.0
2003	5,477.0	0.0	157.7	0.0	0.0	0.0	22.4	4,986.0	310.9	0.0	0.0
Ethane 1											
2004	15,661.6	0.0	0.0	0.0	0.0	0.0	39.2	14,669.0	953.4	0.0	0.0
2003	14,838.9	0.0	0.0	0.0	0.0	0.0	0.0	13,741.8	1,097.1	0.0	0.0
millions of cubic metres											
Natural gas											
2004	200,480.6	262.1	4,324.3	0.0	273.0	0.0	8,891.1	155,664.1	31,201.3	185.5	731.0
2003	200,199.9	281.0	4,662.2	0.0	295.7	0.0	8,541.2	156,399.9	29,483.4	254.0	984.4
thousands of metric tonnes											
Elemental sulphur											
2004	7,486.2	0.0	0.0	0.0	0.0	0.0	0.0	6,704.5	781.7	0.0	0.0
2003	6,764.9	0.0	0.0	0.0	0.0	0.0	0.0	6,006.3	758.6	0.0	0.0

1. Estimated before solvent flood.

Table 5-2
Commodity data, oil and gas extraction — Marketable production

	Canada	Offshore Newfoundland	Offshore Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories
thousands of cubic metres											
Crude oil	81,759.8	18,249.2	0.0	0.0	155.1	637.4	24,575.2	34,888.5	2,019.0	0.0	1,235.4
Synthetic crude oil	26,927.3	0.0	0.0	0.0	0.0	0.0	0.0	26,927.3	0.0	0.0	0.0
Crude bitumen	30,854.7	0.0	0.0	0.0	0.0	0.0	0.0	30,854.7	0.0	0.0	0.0
Condensate	1,134.9	0.0	463.2	0.0	0.0	0.0	0.0	502.0	169.7	0.0	0.0
Pentanes plus	8,739.4	0.0	0.0	0.0	0.0	0.0	28.2	8,099.9	520.0	0.0	91.3
Propane	9,019.6	0.0	185.1	0.0	0.0	0.0	44.7	8,397.4	392.4	0.0	0.0
Butanes	5,380.5	0.0	133.5	0.0	0.0	0.0	23.6	4,904.5	318.9	0.0	0.0
Ethane ¹	15,661.6	0.0	0.0	0.0	0.0	0.0	39.2	14,669.0	953.4	0.0	0.0
millions of cubic metres											
Natural gas	167,359.8	0.0	4,174.0	0.0	273.0	0.0	7,397.2	128,804.6	26,000.0	143.8	567.2
thousands cubic tonnes											
Elemental sulphur	7,486.2	0.0	0.0	0.0	0.0	0.0	0.0	6,704.5	781.7	0.0	0.0
thousands of dollars											
Crude oil	22,142,365	5,651,960	0	0	53,815	195,637	5,572,434	9,683,073	618,742	0	366,704
Synthetic crude oil	8,655,781	0	0	0	0	0	0	8,655,781	0	0	0
Crude bitumen	6,291,273	0	0	0	0	0	0	6,291,273	0	0	0
Condensate	380,381	0	155,079	0	0	0	0	175,303	49,999	0	0
Pentanes plus	3,252,858	0	0	0	0	0	9,613	3,047,587	166,436	0	29,222
Propane	1,996,729	0	40,579	0	0	0	9,062	1,865,147	81,941	0	0
Butanes	1,483,143	0	40,898	0	0	0	6,551	1,361,489	74,205	0	0
Ethane ¹	2,781,028	0	0	0	0	0	0	2,604,334	169,734	0	0
Natural gas	38,071,294	0	1,068,628	0	79,877	0	1,670,362	29,475,645	5,620,940	33,945	121,897
Elemental sulphur	207,505	0	0	0	0	0	0	201,470	6,035	0	0
Total value in dollars	85,262,357	5,651,960	1,305,184	0	133,692	195,637	7,274,982	63,361,102	6,788,032	33,945	517,823

1. Estimated before solvent flood.

2. Excludes volume of upgraded crude oil.

3. Excludes value of upgraded crude oil. See reconciliation table 10.

Table 5-3
Commodity data, oil and gas extraction — Shipments

	Canada	Offshore Newfoundland	Offshore Nova Scotia	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Yukon	Northwest Territories
thousands of cubic metres											
Crude oil	81,759.8	18,249.2	0.0	0.0	155.1	637.4	24,575.2	34,888.5	2,019.0	0.0	1,235.4
Synthetic crude oil	26,927.3	0.0	0.0	0.0	0.0	0.0	0.0	26,927.3	0.0	0.0	0.0
Crude bitumen	30,854.7	0.0	0.0	0.0	0.0	0.0	0.0	30,854.7	0.0	0.0	0.0
Condensate	1,134.9	0.0	463.2	0.0	0.0	0.0	0.0	502.0	169.7	0.0	0.0
Pentanes plus	8,739.4	0.0	0.0	0.0	0.0	0.0	28.2	8,099.9	520.0	0.0	91.3
Propane	8,811.5	0.0	185.1	0.0	0.0	0.0	44.7	8,397.4	392.4	0.0	0.0
Butanes	5,119.3	0.0	133.5	0.0	0.0	0.0	23.6	4,904.5	318.9	0.0	0.0
Ethane ¹	15,661.6	0.0	0.0	0.0	0.0	0.0	39.2	14,669.0	953.4	0.0	0.0
millions of cubic metres											
Natural gas	172,197.2	0.0	4,174.0	0.0	273.0	0.0	7,397.2	128,804.6	26,000.0	143.8	567.2
thousands of metric tonnes											
Elemental sulphur	6,238.2	0.0	0.0	0.0	0.0	0.0	0.0	5,456.5	781.7	0.0	0.0
thousands of dollars											
Crude oil	22,142,365	5,651,960	0	0	53,815	195,637	5,572,434	9,683,073	618,742	0	366,704
Synthetic crude oil	8,655,781	0	0	0	0	0	0	8,655,781	0	0	0
Crude bitumen	6,291,273	0	0	0	0	0	0	6,291,273	0	0	0
Condensate	380,381	0	155,079	0	0	0	0	175,303	49,999	0	0
Pentanes plus	3,252,858	0	0	0	0	0	9,613	3,047,587	166,436	0	29,222
Propane	1,996,729	0	40,579	0	0	0	9,062	1,865,147	81,941	0	0
Butanes	1,483,143	0	40,898	0	0	0	6,551	1,361,489	74,205	0	0
Ethane ¹	2,781,028	0	0	0	0	0	6,960	2,604,334	169,734	0	0
Natural gas	38,071,294	0	1,068,628	0	79,877	0	1,670,362	29,475,645	5,620,940	33,945	121,897
Elemental sulphur	170,004	0	0	0	0	0	0	163,969	6,035	0	0
Total value in dollars	85,224,856	5,651,960	1,305,184	0	133,692	195,637	7,274,982	63,323,601	6,788,032	33,945	517,823

1. Estimated before solvent flood.
2. Excludes volume of upgraded crude oil.
3. Excludes value of upgraded crude oil. See reconciliation table 10.

Table 6
Conventional crude oil and equivalent and marketable natural gas remaining established reserves in Canada, 2004

	Canada	Eastcoast ¹ offshore	Arctic ² Islands	Mackenzie ² Delta-Beaufort Sea	Mainland ² territories	Eastern Canada
thousands of cubic metres						
Conventional crude oil						
Remaining reserves at the 31 st of December, 2003	676,287	121,197	0	53,950	7,733	0
Positive revisions	0	0	0	0	0	0
Negative revisions	0	0	0	0	0	0
Extensions	0	0	0	0	0	0
Gross additions	97,629	35,750	0	0	291	0
Total crude oil	773,916	156,947	0	53,950	8,024	0
2004 net production ³	81,975	18,248	0	0	1,236	0
Remaining reserves at the 31 st of December, 2004	691,941	138,699	0	53,950	6,788	0
Net change in reserves during 2004	15,654	17,502	0	0	-945	0
Pentanes plus						
Remaining reserves at 31 st of December, 2003	73,624	7,801	0	0	2,789	0
Positive revisions	0	0	0	0	0	0
Negative revisions	0	0	0	0	0	0
Extensions	0	0	0	0	0	0
Gross additions	6,994	0	0	0	0	0
Total pentanes plus	80,618	7,801	0	0	2,789	0
2004 net production ³	10,064	253	0	0	58	0
Remaining reserves at 31 st of December, 2004	70,554	7,548	0	0	2,731	0
Net change in reserves during 2004	-3,070	-253	0	0	-58	0
Total remaining conventional crude oil and equivalent reserves	762,495	146,247	0	53,950	9,519	0
millions of cubic metres						
Marketable natural gas						
Remaining reserves at 31 st of December, 2003	1,594,001	23,324	0	0	12,456	105
Positive revisions	0	0	0	0	0	0
Negative revisions	0	0	0	0	0	0
Extensions	0	0	0	0	0	0
Gross additions	173,244	0	0	0	0	0
Total marketable natural gas	1,767,245	23,324	0	0	12,456	105
Net change in underground storage	0	0	0	0	0	0
2004 net production ^{3,4}	174,203	4,046	0	0	584	0
Remaining reserves at 31 st of December, 2004	1,593,042	19,278	0	0	11,872	105
Non-associated	1,359,701	19,278	0	0	10,732	105
Associated	233,341	0	0	0	1,140	0
Dissolved	0	0	0	0	0	0
Underground storage	0	0	0	0	0	0
Net change in reserves during 2004	-959	-4,046	0	0	-584	0

See footnotes at the end of the table.

Table 6 – continued

Conventional crude oil and equivalent and marketable natural gas remaining established reserves in Canada, 2004

	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
thousands of cubic metres					
Conventional crude oil					
Remaining reserves at the 31 st of December, 2003	1,877	4,640	184,739	278,583	23,568
Positive revisions	0	0	0	0	0
Negative revisions	0	0	0	0	0
Extensions	0	0	0	0	0
Gross additions	223	-142	27,821	32,814	872
Total crude oil	2,100	4,498	212,560	311,397	24,440
2004 net production ³	153	637	24,658	34,765	2,278
Remaining reserves at the 31 st of December, 2004	1,947	3,861	187,902	276,632	22,162
Net change in reserves during 2004	70	-779	3,163	-1,951	-1,406
Pentanes plus					
Remaining reserves at 31 st of December, 2003	0	0	295	56,865	5,874
Positive revisions	0	0	0	0	0
Negative revisions	0	0	0	0	0
Extensions	0	0	0	0	0
Gross additions	0	0	45	5,435	1,514
Total pentanes plus	0	0	340	62,300	7,388
2004 net production ³	0	0	78	8,764	911
Remaining reserves at 31 st of December, 2004	0	0	262	53,536	6,477
Net change in reserves during 2004	0	0	-33	-3,329	603
Total remaining conventional crude oil and equivalent reserves	1,947	3,861	188,164	330,168	28,639
millions of cubic metres					
Marketable natural gas					
Remaining reserves at 31 st of December, 2003	11,586	0	87,877	1,198,748	259,905
Positive revisions	0	0	0	0	0
Negative revisions	0	0	0	0	0
Extensions	0	0	0	0	0
Gross additions	230	0	4,138	112,495	56,381
Total marketable natural gas	11,816	0	92,015	1,311,243	316,286
Net change in underground storage	0	0	0	0	0
2004 net production ^{3, 4}	360	0	7,008	135,351	26,854
Remaining reserves at 31 st of December, 2004	11,456	0	85,007	1,175,892	289,432
Non-associated	11,456	0	82,963	957,324	277,843
Associated	0	0	2,044	218,568	11,589
Dissolved	0	0	0	0	0
Underground storage	0	0	0	0	0
Net change in reserves during 2004	-130	0	-2,870	-22,856	29,527

1. Crude oil reserves were booked for the eastcoast offshore for the first time in year-end 1981 reserves.

2. As with all other areas, reserves for frontier areas are carried in accordance with the definition of established reserves. However, reserves for frontier areas are only shown when a threshold volume has been determined to exist.

3. Preliminary estimate.

4. Before re-processing plant operations.

Source(s): Canadian Association of Petroleum Producers. (Excludes oil sands reserves, see text table 2).

Table 7-1
Supply and disposition of crude oil and equivalent by source, Canada — 2003

	Offshore Newfoundland	Offshore Nova Scotia	Ontario	Manitoba	Saskat. ¹ chewan	Alberta
thousands of cubic metres						
Supply						
Domestic production:						
Crude oil						
Light and medium	19,550.0	0.0	195.2	633.0	5,084.9	24,019.3
Heavy	0.0	0.0	0.0	0.0	19,246.5	12,508.6
Synthetic crude oil	0.0	0.0	0.0	0.0	0.0	25,028.8
Crude bitumen	0.0	0.0	0.0	0.0	0.0	25,029.0
Less returned to formation	0.0	0.0	0.0	0.0	0.0	0.0
Total	19,550.0	0.0	195.2	633.0	24,331.4	86,585.7
Condensate	0.0	549.3	0.0	0.0	0.0	486.8
Pentanes plus	0.0	0.0	0.0	0.0	29.0	8,238.9
Net withdrawals	19,550.0	549.3	195.2	633.0	24,360.4	95,311.4
Imports	0.0	0.0	0.0	0.0	0.0	0.0
Total supply	19,550.0	549.3	195.2	633.0	24,360.4	95,311.4
Disposition						
Deliveries to refineries:						
Atlantic provinces	3,781.4	0.0	0.0	0.0	0.0	0.0
Quebec	2,784.6	0.0	0.0	0.0	0.0	0.0
Ontario	3,217.4	0.0	195.2	28.0	1,982.4	9,386.6
Manitoba	0.0	0.0	0.0	0.0	0.0	0.0
Saskatchewan	0.0	0.0	0.0	0.0	2,753.5	1,693.6
Alberta	0.0	0.0	0.0	0.0	736.2	20,707.5
British Columbia	0.0	0.0	0.0	0.0	0.0	1,959.4
Northwest Territories	0.0	0.0	0.0	0.0	0.0	0.0
Total	9,783.4	0.0	195.2	28.0	5,472.1	33,747.1
Export to United States						
Petroleum administration						
East Coast	7,045.8	103.3	0.0	6.9	1,835.4	1,701.0
Midwest	205.8	0.0	0.0	687.5	17,008.2	34,614.0
Gulf Coast	2,514.5	98.1	0.0	0.0	0.0	218.1
Rocky Mountains	0.0	0.0	0.0	0.0	416.2	18,650.4
West Coast	0.0	0.0	0.0	0.0	0.0	3,883.7
Total United States	9,766.1	201.4	0.0	694.4	19,259.8	59,067.2
Other countries	87.9	0.0	0.0	0.0	0.0	298.8
Total exports	9,854.0	201.4	0.0	694.4	19,259.8	59,366.0
Net inventory changes	-87.4	347.9	0.0	0.4	152.6	644.3
Deliveries to other purchasers	0.0	0.0	0.0	0.0	0.0	0.0
Losses and adjustments	0.0	0.0	0.0	-89.8	-524.1	1,554.0
Total disposition	19,550.0	549.3	195.2	633.0	24,360.4	95,311.4

See footnotes at the end of the table.

Table 7-1 – continued

Supply and disposition of crude oil and equivalent by source, Canada — 2003

	British Columbia	Northwest Territories	Total Canadian sources	Total foreign sources	Total all sources
thousands of cubic metres					
Supply					
Domestic production:					
Crude oil					
Light and medium	2,168.2	1,284.3	52,934.9	0.0	52,934.9
Heavy	0.0	0.0	31,755.1	0.0	31,755.1
Synthetic crude oil	0.0	0.0	25,028.8	0.0	25,028.8
Crude bitumen	0.0	0.0	25,029.0	0.0	25,029.0
Less returned to formation	0.0	0.0	0.0	0.0	0.0
Total	2,168.2	1,284.3	134,747.8	0.0	134,747.8
Condensate	144.7	0.0	1,180.8	0.0	1,180.8
Pentanes plus	526.7	90.0	8,884.6	0.0	8,884.6
Net withdrawals	2,839.6	1,374.3	144,813.2	0.0	144,813.2
Imports	...	...	...	52,652.6	52,652.6
Total supply	2,839.6	1,374.3	144,813.2	52,652.6	197,465.8
Disposition					
Deliveries to refineries:					
Atlantic provinces	0.0	0.0	3,781.4	20,878.3	24,659.7
Quebec	0.0	0.0	2,784.6	21,189.0	23,973.6
Ontario	0.0	1,343.7	16,153.3	10,585.3	26,738.6
Manitoba	0.0	0.0	0.0	0.0	0.0
Saskatchewan	0.0	0.0	4,447.1	0.0	4,447.1
Alberta	1,331.7	0.0	22,775.4	0.0	22,775.4
British Columbia	1,341.3	0.0	3,300.7	0.0	3,300.7
Northwest Territories	0.0	0.0	0.0	0.0	0.0
Total	2,673.0	1,343.7	53,242.5	52,652.6	105,895.1
Export to United States					
Petroleum administration					
East Coast	0.0	0.0	10,692.4	0.0	10,692.4
Midwest	71.1	0.0	52,586.6	0.0	52,586.6
Gulf Coast	0.0	0.0	2,830.7	0.0	2,830.7
Rocky Mountains	0.0	0.0	19,066.6	0.0	19,066.6
West Coast	65.7	0.0	3,949.4	0.0	3,949.4
Total United States	136.8	0.0	89,125.7	0.0	89,125.7
Other countries	0.0	0.0	386.7	0.0	386.7
Total exports	136.8	0.0	89,512.4	0.0	89,512.4
Net inventory changes	-36.0	0.8	1,022.6	0.0	1,022.6
Deliveries to other purchasers	0.0	0.0	0.0	0.0	0.0
Losses and adjustments	65.8	29.8	1,035.7	0.0	1,035.7
Total disposition	2,839.6	1,374.3	144,813.2	52,652.6	197,465.8

1. Total supply excludes volume of upgraded crude oil.

Note(s): This table is not restricted to NAICS 211; it includes certain statistics of Petroleum refineries (NAICS 324) and of Oil Pipeline Transport (NAICS 4861).

Table 7-2
Supply and disposition of crude oil and equivalent by source, Canada — 2004

	Offshore Newfoundland	Offshore Nova Scotia	Ontario	Manitoba	Saskat. ¹ chewan	Alberta
thousands of cubic metres						
Supply						
Domestic production:						
Crude oil						
Light and medium	18,249.2	0.0	155.1	637.4	5,058.3	22,606.0
Heavy	0.0	0.0	0.0	0.0	19,516.9	12,282.5
Synthetic crude oil	0.0	0.0	0.0	0.0	0.0	26,927.3
Crude bitumen	0.0	0.0	0.0	0.0	0.0	30,854.7
Less returned to formation	0.0	0.0	0.0	0.0	0.0	0.0
Total	18,249.2	0.0	155.1	637.4	24,575.2	92,670.5
Condensate	0.0	463.2	0.0	0.0	0.0	502.0
Pentanes plus	0.0	0.0	0.0	0.0	28.2	8,099.9
Net withdrawals	18,249.2	463.2	155.1	637.4	24,603.4	101,272.4
Imports	0.0	0.0	0.0	0.0	0.0	0.0
Total supply	18,249.2	463.2	155.1	637.4	24,603.4	101,272.4
Disposition						
Deliveries to refineries:						
Atlantic provinces	2,277.7	0.0	0.0	0.0	0.0	0.0
Quebec	2,763.3	0.0	0.0	0.0	0.0	0.0
Ontario	3,544.0	0.0	155.1	252.7	1,549.4	10,232.9
Manitoba	0.0	0.0	0.0	0.0	0.0	0.0
Saskatchewan	0.0	0.0	0.0	0.0	3,160.0	2,171.3
Alberta	0.0	0.0	0.0	0.0	839.3	23,569.4
British Columbia	0.0	0.0	0.0	0.0	0.0	1,878.0
Northwest Territories	0.0	0.0	0.0	0.0	0.0	0.0
Total	8,585.0	0.0	155.1	252.7	5,548.7	37,851.6
Export to United States						
Petroleum administration						
East Coast	7,266.9	103.4	0.0	0.0	1,979.8	1,528.4
Midwest	0.0	0.0	0.0	389.0	17,134.5	37,727.9
Gulf Coast	1,385.0	0.0	0.0	0.0	0.0	0.0
Rocky Mountains	0.0	0.0	0.0	0.0	533.7	19,263.3
West Coast	0.0	0.0	0.0	0.0	0.0	5,730.7
Total United States	8,651.9	103.4	0.0	389.0	19,648.0	64,250.3
Other countries	1,021.6	44.4	0.0	0.0	0.0	0.0
Total exports	9,673.5	147.8	0.0	389.0	19,648.0	64,250.3
Net inventory changes	-9.3	315.4	0.0	117.3	-197.0	-690.3
Deliveries to other purchasers	0.0	0.0	0.0	0.0	0.0	0.0
Losses and adjustments	0.0	0.0	0.0	-121.6	-396.3	-139.2
Total disposition	18,249.2	463.2	155.1	637.4	24,603.4	101,272.4

See footnotes at the end of the table.

Table 7-2 – continued

Supply and disposition of crude oil and equivalent by source, Canada — 2004

	British Columbia	Northwest Territories	Total Canadian sources	Total foreign sources	Total all sources
thousands of cubic metres					
Supply					
Domestic production:					
Crude oil					
Light and medium	2,019.0	1,235.4	49,960.4	0.0	49,960.4
Heavy	0.0	0.0	31,799.4	0.0	31,799.4
Synthetic crude oil	0.0	0.0	26,927.3	0.0	26,927.3
Crude bitumen	0.0	0.0	30,854.7	0.0	30,854.7
Less returned to formation	0.0	0.0	0.0	0.0	0.0
Total	2,019.0	1,235.4	139,541.8	0.0	139,541.8
Condensate	169.7	0.0	1,134.9	0.0	1,134.9
Pentanes plus	520.0	91.3	8,739.4	0.0	8,739.4
Net withdrawals	2,708.7	1,326.7	149,416.1	0.0	149,416.1
Imports	...	...	...	54,274.4	54,274.4
Total supply	2,708.7	1,326.7	149,416.1	54,274.4	203,690.5
Disposition					
Deliveries to refineries:					
Atlantic provinces	0.0	0.0	2,277.7	22,437.5	24,715.2
Quebec	0.0	0.0	2,763.3	20,721.3	23,484.6
Ontario	0.0	1,279.5	17,013.6	11,115.6	28,129.2
Manitoba	0.0	0.0	0.0	0.0	0.0
Saskatchewan	0.0	0.0	5,331.3	0.0	5,331.3
Alberta	1,183.4	0.0	25,592.1	0.0	25,592.1
British Columbia	1,283.7	0.0	3,161.7	0.0	3,161.7
Northwest Territories	0.0	0.0	0.0	0.0	0.0
Total	2,467.1	1,279.5	56,139.7	54,274.4	110,414.1
Export to United States					
Petroleum administration					
East Coast	0.0	0.0	10,878.5	0.0	10,878.5
Midwest	0.0	0.0	55,251.4	0.0	55,251.4
Gulf Coast	0.0	0.0	1,385.0	0.0	1,385.0
Rocky Mountains	0.0	0.0	19,797.0	0.0	19,797.0
West Coast	119.0	0.0	5,849.7	0.0	5,849.7
Total United States	119.0	0.0	93,161.6	0.0	93,161.6
Other countries	0.0	0.0	1,066.0	0.0	1,066.0
Total exports	119.0	0.0	94,227.6	0.0	94,227.6
Net inventory changes	-1.9	-1.3	-467.1	0.0	-467.1
Deliveries to other purchasers	0.0	0.0	0.0	0.0	0.0
Losses and adjustments	124.5	48.5	-484.1	0.0	-484.1
Total disposition	2,708.7	1,326.7	149,416.1	54,274.4	203,690.5

1. Total supply excludes volume of upgraded crude oil.

Note(s): This table is not restricted to NAICS 211; it includes certain statistics of Petroleum refineries (NAICS 324) and of Oil Pipeline Transport (NAICS 4861).

Table 8-1
Supply and disposition of natural gas, by source, Canada — 2003

	Newfoundland and Labrador	Nova Scotia	Ontario	Saskat- chewan	Alberta	British Columbia
millions of cubic metres at 101.325 kPa and 15°C.						
Field and processing plants						
Supply						
Gross new production	3,913.6	4,665.8	295.7	9,030.5	166,671.8	29,627.4
Less field flared and waste	352.0	3.6	0.0	489.3	1,171.5	144.0
Net new production	3,561.6	4,662.2	295.7	8,541.2	165,500.3	29,483.4
Reproduced	0.0	0.0	0.0	0.0	0.0	0.0
Less injected and stored	3,280.6	0.0	0.0	0.0	9,100.4	0.0
Net withdrawals	281.0	4,662.2	295.7	8,541.2	156,399.9	29,483.4
Disposition						
Field disposition and uses	281.0	0.0	0.0	1,013.5	3,970.0	945.8
Gathering system disposition and uses	0.0	10.3	0.0	412.5	4,302.1	0.0
Processing plant disposition and uses						
Processing and re-processing shrinkage	0.0	404.4	0.0	76.8	15,394.6	2,095.3
Other disposition and uses	0.0	0.0	0.0	90.9	6,115.2	954.4
Other uses	0.0	0.0	0.0	0.0	0.0	0.0
Adjustment	0.0	-222.0	0.0	-42.6	-1,588.3	-56.3
Deliveries of marketable gas to transport and distribution systems	0.0	4,469.5	295.7	6,990.1	128,206.3	25,544.2
Total disposition	281.0	4,662.2	295.7	8,541.2	156,399.9	29,483.4
Gas utilities						
Supply						
Total marketable gas	0.0	4,469.5	295.7	6,990.1	128,206.3	25,544.2
Receipts from distributor storage	0.0	0.0	0.0	863.6	28,181.5	1,181.2
Imports	0.0	0.0	0.0	0.0	0.0	0.0
Other receipts ¹	0.0	0.0	0.0	0.0	0.0	0.0
Total supply of marketable gas	0.0	4,469.5	295.7	7,853.7	156,387.8	26,725.4
Disposition						
Utility sales (excluding direct sales)						
British Columbia	0.0	0.0	0.0	0.0	287.1	2,281.6
Alberta	0.0	0.0	0.0	0.0	19,206.9	4,837.5
Saskatchewan	0.0	0.0	0.0	1,725.5	0.0	0.0
Manitoba	0.0	0.0	0.0	0.0	1,372.9	0.0
Ontario	0.0	0.0	295.7	2,408.4	11,679.9	1,530.7
Quebec	0.0	0.0	0.0	0.0	4,103.8	0.0
New Brunswick	0.0	0.0	0.0	0.0	0.0	0.0
Northwest Territories	0.0	0.0	0.0	0.0	0.0	0.0
Total utility sales	0.0	0.0	295.7	4,133.9	36,650.6	8,649.8
Exports	0.0	3,814.1	0.0	7.9	85,979.1	11,671.3
Direct sales ^{2, 3}	0.0	631.0	0.0	2,454.9	15,634.1	3,517.2
Delivered to distributor storage	0.0	0.0	0.0	662.1	13,157.8	2,163.5
Line pack fluctuation	0.0	10.7	0.0	0.1	-267.9	22.2
Pipeline fuel	0.0	6.1	0.0	70.5	4,121.1	450.4
Pipeline losses and unaccounted volumes	0.0	7.6	0.0	524.3	1,113.0	251.0
Total disposition of marketable gas	0.0	4,469.5	295.7	7,853.7	156,387.8	26,725.4

See footnotes at the end of the table.

Table 8-1 – continued

Supply and disposition of natural gas, by source, Canada — 2003

	Yukon	Northwest Territories	Total Canadian sources	Total foreign sources	Total all sources
millions of cubic metres at 101.325 kPa and 15°C.					
Field and processing plants					
Supply					
Gross new production	255.2	990.2	215,450.2	0.0	215,450.2
Less field flared and waste	1.2	5.8	2,167.4	0.0	2,167.4
Net new production	254.0	984.4	213,282.8	0.0	213,282.8
Reproduced	0.0	0.0	0.0	0.0	0.0
Less injected and stored	0.0	0.0	12,381.0	0.0	12,381.0
Net withdrawals	254.0	984.4	200,901.8	0.0	200,901.8
Disposition					
Field disposition and uses	0.0	0.0	6,210.3	0.0	6,210.3
Gathering system disposition and uses	0.0	0.0	4,724.9	0.0	4,724.9
Processing plant disposition and uses					
Processing and re-processing shrinkage	43.3	143.5	18,157.9	0.0	18,157.9
Other disposition and uses	10.8	89.4	7,260.7	0.0	7,260.7
Other uses	0.0	0.0	0.0	0.0	0.0
Adjustment	0.0	0.0	-1,909.2	0.0	-1,909.2
Deliveries of marketable gas to transport and distribution systems	199.9	751.5	166,457.2	0.0	166,457.2
Total disposition	254.0	984.4	200,901.8	0.0	200,901.8
Gas utilities					
Supply					
Total marketable gas	199.9	751.5	166,457.2	0.0	166,457.2
Receipts from distributor storage	0.0	0.0	30,226.3	0.0	30,226.3
Imports	0.0	0.0	0.0	9,680.4	9,680.4
Other receipts ¹	0.0	0.0	0.0	0.0	0.0
Total supply of marketable gas	199.9	751.5	196,683.5	9,680.4	206,363.9
Disposition					
Utility sales (excluding direct sales)					
British Columbia	199.9	677.4	3,446.0	0.0	3,446.0
Alberta	0.0	0.0	24,044.4	0.0	24,044.4
Saskatchewan	0.0	0.0	1,725.5	0.0	1,725.5
Manitoba	0.0	0.0	1,372.9	0.0	1,372.9
Ontario	0.0	0.0	15,914.7	0.0	15,914.7
Quebec	0.0	0.0	4,103.8	0.0	4,103.8
New Brunswick	0.0	0.0	0.0	0.0	0.0
Northwest Territories	0.0	74.1	74.1	0.0	74.1
Total utility sales	199.9	751.5	50,681.4	0.0	50,681.4
Exports	0.0	0.0	101,472.4	0.0	101,472.4
Direct sales ^{2, 3}	0.0	0.0	22,237.2	0.0	22,237.2
Delivered to distributor storage	0.0	0.0	15,983.4	9,680.4	25,663.8
Line pack fluctuation	0.0	0.0	-234.9	0.0	-234.9
Pipeline fuel	0.0	0.0	4,648.1	0.0	4,648.1
Pipeline losses and unaccounted volumes	0.0	0.0	1,895.9	0.0	1,895.9
Total disposition of marketable gas	199.9	751.5	196,683.5	9,680.4	206,363.9

1. Liquefied petroleum gas for gas enrichment, peak shaving or temporary supply.

2. Direct deliveries for industrial consumption and miscellaneous utility deliveries.

3. Data presented for Alberta as direct sales are intended to represent direct sales volumes actually consumed in the provinces of Saskatchewan, Manitoba, Ontario, and Quebec. Spacing constraints within the table does not allow for the allocation by province.

Note(s): This table is not restricted to NAICS 211; it includes certain statistics of Gas Distribution (NAICS 2212) and of Pipeline Transport (NAICS 4862).

Table 8-2
Supply and disposition of natural gas, by source, Canada — 2004

	Newfoundland and Labrador	Nova Scotia	Ontario	Saskat- chewan	Alberta	British Columbia
millions of cubic metres at 101.325 kPa and 15°C.						
Field and processing plants						
Supply						
Gross new production	3,984.5	4,327.9	273.0	9,409.5	167,726.4	31,354.4
Less field flared and waste	288.4	3.6	0.0	518.4	1,024.8	153.1
Net new production	3,696.1	4,324.3	273.0	8,891.1	166,701.6	31,201.3
Reproduced	0.0	0.0	0.0	0.0	0.0	0.0
Less injected and stored	3,434.0	0.0	0.0	0.0	11,037.5	0.0
Net withdrawals	262.1	4,324.3	273.0	8,891.1	155,664.1	31,201.3
Disposition						
Field disposition and uses	262.1	0.0	0.0	1,072.6	3,491.3	1,666.2
Gathering system disposition and uses	0.0	13.0	0.0	436.3	3,219.1	0.0
Processing plant disposition and uses						
Processing and re-processing shrinkage	0.0	318.4	0.0	81.3	15,528.6	1,894.7
Other disposition and uses	0.0	3.1	0.0	96.0	5,021.5	858.9
Other uses	0.0	0.0	0.0	0.0	0.0	0.0
Adjustment	0.0	-184.2	0.0	-192.3	-401.0	781.5
Deliveries of marketable gas to transport and distribution systems	0.0	4,174.0	273.0	7,397.2	128,804.6	26,000.0
Total disposition	262.1	4,324.3	273.0	8,891.1	155,664.1	31,201.3
Gas utilities						
Supply						
Total marketable gas	0.0	4,174.0	273.0	7,397.2	128,804.6	26,000.0
Receipts from distributor storage	0.0	0.0	0.0	584.3	23,011.0	1,341.6
Imports	0.0	0.0	0.0	0.0	0.0	0.0
Other receipts ¹	0.0	0.0	0.0	0.0	0.0	0.0
Total supply of marketable gas	0.0	4,174.0	273.0	7,981.5	151,815.6	27,341.6
Disposition						
Utility sales (excluding direct sales)						
British Columbia	0.0	0.0	0.0	0.0	387.5	2,318.0
Alberta	0.0	0.0	0.0	0.0	19,157.0	4,824.2
Saskatchewan	0.0	0.0	0.0	1,640.9	0.0	0.0
Manitoba	0.0	0.0	0.0	0.0	1,344.2	0.0
Ontario	0.0	0.0	273.0	2,552.3	10,570.6	1,738.1
Quebec	0.0	0.0	0.0	0.0	4,089.7	0.0
New Brunswick	0.0	0.0	0.0	0.0	0.0	0.0
Northwest Territories	0.0	0.0	0.0	0.0	0.0	0.0
Total utility sales	0.0	0.0	273.0	4,193.2	35,549.0	8,880.3
Exports	0.0	3,495.5	0.0	29.4	89,845.1	10,648.5
Direct sales ^{2, 3}	0.0	668.6	0.0	2,621.9	15,572.1	3,566.5
Delivered to distributor storage	0.0	0.0	0.0	726.9	5,984.0	1,934.7
Line pack fluctuation	0.0	6.5	0.0	-1.0	-335.5	0.1
Pipeline fuel	0.0	15.2	0.0	65.2	3,783.1	479.6
Pipeline losses and unaccounted volumes	0.0	-11.8	0.0	345.9	1,417.8	1,831.9
Total disposition of marketable gas	0.0	4,174.0	273.0	7,981.5	151,815.6	27,341.6

See footnotes at the end of the table.

Table 8-2 – continued

Supply and disposition of natural gas, by source, Canada — 2004

	Yukon	Northwest Territories	Total Canadian sources	Total foreign sources	Total all sources
millions of cubic metres at 101.325 kPa and 15°C.					
Field and processing plants					
Supply					
Gross new production	186.6	738.1	218,000.4	...	218,000.4
Less field flared and waste	1.1	7.1	1,996.5	...	1,996.5
Net new production	185.5	731.0	216,003.9	...	216,003.9
Reproduced	0.0	0.0	0.0	...	0.0
Less injected and stored	0.0	0.0	14,471.5	...	14,471.5
Net withdrawals	185.5	731.0	201,532.4	...	201,532.4
Disposition					
Field disposition and uses	0.0	0.0	6,492.2	...	6,492.2
Gathering system disposition and uses	0.0	0.0	3,668.4	...	3,668.4
Processing plant disposition and uses					
Processing and re-processing shrinkage	38.1	95.4	17,956.5	...	17,956.5
Other disposition and uses	3.6	68.4	6,051.5	...	6,051.5
Other uses	0.0	0.0	0.0	...	0.0
Adjustment	0.0	0.0	4.0	...	4.0
Deliveries of marketable gas to transport and distribution systems	143.8	567.2	167,359.8	...	167,359.8
Total disposition	185.5	731.0	201,532.4	...	201,532.4
Gas utilities					
Supply					
Total marketable gas	143.8	567.2	167,359.8	...	167,359.8
Receipts from distributor storage	0.0	0.0	24,936.9	0.0	24,936.9
Imports	0.0	0.0	0.0	10,860.6	10,860.6
Other receipts ¹	0.0	0.0	0.0	0.0	0.0
Total supply of marketable gas	143.8	567.2	192,296.7	10,860.6	203,157.3
Disposition					
Utility sales (excluding direct sales)					
British Columbia	143.8	490.2	3,339.5	0.0	3,339.5
Alberta	0.0	0.0	23,981.2	0.0	23,981.2
Saskatchewan	0.0	0.0	1,640.9	0.0	1,640.9
Manitoba	0.0	0.0	1,344.2	0.0	1,344.2
Ontario	0.0	0.0	15,134.0	0.0	15,134.0
Quebec	0.0	0.0	4,089.7	0.0	4,089.7
New Brunswick	0.0	0.0	0.0	0.0	0.0
Northwest Territories	0.0	77.0	77.0	0.0	77.0
Total utility sales	143.8	567.2	49,606.5	0.0	49,606.5
Exports	0.0	0.0	104,018.5	0.0	104,018.5
Direct sales ^{2, 3}	0.0	0.0	22,429.1	0.0	22,429.1
Delivered to distributor storage	0.0	0.0	8,645.6	10,860.6	19,506.2
Line pack fluctuation	0.0	0.0	-329.9	0.0	-329.9
Pipeline fuel	0.0	0.0	4,343.1	0.0	4,343.1
Pipeline losses and unaccounted volumes	0.0	0.0	3,583.8	0.0	3,583.8
Total disposition of marketable gas	143.8	567.2	192,296.7	10,860.6	203,157.3

1. Liquefied petroleum gas for gas enrichment, peak shaving or temporary supply.

2. Direct deliveries for industrial consumption and miscellaneous utility deliveries.

3. Data presented for Alberta as direct sales are intended to represent direct sales volumes actually consumed in the provinces of Saskatchewan, Manitoba, Ontario, and Quebec. Spacing constraints within the table does not allow for the allocation by province.

Note(s): This table is not restricted to NAICS 211; it includes certain statistics of Gas Distribution (NAICS 2212) and of Pipeline Transport (NAICS 4862).

Table 9
Total sales of natural gas, by province

	Gas Utility Sales ¹				Direct ² sales	Total sales
	Residential	Commercial	Industrial	Total		
millions of cubic metres						
2004						
Nova Scotia	0.0	0.0	0.0	0.0	44.5	44.5
New Brunswick	0.0	0.0	0.0	0.0	624.1	624.1
Quebec	721.7	1,910.1	1,458.0	4,089.8	1,650.2	5,740.0
Ontario	8,756.5	5,588.3	789.3	15,134.1	11,710.5	26,844.6
Manitoba	578.4	704.9	60.9	1,344.2	832.9	2,177.1
Saskatchewan	951.4	683.8	5.8	1,641.0	3,998.6	5,639.6
Alberta	4,260.3	2,631.0	17,090.1	23,981.4	0.0	23,981.4
British Columbia	1,917.3	1,246.4	176.3	3,340.0	3,679.2	7,019.2
Canada	17,185.6	12,764.5	19,580.4	49,530.5	22,540.0	72,070.5
2003						
Nova Scotia	0.0	0.0	0.0	0.0	55.1	55.1
New Brunswick	0.0	0.0	0.0	0.0	575.8	575.8
Quebec	737.5	1,953.6	1,412.8	4,103.9	1,496.4	5,600.3
Ontario	9,133.0	5,901.5	934.9	15,969.4	11,939.0	27,908.4
Manitoba	577.2	701.8	93.8	1,372.8	782.2	2,155.0
Saskatchewan	985.6	726.8	13.0	1,725.4	3,982.9	5,708.3
Alberta	4,289.6	2,907.0	16,847.5	24,044.1	0.0	24,044.1
British Columbia	1,987.4	1,279.2	192.0	3,458.6	3,428.0	6,886.6
Canada	17,710.3	13,469.9	19,494.0	50,674.2	22,259.4	72,933.6

1. Represents sales of natural gas by natural gas utilities.

2. Represents direct, non-utility sales of natural gas.

Table 10
Reconciliation table – Saskatchewan value of crude oil production, 2004

	Value
	thousands of dollars
Marketable production of Saskatchewan conventional crude oil – Table 5 ¹	5,572,434
Add: Value of sales of upgraded crude oil ²	1,058,000
Total value of marketable production of Saskatchewan crude oil ³	6,630,434

1. Represents value of marketable conventional crude oil as published by Saskatchewan Industry and Resources.

2. Represents estimate of value of sales of Saskatchewan upgraded crude oil.

3. Represents the value of Saskatchewan crude oil, including upgraded crude oil. This valuation is consistent with NAICS based industry statistics as published by the System of National Accounts, Input-Output Division.

Data quality and methodology

This publication presents data on the Crude Petroleum and Natural Gas Industry (NAICS 211 of the North American Industry Classification System, catalogue no.12-501-X). This industry includes establishments primarily engaged in exploration for and/or production of petroleum or natural gas from wells or tar sands, and natural gas plants processing the natural gas. In this publication, the oil sands industry is excluded from the tables which present principal statistics and labour data. However, the operating and capital expenditures of the oil sands industry are shown in text table 1 and the synthetic crude produced is included in commodity tables 4, 5 and 6.

Data presented in this publication on the supply and disposition of crude oil and equivalents and natural gas are compiled from information provided by agencies or departments of the provinces and territories responsible for the regulation of crude oil and natural gas production. As a result, 100% of oil and natural gas production by conventional or other means, whether offshore or on land, is accounted for.

Data on operating and capital expenditures are compiled from an annual survey of approximately 500 companies engaged in oil and natural gas exploration, development and production. Companies with annual capital expenditures of less than \$50,000 are excluded from the survey. The response rate for the survey is very high — over 95%. As a consequence, minimal imputation is required and minimal bias resulting from non-response is introduced in these data.

Data on drilling completions and crude oil and natural gas reserves are obtained from the Canadian Association of Petroleum Producers (formerly Canadian Petroleum Association).

Data published in this publication are subject to a certain degree of error, be it in differences in the interpretation of the questions, or mistakes introduced during processing. Reasonable efforts are made to ensure these errors are kept within acceptable limits through careful questionnaire design, liaison with major respondents, editing of data for inconsistencies and subsequent follow-up and quality control of manual processing operations. Historically, experience has indicated that the data rarely contain a serious error.

Concepts

Establishments in the crude petroleum and natural gas industry explore for and produce crude petroleum, natural gas, propane, butanes, ethane, and sulphur, either directly from the fields or from processing plants. That is, the establishment boundary includes within it the facilities of the processing plants, the oil and gas fields, geological and geophysical exploration, and head office functions supporting such activities, and any other ancillary services as are required to maintain such exploration or producing programmes. Although a company may be engaged in all phases of the industry, it may not necessarily be engaged in all phases in anyone province. Refining and marketing activities of oil companies are not included in NAICS 211, but are coded to separate industries. It should also be carefully noted that the companies engaged in geological and geophysical consulting, or as contractors, are not included in the NAICS 211, Crude Petroleum and Natural Gas Industry.

In our statistical publications, expenditures of the industry are segregated between exploration, development, operating and royalties. The primary purpose of this publication is to make available operational type data, while the basic statistics on capital expenditures are published by the Investment and Capital Stock Division in **Private and Public Investment in Canada** (catalogue no. 61-205-X).

Producing activity is defined as activity in which capital and operating expenditures are made by the establishment for the purpose of producing crude petroleum and natural gas. This includes expenditures on gas processing and re-processing plants and production facilities.

Total activity includes the producing activity plus an extension of the data for other non-producing activities in which the establishment might be engaged. Generally speaking, these are the geological and geophysical activities plus capital additions produced by own labour force for own use and charged to Fixed Assets Accounts.

Periodically, Statistics Canada, undertakes a special survey of the exploration, and production activities of 25 major oil and gas companies operating in Canada. Detailed data are collected from these selected companies for each operating and capital function, breaking the expenditures down into salaries and wages, materials and supplies and payments to contractors. These breakdowns of expenditures are considered as representative of the industry, and the total expenditures collected from all respondents in the annual survey are broken down in the same proportion as indicated by the special survey.

Definitions

Production and expenditures

Gross new production: All new production as measured at the first well head metering point.

Net new production: "Gross new production" after the deduction of flared field production. It is the production that is available for further processing, sale, storage and field uses.

Production net withdrawals: "Net new production" plus reproduction from field storage, less the amount of gas or oil that is reinjected into field pools or storage.

Marketable production: The production of gas, oil, propane, butanes, ethane and pentanes which are produced and available for market; in other words, the production of natural gas products produced by gas processing plants after processing and reprocessing plant uses, losses and shrinkage, the sales of natural gas from dry gas fields after field use, losses, reinjection or the production for sale of crude oil after field use and losses, reinjection but before inventory changes.

Crude oil: A mixture mainly of pentanes and heavier hydrocarbons that may be contaminated with sulphur compounds, that is recovered or is recoverable at a well from an underground reservoir and that is liquid at the conditions under which its volume is measured or estimated. It includes all other hydrocarbon mixtures so recovered or recoverable except raw gas or condensate.

Conventional crude oil: Crude oil recoverable from a well using standard production methods.

Heavy crude oil: Oil with high viscosity, recoverable only to a very limited extent by using standard production methods.

Synthetic crude oil: A mixture of mainly pentanes and heavier hydrocarbons that may contain sulphur compounds, that is derived from crude bitumen and that is liquid at the conditions under which its volume is measured or estimated, and includes all other hydrocarbon mixtures so derived.

Crude bitumen: A naturally occurring viscous mixture, mainly of hydrocarbons heavier than pentane, that may contain sulphur compounds and that, in its naturally occurring viscous state, will not flow to a well.

Condensate: A mixture of mainly pentanes and heavier hydrocarbons that may be contaminated with sulphur compounds, that is recoverable at a well from an underground reservoir and that is gaseous in its virgin reservoir state but is liquid at the conditions under which its volume is measured or estimated.

Pentanes plus: A mixture of mainly pentanes and heavier hydrocarbons which ordinarily may contain some butanes and which is obtained from the processing of raw gas, condensate or crude oil.

In-Situ recovery: Refers to recovery methods applicable in heavy oil and oil sands formations without the removal of conglomerates from the location.

Oil sands: Deposits of sands and clays (excluding oil shales) heavily impregnated with semi-solid or solid bitumen, also known as tar sands. Athabasca, Peace River, Wabasca, Cold Lake and Buffalo Head Hills are the main Canadian resource areas.

Natural gas: A mix of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in a gaseous phase or in solution with crude oil at reservoir conditions.

Natural gas liquids (NGL): That portion of reservoir gas which is liquefied at the surface in lease separators, field facilities, or gas processing plants. Includes ethane, propane, butanes and pentanes.

Propane: In addition to its normal scientific meaning, a mixture mainly of propane which ordinarily may contain some ethane or butanes.

Butanes: In addition to its normal scientific meaning, a mixture mainly of butanes which ordinarily may contain some propane or pentanes plus.

Ethane: In addition to its normal scientific meaning, a mixture mainly of ethane which ordinarily may contain some methane or propane.

Upstream segment: Activities and operations related to the search for, development, production, extraction and recovery of crude oil, natural gas, natural gas liquids and sulphur, as well as the production of synthetic oil.

Downstream segment: Includes refining and marketing, transportation and petrochemical operations.

Geological and geophysical (G&G) expenses: Costs associated with the undertaking of geological and geophysical studies, including salaries and supplies for geologists and geophysical crews as well as outlays for equipment and rights of access.

Exploration costs: Costs associated with the search for oil or natural gas deposits, including all lease fees and land acquisition costs, geological and geophysical expenditures, and exploratory drilling costs whether capitalized or expensed. Exploratory drilling is generally defined as the drilling of a well outside a proven area, or within a proven area but in a previously untested zone, to determine whether oil or gas reserves exist. Also included are costs of dry wells, casing and other materials and equipment abandoned in place.

Production expenditures: All spending related to the production of crude oil and natural gas, including expenditures on natural gas processing plants.

Gas utilities

Total marketable gas: Receipt of gas from fields, processing or reprocessing plants after re-injection, field uses, processing plant or reprocessing plant shrinkage, plant use losses have been deducted.

Imports: Receipts of gas, by pipeline, into Canada.

Other receipts: Includes liquified petroleum gases for peak shaving and receipts from non-reporting companies.

Exports: Export of gas, by pipeline, to the United States.

Direct sales: Represents direct, non-utility delivery for consumption.

Drilling completions

New field wildcat: A new field wildcat is a test located on a structural feature or other type of trap which has not previously produced oil or gas. In regions where local geological conditions have little or no control over accumulations, these tests are generally at least three kilometres from the nearest productive area. Distance, however, is not the determining factor. Of greater importance is the degree of risk assumed by the operator, and his intention to test a structure or stratigraphic condition not previously proved productive.

New pool wildcat: A new pool wildcat is a test located to explore for a new pool on a structural feature of other type of trap already producing oil or gas, but outside the known limits of the presently producing area. In some regions where local geological conditions exert an almost negligible control, exploratory holes of this type may be called "near wildcats". Such wells will usually be less than three kilometres from the nearest productive area.

Deeper pool test: A deeper pool test is an exploratory hole located within the productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest productive pool in order to explore for deeper unknown prospects. All metres drilled are assigned to the exploratory category. This practise was adopted commencing with the 1979 data. Previously, metres drilled were split between the exploratory and development category.

Shallower pool test: A shallower pool test is an exploratory test drilled in search of a new productive reservoir, unknown but possibly suspected from data secured from other wells, and shallower than known productive pools. This test is located within the productive area of a pool or pools previously developed.

Outposts: An outpost is a test located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive site.

Development well: A development well is a well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive. If the well is completed for production, it is classified as an oil or gas development well. If the well is not completed for production and is abandoned, it is classified as a dry development hole.

Stratigraphic test: A stratigraphic test is a drilling effort, geologically directed, to obtain information pertaining to a specific geological condition that might lead toward the discovery of an accumulation of hydrocarbons. Such tests are customarily drilled without the intention of being completed for hydrocarbon production. This classification also includes tests identified as score tests and all types of expendable holes related to hydrocarbon exploration.

Service well: A service well is a well drilled or completed for the purpose of supporting production in an existing field. Wells of this class are drilled for the following specific purposes: Gas injection (natural gas, propane, butane), water injection, air injection, steam injection, salt water disposal, water supply for injection, observation, injection for in situ combustion.

Miscellaneous wells: This classification includes storage wells (natural gas, propane, butane), salt brine wells and other wells not classified under categories above.

Project wells: A project well is a well drilled within a designated oil sands area or like deposit for the purpose of producing raw bitumen from the deposit. Such wells may be drilled for pilot, experimental or commercial projects.

Reserves

Established reserves: Those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist, from geological, geophysical or similar information, with reasonable certainty.

Value added

By production activities: Is defined as the value of marketable production less materials and supplies purchased and fuel and electricity consumed in the production of hydrocarbons and sulphur.

Components of value added — Producing activity

Electricity: Data refer to amounts purchased and used, with costs being delivered costs at plant and/or field. Electricity produced by establishments for internal consumption is not included in electricity purchases.

Shipments: The quantity and value of the marketable production that has actually been shipped. The differences between shipments and marketable production are inventory changes which may occur because a company may produce and accumulate or draw down inventories.

Materials and supplies used in producing activities: Data provided in table 6 represent quantities at laid down cost to the establishment of materials, supplies, chemicals, explosives and components consumed during the year in producing activities. In the oil and gas industry it is not practical to estimate the amount of materials that are used as fuel, since this amount represents only a small part of the total energy requirements of the industry and company accounting records do not provide this breakdown. For this reason the amount of fuel purchased and used is shown as a component of materials and supplies. The statistics represent only commodity items or physical goods (costs of

services or overhead charges such as advertising, insurance and depreciation are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Respondents were requested to report materials and supplies purchased and used. Included are repair and maintenance supplies not chargeable to fixed assets accounts. Also included is the cost of office supplies not chargeable to fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment operated cafeterias and lunch counters, first aid medical supplies, laboratory supplies and other general supplies and materials used.

Employment, person-hours, salaries and wages: Employees include salaried management, professional, technical and administrative personnel, plus production, field, plant and related workers, and relate both to producing and non-producing activities.

"Production and related workers" are reported as those receiving pay during the last pay period in the respective month. The numbers are somewhat affected by turnover, in that employment may be overstated when an employee changes employment in the middle of a pay period.

Man-hours of production and related workers in producing activities represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave and statutory holidays). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour.