

National Energy
Board



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Short-term **Natural Gas** Deliverability
from the

Western **C**anada **S**edimentary **B**asin
2003-2005

APPENDICES

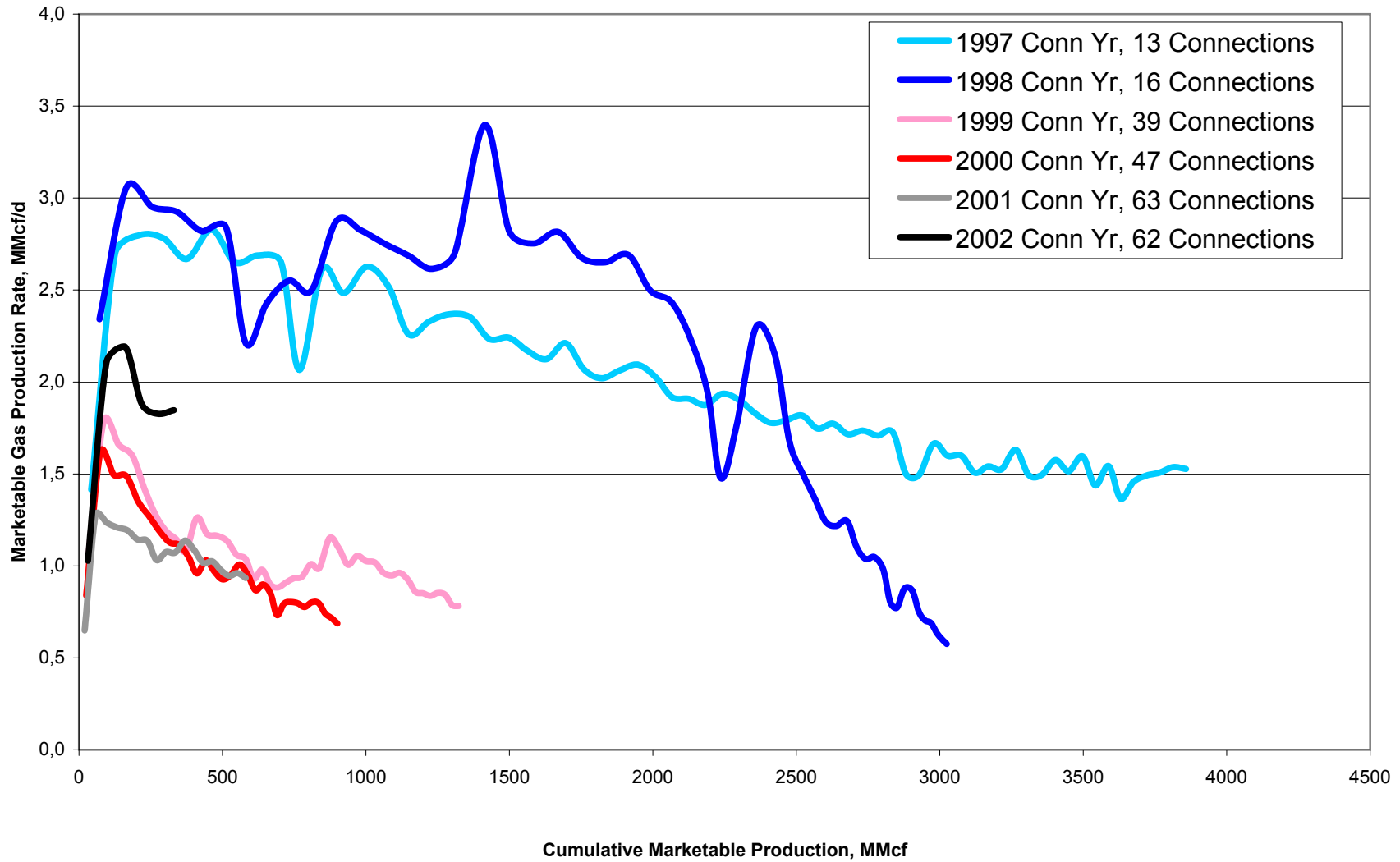
An **ENERGY MARKET ASSESSMENT** • December 2003

Appendix 1

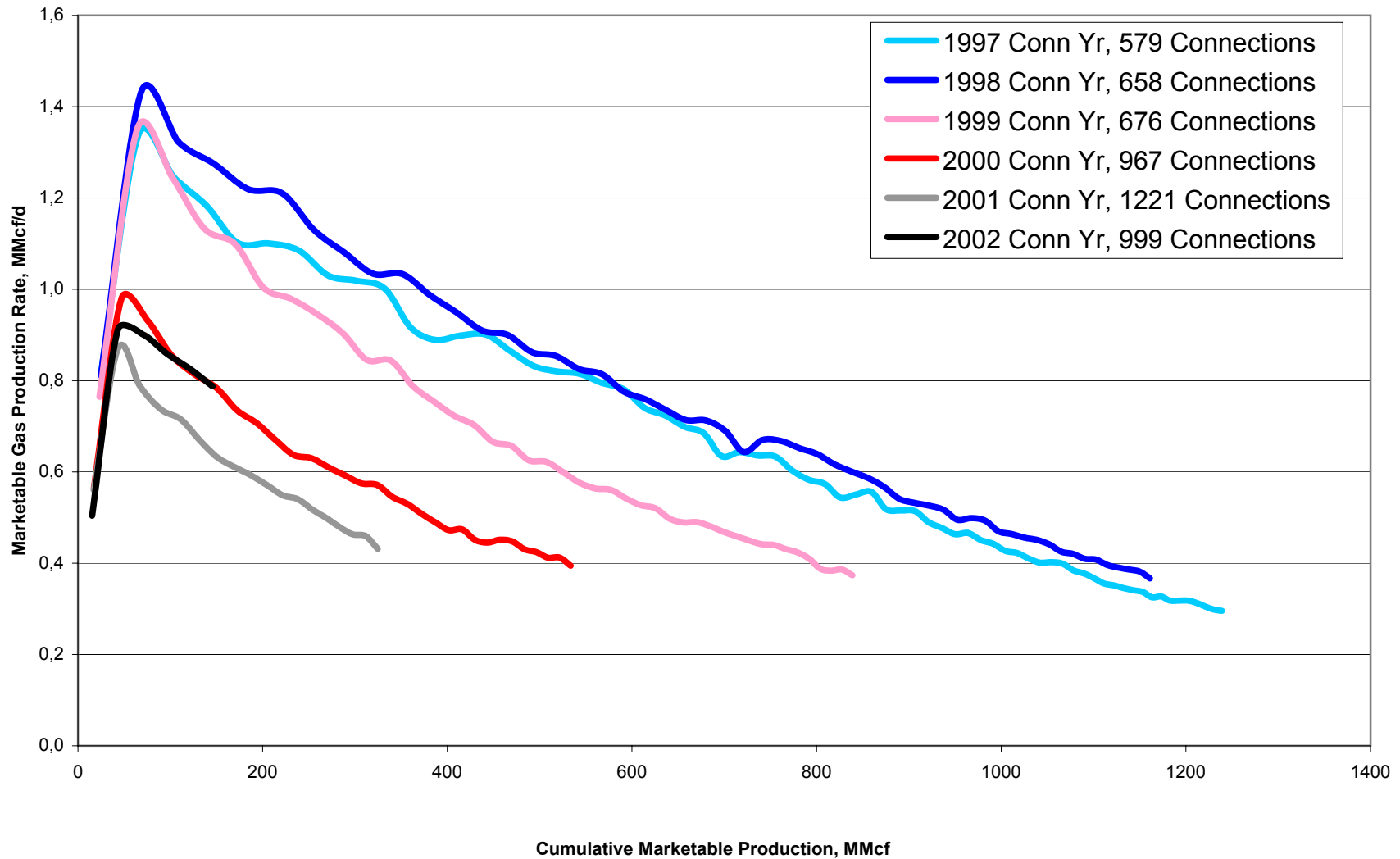
Typical Gas Well Connection Performance for Recent Years

A1-1: Typical Gas Well Connection Performance in Recent Years

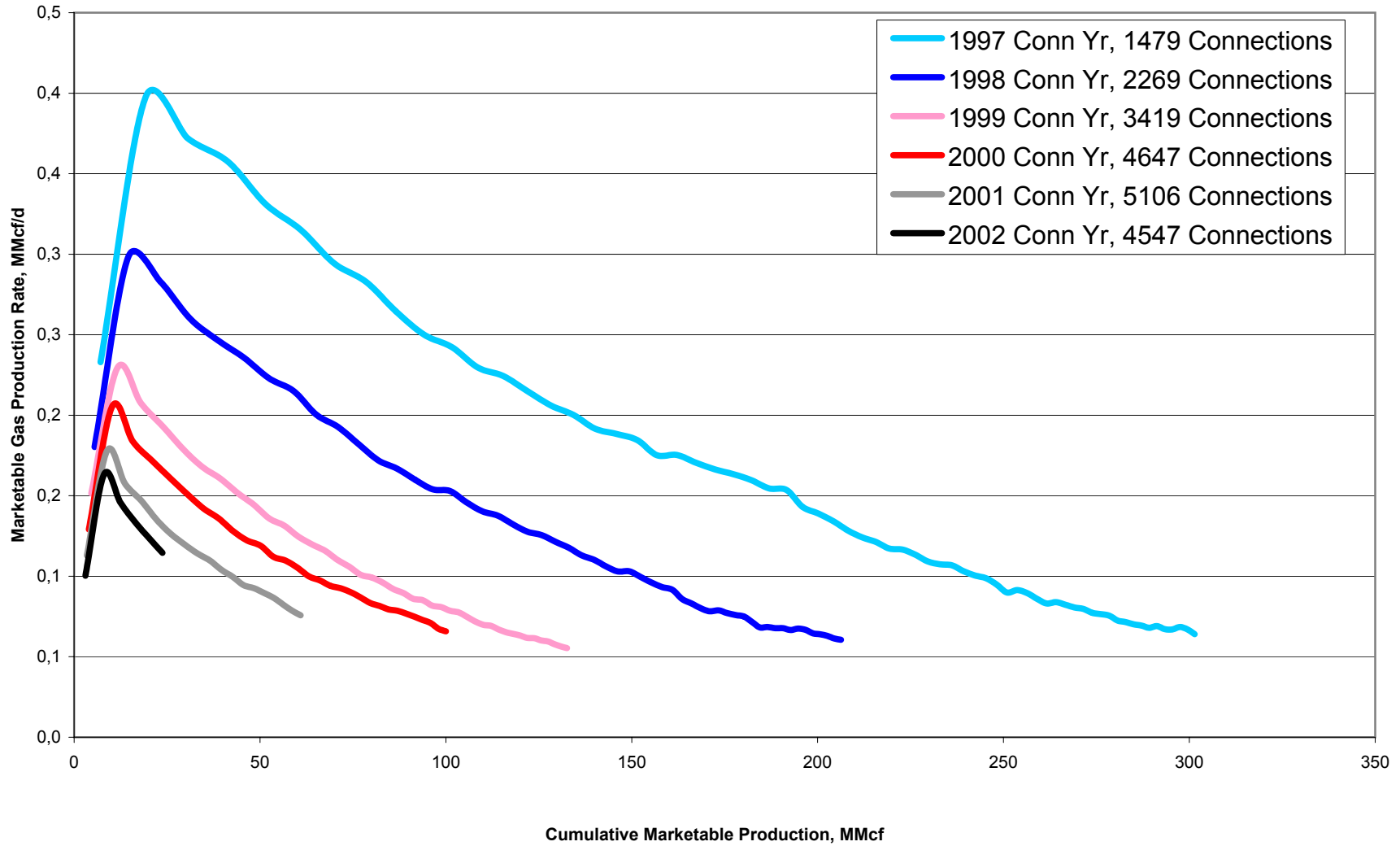
Area: Alberta Foothills



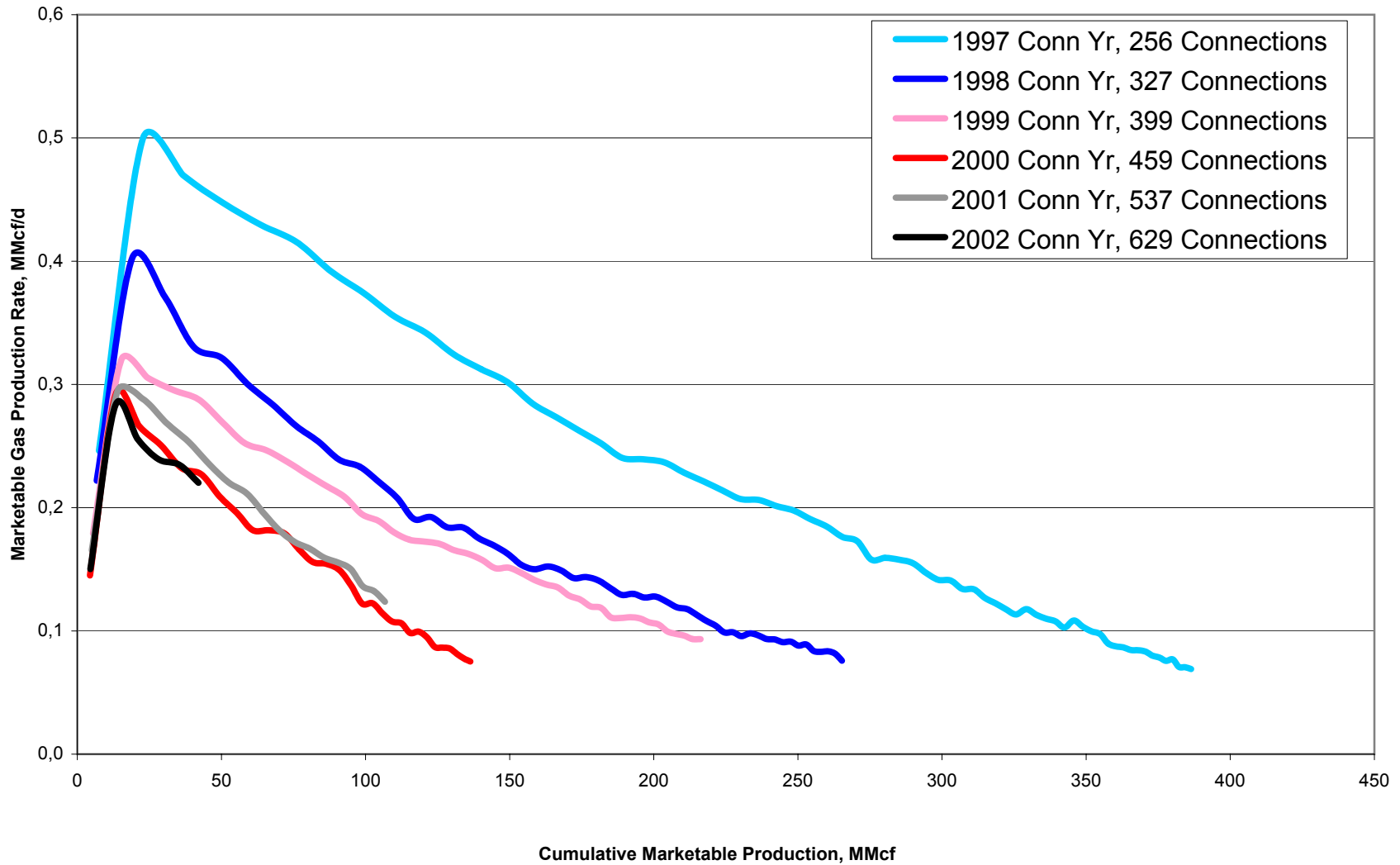
A1-2: Typical Gas Well Connection Performance in Recent Years Area: Alberta Foothills Front



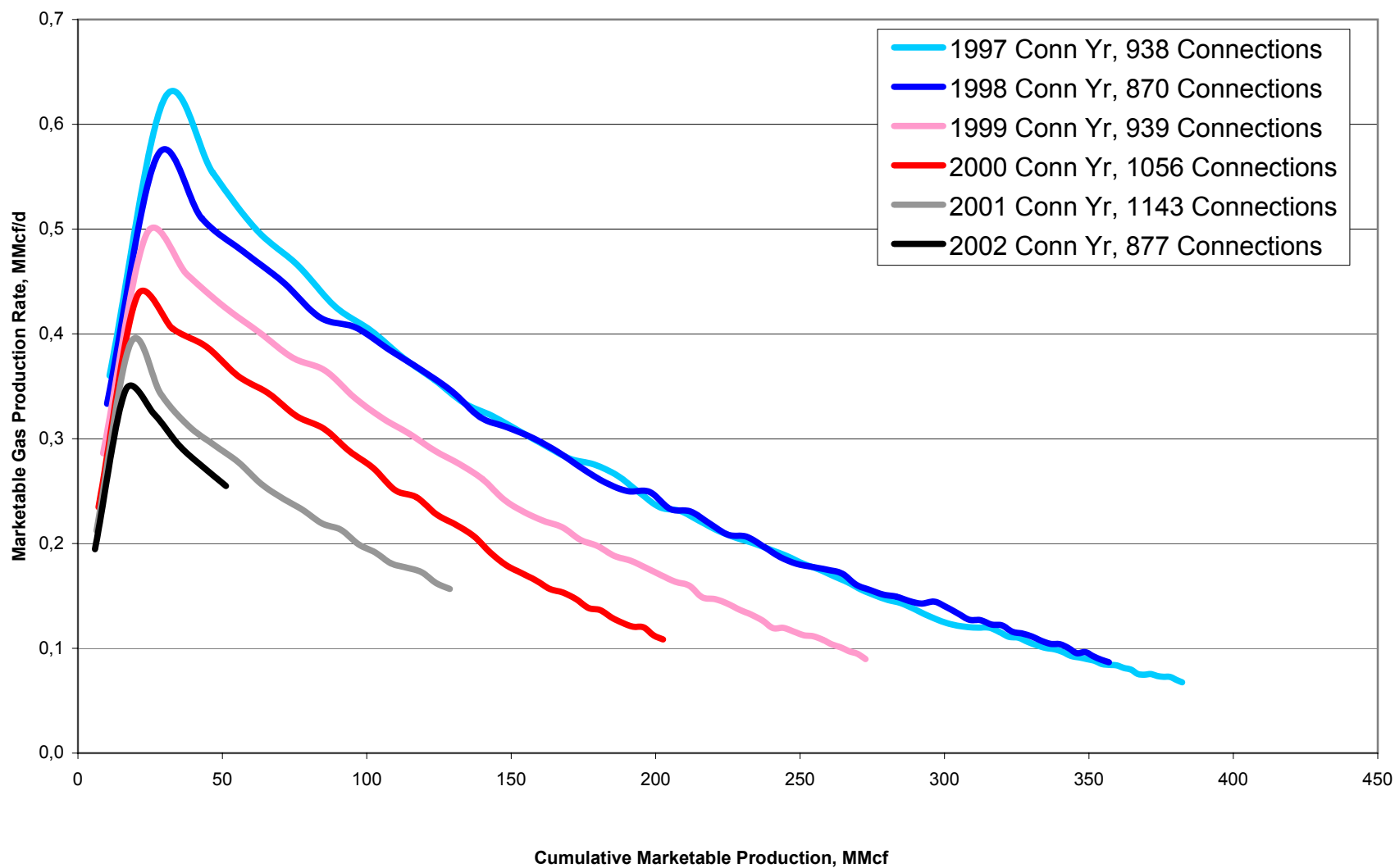
A1-3: Typical Gas Well Connection Performance in Recent Years Area: Alberta SE



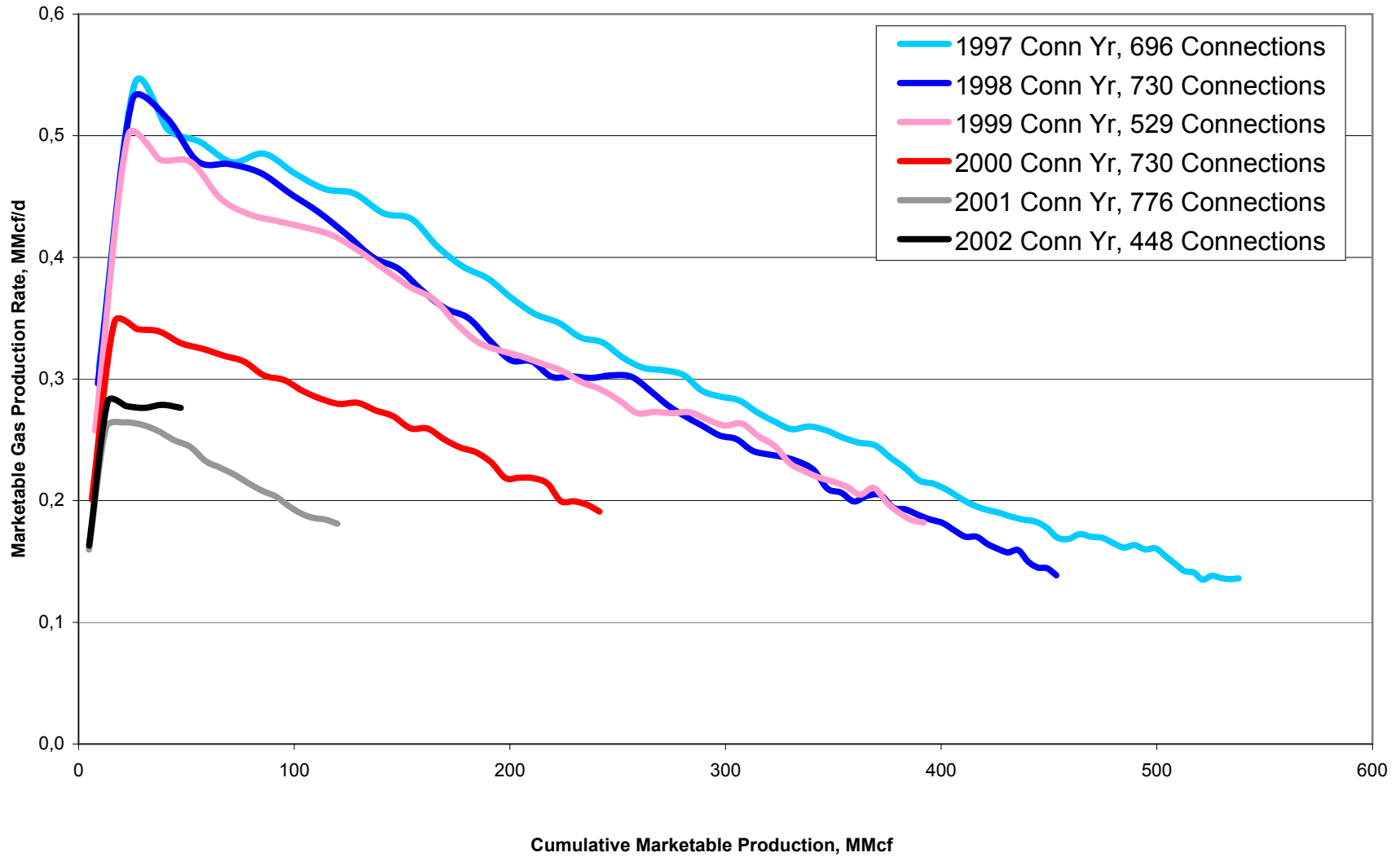
A1-4: Typical Gas Well Connection Performance in Recent Years Area: Alberta East



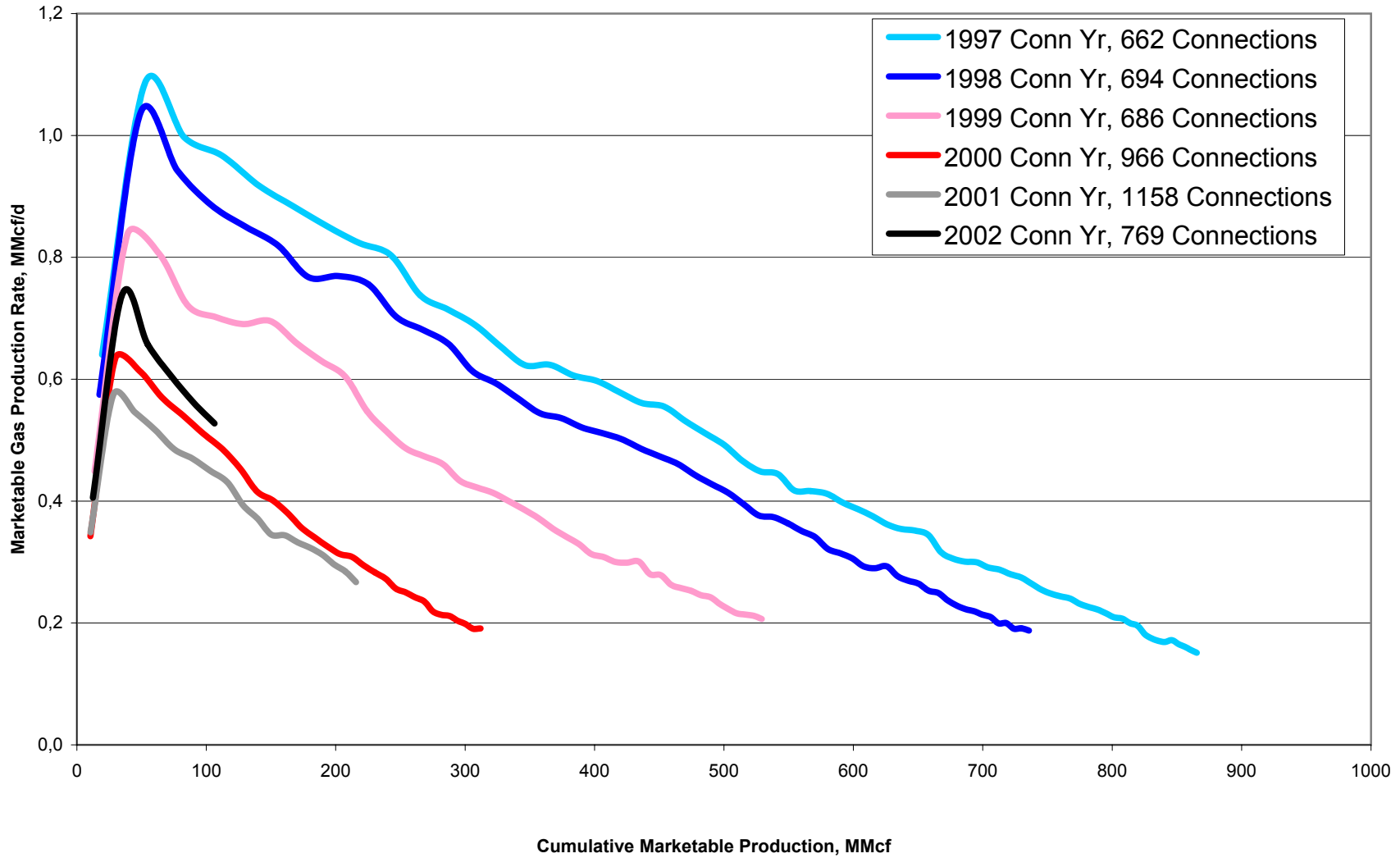
A1-5: Typical Gas Well Connection Performance in Recent Years Area: Alberta Central



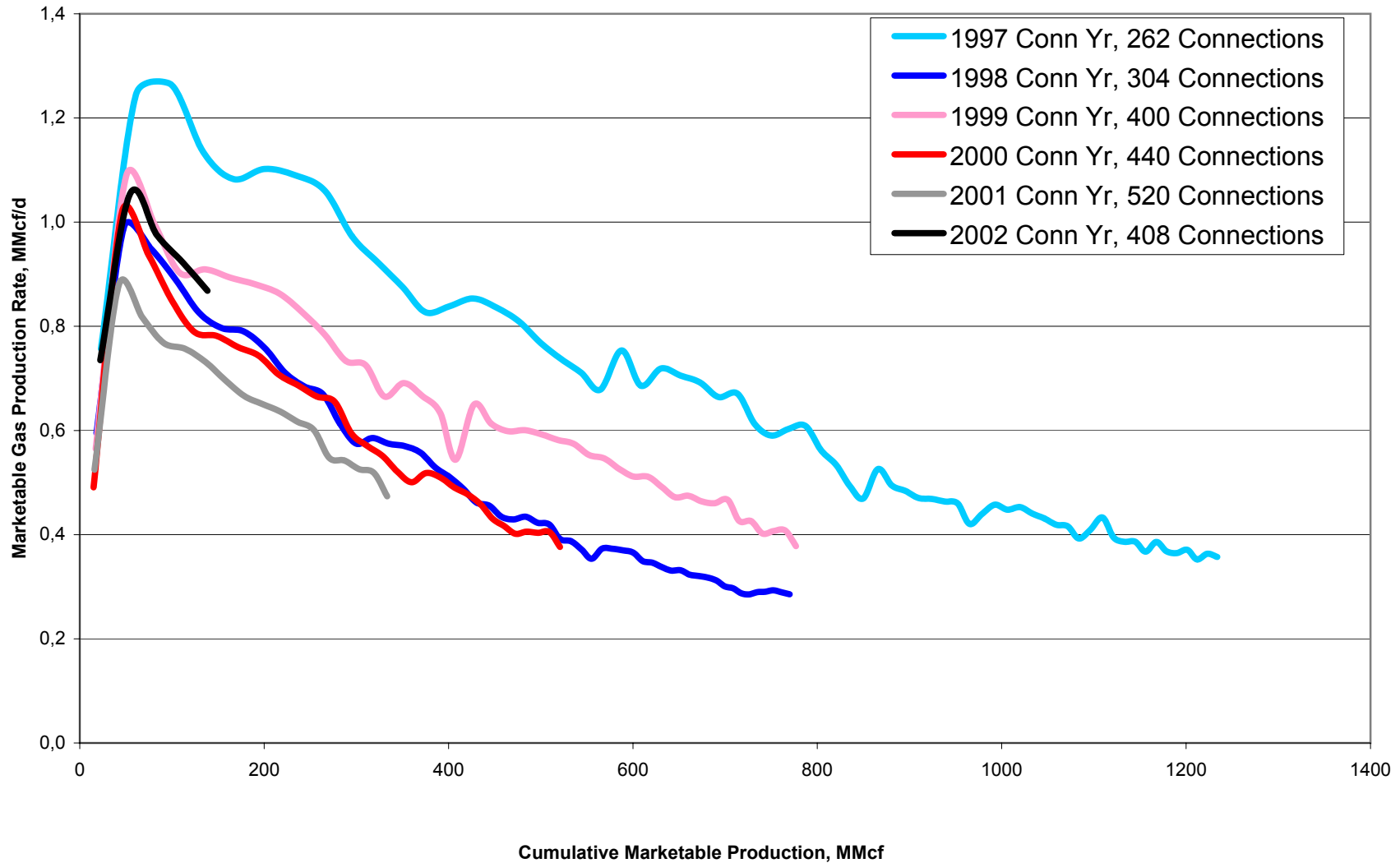
A1-6: Typical Gas Well Connection Performance in Recent Years Area: Alberta NE



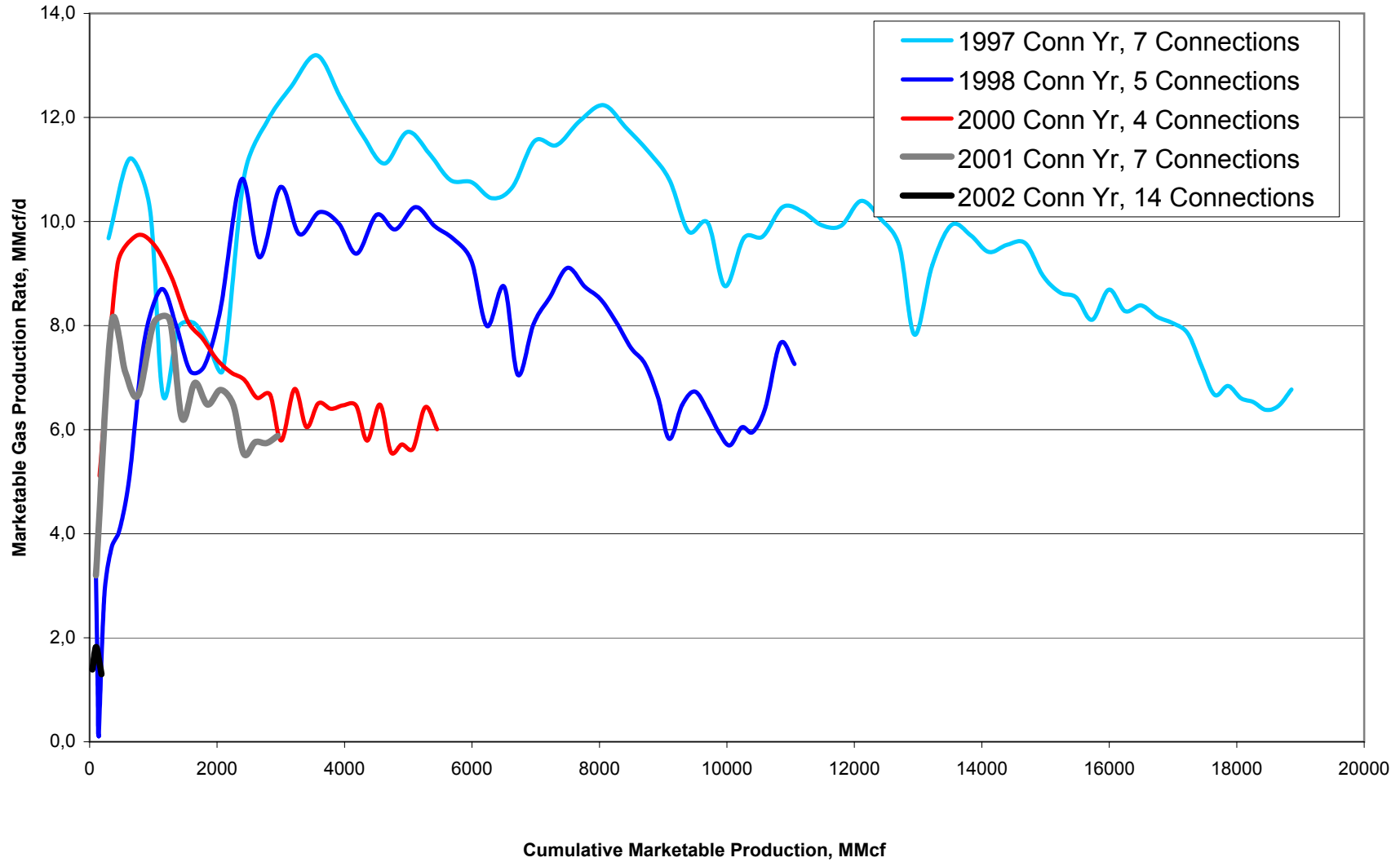
A1-7: Typical Gas Well Connection Performance in Recent Years Area: Alberta NW



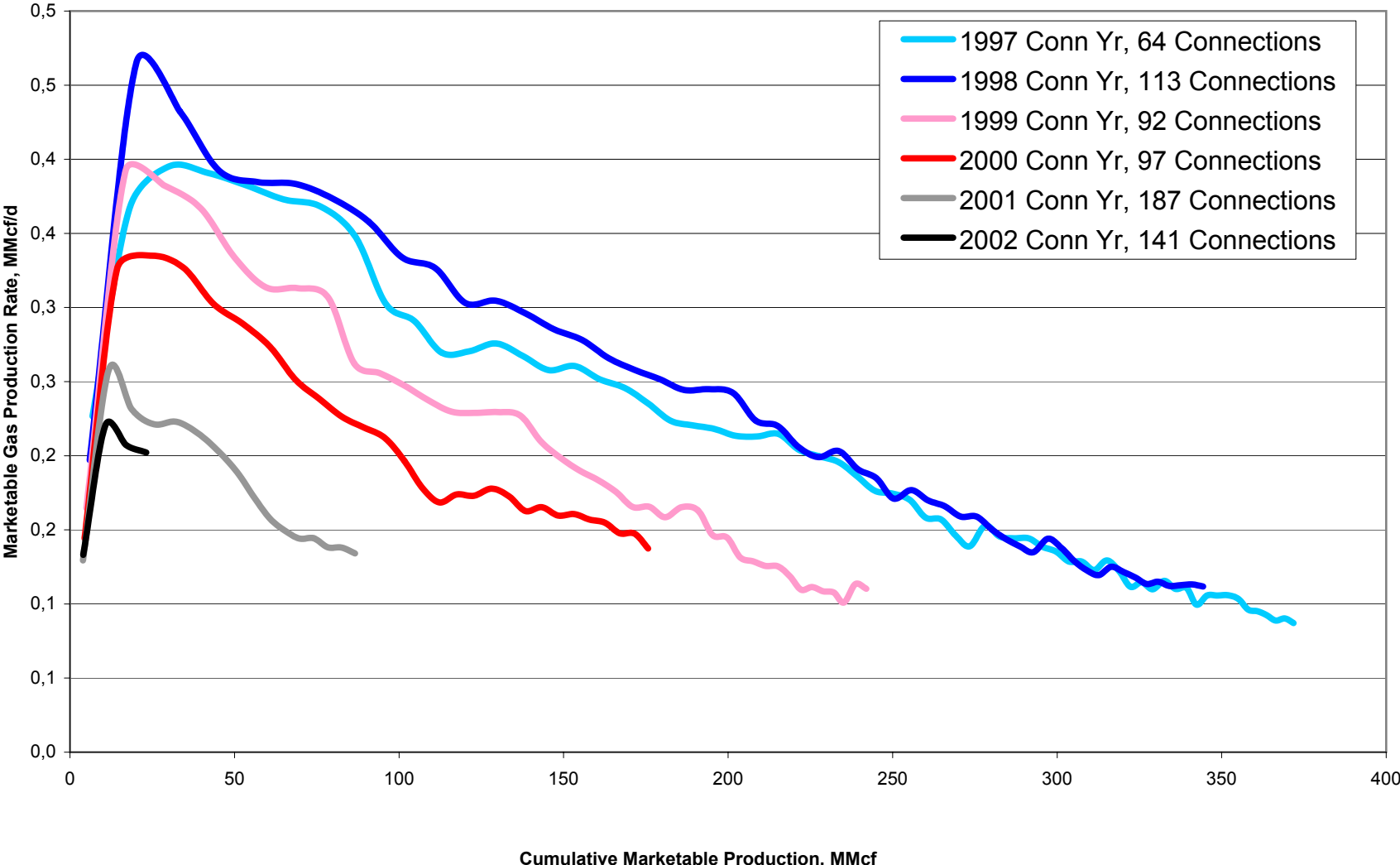
A1-8: Typical Gas Well Connection Performance in Recent Years Area: B.C. Plains



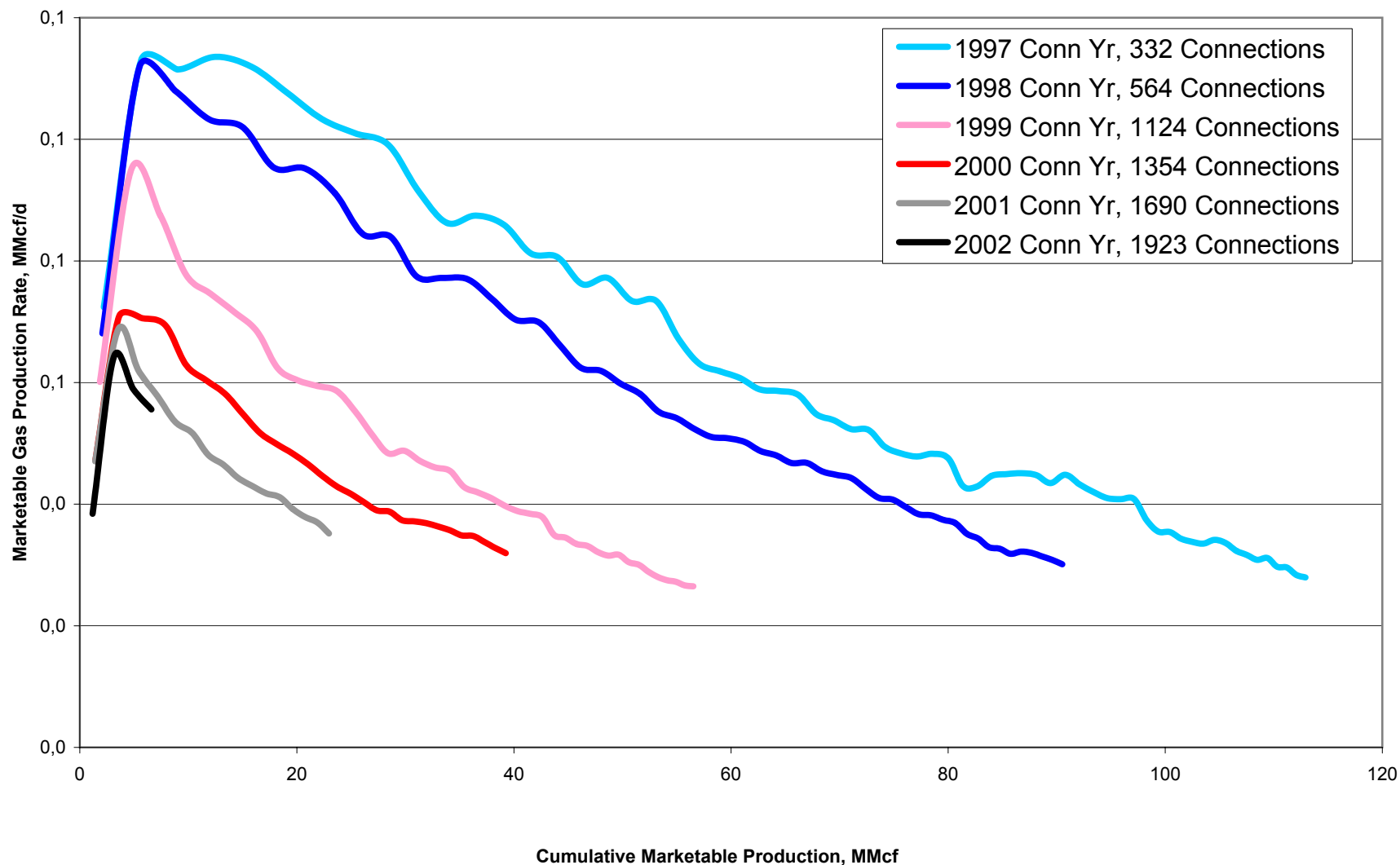
A1-9: Typical Gas Well Connection Performance in Recent Years Area: B.C. Foothills



A1-10: Typical Gas Well Connection Performance in Recent Years
Area: Sask. West Central



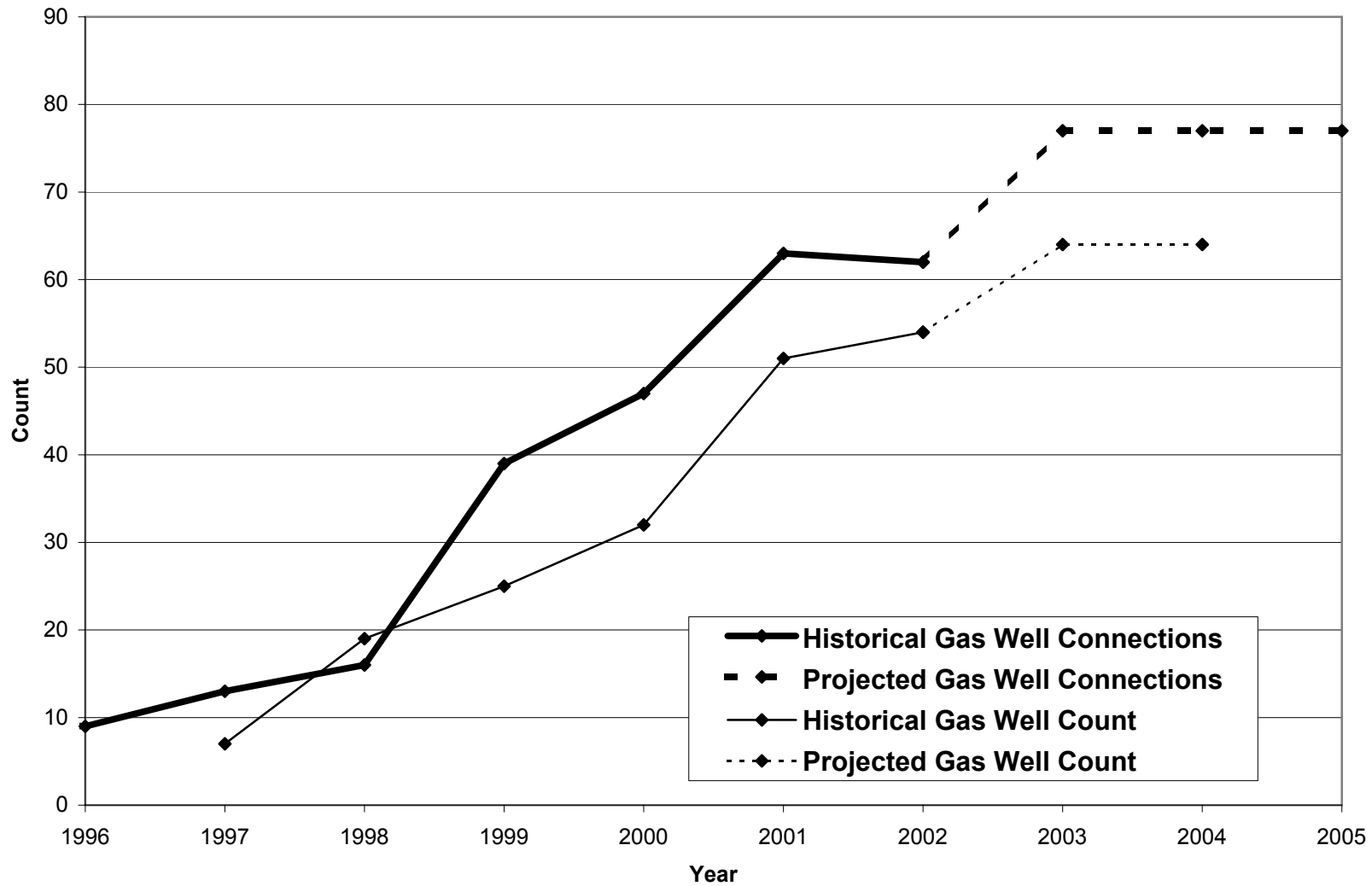
A1-11: Typical Gas Well Connection Performance in Recent Years Area: Sask. South West



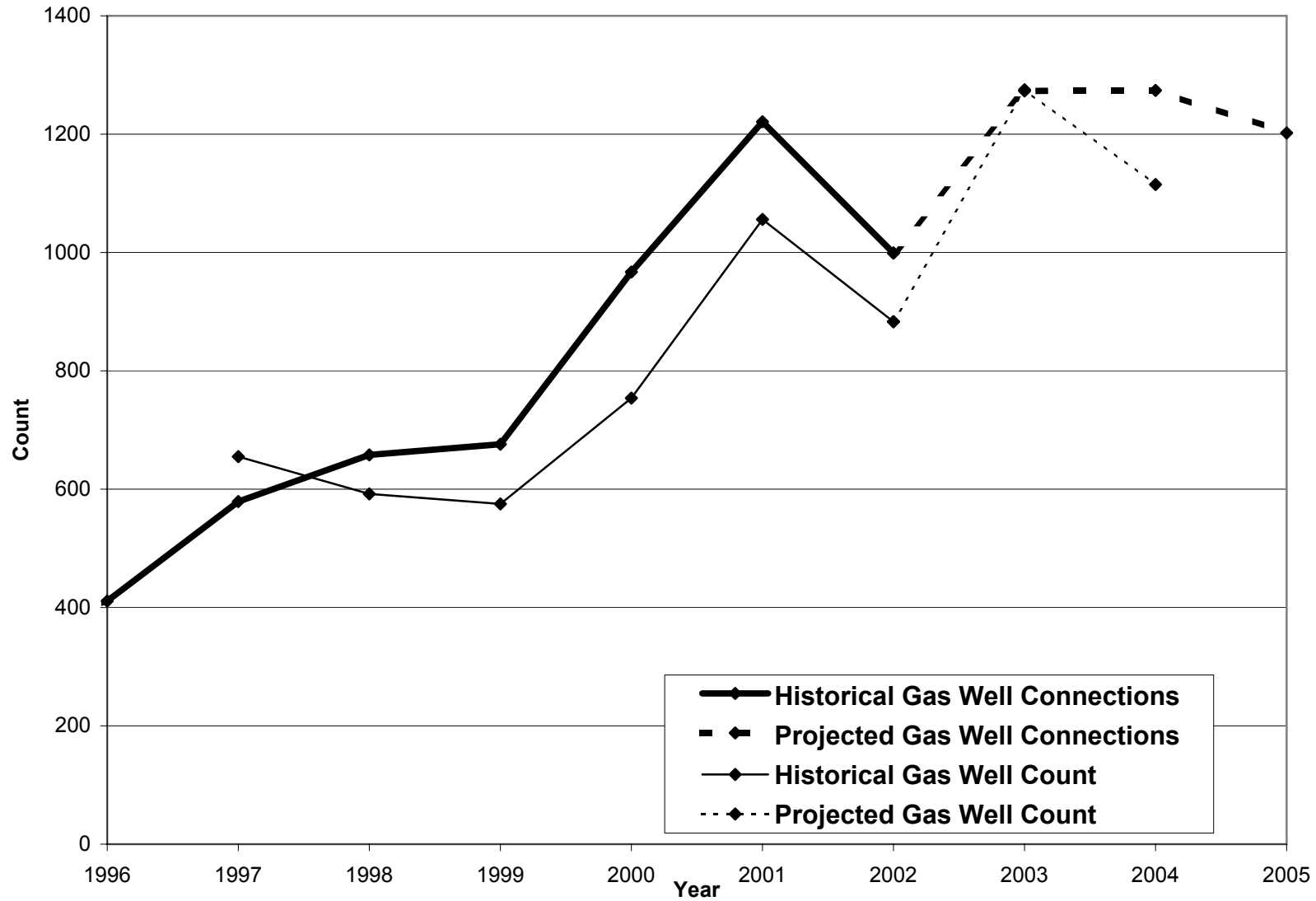
Appendix 2

Gas Drilling Activity and Gas Well Connections by Geographic Area

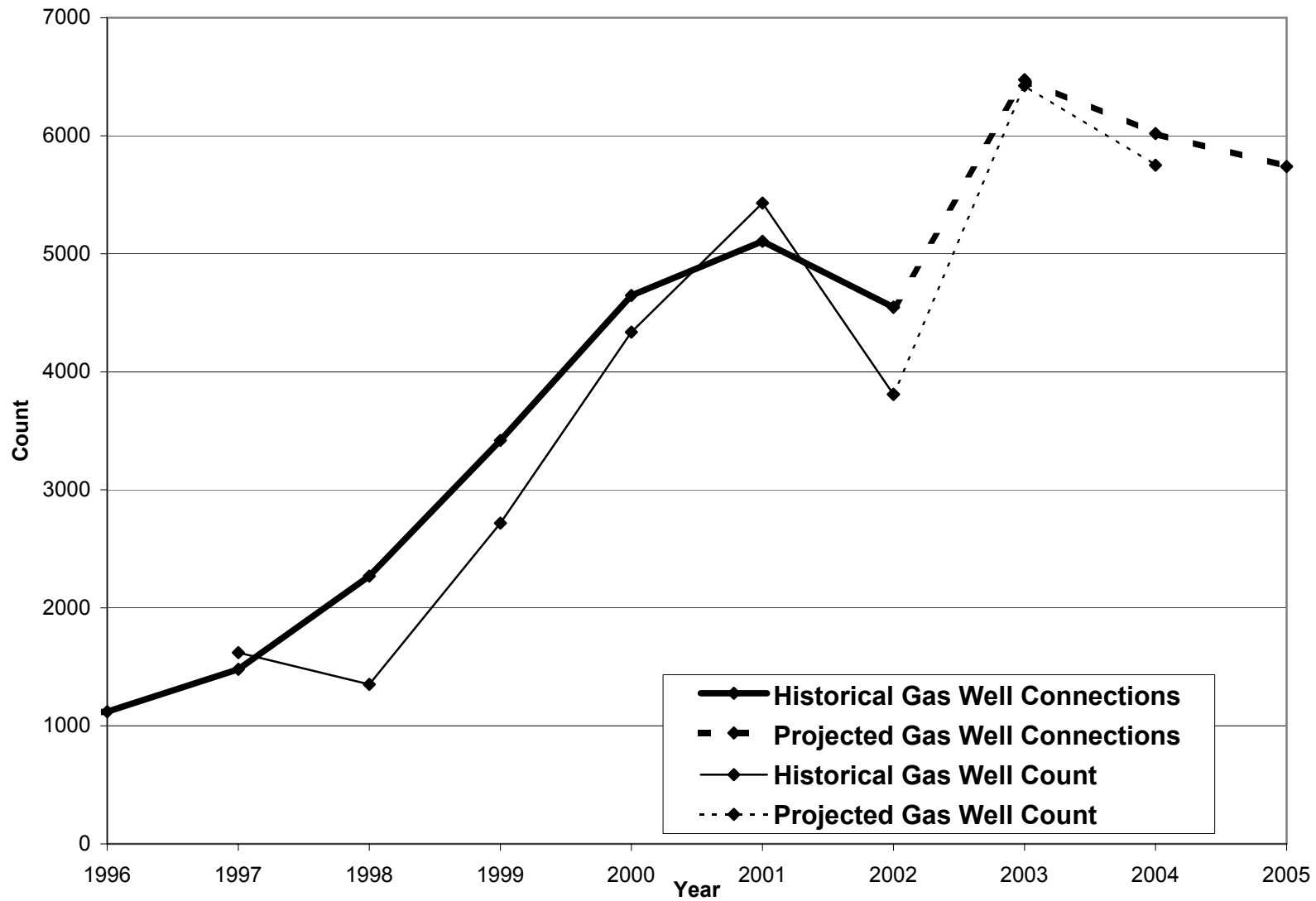
A2-1: Gas Well Drilling and Gas Well Connections Alberta Foothills



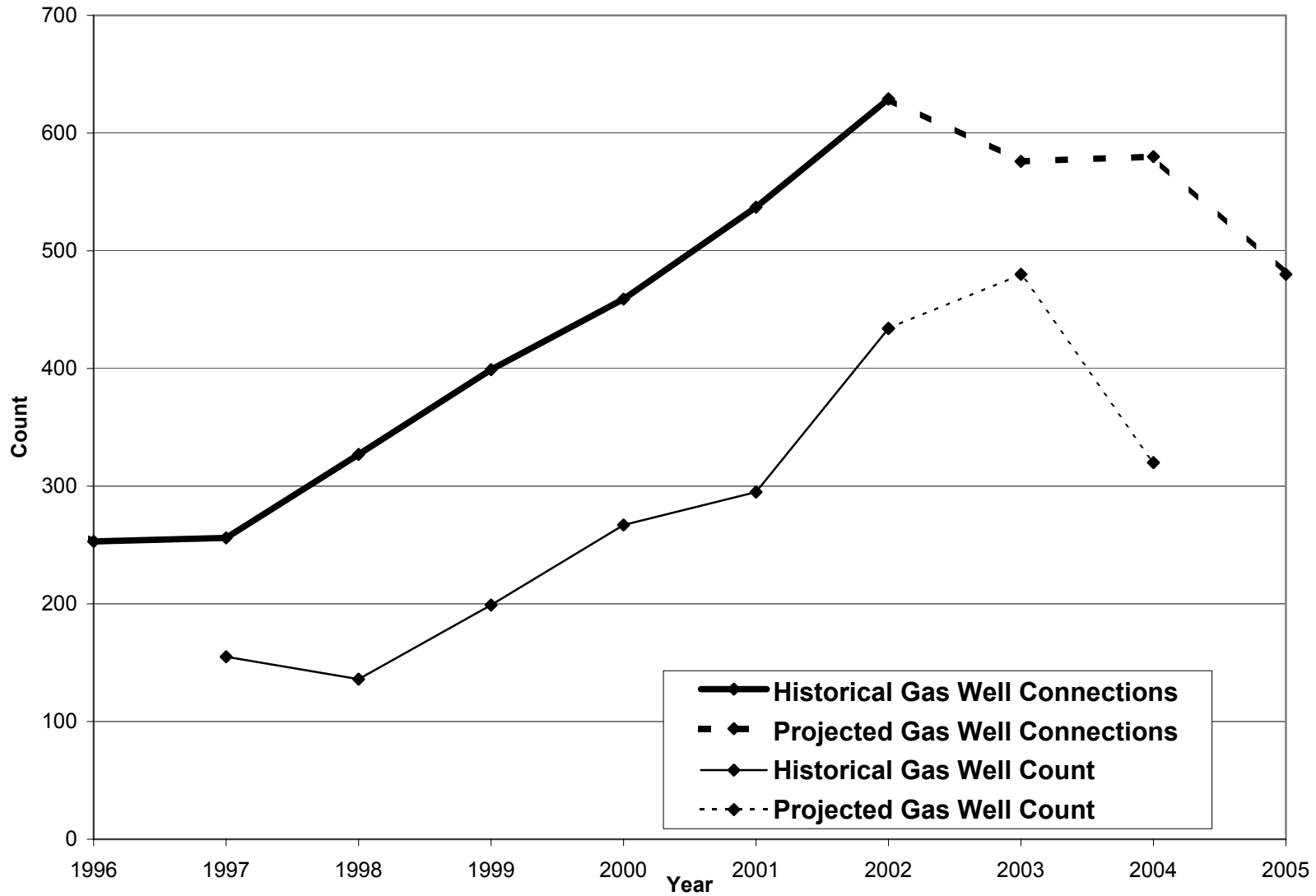
A2-2: Gas Well Drilling and Gas Well Connections Alberta Foothills Front



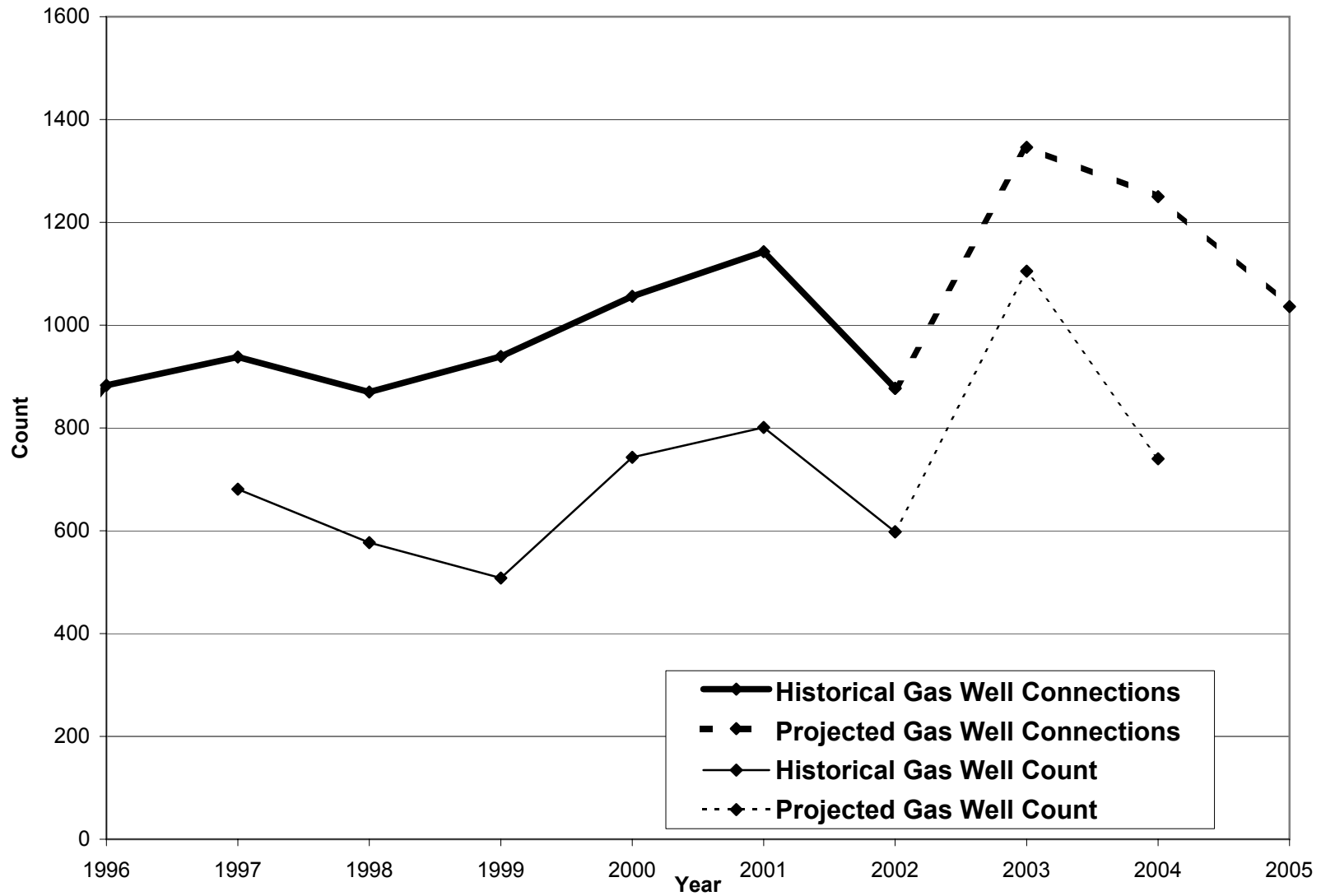
A2-3: Gas Well Drilling and Gas Well Connections Alberta South East



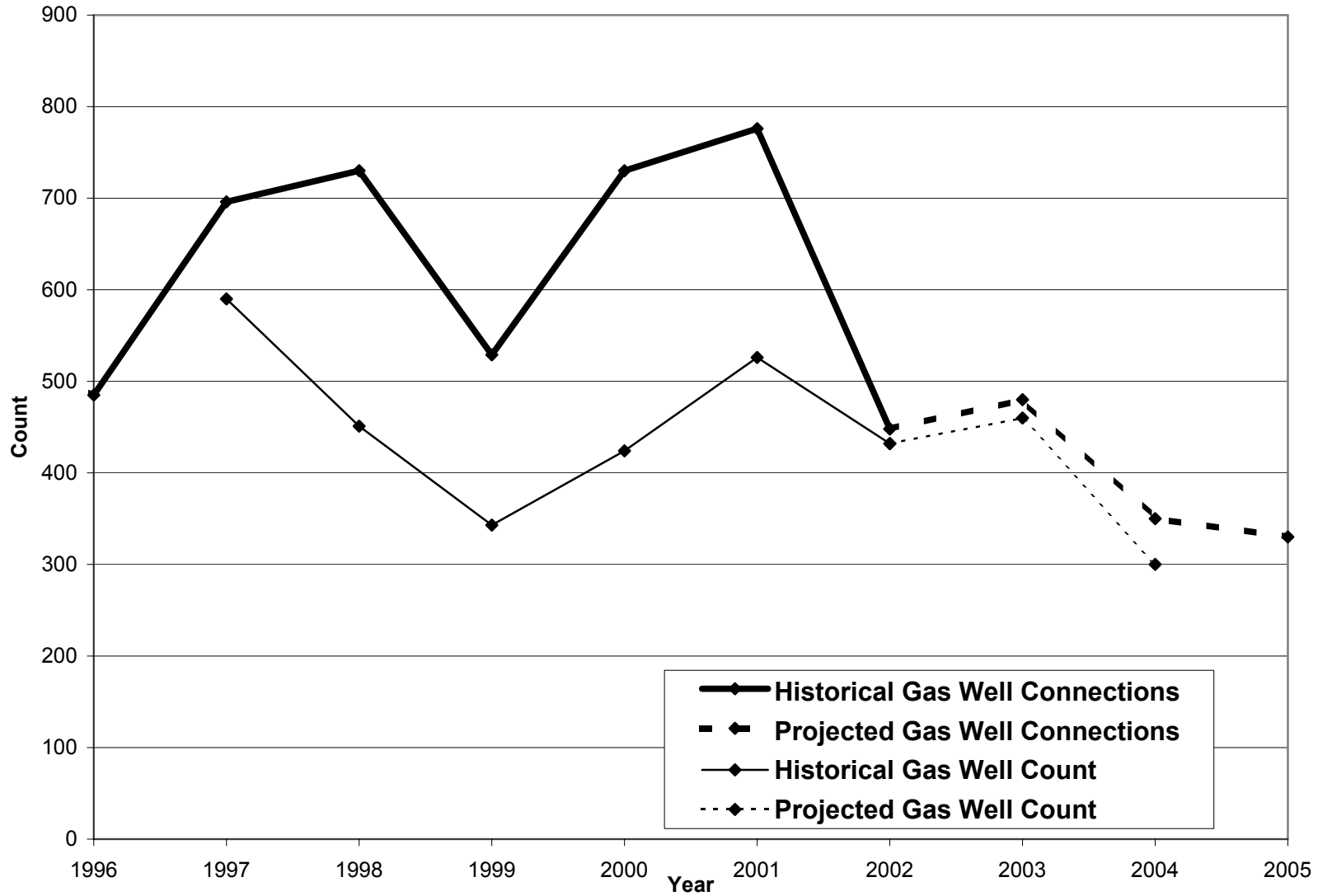
A2-4: Gas Well Drilling and Gas Well Connections Alberta East



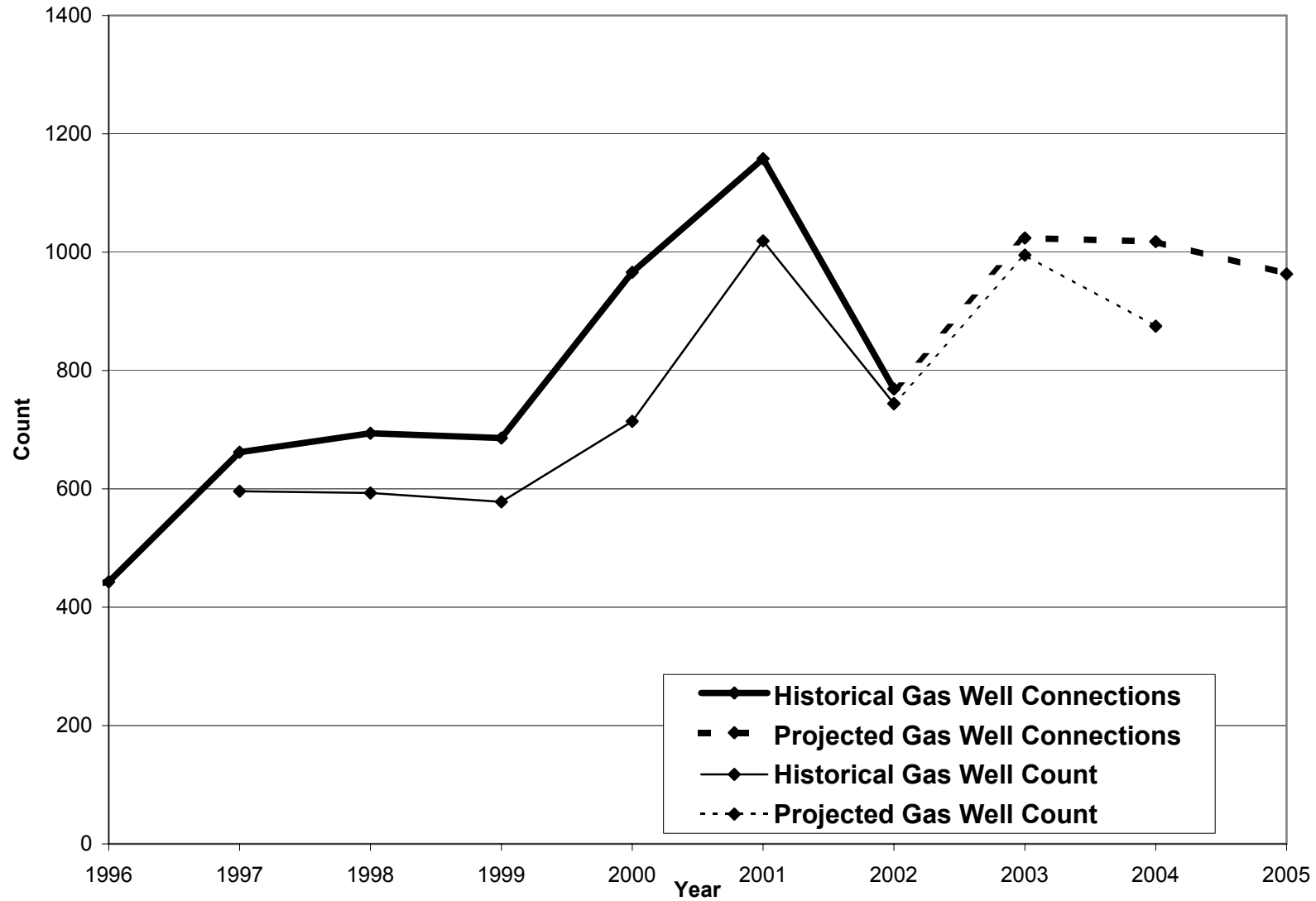
A2-5: Gas Well Drilling and Gas Well Connections Alberta Central



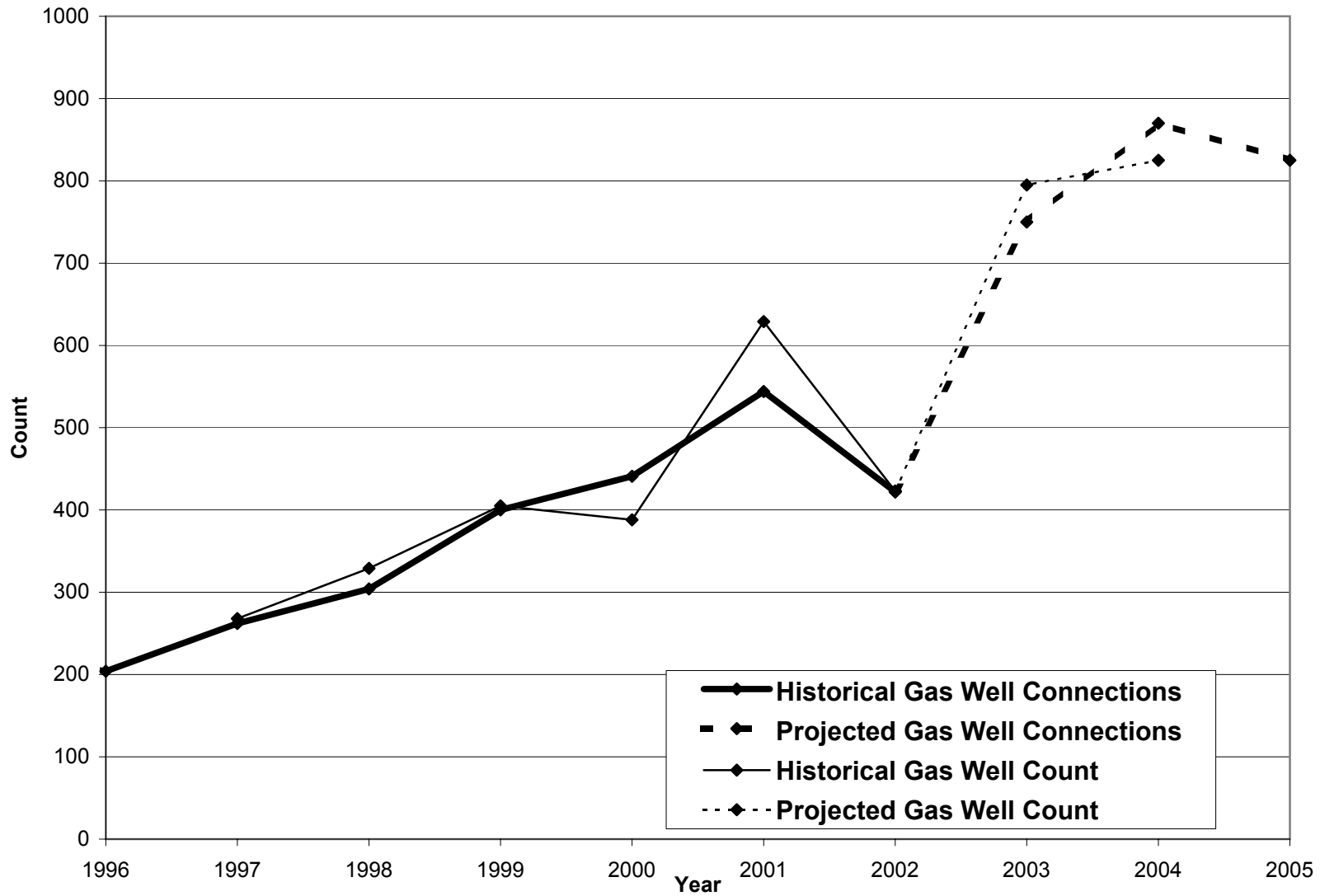
A2-6: Gas Well Drilling and Gas Well Connections Alberta North East



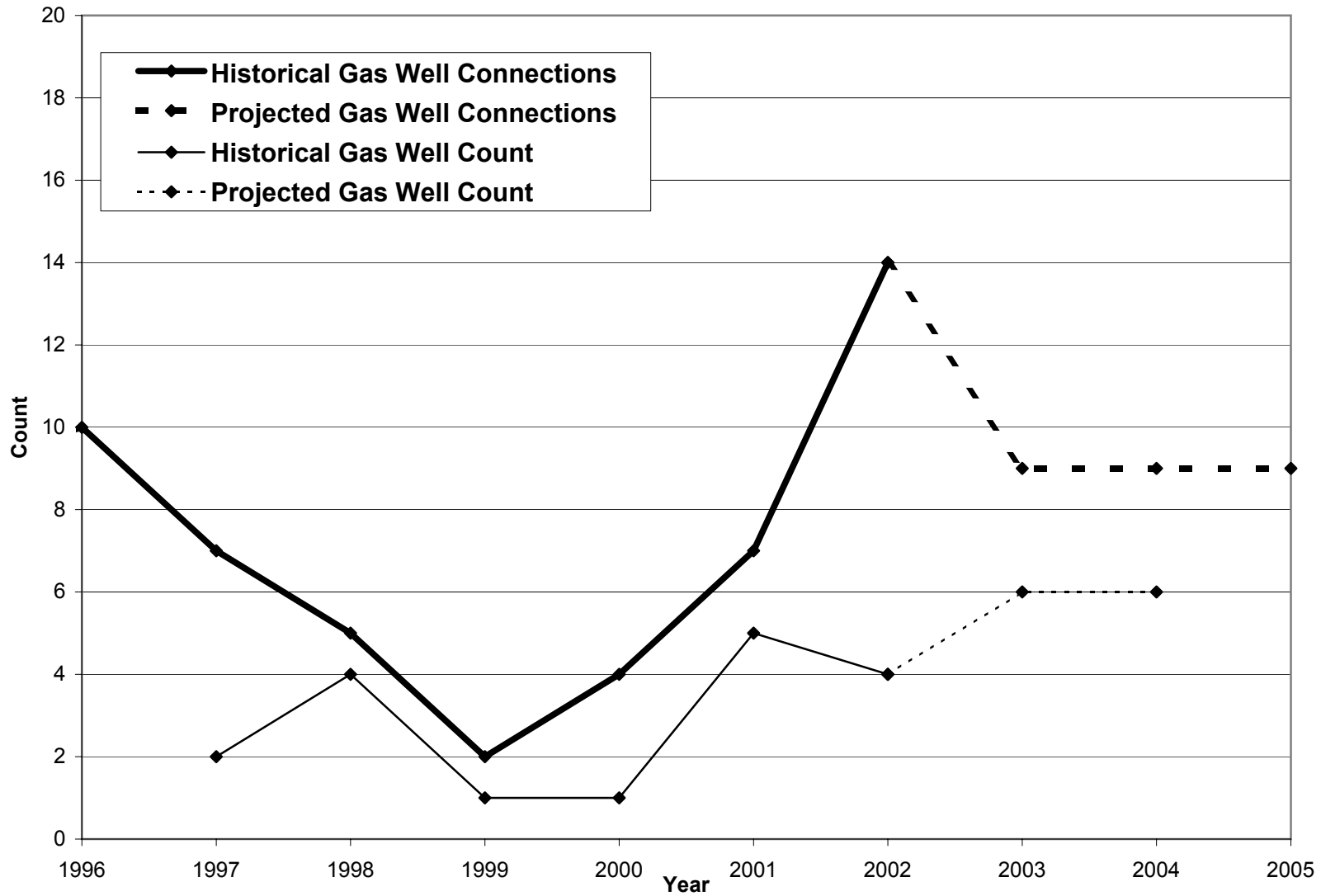
A2-7: Gas Well Drilling and Gas Well Connections Alberta North West



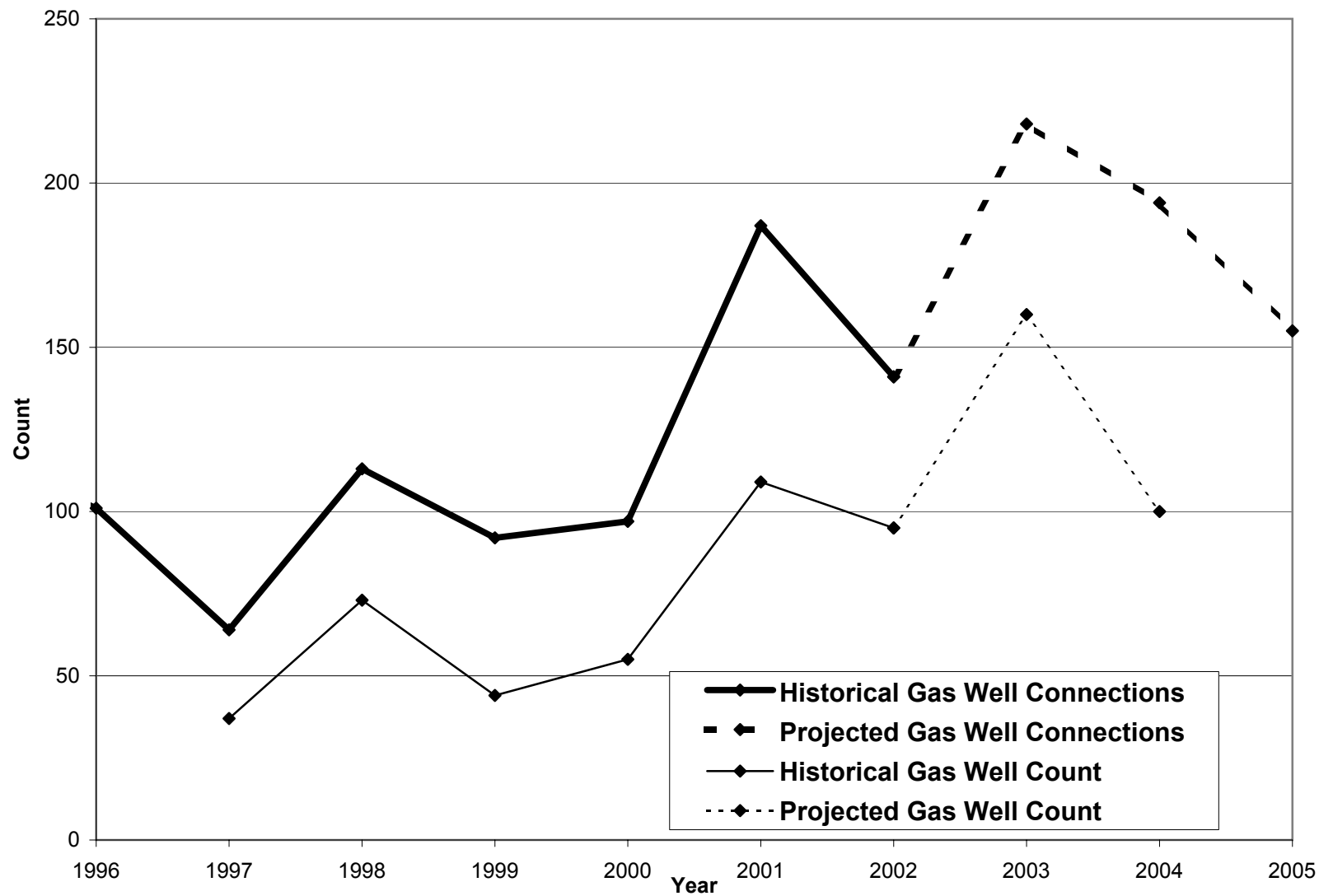
A2-8: Gas Well Drilling and Gas Well Connections B.C. Plains



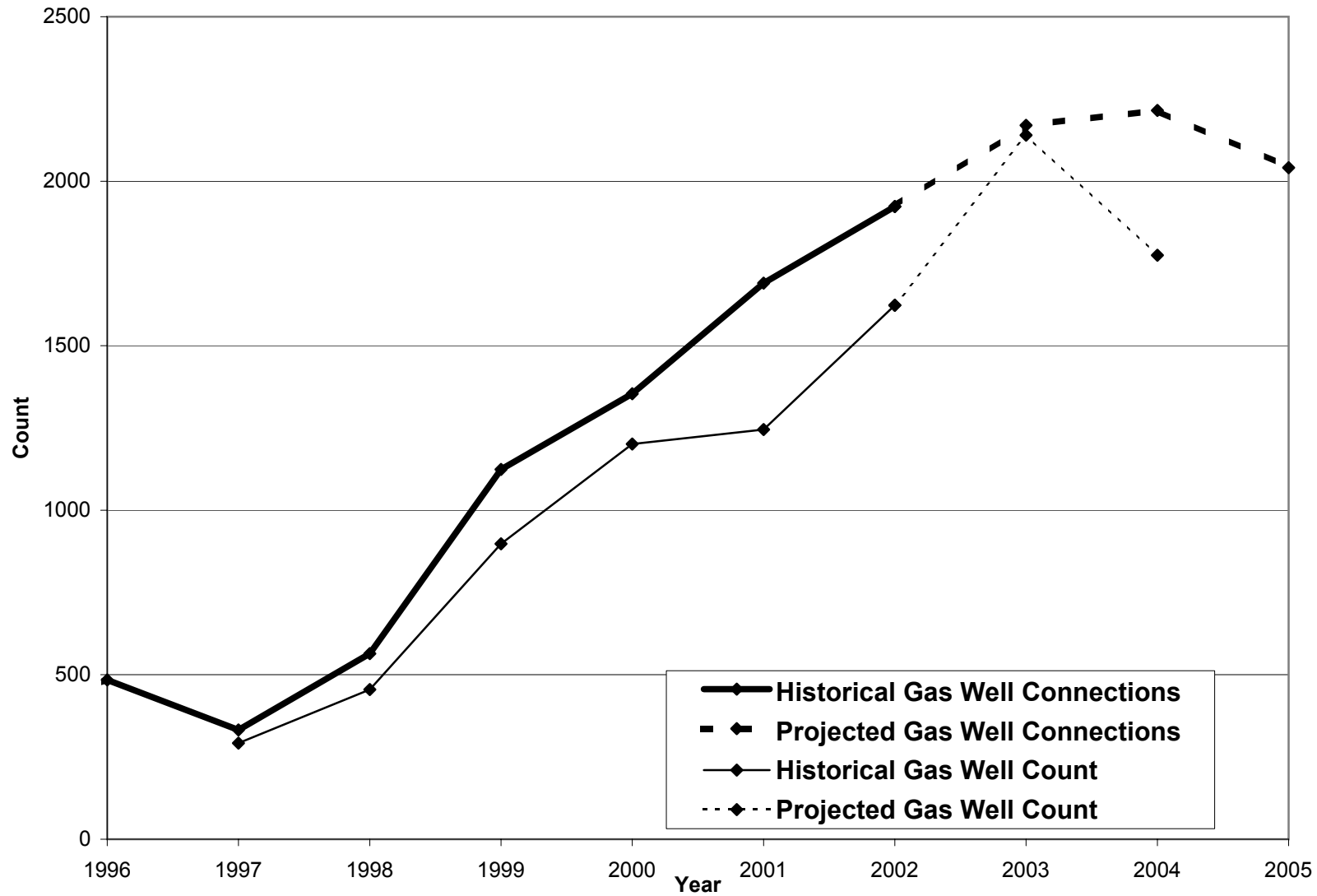
A2-9: Gas Well Drilling and Gas Well Connections B.C. Foothills



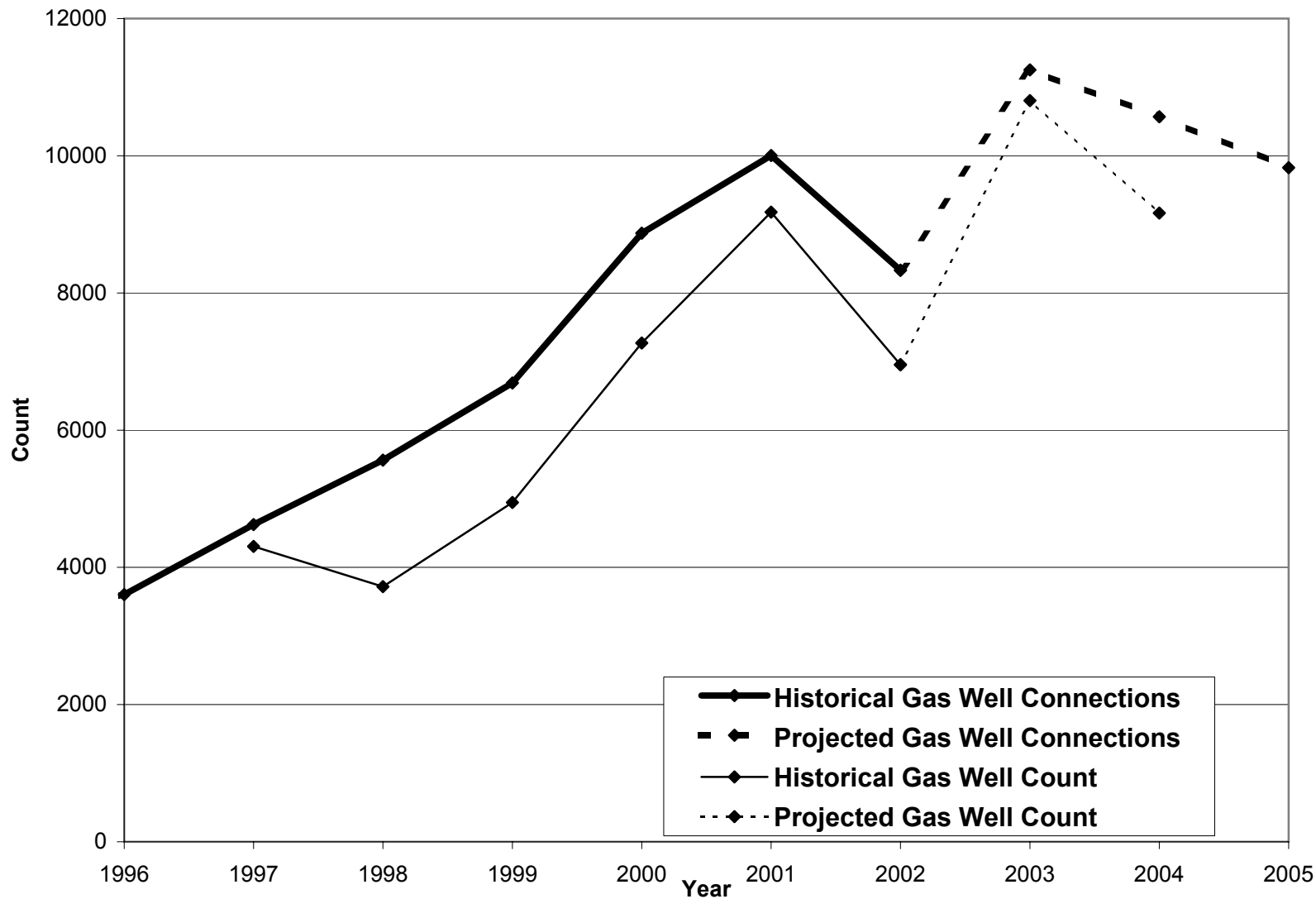
A2-10: Gas Well Drilling and Gas Well Connections Sask. West Central



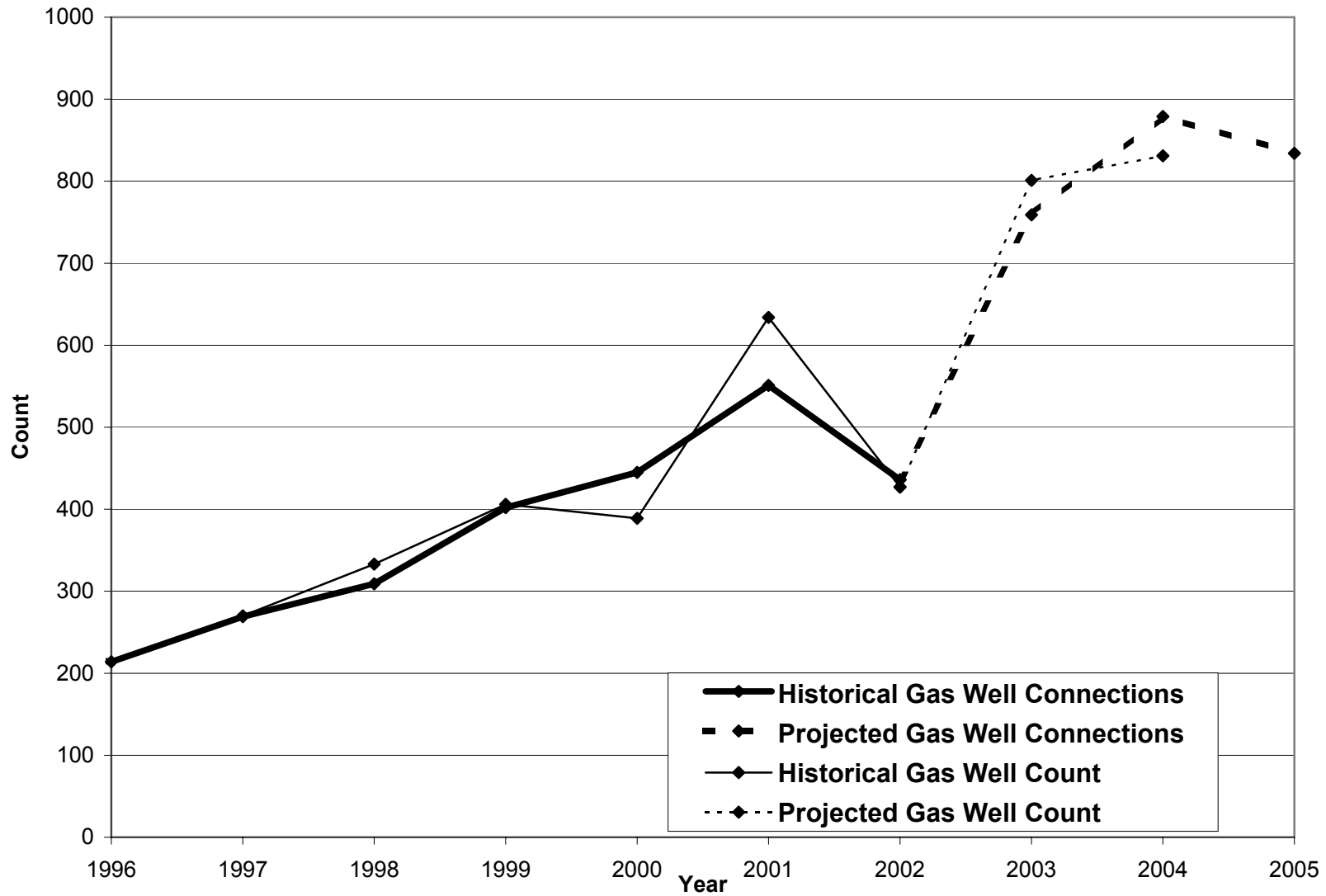
A2-11: Gas Well Drilling and Gas Well Connections Sask. South West



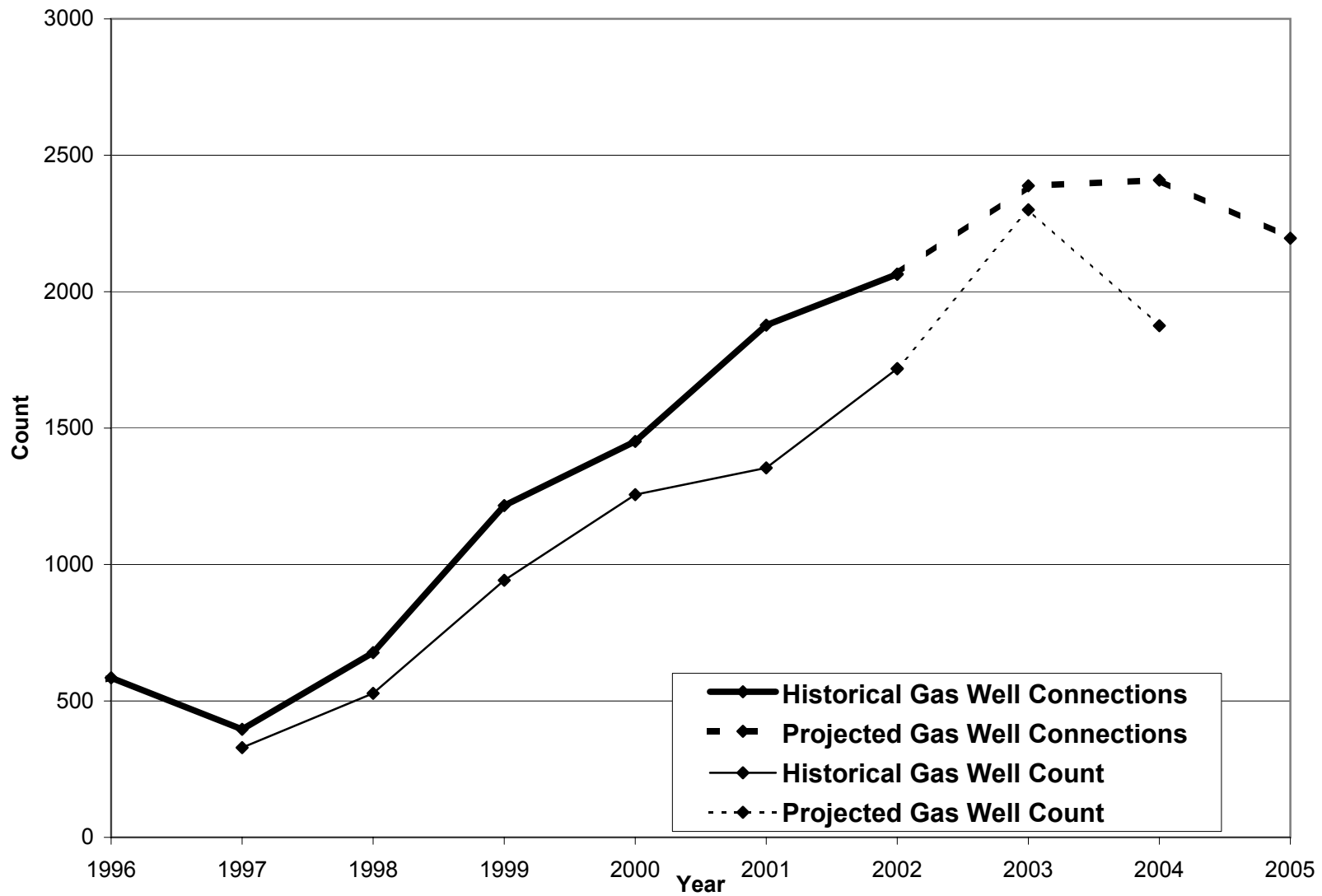
A2-12: Gas Well Drilling and Gas Well Connections Alberta



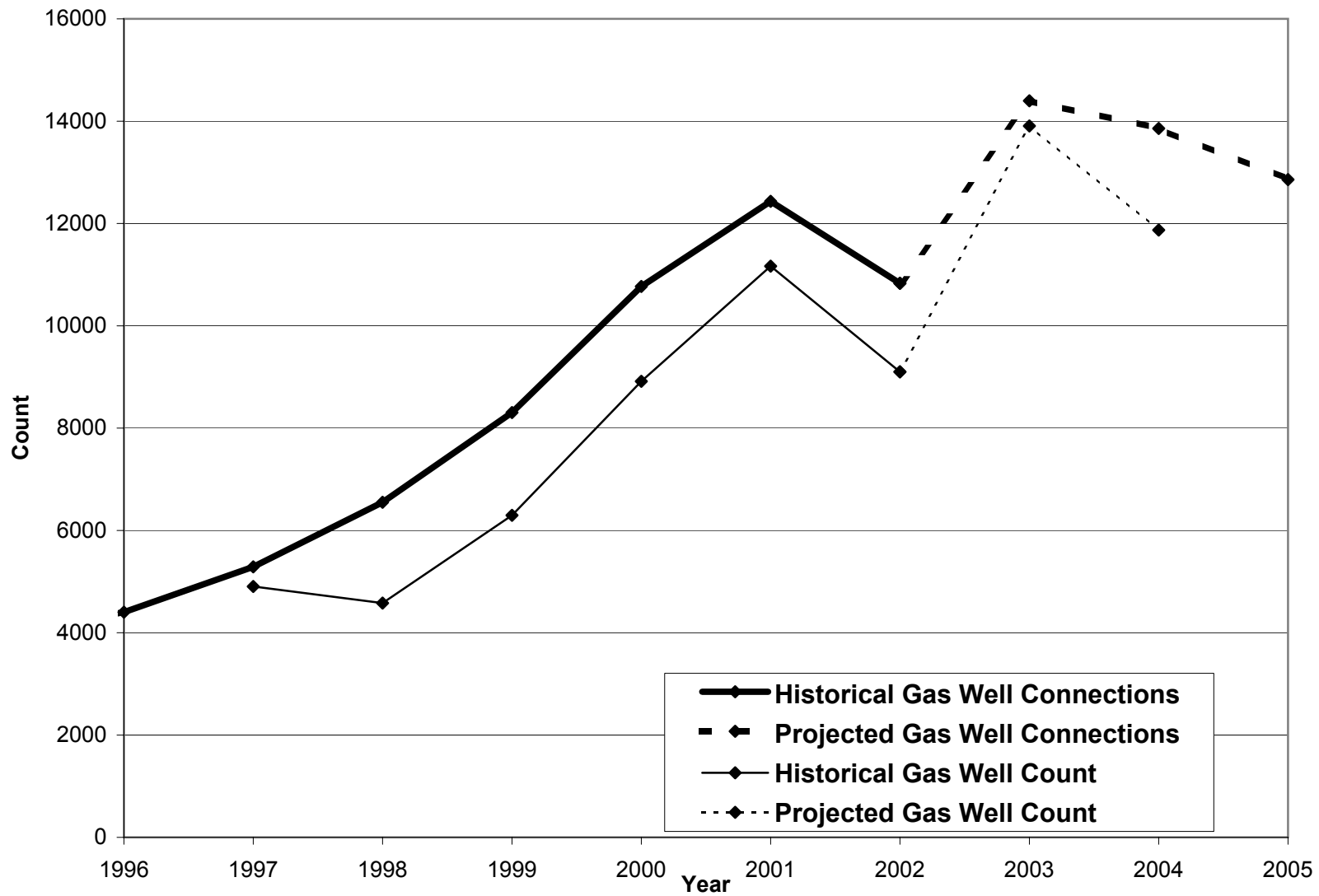
A2-13: Gas Well Drilling and Gas Well Connections B.C.



A2-14: Gas Well Drilling and Gas Well Connections Saskatchewan



A2-15: Gas Well Drilling and Gas Well Connections WCSB



Appendix 3

Group Performance Parameters Applicable to Existing Production

A3-1- Table of Group Performance Parameters Applicable to Existing Production

Gas Type	Province	Area	Connection Year	Group Performance Parameters			
				Marketable Gas Production Rate at 2002-12-31	1st Decline (frac)	Months to 2nd Decline	2nd Decline (frac)
Non-Solution Gas	Alberta	Foothills	1989	217.0	0.085	N/A	
Non-Solution Gas	Alberta	Foothills	1990	19.5	0.080	N/A	
Non-Solution Gas	Alberta	Foothills	1991	5.0	0.150	N/A	
Non-Solution Gas	Alberta	Foothills	1992	6.5	0.065	N/A	
Non-Solution Gas	Alberta	Foothills	1993	5.5	0.110	N/A	
Non-Solution Gas	Alberta	Foothills	1994	14.3	0.035	N/A	
Non-Solution Gas	Alberta	Foothills	1995	5.9	0.100	N/A	
Non-Solution Gas	Alberta	Foothills	1996	14.0	0.130	N/A	
Non-Solution Gas	Alberta	Foothills	1997	20.0	0.040	N/A	
Non-Solution Gas	Alberta	Foothills	1998	8.4	0.400	N/A	
Non-Solution Gas	Alberta	Foothills	1999	30.5	0.220	N/A	
Non-Solution Gas	Alberta	Foothills	2000	33.0	0.210	N/A	
Non-Solution Gas	Alberta	Foothills	2001	50.0	0.200	N/A	
Non-Solution Gas	Alberta	Foothills	2002	115.0	0.450	8	0.200
Non-Solution Gas	Alberta	Foothills Front	1989	830.0	0.105	N/A	
Non-Solution Gas	Alberta	Foothills Front	1990	36.5	0.110	N/A	
Non-Solution Gas	Alberta	Foothills Front	1991	42.0	0.140	N/A	
Non-Solution Gas	Alberta	Foothills Front	1992	22.5	0.200	N/A	
Non-Solution Gas	Alberta	Foothills Front	1993	208.0	0.110	N/A	
Non-Solution Gas	Alberta	Foothills Front	1994	165.0	0.130	N/A	
Non-Solution Gas	Alberta	Foothills Front	1995	97.0	0.135	N/A	
Non-Solution Gas	Alberta	Foothills Front	1996	107.0	0.210	N/A	
Non-Solution Gas	Alberta	Foothills Front	1997	174.0	0.170	N/A	
Non-Solution Gas	Alberta	Foothills Front	1998	246.0	0.180	N/A	
Non-Solution Gas	Alberta	Foothills Front	1999	257.0	0.200	N/A	
Non-Solution Gas	Alberta	Foothills Front	2000	375.0	0.250	N/A	
Non-Solution Gas	Alberta	Foothills Front	2001	510.0	0.250	N/A	
Non-Solution Gas	Alberta	Foothills Front	2002	758.0	0.500	14	0.250
Non-Solution Gas	Alberta	South East	1989	551.0	0.090	N/A	
Non-Solution Gas	Alberta	South East	1990	23.0	0.130	N/A	
Non-Solution Gas	Alberta	South East	1991	18.5	0.140	N/A	
Non-Solution Gas	Alberta	South East	1992	20.0	0.120	N/A	
Non-Solution Gas	Alberta	South East	1993	53.0	0.110	N/A	
Non-Solution Gas	Alberta	South East	1994	108.0	0.125	N/A	
Non-Solution Gas	Alberta	South East	1995	62.0	0.150	N/A	
Non-Solution Gas	Alberta	South East	1996	65.0	0.150	N/A	
Non-Solution Gas	Alberta	South East	1997	96.0	0.180	N/A	
Non-Solution Gas	Alberta	South East	1998	141.0	0.160	N/A	
Non-Solution Gas	Alberta	South East	1999	195.0	0.180	N/A	
Non-Solution Gas	Alberta	South East	2000	315.0	0.250	N/A	
Non-Solution Gas	Alberta	South East	2001	405.0	0.400	6	0.300
Non-Solution Gas	Alberta	South East	2002	530.0	0.550	12	0.300
Non-Solution Gas	Alberta	East	1989	145.0	0.060	N/A	
Non-Solution Gas	Alberta	East	1990	6.8	0.160	N/A	
Non-Solution Gas	Alberta	East	1991	14.0	0.140	N/A	
Non-Solution Gas	Alberta	East	1992	8.9	0.150	N/A	
Non-Solution Gas	Alberta	East	1993	11.5	0.110	N/A	
Non-Solution Gas	Alberta	East	1994	21.0	0.170	N/A	
Non-Solution Gas	Alberta	East	1995	20.5	0.160	N/A	
Non-Solution Gas	Alberta	East	1996	20.0	0.180	N/A	
Non-Solution Gas	Alberta	East	1997	19.0	0.250	N/A	
Non-Solution Gas	Alberta	East	1998	25.5	0.220	N/A	
Non-Solution Gas	Alberta	East	1999	38.0	0.230	N/A	
Non-Solution Gas	Alberta	East	2000	33.0	0.300	N/A	
Non-Solution Gas	Alberta	East	2001	66.0	0.300	N/A	
Non-Solution Gas	Alberta	East	2002	137.0	0.550	15	0.300
Non-Solution Gas	Alberta	Central	1989	275.0	0.135	N/A	
Non-Solution Gas	Alberta	Central	1990	26.0	0.160	N/A	
Non-Solution Gas	Alberta	Central	1991	21.5	0.170	N/A	
Non-Solution Gas	Alberta	Central	1992	12.3	0.190	N/A	
Non-Solution Gas	Alberta	Central	1993	29.0	0.170	N/A	
Non-Solution Gas	Alberta	Central	1994	48.0	0.170	N/A	
Non-Solution Gas	Alberta	Central	1995	39.5	0.130	N/A	
Non-Solution Gas	Alberta	Central	1996	57.5	0.180	N/A	
Non-Solution Gas	Alberta	Central	1997	64.0	0.200	N/A	
Non-Solution Gas	Alberta	Central	1998	77.0	0.200	N/A	
Non-Solution Gas	Alberta	Central	1999	86.0	0.250	N/A	
Non-Solution Gas	Alberta	Central	2000	114.0	0.310	N/A	
Non-Solution Gas	Alberta	Central	2001	173.0	0.550	10	0.310
Non-Solution Gas	Alberta	Central	2002	240.0	0.600	20	0.310
Non-Solution Gas	Alberta	North East	1989	178.0	0.150	N/A	
Non-Solution Gas	Alberta	North East	1990	25.0	0.120	N/A	
Non-Solution Gas	Alberta	North East	1991	23.0	0.170	N/A	
Non-Solution Gas	Alberta	North East	1992	12.5	0.160	N/A	
Non-Solution Gas	Alberta	North East	1993	46.0	0.160	N/A	
Non-Solution Gas	Alberta	North East	1994	64.5	0.150	N/A	
Non-Solution Gas	Alberta	North East	1995	66.0	0.150	N/A	
Non-Solution Gas	Alberta	North East	1996	69.0	0.170	N/A	
Non-Solution Gas	Alberta	North East	1997	88.0	0.180	N/A	
Non-Solution Gas	Alberta	North East	1998	99.0	0.190	N/A	
Non-Solution Gas	Alberta	North East	1999	91.0	0.210	N/A	
Non-Solution Gas	Alberta	North East	2000	130.0	0.220	N/A	
Non-Solution Gas	Alberta	North East	2001	134.0	0.260	20	0.220
Non-Solution Gas	Alberta	North East	2002	110.0	0.260	20	0.220
Non-Solution Gas	Alberta	North West	1989	253.0	0.120	N/A	
Non-Solution Gas	Alberta	North West	1990	29.0	0.150	N/A	
Non-Solution Gas	Alberta	North West	1991	23.5	0.180	N/A	
Non-Solution Gas	Alberta	North West	1992	13.5	0.170	N/A	
Non-Solution Gas	Alberta	North West	1993	24.0	0.220	N/A	
Non-Solution Gas	Alberta	North West	1994	54.0	0.160	N/A	
Non-Solution Gas	Alberta	North West	1995	80.0	0.180	N/A	
Non-Solution Gas	Alberta	North West	1996	88.0	0.210	N/A	
Non-Solution Gas	Alberta	North West	1997	98.0	0.280	N/A	
Non-Solution Gas	Alberta	North West	1998	129.0	0.220	N/A	
Non-Solution Gas	Alberta	North West	1999	135.0	0.260	N/A	
Non-Solution Gas	Alberta	North West	2000	170.0	0.300	N/A	
Non-Solution Gas	Alberta	North West	2001	305.0	0.500	9	0.320
Non-Solution Gas	Alberta	North West	2002	370.0	0.550	17	0.320
Non-Solution Gas	B.C.	Plains	1989	325.0	0.090	N/A	
Non-Solution Gas	B.C.	Plains	1990	43.5	0.110	N/A	
Non-Solution Gas	B.C.	Plains	1991	26.0	0.120	N/A	
Non-Solution Gas	B.C.	Plains	1992	28.0	0.140	N/A	

Gas Type	Province	Area	Connection Year	Group Performance Parameters			
				Marketable Gas Production Rate at 2002-12-31	1st Decline (frac)	Months to 2nd Decline	2nd Decline (frac)
Non-Solution Gas	B.C.	Plains	1993	31.5	0.140	N/A	
Non-Solution Gas	B.C.	Plains	1994	80.0	0.150	N/A	
Non-Solution Gas	B.C.	Plains	1995	69.0	0.130	N/A	
Non-Solution Gas	B.C.	Plains	1996	51.0	0.180	N/A	
Non-Solution Gas	B.C.	Plains	1997	91.0	0.130	N/A	
Non-Solution Gas	B.C.	Plains	1998	82.0	0.150	N/A	
Non-Solution Gas	B.C.	Plains	1999	150.0	0.210	N/A	
Non-Solution Gas	B.C.	Plains	2000	440.0	0.580	18	0.350
Non-Solution Gas	B.C.	Plains	2001	245.0	0.400	5	0.200
Non-Solution Gas	B.C.	Plains	2002	320.0	0.400	15	0.200
Non-Solution Gas	B.C.	Foothills	1989	28.0	0.100	N/A	
Non-Solution Gas	B.C.	Foothills	1990	0.0	0.000	N/A	
Non-Solution Gas	B.C.	Foothills	1991	9.5	0.230	N/A	
Non-Solution Gas	B.C.	Foothills	1992	1.4	1.250	N/A	
Non-Solution Gas	B.C.	Foothills	1993	9.0	0.200	N/A	
Non-Solution Gas	B.C.	Foothills	1994	24.0	0.220	N/A	
Non-Solution Gas	B.C.	Foothills	1995	8.5	0.300	N/A	
Non-Solution Gas	B.C.	Foothills	1996	24.0	0.180	N/A	
Non-Solution Gas	B.C.	Foothills	1997	45.0	0.220	N/A	
Non-Solution Gas	B.C.	Foothills	1998	37.0	0.180	N/A	
Non-Solution Gas	B.C.	Foothills	1999	0.0	0.000	N/A	
Non-Solution Gas	B.C.	Foothills	2000	22.0	0.200	N/A	
Non-Solution Gas	B.C.	Foothills	2001	50.0	0.200	N/A	
Non-Solution Gas	B.C.	Foothills	2002	19.0	0.200	N/A	
Non-Solution Gas	Saskatchewan	West Central	1989	16.5	0.080	N/A	
Non-Solution Gas	Saskatchewan	West Central	1990	6.5	0.130	N/A	
Non-Solution Gas	Saskatchewan	West Central	1991	6.2	0.100	N/A	
Non-Solution Gas	Saskatchewan	West Central	1992	3.0	0.160	N/A	
Non-Solution Gas	Saskatchewan	West Central	1993	6.0	0.080	N/A	
Non-Solution Gas	Saskatchewan	West Central	1994	9.5	0.190	N/A	
Non-Solution Gas	Saskatchewan	West Central	1995	8.8	0.130	N/A	
Non-Solution Gas	Saskatchewan	West Central	1996	7.3	0.140	N/A	
Non-Solution Gas	Saskatchewan	West Central	1997	5.3	0.200	N/A	
Non-Solution Gas	Saskatchewan	West Central	1998	12.5	0.180	N/A	
Non-Solution Gas	Saskatchewan	West Central	1999	10.0	0.180	N/A	
Non-Solution Gas	Saskatchewan	West Central	2000	12.0	0.150	N/A	
Non-Solution Gas	Saskatchewan	West Central	2001	22.0	0.150	N/A	
Non-Solution Gas	Saskatchewan	West Central	2002	25.0	0.480	15	0.200
Non-Solution Gas	Saskatchewan	South West	1989	66.0	0.110	N/A	
Non-Solution Gas	Saskatchewan	South West	1990	10.2	0.130	N/A	
Non-Solution Gas	Saskatchewan	South West	1991	7.0	0.130	N/A	
Non-Solution Gas	Saskatchewan	South West	1992	4.8	0.140	N/A	
Non-Solution Gas	Saskatchewan	South West	1993	16.5	0.140	N/A	
Non-Solution Gas	Saskatchewan	South West	1994	15.0	0.150	N/A	
Non-Solution Gas	Saskatchewan	South West	1995	6.0	0.130	N/A	
Non-Solution Gas	Saskatchewan	South West	1996	13.7	0.140	N/A	
Non-Solution Gas	Saskatchewan	South West	1997	9.5	0.160	N/A	
Non-Solution Gas	Saskatchewan	South West	1998	17.3	0.190	N/A	
Non-Solution Gas	Saskatchewan	South West	1999	28.5	0.200	N/A	
Non-Solution Gas	Saskatchewan	South West	2000	42.0	0.200	N/A	
Non-Solution Gas	Saskatchewan	South West	2001	59.0	0.480	5	0.260
Non-Solution Gas	Saskatchewan	South West	2002	108.0	0.450	18	0.240
Solution Gas	Alberta	Foothills	N/A	1.9	0.180	N/A	
Solution Gas	Alberta	Foothills Front	N/A	350.0	0.050	N/A	
Solution Gas	Alberta	South East	N/A	152.0	0.040	N/A	
Solution Gas	Alberta	East	N/A	78.0	0.010	N/A	
Solution Gas	Alberta	Central	N/A	330.0	0.035	N/A	
Solution Gas	Alberta	North East	N/A	62.0	0.040	N/A	
Solution Gas	Alberta	North West	N/A	290.0	0.010	N/A	
Solution Gas	B.C.	Plains	N/A	75.0	0.160	N/A	
Solution Gas	Saskatchewan	West Central	N/A	23.0	0.010	N/A	
Solution Gas	Saskatchewan	South West	N/A	60.0	0.040	N/A	

← Note: These parameters for the BC Plains area in Conn Yr 2000 are adjusted to reflect the expected production levels for all Ladyfern wells.

← Note: includes solution gas from SE Saskatchewan

Notes:

Decline Rates are nominal annual decline rates

1989 Connection Year represents production for all gas well connections made prior to 1990

2nd decline rate is Not Applicable to most groupings as the 1st decline rate is deemed to be representative of group deliverability for the projection period.

Appendix 4

Historical Performance Parameters for Typical Gas Well Connections

A4-1: Historical Performance Parameters for Typical Gas Well Connections

Province	Area	Connection Year	Performance Parameters			
			Initial Productivity, MMcf/d	1st Decline Rate, (frac)	Months to 2nd decline (calc'd)	2nd Decline Rate, (frac)
Alberta	Foothills	1990	6.400	0.120	38	0.095
Alberta	Foothills	1991	8.300	0.330	27	0.160
Alberta	Foothills	1992	3.600	0.170	48	0.095
Alberta	Foothills	1993	12.000	0.250	21	0.170
Alberta	Foothills	1994	3.300	0.200	17	0.040
Alberta	Foothills	1995	2.500	0.540	18	0.110
Alberta	Foothills	1996	4.500	0.245	30	0.130
Alberta	Foothills	1997	2.850	0.160	34	0.090
Alberta	Foothills	1998	2.850	0.030	23	0.650
Alberta	Foothills	1999	1.780	0.500	13	0.115
Alberta	Foothills	2000	1.650	0.550	12	0.210
Alberta	Foothills	2001	1.260	0.200	X	X
Alberta	Foothills	2002	2.200	X	X	X
Alberta	Foothills Front	1990	1.750	0.200	106	0.110
Alberta	Foothills Front	1991	1.600	0.050	20	0.210
Alberta	Foothills Front	1992	1.850	0.090	21	0.250
Alberta	Foothills Front	1993	2.800	0.140	39	0.090
Alberta	Foothills Front	1994	1.350	0.170	26	0.130
Alberta	Foothills Front	1995	1.300	0.250	52	0.160
Alberta	Foothills Front	1996	1.620	0.470	19	0.230
Alberta	Foothills Front	1997	1.300	0.330	29	0.250
Alberta	Foothills Front	1998	1.430	0.400	23	0.250
Alberta	Foothills Front	1999	1.350	0.540	20	0.250
Alberta	Foothills Front	2000	1.000	0.500	17	0.250
Alberta	Foothills Front	2001	0.850	0.470	X	X
Alberta	Foothills Front	2002	0.950	X	X	X
Alberta	South East	1990	0.365	0.260	61	0.140
Alberta	South East	1991	0.420	0.280	54	0.150
Alberta	South East	1992	0.520	0.420	41	0.130
Alberta	South East	1993	0.350	0.380	40	0.135
Alberta	South East	1994	0.335	0.370	31	0.160
Alberta	South East	1995	0.355	0.310	49	0.170
Alberta	South East	1996	0.390	0.560	25	0.190
Alberta	South East	1997	0.400	0.530	21	0.270
Alberta	South East	1998	0.300	0.530	21	0.290
Alberta	South East	1999	0.235	0.650	18	0.280
Alberta	South East	2000	0.205	0.600	17	0.310
Alberta	South East	2001	0.175	0.600	X	X
Alberta	South East	2002	0.160	X	X	X
Alberta	East	1990	0.535	0.130	27	0.200
Alberta	East	1991	0.550	0.160	128	0.150
Alberta	East	1992	0.640	0.320	38	0.180
Alberta	East	1993	0.530	0.390	51	0.180
Alberta	East	1994	0.620	0.570	24	0.240
Alberta	East	1995	0.520	0.380	30	0.250
Alberta	East	1996	0.540	0.430	27	0.250
Alberta	East	1997	0.520	0.520	20	0.320
Alberta	East	1998	0.400	0.600	19	0.270
Alberta	East	1999	0.330	0.480	18	0.300
Alberta	East	2000	0.300	0.630	25	0.300
Alberta	East	2001	0.315	0.650	X	X
Alberta	East	2002	0.280	X	X	X
Alberta	Central	1990	0.630	0.190	65	0.160
Alberta	Central	1991	0.720	0.360	25	0.180
Alberta	Central	1992	0.660	0.380	39	0.210
Alberta	Central	1993	0.725	0.345	47	0.220
Alberta	Central	1994	0.750	0.450	25	0.280
Alberta	Central	1995	0.700	0.530	27	0.250
Alberta	Central	1996	0.660	0.580	28	0.260
Alberta	Central	1997	0.600	0.650	23	0.300
Alberta	Central	1998	0.570	0.600	21	0.320
Alberta	Central	1999	0.500	0.600	27	0.320
Alberta	Central	2000	0.450	0.630	27	X
Alberta	Central	2001	0.380	0.650	X	X
Alberta	Central	2002	0.360	X	X	X
Alberta	North East	1990	0.700	0.060	29	0.170
Alberta	North East	1991	0.680	0.030	35	0.220
Alberta	North East	1992	0.770	0.250	47	0.200
Alberta	North East	1993	0.900	0.270	31	0.170
Alberta	North East	1994	0.610	0.210	30	0.195
Alberta	North East	1995	0.680	0.310	30	0.190
Alberta	North East	1996	0.695	0.330	29	0.190
Alberta	North East	1997	0.550	0.320	29	0.230
Alberta	North East	1998	0.530	0.350	24	0.260
Alberta	North East	1999	0.510	0.320	23	0.270
Alberta	North East	2000	0.365	0.260	29	X
Alberta	North East	2001	0.280	0.300	X	X
Alberta	North East	2002	0.290	X	X	X
Alberta	North West	1990	0.930	0.010	61	0.180

Alberta	North West	1991	1.150	0.030		30	0.210
Alberta	North West	1992	0.780	0.050		25	0.185
Alberta	North West	1993	1.080	0.130		10	0.240
Alberta	North West	1994	1.120	0.310		31	0.240
Alberta	North West	1995	1.150	0.170		19	0.280
Alberta	North West	1996	1.420	0.360		38	0.260
Alberta	North West	1997	1.080	0.440		25	0.320
Alberta	North West	1998	1.020	0.450		28	0.320
Alberta	North West	1999	0.860	0.500		22	0.350
Alberta	North West	2000	0.660	0.600		22	0.300
Alberta	North West	2001	0.600	0.550	X		X
Alberta	North West	2002	0.730	X	X		X
B.C.	Plains	1990	0.800	0.010		43	0.120
B.C.	Plains	1991	1.250	0.050		21	0.180
B.C.	Plains	1992	1.550	0.080		19	0.140
B.C.	Plains	1993	1.600	0.260		35	0.180
B.C.	Plains	1994	1.180	0.050		8	0.150
B.C.	Plains	1995	0.640	0.020		25	0.125
B.C.	Plains	1996	1.320	0.320		40	0.220
B.C.	Plains	1997	1.200	0.300		36	0.140
B.C.	Plains	1998	1.000	0.450		25	0.160
B.C.	Plains	1999	1.030	0.340		21	0.230
B.C.	Plains	2000	0.960	0.420		26	X
B.C.	Plains	2001	0.870	0.400	X		X
B.C.	Plains	2002	1.000	X	X		X
B.C.	Foothills	1990	11.000	0.650		45	5.000
B.C.	Foothills	1991	7.500	0.020		55	0.240
B.C.	Foothills	1992	7.000	0.020		56	1.500
B.C.	Foothills	1993	8.000	0.020		38	0.400
B.C.	Foothills	1994	5.500	0.020		22	0.220
B.C.	Foothills	1995	4.800	0.020		33	0.450
B.C.	Foothills	1996	6.000	0.020		4	0.150
B.C.	Foothills	1997	12.000	0.020		27	0.170
B.C.	Foothills	1998	10.000	0.020		28	0.250
B.C.	Foothills	1999	no data	no data	no data		no data
B.C.	Foothills	2000	9.800	0.400		12	0.200
B.C.	Foothills	2001	7.500	0.200	X		X
B.C.	Foothills	2002	1.700	X	X		X
Sask.	West Central	1990	0.480	0.050		20	0.210
Sask.	West Central	1991	0.570	0.050		13	0.150
Sask.	West Central	1992	0.660	0.100		16	0.280
Sask.	West Central	1993	0.540	0.320		76	0.080
Sask.	West Central	1994	0.470	0.500		28	0.220
Sask.	West Central	1995	0.460	0.380		28	0.190
Sask.	West Central	1996	0.390	0.520		26	0.150
Sask.	West Central	1997	0.415	0.360		34	0.240
Sask.	West Central	1998	0.455	0.400		37	0.200
Sask.	West Central	1999	0.385	0.440		38	0.180
Sask.	West Central	2000	0.360	0.570		17	0.150
Sask.	West Central	2001	0.265	0.570		15	X
Sask.	West Central	2002	0.230	X	X		X
Sask.	South West	1990	0.105	0.220		43	0.130
Sask.	South West	1991	0.110	0.240		57	0.130
Sask.	South West	1992	0.132	0.220		53	0.160
Sask.	South West	1993	0.096	0.230		33	0.160
Sask.	South West	1994	0.092	0.240		33	0.170
Sask.	South West	1995	0.115	0.700		21	0.140
Sask.	South West	1996	0.098	0.260		28	0.170
Sask.	South West	1997	0.120	0.340		31	0.220
Sask.	South West	1998	0.115	0.400		25	0.240
Sask.	South West	1999	0.090	0.480		21	0.260
Sask.	South West	2000	0.073	0.440		19	0.220
Sask.	South West	2001	0.066	0.480	X		X
Sask.	South West	2002	0.065	X	X		X

X - indicates insufficient data to estimate parameter