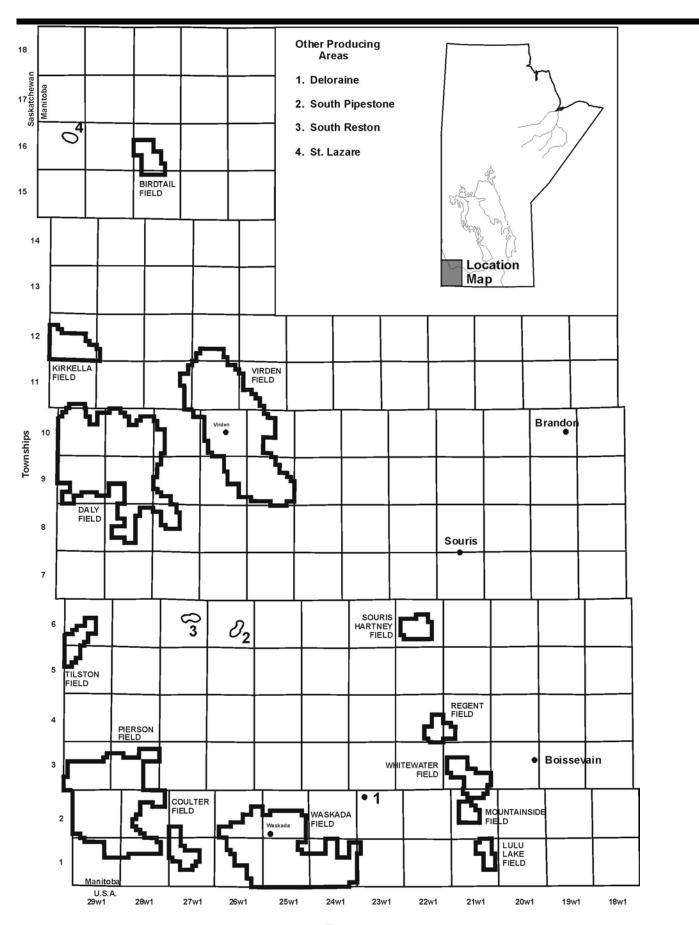
# Manitoba Oil Activity Review 2003

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Ranges

#### 2003 Highlights

- During 2003, 94 wells were drilled in Manitoba, a 3% decrease from 2002's total of 97 wells.
- Manitoba's annual oil production was down approximately 3% from 2002 production to 633 098 m<sup>3</sup>.
- The value of oil produced in 2003 was approximately \$157.4 million, a 5% increase from 2002.
- Provincial revenues from the oil industry (royalties, production taxes, lease sale bonuses, rentals and fees) were \$6.1 million during 2003, a 9% decrease from 2002.
- Gross royalties payable to freehold mineral owners were estimated to be \$17.0 million in 2003 (Federal and Provincial tax liabilities included).
- Surface rights owners received approximately \$4.7 million from rental payments and bonuses during 2003.
- Municipal tax assessments on wells and oilfield equipment were estimated to be \$36.4 million (with taxes paid amounting to approximately \$2.0 million).
- Oil industry expenditures in Manitoba were estimated to be \$99.6 million in 2003, a 2% increase from 2002.
- Five geophysical programs were run in 2003. Total coverage was 176 kilometres at a cost of approximately \$0.6 million.
- Four sales of Crown oil leases covering 4 416 hectares generated \$329,104 in revenue to the province in 2003, a 40% increase from 2002.
- As of January 1, 2003 there were 13 oil fields and 159 non-confidential oil pools designated in the province.
- Crude oil prices fluctuated throughout the year between \$33.21-56.25/bbl. In 2003, Manitoba's average crude oil selling price was \$39.51/bbl, compared with 2002's average of \$36.64/bbl.

#### **Crown Oil and Gas Dispositions**

Public offerings of Crown oil and gas rights are held under sealed tender in Manitoba throughout the year. Four Crown oil and gas sales were held in 2003.

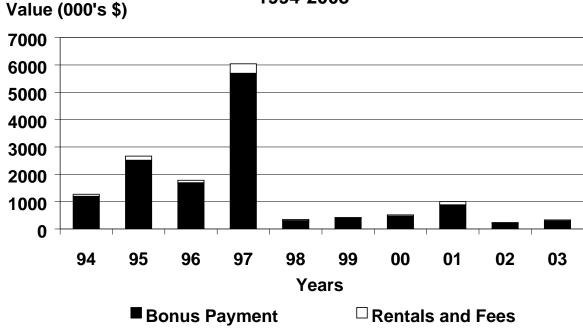
SALE DATE	AVERAGE BONUS \$/ha
February 12, 2003	117.69
May 14, 2003	43.51
August 13, 2003	127.51
November 12, 2003	61.93

As of December 31, 2003, the total area of Crown oil and gas rights under disposition was 47 217 hectares. Of this total, 12 287 hectares were held under exploration reservations and 34 930 hectares were held under lease. In 2003, the total area under disposition decreased by 11% compared with 2002.

Exploration reservations provide the holder with the exclusive right to drill for a 3-year term within the reservation area. Crown oil and gas leases provide the holder with the exclusive right to drill and produce oil and gas for a 5-year term within the lease area. Leases may be renewed for additional 5-year terms, or extended by application for one-year terms with additional rental penalties and drilling commitments. Non-productive leases are surrendered and available for lease by other interested parties.

On December 31, 1982, deeper rights reversion provisions came into effect. Under these provisions, non-productive areas and rights below the producing formation revert to the Crown at the end of the first renewal of the lease term. These rights again become available for lease by other interested parties.

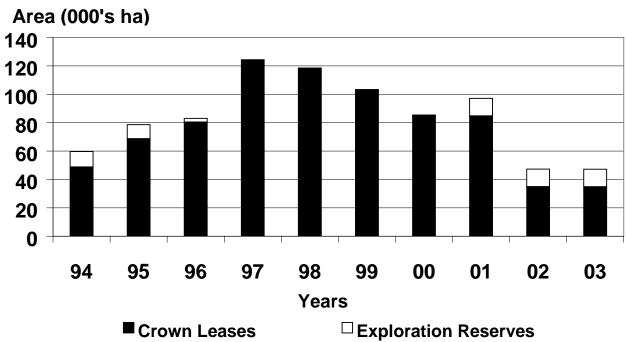




#### Freehold Mineral Owner's Leasing and Revenue

Approximately 80% of the oil and gas rights in southwestern Manitoba are privately owned (freehold). Companies may negotiate leases with freehold mineral owners in areas of current interest where leases have expired or where oil and gas rights are not presently leased. Freehold mineral owners receive revenue from signing bonuses, delay rental payments and royalties when production is obtained. Freehold royalties may range from 12 1/2 to 20% of gross production sales value. It is estimated that gross royalties payable to freehold owners in 2003 were approximately \$17 million (before payment of provincial and federal taxes).

#### Crown Oil and Gas Rights Under Disposition (Dec. 31st) 1994-2003



## Manitoba Crown Lease and Exploration Reservation Sale Statistics 1947-2003

	Lease Sales Reservation Sales												
Year	No. of Leases Sold	Area (ha)	Bonus (\$)	Avg. Price (\$/ha)	Highest Price (\$/ha)	Lease Revenue (\$)	No. of Res. Sold	Area (ha)	Bonus (\$)	Avg. Price (\$/ha)	Highest Price (\$/ha)	Res. Revenue (4)	Total Revenue From Sales (\$)
1947-53			DATA NOT AVAI	LABLE									
1954	31	4 184	82,814	19.79	37.37	88,291	0	0	0	0.00	0.00	0	88,291
1955	140	32 247	579,801	17.98	62.58	620,751	1	8 778	5,854	0.67	0.67	6,213	626,964
1956	28	4 534	43,902	9.68	79.09	49,682	4	255 016	105,587	0.41	1.33	106,587	156,269
1957	16	4 568	100,373	21.97	44.71	106,174	2	48 820	3,256	0.07	0.08	3.756	109,930
1958	0	0	0	0.00	0.00	0	1	10 291	101	0.01	0.01	351	351
1959	1	777	505	0.65	0.65	1,475	2	11 478	11,879	1.03	2.42	12,379	13,854
1960	1	65	4,103	63.12	63.12	4,193	0	0	0	0.00	0.00	0	4,193
1961	0	0	0	0.00	0.00	0	4	50 721	134,099	2.64	6.75	135,099	135,099
1962	2	260	1,327	5.11	12.62	1,668	1	7 464	24,706	3.31	3.31	24,956	26,624
1963	63	5 055	31,614	6.25	17.30	38,468	1	3 498	1,608	0.46	0.46	1,858	40,326
1964	40	9 467	109,125	28.47	388.06	120,717	1	5 641	778	0.14	0.14	1,028	121,745
1965	42	4 347	40,235	9.26	77.60	46,024	15	92 717	52,672	0.57	12.11	56,422	102,446
1966	31	4 417	24,086	5.45	64.22	29,850	6	38 689	62,886	1.63	2.08	64,636	94,486
1967	10	2 274	23,537	10.35	22.25	26,446	5	49 846	55,013	1.10	3.80	56,263	82,709
1968	19	3 599	22,630	6.29	18.92	27,265	6	46 040	31,426	0.68	4.45	32,926	60,191
1969	2	970	7,164	7.39	11.94	8,382	3	16 453	75,282	4.58	7.54	76,032	84,414
1970	8	3 580	10,094	2.82	8.08	14,596	0	0	0	0.00	0.00	0	14,596
1971	2	1 230	33,673	27.38	49.75	34,308	0	0	0	0.00	0.00	0	34,308
1972-78			NO SALES										
1979	86	11 064	897,885	81.15	315.17	929,855	3	4 736	40,888	8.63	12.23	47,558	977,413
1980	80	12 540	1,057,530	84.33	470.51	1,092,880	8	15 572	820,345	52.68	100.31	841,810	1,934,690
1981	85	12 312	1,074,958	87.31	257.26	1,109,988	5	5 376	611,199	113.69	178.43	619,169	1,729,157
1982	56	6 448	1,055,668	163.72	938.88	1,074,588	0	0	0	0.00	0.00	0	1,074,588
1983	66	9 255	1,032,267	111.54	762.34	1,058,705	1	1 024	40,192	39.25	39.25	41,722	1,100,427
1984	104	8 776	2,181,499	248.58	1,411.17	2,208,639	0	0	0	0.00	0.00	0	2,208,639
1985	173	15 471	4,215,083	272.45	1,593.78	4,262,410	0	0	0	0.00	0.00	0	4,262,410

## Manitoba Crown Lease and Exploration Reservation Sale Statistics 1947-2003 (cont'd)

	Lease Sales						Reservation Sales						
Year	No. of Leases Sold	Area (ha)	Bonus (\$)	Avg. Price (\$/ha)	Highest Price (\$/ha)	Lease Revenue (\$)	No. of Res. Sold	Area (ha)	Bonus (\$)	Avg. Price (\$/ha)	Highest Price (\$/ha)	Res. Revenue (4)	Total Revenue From Sales (\$)
1986	103	7 904	891,358	112.77	602.00	916,268	1	768	20,285	26.41	26.41	21,495	937,763
1987	57	5 813	577,253	99.30	230.23	594,635	0	0	0	0.00	0.00	0	594,635
1988	29	3 429	348,439	101.62	313.07	358,462	1	2 112	84,231	39.88	39.88	87,121	445,583
1989	31	2 832	231,918	81.89	400.17	240,548	0	0	0	0.00	0.00	0	240,548
1990	20	1 488	111,930	75.22	250.00	116,650	3	4 128	49,731	12.05	21.33	55,641	172,291
1991	24	1 920	124,275	64.73	184.59	130,275	0	0	0	0.00	0.00	0	130,275
1992	43	3 105	103,135	33.22	118.61	113,047	2	1 855	17,642	9.51	12.87	20,460	133,507
1993	108	14 698	762,578	51.88	352.28	804,723	5	7 320	121,222	16.56	25.41	131,622	936,345
1994	144	18 404	1,145,663	62.25	312.50	1,267,677	3	2 496	49,393	19.79	42.97	53,263	1,320,940
1995	167	23 053	2,517,164	109.19	316.75	2,664,649	0	0	0	0.00	0.00	0	2,664,649
1996	111	12 131	1,692,342	135.51	1305.71	1,779,202	0	0	0	0.00	0.00	0	1,779,202
1997	434	49 969	5,694,789	113.97	874.10	6,043,274	0	0	0	0.00	0.00	0	6,043,274
1998	54	4 220	308,085	73.01	571.50	344,454	0	0	0	0.00	0.00	0	344,454
1999	23	4 058	395,470	97.46	333.44	418,871	0	0	0	0.00	0.00	0	418,871
2000	58	5 173	472,747	91.39	326.23	514,051	0	0	0	0.00	0.00	0	514,051
2001	97	9 344	703,628	75.30	291.50	775,132	5	12 287	181,426	14.77	22.00	226,431	1,001,563
2002	34	2 720	211,957	77.93	211.77	235,077	0	0	0	0.00	0.00	0	235,077
2003	48	4 416	294,448	66.68	617.38	329,104	0	0	0	0.00	0.00	0	329,104
Total	2671	332 117	29,217,052	87.97	N/A	30,601,454	89	703 126	2,601,701	3.70	N/A	2,724,798	32,326,252

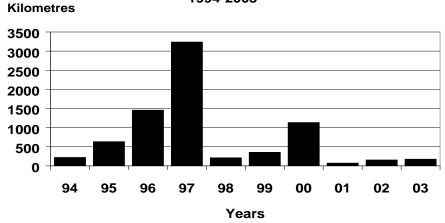
## **Geophysical Activity**

Five geophysical programs were run in 2003 covering 176 km. Three of the five programs ran in 2003 were 2D and two were 3D. The estimated cost of the programs was \$575,057.

## MANITOBA GEOPHYSICAL ACTIVITY SUMMARY 1975-2003

Year	Licenses Issued	Kilometers Run (km)	Total Program Costs \$	Year	Licenses Issued	Kilometers Run (km)	Total Program Costs \$
1975	1	270	106,500	1990	2	30	118,452
1976	3	112	118,302	1991	2	15	62,032
1977	2	830	1,046,220	1992	8	299	370,198
1978	5	1 828	3,451,370	1993	9	202	225,776
1979	10	2 001	2,970,734	1994	14	222	890,307
1980	10	851	1,843,438	1995	16	633	1,634,771
1981	11	1 148	2,116,854	1996	30	1 457	5,480,000
1982	19	879	1,805,512	1997	32	3 239	6,098,000
1983	14	3 410	3,639,692	1998	13	212	619,072
1984	23	2 731	5,547,086	1999	2	354	269,724
1985	25	1 647	3,081,241	2000	13	1 134	2,761,042
1986	8	338	1,227,227	2001	4	73	277,100
1987	13	683	2,713,000	2002	4	156	415,950
1988	13	2 148	2,129,550	2003	5	176	575,057
1989	2	39	114.627				

#### Geophysical Activity 1994-2003



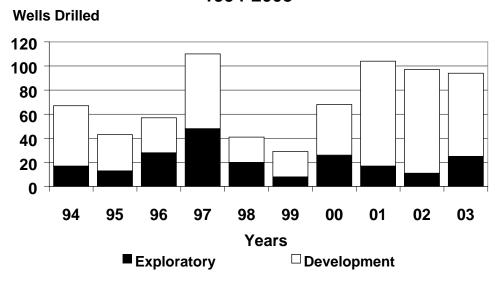
#### **SUMMARY OF 2003 GEOPHYSICAL PROGRAMS**

Licence No.	Licensee	Contractor	Area	Type	Km Run
447	Lanquest Services Ltd.	Discovery Seismic Ltd.	Oak Lake	3D	79.7
448	New Midland Petroleum Ltd.	Discovery Seismic Ltd.	Manitou	2D	15.8
449	New Midland Petroleum Ltd.	Eagle Geophysical Canada Inc.	Reston	3D	61.7
450	Rideau Petroleums Ltd.	Eagle Geophysical Canada Inc.	Daly	2D	12.0
451	Rideau Petroleums Ltd.	Datum Exploration Ltd.	Pierson	2D	7.0
				Total	176.2

### **Drilling Activity**

In 2003, 102 drilling licenses were issued, resulting in 10 different companies drilling 94 wells, a decrease of 3% from 2002. Four drilling contractors drilled 97 510 metres of hole for an average well depth of 1 037 m.

#### Wells Drilled in Manitoba 1994-2003



#### **Drilling Statistics by Operator and Contractor**

Wells Drilled by Operator	2003	2002	Wells Drilled by Contractor	2003	2002
EOG Resources Canada Inc.	41	34	Precision Drilling (1987) Ltd.	37	34
Tundra Oil and Gas Ltd.	27	28	Trinidad Drilling Ltd.	32	28
Rideau Petroleums Ltd.	11	7	Big Sky Drilling Ltd.	18	14
Kiwi Resources Ltd.	5	6	Ensign Drilling Inc.	7	21
New Midland Petroleum Ltd.	4	-	Total	94	97
Canadian Coastal Resources Ltd.	2	-			
385475 Alberta Ltd.	1	-			
Compton Petroleum Corporation	1	-			
Wedona Energy Inc.	1	-			
Mountcliff Resources Ltd.	1	-			
Chevron Canada Resources	-	21			
Creswick Petroleum Ltd.	-	1			
Total	94	97			

## **Drilling Activity by Area**

Field	TWP	RGE WPM	Wells Drld.	Develo Drld.	opment POW	Explo Drld.	ratory POW	Total POW	Dry/ Abd	Other
Daly	8-10	27-29	21	19	17	2	1	18	3	0
Waskada	1-2	25-26	43	35	28	8	7	35	0	8
Virden	9-12	25-26	7	6	6	1	1	7	0	0
Whitewater	3	21	2	2	2	0	0	2	0	0
Pierson	2-3	28-29	1	1	0	0	0	0	1	0
Souris Hartney	6	22	1	1	1	0	0	1	0	0
Regent	4	21-22	2	2	2	0	0	2	0	0
Other Areas			17	3	3	14	12	15	2	0
Total			94	69	59	25	21	80	6	8
% of Total Drilled				7	73	2	:7	=		
DOW Detential Oil V	Valla									

POW – Potential Oil Wells

## **Drilling Success 1981-2003**

Year	Devel	opment Wells	Expl	oratory Wells	A	All Wells			
	Drilled	% Successful	Drilled	% Successful	Drilled	% Successful			
1981	29	100	33	55	62	76			
1982	117	95	78	67	195	84			
1983	187	95	60	77	247	91			
1984	210	95	36	44	246	88			
1985	209	92	52	69	261	87			
1986	90	95	43	91	133	93			
1987	74	93	33	61	107	83			
1988	53	85	18	17	71	68			
1989	45	96	7	14	52	85			
1990	63	94	15	73	78	90			
1991	53	89	1	100	54	89			
1992	22	82	6	33	28	71			
1993	73	90	14	78	87	90			
1994	50	96	17	41	67	82			
1995	30	83	13	23	43	65			
1996	29	83	28	50	57	68			
1997	61	79	48	42	109	62			
1998	21	95	20	45	41	71			
1999	20	100	8	50	28	86			
2000	42	93	26	8	68	60			
2001	87	98	17	41	104	89			
2002	86	95	11	64	97	92			
2003	69	94	25	88	94	93			

## **Drilling Activity 1951-2003**

Year	Licenses Issued	Wells* Drilled	W Classif			nd Gas W pleted Sta		Metres* Drilled	Other** Wells Drilled	Year	Licenses Issued	Wells* Drilled	We Classif			and Gas W		Metres* Drilled	Other** Wells Drilled
			E	D	PO	AD	S						E	D	PO	AD	S		
Pre 1951	15																		
1951	123	18	14	4	6	10	2	14 956	103	1978	16	22	12	10	10	6	6	18 329	0
1952	104	68	40	28	25	33	10	58 344	33	1979	27	25	9	16	16	9	0	20 537	0
1953	127	102	31	71	73	29	0	76 682	9	1980	33	27	12	15	18	9	0	23 508	6
1954	333	310	114	196	217	90	3	233 170	0	1981	76	62	33	29	47	15	0	61 011	5
1955	382	354	57	297	279	66	9	254 774	5	1982	201	195	78	117	164	30	1	184 282	0
1956	283	248	30	218	202	38	8	176 994	14	1983	290	247	60	187	223	24	0	229 304	5
1957	225	224	71	153	139	85	0	155 469	2	1984	249	246	36	210	218	28	0	220 631	0
1958	92	92	16	76	61	31	0	60 430	0	1985	313	261	52	209	229	29	3	228 387	7
1959	50	47	16	31	30	17	0	30 792	2	1986	116	134	44	90	122	11	1	118 675	1
1960	65	66	12	54	50	15	1	43 918	0	1987	116	107	33	74	90	17	0	96 970	0
1961	26	28	11	17	11	16	1	17 389	1	1988	78	72	18	54	48	23	1	63 722	0
1962	30	24	3	21	15	9	0	17 683	2	1989	54	52	7	45	44	8	0	42 948	0
1963	59	57	9	48	39	16	2	43 451	0	1990	93	79	16	63	70	8	1	75 751	0
1964	110	104	32	72	68	35	1	75 303	3	1991	51	54	1	53	48	6	0	48 698	0
1965	79	65	40	25	27	38	0	50 298	10	1992	28	28	7	21	20	8	0	27 391	0
1966	76	63	33	30	29	33	1	54 863	9	1993	102	87	13	74	78	9	0	90 343	0
1967	90	85	42	43	44	41	0	67 068	0	1994	82	67	17	50	55	11	1	77 716	0
1968	64	59	44	15	27	32	0	48 840	3	1995	56	43	13	30	29	14	0	50 591	0
1969	98	46	30	16	14	29	3	34 376	38	1996	82	57	28	29	40	17	0	60 723	0
1970	18	18	13	5	2	16	0	16 253	1	1997	129	109	48	61	68	39	2	108 040	0
1971	24	15	6	9	2	8	5	13 026	6	1998	41	41	20	21	29	12	0	48 908	0
1972	11	9	6	3	0	7	2	6 778	1	1999	31	28	8	20	24	4	0	38 224	1
1973	19	17	17	0	0	17	0	14 083	0	2000	82	68	26	42	41	27	0	71 716	0
1974	22	21	17	4	6	14	1	22 710	1	2001	103	104	17	87	72	12	20	111 612	0
1975	9	7	7	0	2	4	1	6 716	4	2002	101	97	11	86	79	8	10	104 705	0
1976	16	15	13	1	3	11	1	11 161	2	2003	102	94	25	69	80	6	8	97 510	0
1977	21	11	10	1	9	2	0	9 359	2										
										TOTAL	5 223	4 579	1 428	3 150	3 342	1 132	105	3 935 125	276

<sup>\*</sup> Excludes other wells drilled

<sup>\*\*</sup> Other wells drilled includes: structure test holes, potash test holes, gas storage wells, helium

E - Exploratory

D - Development

PO - Potential Oil

AD - Abandoned Dry

S - Service

## Exploratory\* Wells Drilled in Manitoba by Formation 1974-2003 (Geological Period of Deepest Formation Drilled)

Year	Cretaceous	Jurassic	Mississippian	Devonian	Silurian	Ordovician	Cambrian	Precambrian	Total
1974	1		5					12	18
1975	1		4	1		4		1	11
1976			5	7					12
1977			10						10
1978			9	1		1		1	12
1979			6	1				2	9
1980			8	1	1			1	11
1981			21	6				5	32
1982			72	5				1	78
1983		1	48	9	1			1	60
1984	1		32	2				1	36
1985			49	2				1	52
1986			30	13					43
1987			13	19	1				33
1988	3		9	6					18
1989		1	2	3	1				7
1990			15						15
1991			1						1
1992			2	3				1	6
1993		2	9	2				1	14
1994			11	5				1	17
1995			9	4					13
1996			14	14					28
1997		2	19	21	1	3	-	2	48
1998			6	14					20
1999			4	3				1	8
2000		13	5	5	1			2	26
2001		3	8	4	1			1	17
2002			11						11
2003		3	12	9				1	25
TOTAL	6	25	449	160	7	8	-	36	691

<sup>\*</sup> Exploratory - includes outpost, new field wildcat, new pool wildcat and deeper pool wildcat classifications.

### **Horizontal Wells Drilled in 2003**

Field	Surface Location	Bottom Hole Location	Horizontal Length(m)	Licensee	Initial Production* (m³/d)	Status
Virden	1A-10-9-25	9A-10-9-25	744	Tundra Oil and Gas Ltd.	13.8	COOP
		9C-10-9-25	800**			
	7C-11-9-25	5D-12-9-25	869	Tundra Oil and Gas Ltd.	16.5	COOP
		5B-12-9-25	719**			
	15A-14-9-25	2B-14-9-25	1020	Tundra Oil and Gas Ltd.	2.0	COOP
		6C-14-9-25	550**			
	8D-19-11-26	15A-19-11-26	568	Tundra Oil and Gas Ltd.	26.8	COOP
		A16D-19-11-26	535**			
	1B-31-11-26	A3B-32-11-26	926	Tundra Oil and Gas Ltd.	14.9	COOP
Whitewater	400 04 0 04	A9A-33-2-21	809	Tundra Oil and Gas I td.	22.4	000D
vvnitewater	13D-34-2-21					COOP
	4C-21-3-21	12D-21-3-21	563	EOG Resources Inc.	3.1	COOP
Souris Hartney	9C-10-6-22	16D-10-6-22	316	Tundra Oil and Gas Ltd.	47.6	COOP
•		1C-15-6-22	648**			
	16A-10-6-22	4C-14-6-22	686	Tundra Oil and Gas Ltd.	17.0	COOP
		4A-14-6-22	515**			

<sup>\*</sup>Average oil rate for first six months (or less) of production

<sup>\*\*</sup>Second Leg

#### **Areas of Activity**

**Waskada** - In 2003, Waskada continued to be the most active area in the Province with a total of 43 wells being drilled. All of the wells were drilled vertically with 8 of the wells being drilled as water injection wells in Waskada Unit No. 19.

**Daly** – In 2003, there were 21 wells drilled vertically in the Daly Field. There was also one vertical well reentered and deepened to test the Bakken and 4 Lodgepole wells were deepened to test the Bakken.

**Virden -** In 2003, there were 7 wells drilled in the Virden Field of which 6 were drilled horizontally. There was one well re-entered.

**Other Areas -** There were 17 vertical wells drilled in other areas in 2003. Of these, 3 were development and 14 were exploratory. Of the exploratory wells, 12 were completed as potential oil wells.

#### Non-Abandoned Wells 2003

Field	Active <sup>(1)</sup> Oil Producers	Active <sup>(2)</sup> Other Wells
Daly	371	48
Tilston	22	3
Waskada	297	95
Lulu Lake	4	2
Virden	472	124
Whitewater	36	3
Pierson	126	33
Kirkella	28	5
Souris Hartney	10	3
Coulter	3	0
Regent	9	1
Mountainside	14	1
Birdtail	17	4
Confidential Wells	41	0
Other Areas	26	7
Total	1476	329

#### Notes:

- (1) Wells classified as capable of oil production at year end that produced oil in 2003. Dual completions or commingled wells count as one well.
- (2) Includes Water Injection, Salt Water Disposal, Water Supply, Gas Injection and Other Wells.

### **Well Licence Transfers in 2003**

In 2003, there were 127 well name changes resulting from well licence transfers, corporate reorganizations, partnerships and amalgamations.

PREVIOUS OPERATOR	NEW OPERATOR	FIELD/AREA	NO. OF WELLS	TYPE
National Fuel Exploration Corp.	Tundra Oil and Gas Ltd.	Virden	1	Transfer
Case Resources Inc.	385475 Alberta Ltd.	Sinclair	1	Transfer
385475 Alberta Ltd.	Tundra Oil and Gas Ltd.	Sinclair	2	Transfer
PCC Energy Corp.	Enerplus Oil & Gas Ltd.	Kirkella	34	Corporate Takeover
APF Energy Ltd. X-Terra Energy Corp.	X-Terra Energy Corp. Malahat Oil & Gas Ltd.	South Linklater	5	Transfer
Home Oil Company Limited	Devon Canada Corporation	Waskada Virden Pierson Coutler Kemnay South Melita	1 1 21 1 2 2	Corporate Takeover
Progress Energy Production Partnership	Tundra Oil and Gas Ltd.	Daly Virden Birdtail McAuley Solsgirth	3 13 30 1 1	Transfer
National Fuel Exploration Corp.	Seneca Energy Canada Inc.	Waskada Virden	1 2	Name Change
Player Resources Ltd.	Seneca Energy Canada Inc.	South Pierson	1	Name Change
Albchem Holdings Ltd.	ERCO Worldwide	Virden	2	Corporate Takeover
Prairie Well Servicing Ltd.	4478429 Manitoba Ltd.	Daly Virden	1 1	Transfer
		Total	127	

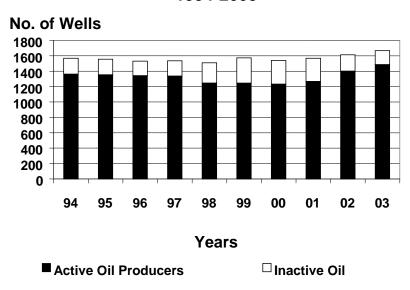
#### **Production and Markets**

Annual oil production in Manitoba was down 3% from 2002 to 633 098 m<sup>3</sup> (4.0 million barrels).

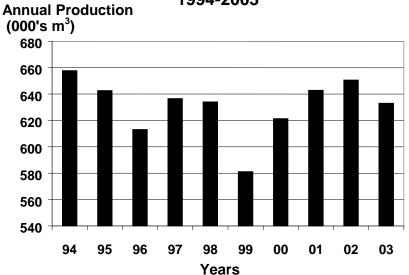
Oil production from the Virden, Daly, Waskada and Pierson Fields accounted for 37%, 21%, 18% and 10% respectively of Manitoba's total production.

In 2003, a number of fields showed an increase in production over 2002 including Souris Hartney (123%), Regent (20%), Coulter (11%), Waskada (7%) and Daly (3%).

#### Oil Wells in Manitoba 1994-2003



## Manitoba Crude Oil Production 1994-2003



## **Manitoba's Top 25 Oil Producers**

		200	3	2002	<u>)</u> *	2003/2002 Increase (decrease)		
Rank	Operator	m³	% of Total	m³	% of Total	m³	% Change	
1	Chevron Canada Resources Ltd.	228 027.4	36.0	255 885.0	39.4	(27 857.6)	(10.9)	
2	Tundra Oil and Gas Ltd.	203 650.3	32.2	200 418.1	30.8	3 169.2	1.6	
3	EOG Resources Canada Inc.	68 282.5	10.8	60 100.5	9.2	8 182.0	13.6	
4	Canadian Natural Resources Limited	36 356.4	5.7	38 771.2	6.0	(2 414.8)	(6.2)	
5	NCE Petrofund Corporation	32 367.2	5.1	35 584.5	5.5	(3 217.3)	(9.0)	
6	Rideau Petroleums Ltd.	26 308.9	4.2	20 994.1	3.2	5 314.8	25.3	
7	Kiwi Resources Ltd.	15 013.3	2.4	14 491.4	2.2	521.9	3.6	
8	Zargon Oil & Gas Ltd.	8 642.7	1.4	8 790.0	1.4	(147.3)	(1.7)	
9	Cosens Drilling Limited	3 949.7	0.6	3 630.2	0.6	319.5	8.8	
10	Enerplus Oil & Gas Ltd.	1 421.4	0.2	2 338.1	0.4	(916.7)	(39.2)	
11	Leader Resources Limited	1 382.8	0.2	1 376.5	0.2	6.3	0.5	
12	Malahat Oil & Gas Ltd.	1 135.6	0.2	1 587.8	0.2	(452.2)	(28.5)	
13	2928419 Manitoba Limited	1 095.3	0.2	828.0	0.1	267.3	32.3	
14	Centoba Oils Limited	938.1	0.1	985.9	0.2	(47.8)	(4.8)	
15	2214351 Manitoba Ltd.	861.6	0.1	819.5	0.1	42.1	5.1	
16	Antler River Resources Ltd.	840.8	0.1	785.1	0.1	55.7	7.1	
17	Gerrand Enterprises Ltd.	751.8	0.1	806.1	0.1	(54.3)	(6.7)	
18	Ka-Bert Resources Limited	470.5	0.1	509.2	0.1	(38.7)	(7.6)	
19	4478429 Manitoba Ltd.	357.1	0.1	258.6	0.0	98.5	38.1	
20	494889 Alberta Incorporated	268.4	0.0	262.9	0.0	5.5	2.1	
21	Graceland Resources Limited	249.1	0.0	308.4	0.0	(59.3)	(19.2)	
22	Eureka Oils Ltd.	191.7	0.0	188.3	0.0	3.4	1.8	
23	Ballantyne International Resources Ltd.	181.9	0.0	205.9	0.0	(24.0)	(11.7)	
24 25	618555 Saskatchewan Ltd. CONFIDENTIAL	134.3	0.0	143.0	0.0	(8.7)	(6.1)	

<sup>\*</sup> Oil production figures may vary year to year due to well transfers and company mergers.

#### **Manitoba Oil and Water Production 1951-2003**

Year	Wells Capable of Producing (December)	Wells Producing (December)	Oil Prod. (m³)	Water Prod. (m³)	Total Fluid Prod. (m³)	Avg. Water Cut(%)	Avg. Oil Prod. (m³/day)	Year	Wells Capable of Producing (December)	Wells Producing (December)	Oil Prod. (m³)	Water Prod. (m³)	Total Fluid Prod. (m³)	Avg. Water Cut(%)	Avg. Oil Prod. (m³/day)
1951	5	5	1 854	152	2 006	7.6	5.1	1978	808	703	598 405	4 603 669	5 202 074	88.5	1 639.5
1952	39	32	17 020	3 918	20 938	18.7	46.6	1979	811	706	583 377	4 302 557	4 885 934	88.1	1 598.3
1953	105	93	104 189	46 597	150 786	30.9	285.4	1980	823	720	563 482	4 454 815	5 018 297	88.8	1 539.6
1954	284	269	341 403	61 606	403 009	15.3	935.4	1981	853	748	542 695	4 574 423	5 117 118	89.4	1 486.8
1955	554	486	658 779	284 601	943 380	30.2	1 804.9	1982	1 002	896	581 937	4 588 111	5 170 048	88.7	1 594.3
1956	736	647	919 329	634 442	1 553 771	40.8	2 511.8	1983	1 160	1 041	736 913	5 090 892	5 827 805	87.4	2 018.9
1957	846	739	967 810	998 380	1 966 190	50.8	2 651.5	1984	1 350	1 209	793 161	5 623 619	6 416 780	87.6	2 167.1
1958	877	736	926 298	1 183 642	2 109 940	56.1	2 537.8	1985	1 505	1 366	820 727	5 926 972	6 747 699	87.8	2 248.6
1959	875	730	803 436	1 274 183	2 077 619	61.3	2 201.2	1986	1 592	1 367	823 321	6 574 356	7 397 677	88.9	2 255.7
1960	893	755	757 033	1 401 502	2 158 535	64.9	2 068.4	1987	1 624	1 434	781 795	6 619 927	7 401 722	89.4	2 141.9
1961	874	729	711 949	1 511 295	2 223 244	68.0	1 950.5	1988	1 627	1 370	768 493	6 618 307	7 386 800	89.6	2 099.7
1962	852	730	623 976	1 551 270	2 175 246	71.3	1 709.5	1989	1 581	1 353	722 821	6 489 970	7 212 791	90.0	1 980.3
1963	839	683	599 249	1 617 970	2 217 219	73.0	1 641.8	1990	1 483	1 430	737 454	6 705 759	7 443 213	90.1	2 020.4
1964	892	745	701 909	2 106 630	2 808 539	75.0	1 917.8	1991	1 567	1 408	712 791	6 899 878	7 612 669	90.6	1 952.9
1965	889	748	786 029	2 369 659	3 155 688	75.1	2 153.5	1992	1 547	1 387	656 454	6 965 246	7 621 700	91.4	1 793.6
1966	905	737	831 230	2 926 156	3 757 386	77.9	2 277.3	1993	1 563	1 394	634 561	6 439 603	7 074 164	91.0	1 738.5
1967	911	752	887 556	3 038 500	3 926 056	77.4	2 431.7	1994	1 568	1 363	657 871	6 410 921	7 068 792	90.7	1 802.4
1968	926	774	986 022	3 644 940	4 630 962	78.7	2 694.0	1995	1 556	1 354	642 650	6 050 635	6 693 285	90.4	1 760.7
1969	923	754	985 987	3 789 952	4 775 939	79.4	2 701.3	1996	1 531	1 342	613 110	5 928 982	6 542 092	90.6	1 675.2
1970	904	730	939 179	3 952 435	4 891 614	80.8	2 573.1	1997	1 535	1 337	636 800	6 011 713	6 648 513	90.4	1 744.7
1971	900	695	890 621	4 213 250	5 103 871	82.6	2 440.1	1998	1 509	1 247	634 173	5 949 658	6 583 831	90.4	1 737.5
1972	891	745	835 385	4 483 101	5 318 486	84.3	2 282.5	1999	1 494	1 246	581 226	5 530 359	6 111 585	90.5	1 592.4
1973	882	687	807 905	4 542 685	5 350 590	84.9	2 213.4	2000	1 516	1 232	621 361	6 496 237	7 117 598	91.3	1 697.7
1974	871	714	754 701	4 518 060	5 272 761	85.7	2 067.7	2001	1 567	1 267	642 885	7 016 732	7 659 617	91.6	1 761.3
1975	831	686	701 491	4 560 448	5 261 939	86.7	1 921.9	2002	1 613	1 402	650 750	7 639 477	8 290 227	92.2	1 782.9
1976	821	688	633 419	4 611 042	5 244 461	87.9	1 730.7	2003	1 666	1487	633 098	7 723 449	8 356 547	92.4	1 734.5
1977	804	701	630 443	4 816 879	5 447 322	88.4	1 727.2								
								TOTAL	_	;	36 176 513	221 379 562	257 556 075		_

TOTAL -- 36 176 513 221 379 562 257 556 075 --

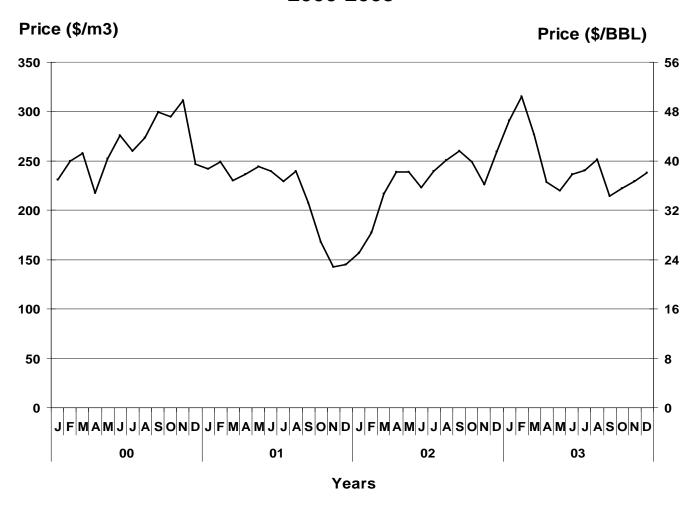
## Comparison of 2003 vs 2002 Oil Production by Field

	20	003	20	02	2003/2002 Increase (decrease)		
Field	m³	% of Total	m³	% of Total	m³	% Change	
Daly	132 315.9	20.9	128 575.1	19.8	3 740.8	2.9	
Tilston	9 263.0	1.5	12 044.1	1.9	(2 781.1)	(23.1)	
Waskada	113 621.5	17.9	105 786.7	16.3	7 834.8	7.4	
Lulu Lake	4 852.9	0.8	6 143.6	0.9	(1 290.7)	(21.0)	
Virden	234 192.1	37.0	250 042.9	38.4	(15 850.8)	(6.3)	
Whitewater	19 907.3	3.1	24 879.5	3.8	(4 972.2)	(20.0)	
Pierson	61 428.1	9.7	67 072.8	10.3	(5 644.7)	(8.4)	
Kirkella	12 001.9	1.9	14 991.7	2.3	(2 989.8)	(19.9)	
Souris Hartney	12 696.2	2.0	5 688.3	0.9	7 007.6	123.2	
Coulter	189.1	0.0	171.1	0.0	18.0	10.5	
Regent	1 734.0	0.3	1 446.6	0.2	287.4	19.9	
Mountainside	4 205.5	0.7	5 054.9	0.8	(849.4)	(16.8)	
Birdtail	6 595.5	1.0	7 038.9	1.1	(443.4)	(6.3)	
Other Areas	20 095.1	3.2	21 814.1	3.4	(1 719.0)	(7.9)	
TOTAL	633 098.1	100	650 750.3	100	(17652.2)	(2.7)	

#### **Oil Prices**

Manitoba's overall average crude oil selling price in 2003 increased 8% from 2002 to  $$248.61/m^3$  (\$39.51 Cdn. per barrel). The average monthly price was lowest in September at  $$248.61/m^3$  (\$34.32 Cdn. per barrel) and highest in February at  $$317.29/m^3$  (\$50.42 Cdn. per barrel).

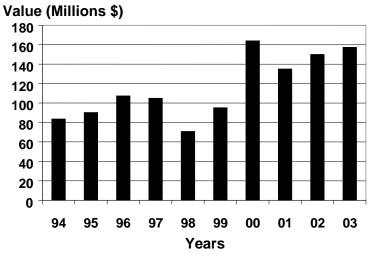
## Monthly Oil Crude Prices 2000-2003



#### **Value of Production**

The total value of oil production during 2003 was \$157.4 million, up 5% from 2002.

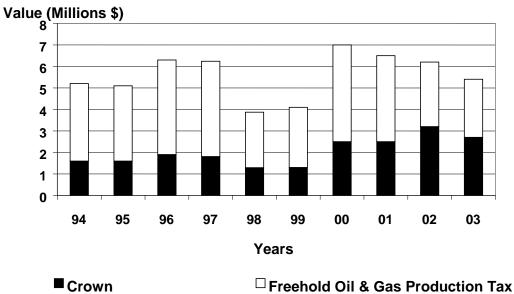




#### **Provincial Revenue from Oil Production**

During 2003, the Manitoba government collected approximately \$6.1 million in revenues (\$2.67 million in Crown oil royalties, \$2.98 million in freehold oil taxes, and \$0.47 million Crown lease sale bonuses, rentals and fees), resulting in a 9% decrease from 2002. These figures do not include provincial revenue from corporate capital tax, sales tax, and corporate and individual income tax.

## **Crown Royalties and Taxes** from Oil Production 1994-2003



## Manitoba Crude Oil Production and Sales Value 1951-2003

	Annual Production	Cumulative Production	Value of Sales	Cumulative Value of Sales (Dec. 31)	Average* Wellhead Price					Annual Production	Cumulative Production	Value of Sales	Cumulative Value of Sales (Dec. 31)	Average* Wellhead Price	
Year	(m³)	(m <sup>3</sup> )	(000's \$)	(000's \$)	(\$/m <sup>3)</sup>	(\$/bbl)	Year	(m³)	(m <sup>3</sup> )	(000's \$)	(000's \$)	(\$/m <sup>3)</sup>	(\$/bbl)		
1951	1 854	1 854	26	26	15.58	2.48	1978	598 354	19 402 670	45,953	432,964	76.77	12.20		
1952	17 022	18 876	229	255	13.77	2.24	1979	583 377	19 986 047	48,403	481,367	82.97	13.19		
1953	104 193	123 069	1,715	1,970	16.51	2.62	1980	563 482	20 549 529	54,958	536,325	97.57	15.51		
1954	341 410	464 479	5,620	7,590	16.46	2.62	1981	542 695	21 092 224	64,055	600,380	118.03	18.82		
1955	658 802	1 123 281	9,517	17,107	14.56	2.31	1982	582 283	21 674 507	100,537	700,917	173.57	27.58		
1956	919 539	2 042 820	13,418	30,524	14.61	2.32	1983	736 934	22 411 441	152,350	853,267	206.64	32.84		
1957	967 721	3 010 541	15,231	45,755	15.81	2.51	1984	793 286	23 204 727	169,296	1,022,563	214.04	34.02		
1958	926 322	3 936 863	14,265	60,020	15.40	2.45	1985	820 729	24 025 456	180,049	1,202,612	220.21	35.00		
1959	803 461	4 740 324	11,615	71,635	14.46	2.30	1986	823 322	24 848 778	95,337	1,297,949	114.66	18.23		
1960	757 054	5 497 378	10,690	82,325	14.16	2.25	1987	781 806	25 630 584	109,202	1,407,151	139.76	22.21		
1961	711 969	6 209 347	10,133	92,458	14.27	2.27	1988	786 563	26 417 147	78,660	1,485,811	102.26	16.25		
1962	623 989	6 833 336	9,500	101,958	15.12	2.49	1989	722 820	27 139 967	90,101	1,575,912	124.66	19.81		
1963	599 212	7 432 548	9,183	111,141	15.33	2.44	1990	737 762	27 877 729	114,805	1,609,717	155.85	24.78		
1964	701 920	8 134 468	10,694	121,835	15.31	2.43	1991	712 792	28 590 521	90,343	1,781,060	126.74	20.15		
1965	786 050	8 920 518	12,270	134,105	15.59	2.48	1992	656 415	29 246 936	86,289	1,867,349	131.46	20.89		
1966	831 248	9 751 766	13,087	147,192	15.73	2.50	1993	634 561	29 881 497	77,486	1,944,835	122.07	19.40		
1967	887 572	10 639 338	13,974	161,166	15.77	2.51	1994	657 870	30 539 367	83,620	2,028,455	126.76	20.14		
1968	986 024	11 625 362	15,561	176,727	15.79	2.51	1995	642 650	31 182 017	90,238	2,118,693	140.51	22.33		
1969	985 981	12 611 343	15,615	192,342	15.82	2.51	1996	613 114	31 795 131	107,245	2,225,938	173.90	27.63		
1970	939 175	13 550 518	14,848	207,200	15.80	2.51	1997	636 681	32 431 812	104,884	2,330,822	161.49	25.66		
1971	890 622	14 441 140	15,445	222,645	17.31	2.75	1998	634 071	33 065 883	70,730	2,401,552	116.97	18.54		
1972	835 380	15 276 520	14,586	237,231	17.46	2.77	1999	581 206	33 647 089	95,129	2,496,681	166.25	26.42		
1973	807 882	16 084 402	17,155	254,386	21.23	3.37	2000	621 378	34 268 467	163,933	2,660,614	266.16	42.30		
1974	754 667	16 839 069	27,182	281,568	36.00	5.72	2001	642 908	34 911 375	134,996	2,795,610	214.67	34.11		
1975	701 459	17 540 528	31,453	313,021	44.81	7.12	2002	650 750	35 562 125	154,060	2,949,670	230.59	36.64		
1976	633 322	18 173 850	33,533	346,554	52.99	8.42	2003	633 098	36 176 513	157,399	3,106,969	248.61	39.51		
1977	630 466	18 804 316	40.457	387.011	64.12	10.19									

<sup>\*</sup> Average Wellhead Price = Value of Sales/Volume Sold

## Direct Revenues to Crown from Oil Exploration and Production in Manitoba\* 1951-2003

Year	Crown Royalties (\$000's)	Freehold Oil Tax (\$000's)	Crown Oil & Gas Rights Revenue (\$000's)	Miscellaneous Fees (\$000's)	Total Direct Revenue (\$000's)	Year	Crown Royalties (\$000's)	Freehold Oil Tax (\$000's)	Crown Oil & Gas Rights Revenue (\$000's)	Miscellaneous Fees (\$000's)	Total Direct Revenue (\$000's)
	(**************************************	(***********	(44444)	(**************************************	(4)	1001	(**************************************	(4000 0)	(********)	(4000 0)	(4555 5)
1951	2		4	5	11	1980	2,575	9,159	2,012	11	13,757
1952	7		7	9	23	1981	2,715	10,022	1,846	12	14,595
1953	50	46	6	8	110	1982	3,176	11,947	1,292	28	16,443
1954	156	64	106	24	350	1983	4,111	14,825	1,347	59	20,342
1955	230	92	696	10	1,028	1984	4,238	15,642	2,466	67	22,413
1956	318	83	668	18	1,087	1985	4,323	14,977	4,522	90	23,912
1957	382	126	531		1,039	1986	2,570	8,179	1,195	53	11,997
1958	356	137	293	31	817	1987	2,740	8,649	855	55	12,299
1959	344	165	215	2	726	1988	2,034	5,861	639	40	8,574
1960	313	130	102	2	547	1989	2,273	6,757	364	37	9,431
1961	306	105	228	5	644	1990	2,578	7,662	266	35	10,541
1962	298	96	116	10	520	1991	2,567	6,438	213	37	9,255
1963	276	91	87	3	457	1992	1,978	4,938	209	21	7,146
1964	307	86	157	23	573	1993	1,884	4,501	1,005	41	7,431
1965	344	84	164	3	595	1994	1,581	3,620	1,415	44	6,660
1966	353	96	154	3	606	1995	1,618	3,480	2,860	43	8,001
1967	370	111	139	10	630	1996	1,866	4,450	2,024	51	8,391
1968	411	116	99	14	640	1997	1,806	4,431	6,335	55	12,627
1969	405	128	115	4	652	1998	1,259	2,579	752	30	4,620
1970	377	143	43	1	564	1999	1,286	2,751	764	18	4,819
1971	373	143	55	2	573	2000	2,537	4,488	783	21	7,829
1972	348	138	16	1	503	2001	2,506	4,008	1,272	28	7,814
1973	404	144	15	2	565	2002	3,203	2,994	444	60	6 701
1974	1,599	5,216	15	4	6,834	2003	2,668	2,984	431	44	6,127
1975	1,823	6,498	12	1	8,334						
1976	2,024	6,128	11	11	8,174						
1977	2,263	7,012	10	3	9,288	TOTAL	79,092	209,307	40,373	1,207	329,979
1978	2,281	8,018	10	6	10,315						
9	2.280	8.769	988	12	12.049						

1979

<sup>\*</sup> Does not include corporate capital tax, sales tax or corporate and individual income tax. All figures are based on calendar year receipts.

#### Manitoba Drilling Incentive Program (1992-2004)

The Manitoba Drilling Incentive Program provides eligible wells a Crown royalty/freehold production tax-free holiday volume.

Highlights of the program include:

- · a Deep Drilling Incentive for new wells.
- up to 10 000 m<sup>3</sup> holiday volume for exploratory wells drilled into existing producing formations
- a 10 000 m<sup>3</sup> holiday volume for horizontal wells
- a 500 m<sup>3</sup> holiday volume for marginal wells on which a major workover is conducted
- flexibility in the allocation of earned holiday volumes

Effective April 1, 1999, a reduction in Crown oil royalty and freehold oil production tax was implemented for vertical wells, reactivated wells and new EOR projects.

Under the new Third Tier oil status, Crown royalty rates are reduced by 14.5% and freehold oil production tax rates by 44%.

Effective April 1, 2002, the Deep Drilling Incentive was introduced to replace the Special New Formation Incentive. An Injection Well Incentive was also introduced, along with enhancements to the Major Workover Incentive.

Under the Deep Drilling Incentive, new wells drilled to completely penetrate the Devonian Duperow Formation earn a holiday volume which can be doubled from 10 000 m<sup>3</sup> to 20 000 m<sup>3</sup>. Wells completed for production in a formation deeper than the Devonian Three Forks Formation, can be topped up to a maximum of 10 000 m<sup>3</sup>.

Under the Injection Well Incentive, the unit tract or tracts of vertical or horizontal wells drilled or converted for injection in an approved enhanced recovery project are exempt from Crown royalties or freehold production taxes for a period of one-year commencing in the month that injection is initiated.

Crown royalty or Freehold Oil Production Tax payable on marginal wells that have had a major workover is reduced to Third Tier oil status rate under the Major Workover Incentive.

A total of 74 wells received a holiday volume in 2003 to bring the total number of wells with a holiday volume in the program to 294. Detailed information on the Manitoba Drilling Incentive Program is available from the Petroleum Branch.

#### **Municipal Taxes**

Oil producers in Manitoba pay municipal taxes on production facilities, including oil wells, batteries, salt water disposal wells, salt water disposal plants and water injection wells.

The portioned municipal tax assessment on these facilities for the calendar year 2003 was approximately \$38.0 million dollars.

Actual tax revenue from these assessments amounted to approximately \$2.0 million for municipalities with oil and gas facilities.

#### **Industry Employment**

Direct employment in the petroleum industry during 2003 was approximately 300-350 person years. Of this total, approximately 20 percent is attributed to geophysical and drilling activity, while the remaining 80 percent is associated ongoing operation and maintenance of existing facilities.

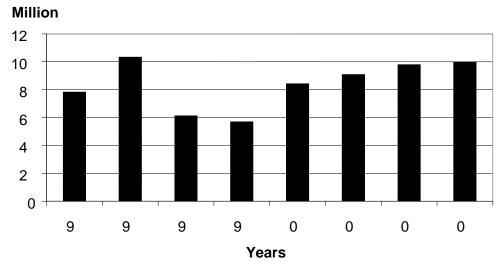
In addition, there are indirect jobs created as a result of petroleum industry activity. For every direct job in the petroleum industry it is estimated that 1.2 indirect jobs are created. This results in another approximately 360 to 420 person years of indirect employment.

#### **Industry Expenditures**

It is estimated that industry spent \$99.6 million in 2003 compared with \$97.9 million in 2002. The total expenditures can be broken down into eight categories: exploration, development, land, production, pipelines, royalties, abandonment and rehabilitation, and other costs.

- **Exploration**, which includes, exploratory drilling costs, geophysical and geological work, amounted to approximately \$7.4 million.
- **Development** including development drilling, workovers, recompletions and production facility construction accounted for approximately \$22.3 million.
- Land including freehold and Crown mineral and surface rights acquisition costs, fees and rentals. The total estimated expenditures in this component amounted to \$6.1 million.
- Production estimated at \$28.0 million and include well and facility operating costs.
- **Pipelines** including capital, operating, repair and maintenance costs, for pipelines licensed under The Oil and Gas Act that carry crude oil and refined petroleum products amounted to \$9.3 million.
- Royalties and Production Taxes including freehold royalties, Crown royalties and freehold production taxes, are estimated at approximately \$22.7 million.
- Abandonment and rehabilitation of sites damaged by oil field operations totalled approximately \$1.8 million.
- Other including municipal taxes and miscellaneous expenditures, totaling approximately \$2.0 million.

## Petroleum Industry Expenditures in Manitoba 1996-2003



#### **Surface Owners**

Prior to drilling a well, an oil company is required to negotiate a surface lease, which provides right of entry, with the landowner. The typical surface lease includes a first-year bonus payment and a subsequent annual rental for the duration of the lease.

Where the landowner is renting the land to another party, the oil company must obtain the consent of both the landowner and the occupant.

After a lease has been signed, the landowner and occupant then determine what share of the compensation paid by the oil company each receives.

An estimated \$4.7 million was paid by oil companies to landowners in the form of first-year bonuses and annual rental fees.

Disputes relating to right-of-entry or compensation are referred to the Surface Rights Board (www.gov.mb.ca/itm/mrd/board/srboard.html). The Board's principal function is to arbitrate disputes between the petroleum industry and landowners regarding use of land for exploration, development and related operations, and to determine what compensation should be paid to the landowner.

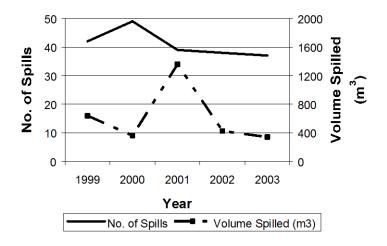
#### **Spills and Rehabilitation**

Accidental spills of oil and salt water occasionally result from oil industry operations. Regulations require land damaged by oil and salt water spills must be fully rehabilitated by the responsible operator. Sites used for wells or production facilities must also be fully rehabilitated when the well or facility is abandoned.

In 2003, 33 spills involving a total volume 339.4 m³ occurred. The number of spills in 2003 was 24% less than the 5 year average, and the volume spilled was 25% less than the 5 year average. The volume of fluid spilled is equal to 0.004 percent of the total volume of oil and salt water produced.

Activities by industry resulted in 87 abandoned well and spill sites becoming fully rehabilitated in 2003. Further rehabilitation is required on 443 spill sites and abandoned wellsites.

#### Spill Data 1999-2003



#### Manitoba Oil Fields - 2003

	Daly	Tilston	Waskada	Lulu Lake	Virden	White- Water	Pierson	Kirkella	Souris Hartney	Coulter	Regent	Mountain- side	Birdtail	Other Areas	Total
Discovery Year	1951	1952	1952	1953	1953	1953	1954	1957	1962	1952	1955	1982	1996		
Avg. Depth to Producing Formation (m)	835	940	918	1 005	634	782	1 003	734	655	968	767	895	522	858	
Producing Formation	L/B/TF	MC	MC/LAm	L	L	LAm/L	MC/LAm	L	L	MC/LAm	L	L	В	LAm MC/L	
Well Spacing (ha)	32/16/8	16	16/8/4	16	16/8	16	32/16	16	32/16	16	16	16	16	16	
Active Oil Wells 2003*	371	22	297	4	472	36	126	28	10	3	9	14	17	26	1476
2003 Oil Prod. (`000 m³)	132.3	9.3	113.6	4.9	234.2	19.9	61.4	12.0	12.7	0.2	1.7	4.2	6.6	20.1	633.1
Cum. Oil Prod. (Dec. 31, 2003) (`000 m³)	6 230.5	397.0	3 585.1	113.7	22 735.2	396.4	1 714.6	410.2	221.9	16.1	49.6	105.3	52.5	148.2	36 176.5
Remaining Established	1 417.8	29.6	950.5	19.1	1 382.4	82.6	505.8	41.5	18.1	0.5	6.8	48.8	33.8	47.9	4 598.3***

Reserves (Dec. 31, 2002) (`000 m³)\*\*

L = Lodgepole

LAm = Lower Amaranth

MC = Mission Canyon

B = Bakken

TF = Three Forks

<sup>\*</sup> Wells classified as capable of oil production at year-end that produced oil in 2003. Dual completions or commingled wells count as one well. Confidential wells not included.

<sup>\*\*</sup> Does not include 2003 reserve additions

<sup>\*\*\*</sup> Total includes confidential remaining reserves

#### **COMMENTS?**

Drop us a note at: Manitoba Industry, Economic Development and Mines Petroleum Branch

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