

**SCHEDULES  
TO THE  
DIRECT TESTIMONY  
OF  
EDWARD FEINSTEIN**

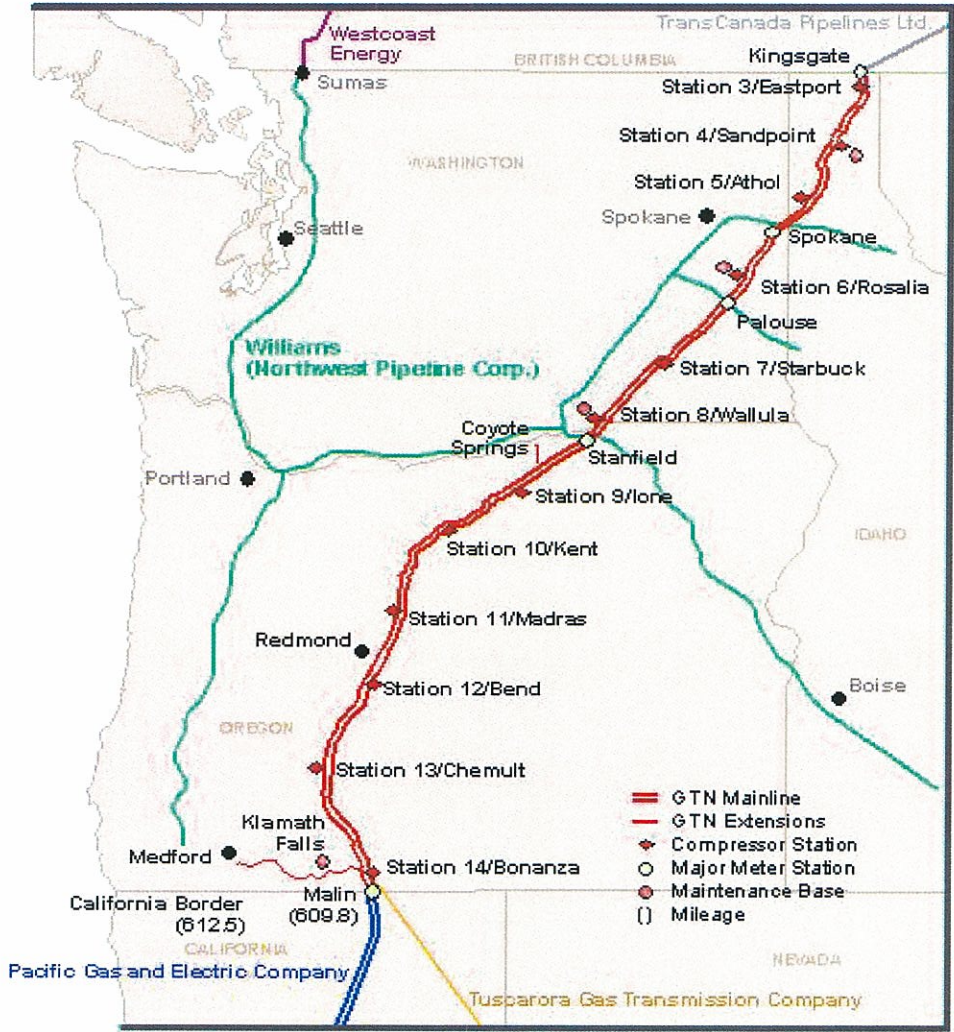
Schedule No. 1

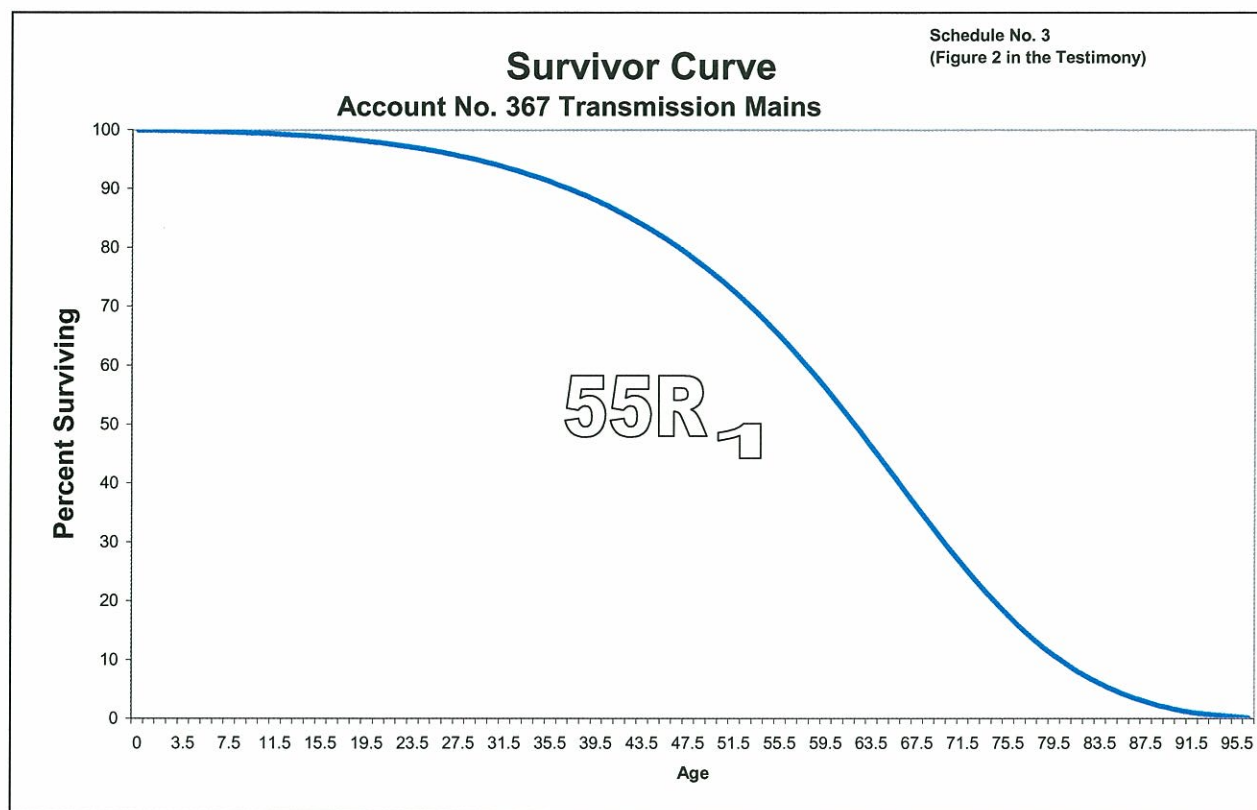
GAS TRANSMISSION NORTHWEST

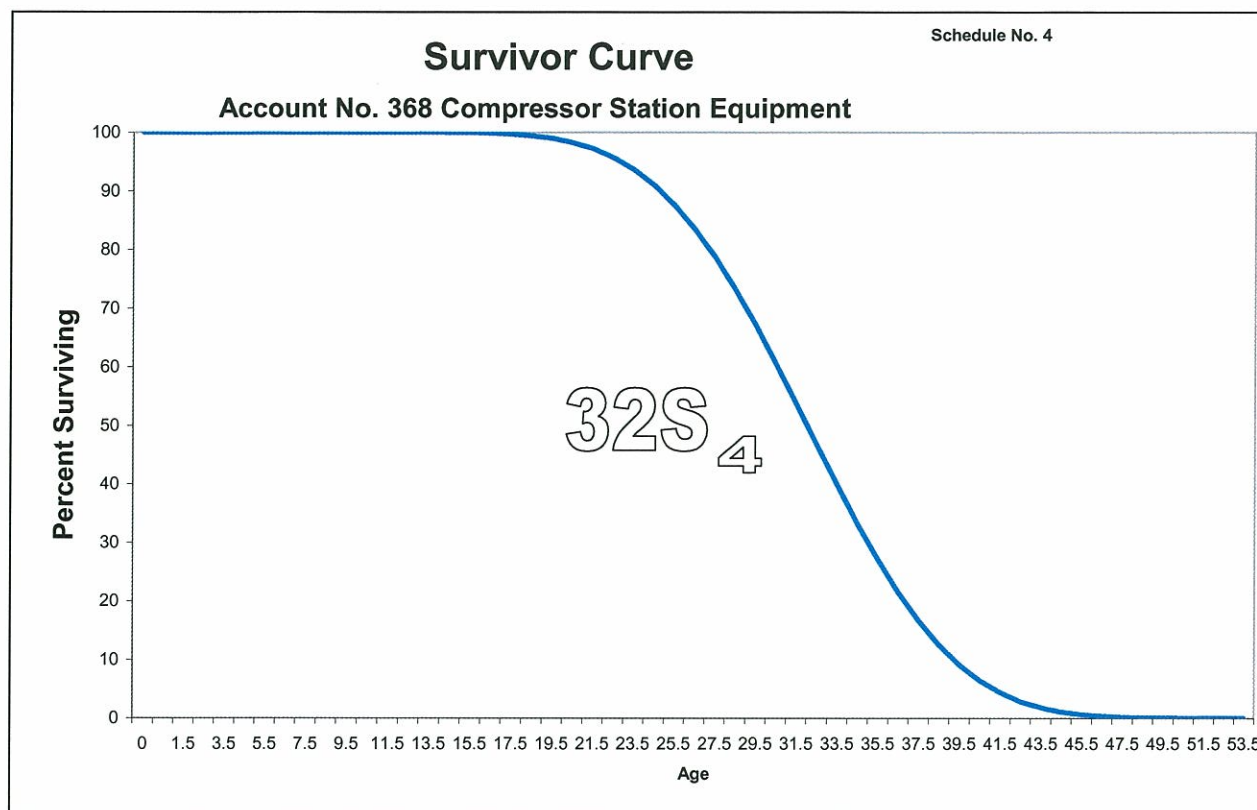
COMPARISON OF GTN'S EXISTING DEPRECIATION RATES  
WITH INDICATED RATES

		Existing Rates		Indicated Rates	
		Depreciation	Depreciation	Depreciation	Depreciation
		Capital Recovery	Negative Salvage	Capital Recovery	Negative Salvage
Gross Depreciable Plant					
\$		%	%	%	%
Transmission -	1,578,132,110	2.302	0.05	2.76%	0.74%
General Plant					
Account 391	Office Furniture and Equipment				
	Office Furniture	7.303		6.67	
	Computer Hardware	7.303		33.33	
	PCs and Laptops	7.303		33.33	
	Computer Software	7.303		20.00	
	Office Equipment	7.303		6.67	
Account 392	Transportation Equipment	7.303		18.00	
Account 394	Tools, Shop, and Garage Equipment	7.303		4.00	
Account 396	Power Operated Equipment	7.303		4.00	
Account 397	Communication Equipment	7.303		10.00	

Schedule No. 2

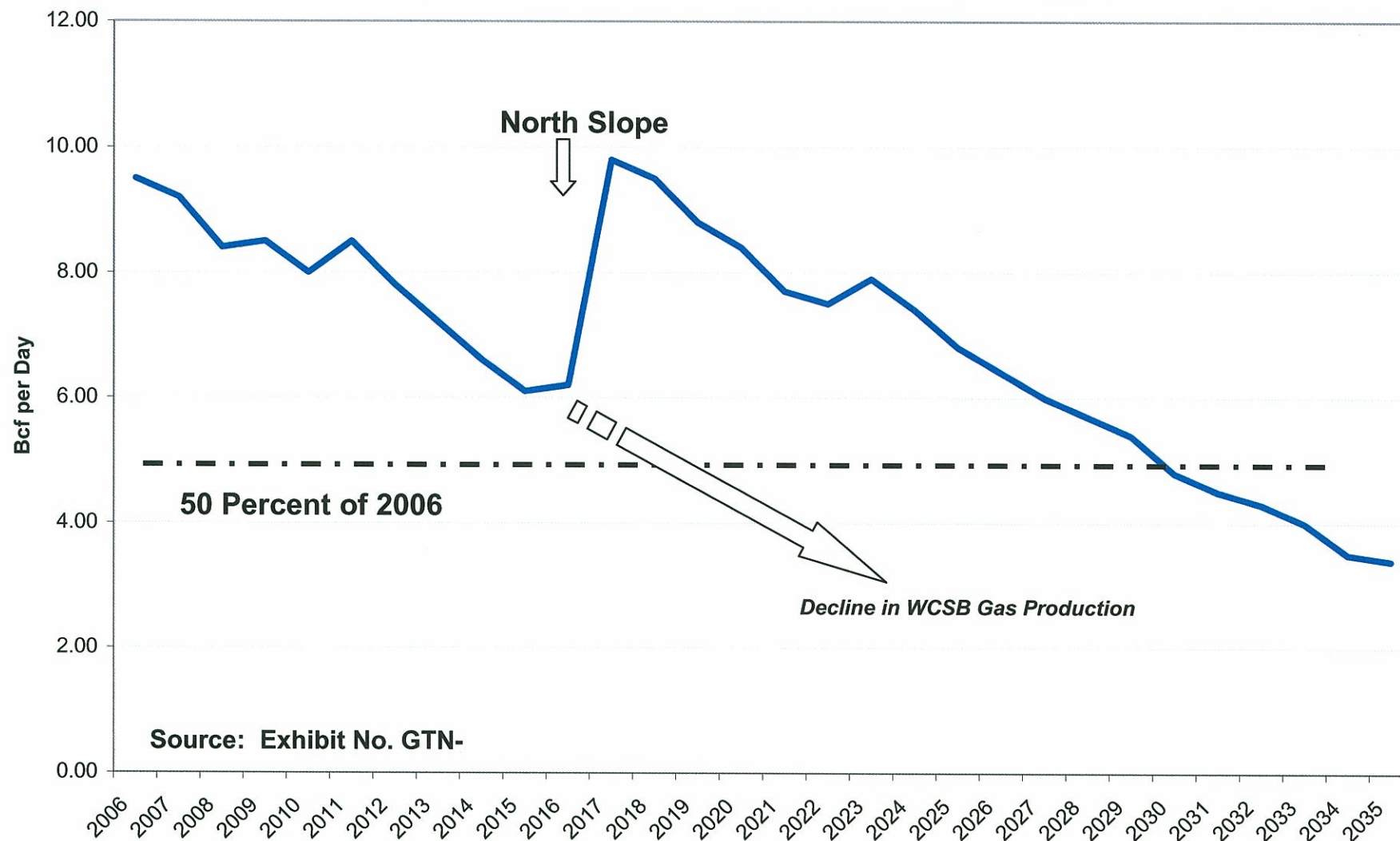






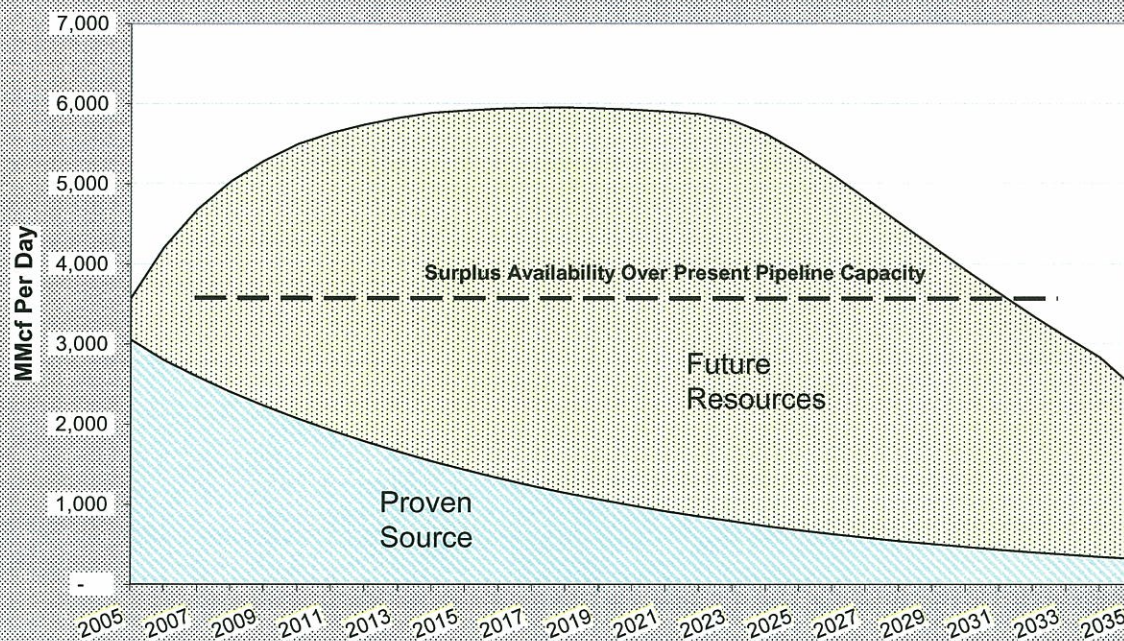
Schedule No. 5

## Availability of Western Canadian Gas for Export



## Natural Gas Productive Capacity Colorado, Utah and Wyoming

Schedule No. 6  
Page 1



## Schedule No. 6

## Page 2

# PRODUCTIVE CAPACITY ROCKY MOUNTAIN AREA

Colorado, Utah and Wyoming

Year	Productive Availability of 2004 Reserves	Productive Availability of Future Reserves	Productive Availability Total	
	Bcf/Year	Bcf/Year	Bcf/Year	Bcf / Day
2005	3,056	511	3,568	9.8
2006	2,802	1,404	4,206	11.5
2007	2,597	2,081	4,678	12.8
2008	2,407	2,618	5,025	13.8
2009	2,235	3,053	5,288	14.5
2010	2,075	3,419	5,493	15.1
2011	1,926	3,710	5,636	15.4
2012	1,789	3,951	5,740	15.7
2013	1,661	4,162	5,823	16.0
2014	1,542	4,344	5,885	16.1
2015	1,431	4,485	5,916	16.2
2016	1,329	4,609	5,938	16.3
2017	1,234	4,718	5,952	16.3
2018	1,146	4,809	5,955	16.3
2019	1,064	4,881	5,945	16.3
2020	988	4,939	5,927	16.2
2021	917	4,985	5,902	16.2
2022	852	5,018	5,869	16.1
2023	791	4,996	5,787	15.9
2024	734	4,887	5,621	15.4
2025	682	4,697	5,379	14.7
2026	633	4,473	5,106	14.0
2027	588	4,228	4,815	13.2
2028	546	3,970	4,516	12.4
2029	507	3,710	4,216	11.6
2030	471	3,451	3,921	10.7
2031	437	3,197	3,634	10.0
2032	406	2,950	3,356	9.2
2033	377	2,714	3,091	8.5
2034	350	2,489	2,839	7.8
2035	325	2,145	2,470	6.8

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National Energy  
Board



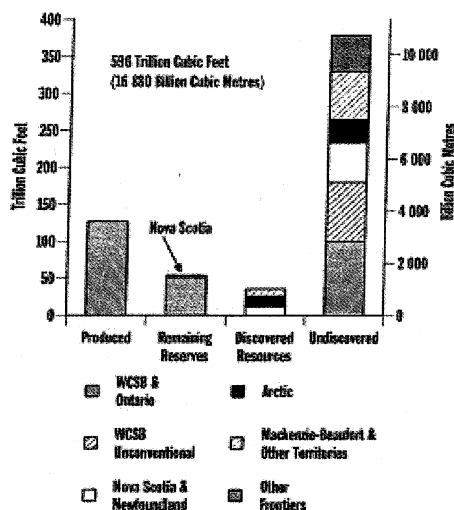
Office national  
de l'énergie



# **Canada's Energy Future**

**SCENARIOS FOR SUPPLY AND DEMAND TO 2025**

Figure 5.20 Natural Gas Resources in Canada – Techno-Vert



The WCSB also contains unconventional natural gas resources, including CBM and shale gas. CBM would be the main source of natural gas produced in this category over the projection period. The estimates for unconventional resources are considered preliminary since these natural gas sources are in the very early stages of development in Canada.

With the exception of offshore Nova Scotia, most frontier resources are situated in areas that are not currently producing natural gas. Resources in a number of the frontier areas were discovered decades ago, but their exploitation has not been economically feasible, and today they remain without access to transportation systems.

### Uncertainties Regarding Natural Gas Resources

The size of Canada's natural gas resource base continues to be a significant uncertainty, especially for the frontier regions and unconventional natural gas. Through exploration drilling and development, industry's knowledge of the WCSB has improved and resource estimates have generally increased. Continuous development of technology further enhances the ability to identify and exploit pools. At the same time, improved information leads to a narrower range of estimates. However, as with other basins, opinions still vary on the actual size of the WCSB resource base.

As technology improves and exploration increases in both scenarios, perhaps new geological concepts can be proved that would enable further increases to natural gas resource estimates. However, recent drilling and production data suggests that the WCSB may be maturing; and changes in natural gas resource estimates may be warranted for some areas.

Very little development of unconventional natural gas has occurred to date; consequently, the uncertainty associated with estimates of unconventional natural gas resources is high. A few producers have successfully developed CBM and if success continues, the unconventional natural gas resource base could be much larger. Estimates of resources for most of the frontier regions have a much greater degree of uncertainty than estimates for the WCSB, reflecting the limited state of exploration in those areas. Although discovered resources may exist in some frontier areas, in general these basins are relatively undeveloped compared to the WCSB. Estimates of resources for the frontier areas rely on more limited information and therefore are subject to significant upward or downward revisions as new information becomes available. Some of these regions, such as the Arctic Islands, may have discovered resources but are not expected to produce any natural gas over the projection period due to the high cost of developing production and transportation facilities in remote areas.

**Schedule No.8**  
**Page 1**

**Table 4.2. Upper Cretaceous CBM in place and established reserves, 2004 ( $10^6 \text{ m}^3$ ), deposit block model method**

Field/ strike area	Block model area (ha)	Average coal thickness (m)	Estimated gas content ( $\text{m}^3 \text{ gas}/$ $\text{m}^3 \text{ coal}$ )	Initial gas in place ( $10^6 \text{ m}^3$ )	Adjusted average recovery factor	Initial established reserves ( $10^6 \text{ m}^3$ )	Gas - cumulative production ( $10^6 \text{ m}^3$ )	Remaining established reserves ( $10^6 \text{ m}^3$ )	Water - cumulative production ( $10^3 \text{ m}^3$ )
Ardenode	14 848	11	2.50	4 177	4%	178	2	176	0.0
Bashaw	68 384	11	1.05	8 183	2%	181	27	154	3.2
Carbon	5 192	15	1.22	946	9%	88	2	86	0.0
Centron	9 088	16	2.43	3 606	4%	145	2	143	0.0
Clive-Alix	17 488	14	1.40	3 366	4%	135	20	114	6.3
Entice	58 921	16	1.81	18 254	11%	2 169	134	2 034	0.4
Gayford	11 704	19	1.23	2 712	10%	274	61	212	0.1
Ghostpine	63 360	12	1.14	8 765	6%	482	6	476	0.1
Irricana	4 984	20	2.45	2 499	15%	383	71	312	0.6
Manito	5 400	11	0.94	577	4%	23	4	19	0.0
Nevis	35 848	14	1.14	5 544	4%	209	35	174	0.9
Parflesh	9 290	13	1.17	1 411	9%	125	1	124	0.0
Redland	14 448	14	1.09	2 133	11%	225	17	209	0.1
Rockyford	21 024	14	1.09	3 289	11%	368	52	316	0.3
Strathmore	41 608	14	2.25	13 426	5%	687	44	643	0.4
Trochu	12 024	14	1.04	1 695	6%	93	12	81	0.0
Twining	92 664	14	1.45	19 026	5%	977	10	967	18.3
Wimbome	14 800	11	1.65	2 621	6%	144	3	141	0.1
Total	501 075			102 230		6 886	505	6 381	30.8
Average		14	1.50		8%				

Note that the Bashaw and Nevis Fields have very little data to calculate CBM reserves. Once data are collected in a more rigorous fashion, the reserves should increase dramatically. Larger reserves for fields such as Entice and Irricana are due to higher-density infill drilling.

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Table 4.3. Upper Cretaceous CBM in place and established reserves, 2004 ( $10^6 \text{ m}^3$ ), production extrapolation method

Field/strike area	Initial gas in place ( $10^6 \text{ m}^3$ )	Initial established reserves ( $10^6 \text{ m}^3$ )	Gas - cumulative production ( $10^6 \text{ m}^3$ )	Remaining established reserves ( $10^6 \text{ m}^3$ )	Water - cumulative production ( $10^3 \text{ m}^3$ )
Chigwell	not calc	98	7	91	0.9
Delia	not calc	109	7	102	0.0
Donalda	not calc	35	2	33	0.0
Mikwan	not calc	61	4	57	0.0
Rowley	not calc	119	8	111	0.0
Rumsey	not calc	146	10	136	0.0
Swalwell	not calc	31	2	29	0.0
Three H Ck	not calc	117	8	110	1.3
Wetwin	not calc	13	1	13	0.4
Fenn BV	not calc	383	26	357	3.0
Total	~16 000	1 114	74	1 039	5.7

Table 4.4. Noncommercial CBM production, 2004 ( $10^6 \text{ m}^3$ ), production extrapolation method—other CBM areas

Field/strike area	Coal zone	Initial gas in place ( $10^6 \text{ m}^3$ )	Initial established reserves ( $10^6 \text{ m}^3$ )	Gas - cumulative production ( $10^6 \text{ m}^3$ )	Remaining established reserves ( $10^6 \text{ m}^3$ )	Water - cumulative production ( $10^3 \text{ m}^3$ )
Canmore	Kootenay	not calc	not recorded	not recorded	0	not recorded
Fenn BV	Mannville	not calc	9	9	0	438.8
Coleman / Livingstone	Kootenay	not calc	0	0	0	0.0
Redwater	Mannville	not calc	not recorded	not recorded	0	not recorded
Pine Creek/Brazeau	Ardley	not calc	not recorded	not recorded	0	not recorded
Pembina	Ardley	not calc	15	15	0	89.5
Corbett/Thunder	Mannville	not calc	22	22	0	347.4
Manola/Mellow	Mannville	not calc	16	16	0	14.9
Drumheller	Mannville	not calc	0	0	0	0.0
Norris	Mannville	not calc	4	4	0	48.0
Strome	Mannville	not calc	0	0	0	4.9
Battle South	Mannville	not calc	0	0	0	5.3
Kelsey	Mannville	not calc	1	1	0	95.9
Swan Hills / Swan Hills S	Mannville	not calc	0	0	0	10.5
Miscellaneous	All	not calc	109	109	0	146.8
Total		not calc	176	176	0	1 202.0

The  $118 \times 10^9 \text{ m}^3$  initial in-place volume (Tables 4.2 and 4.3) encompasses the areas of commercial CBM production. This volume is expected to increase with further evaluation to include areas of known resources drilled but not yet producing. The remaining established reserves is set at  $7.42 \times 10^9 \text{ m}^3$  based on the two methods, as shown in Tables 4.2 and 4.3. Recent additional requirements placed on industry to gather testing data on designated CBM pools and greater identification of CBM-specific activity resulting from *Bulletin 2004-21* may enable a more complete assessment of CBM reserves for additional regions of the province for the next year-end.

Schedule No. 9

# **DETERMINATION OF THE AVERAGE ECONOMIC LIFE OF GTN'S PIPELINE FACILITIES**

Western Canada Gas Availability for U.S Export

Dr. Haessel's Base Case

Year	Gas Available for Export (Relative Throughput) Bcf/day	Deficient Gas Availability as a % of 2006 Capability	Facility Redundancy of Current Plant Facilities	Underutilization of Facilities	3-Year Increments of Underutilization of Facilities	Years Remaining From 2006	Weighted Years Year-to-Year Direct Weighting	Weighted Years 3-Year Increments Direct Weighting
		9.50	\$ 1,577,585,699					

2006	9.50					1		
2007	9.20					2		
2008	8.40					3		
2009	8.50		-			4		
2010	8.00		-	-		5		
2011	8.50		-	-	-	6	-	
2012	7.80		-	-		7		
2013	7.20		-	-		8		
2014	6.60		-	-	-	9	-	
2015	6.10		-	-		10		
2016	6.20		-	-		11		
2017	9.80		-	-	-	12	-	
2018	9.50	1.00	1,577,585,699			13		
2019	8.80	0.93	1,461,342,542	116,243,157		14	1,627,404,194	
2020	8.40	0.88	1,394,917,881	66,424,661		15	996,369,915	
2021	7.70	0.81				16	-	
2022	7.50	0.79		-		17	-	
2023	7.90	0.83	1,311,887,055	83,030,826	265,698,644	18	1,494,554,872	4,782,575,591
2024	7.40	0.78	1,228,856,228	83,030,826		19	1,577,585,699	
2025	6.80	0.72	1,129,219,237	99,636,991		20	1,992,739,830	
2026	6.40	0.67	1,062,794,576	66,424,661	249,092,479	21	1,394,917,881	5,230,942,053
2027	6.00	0.63	996,369,915	66,424,661		22	1,461,342,542	
2028	5.70	0.60	946,551,419	49,818,496		23	1,145,825,402	
2029	5.40	0.57	896,732,923	49,818,496	166,061,652	24	1,195,643,898	3,985,479,659
2030	4.80	0.51	797,095,932	99,636,991		25	2,490,924,787	
2031	4.50	0.47	747,277,436	49,818,496		26	1,295,280,889	
2032	4.30	0.45	714,065,106	33,212,330	182,667,818	27	896,732,923	4,932,031,079
2033	4.00	0.42	664,246,610	49,818,496		28	1,394,917,881	
2034	3.50	0.37	581,215,784	83,030,826		29	2,407,893,961	
2035	3.40	0.36	564,609,618	581,215,784	714,065,106	30	17,436,473,510	21,421,953,170

Weighted Average Economic Life	1,577,585,699	1,577,585,699	24.600	38,808,608,184	40,352,981,552
		Direct Weighting			25.579
			Direct Weighting 3- Year Increments		

Schedule No. 10

**DETERMINATION OF THE AVERAGE ECONOMIC LIFE OF GTN'S PIPELINE FACILITIES**  
Western Canada Gas Availability for U.S Export Supplemented by Available Rocky Mountain Region Gas

Year	Gas Available to GTN W. Canada and RM Regions (Relative Throughput) Bcf/day	Deficient Gas Availability as a % of 2006 Capability	Facility Redundancy of Current Plant Facilities	Underutilization of Facilities	3-Year Increments of Underutilization of Facilities	Years Remaining From 2006	Weighted Years Year-to-Year Direct Weighting	Weighted Years 3-Year Increments Direct Weighting
		9.30	\$ 1,577,585,699					

2006	9.30					1		
2007	9.00					2		
2008	8.50					3		
2009	8.50		-			4		
2010	8.00		-	-		5		
2011	8.50		-	-	-	6	-	
2012	7.80		-	-		7		
2013	7.20		-	-		8		
2014	6.60		-	-	-	9	-	
2015	6.90		-	-		10		
2016	6.20		-	-		11		
2017	9.90		-	-	-	12	-	
2018	9.20	0.99	1,560,622,411	16,963,267		13	220,522,732	
2019	8.60	0.92	1,458,842,689	101,779,722		14	1,424,916,115	
2020	8.20	0.88	1,390,989,541	67,853,148	186,596,158	15	1,017,797,225	2,798,942,368
2021	7.60					16	-	
2022	7.30			-		17	-	
2023	7.90	0.85	1,340,099,679	50,889,861	50,889,861	18	916,017,502	916,017,502
2024	7.30	0.78	1,238,319,957	101,779,722		19	1,933,814,727	
2025	6.90	0.74	1,170,466,809	67,853,148		20	1,357,062,966	
2026	6.30	0.68	1,068,667,086	101,779,722	271,412,593	21	2,137,374,172	5,699,664,459
2027	6.00	0.65	1,017,797,225	50,889,861		22	1,119,576,947	
2028	5.70	0.61	966,907,364	50,889,861		23	1,170,466,809	-
2029	5.40	0.58	916,017,502	50,889,861	152,669,584	24	1,221,356,670	3,664,070,010
2030	4.80	0.52	814,237,780	101,779,722		25	2,544,493,062	
2031	4.60	0.49	780,311,206	33,926,574		26	882,090,928	-
2032	4.30	0.46	729,421,344	50,889,861	186,596,158	27	1,374,026,254	5,038,096,263
2033	4.00	0.43	678,531,483	50,889,861		28	1,424,916,115	
2034	3.50	0.38	593,715,048	84,816,435		29	2,459,676,627	-
2035	3.50	0.38	593,715,048	593,715,048	729,421,344	30	17,811,451,435	21,882,640,335

Weighted Average Economic Life	1,577,585,699	1,577,585,699	24.731	39,015,560,287	39,999,430,937
		Direct Weighting			25.355
			Direct Weighting 3- Year Increments		

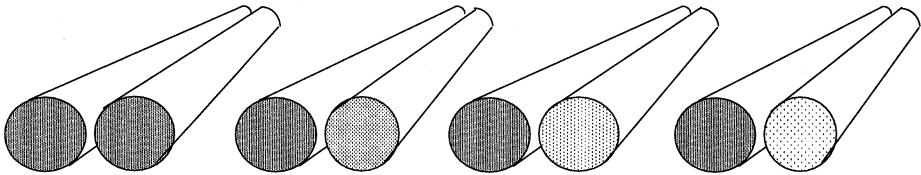
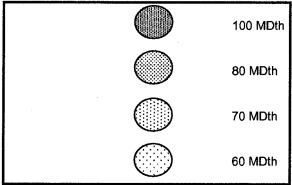
Schedule No. 11

**DETERMINATION OF THE AVERAGE ECONOMIC LIFE OF GTN'S PIPELINE FACILITIES**  
Northern Rocky Mountain Gas Availability

Year	Productive Capacity (Relative Throughput) MMcf/day	Adjusted for GTN's Capacity Share Bcf Per Year	Deficient Productive Capacity as a % of 2006 Capacity 11.469	Facility Redundancy of Current Plant Facilities \$ 1,577,585,699	Underutilization of Facilities	3-Year Increments of Underutilization of Facilities	Years Remaining From 2006	Weighted Years Year-to-Year Direct Weighting	Weighted Years 3-Year Increments Direct Weighting
2006	11.469	11.469					1		
2007	12.735	11.469		-			2		
2008	13.667	11.469		-			3		
2009	14.370	11.469		-			4		
2010	14.919	11.469		-			5		
2011	15.298	11.469		-			6		
2012	15.574	11.469		-			7		
2013	15.793	11.469		-			8		
2014	15.958	11.469		-			9		
2015	16.037	11.469		-			10		
2016	16.093	11.469		-			11		
2017	16.127	11.469		-			12		
2018	16.130	11.469		-			13		
2019	16.099	11.469		-			14		
2020	16.049	11.469		-			15		
2021	15.978	11.469		-			16		
2022	15.888	11.469		-			17		
2023	15.663	11.469		-			18		
2024	15.212	11.469		-			19		
2025	14.556	11.469		-			20		
2026	13.817	11.469		-			21		
2027	13.031	11.469		-			22		
2028	12.220	11.469		-			23		
2029	11.409	10.652	0.93	1,577,585,699	112,286,571		24	2,694,877,698	
2030	10.611	9.907	0.86	1,362,780,272	102,518,856		25	2,562,971,394	
2031	9.833	9.180	0.80	1,262,830,534	99,949,738	314,755,165	26	2,598,693,188	8,183,634,277
2032	9.081	8.478	0.74	1,166,242,117	96,588,417		27	2,607,887,257	
2033	8.363	7.808	0.68	1,074,098,845	92,143,272		28	2,580,011,622	
2034	7.682	7.172	0.63	986,563,510	87,535,335	276,267,024	29	2,538,524,718	8,011,743,703
2035	6.984	6.520	0.57	896,945,073	986,563,510	986,563,510	30	29,596,905,294	29,596,905,294
Weighted Average Economic Life							28.64	45,179,871,171	45,792,283,274
							Direct Weighting		29.03
							Direct Weighting 3- Year Increments		

Schedule No. 12

ILLUSTRATIVE EXAMPLE OF THE EFFECTS OF UNDERUTILIZATION ON THE ECONOMIC LIFE OF A PIPELINE



Plant Investment (\$)

Cost of Service (\$)

Depreciation Rate -

Depreciation Expense (\$)

Time Period (Years)

Throughput (MDth)

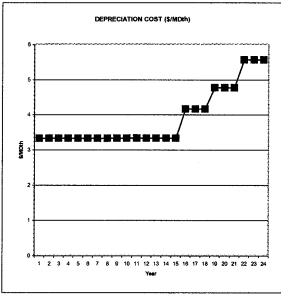
Depr Exp Per MDth

Cost of Serv Per MDth

10,000	10,000	10,000	10,000
1,000	900	800	700
3.33	3.33	3.33	3.33
333	333	333	333
0 TO 15	16 to 18	19 to 21	22 to 24
100	80	70	60
3.33 \$/MDth	4.16 \$/MDth	4.76 \$/MDth	5.55 \$/MDth
10 \$/MDth	11.25 \$/MDth	11.43 \$/MDth	11.67 \$/MDth

Depreciation  
Cost Per MDth

1	3.33
2	3.33
3	3.33
4	3.33
5	3.33
6	3.33
7	3.33
8	3.33
9	3.33
10	3.33
11	3.33
12	3.33
13	3.33
14	3.33
15	3.33
16	4.16
17	4.16
18	4.16
19	4.76
20	4.76
21	4.76
22	5.55
23	5.55
24	5.55



Schedule No. 13

**Gas Transmission Northwest**  
**Summary of ASL and Iowa Type Survivor Curve**  
**Physical Life**

Account Number	Description	Type Survivor Curve	Average Service Life
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**Transmission Plant**

365.2	Rights of Way	R <sub>3</sub>	55
366.1	Structures - Compressor Station	S <sub>5</sub>	44
366.2	Structures - Measuring and Regulating	S <sub>5</sub>	44
366.3	Structures - Other Equipment	S <sub>5</sub>	44
367	Mains	R <sub>1</sub>	55
368	Compressor Station Equipment	S <sub>4</sub>	32
369	Measuring and Regulating Station Equipment	L <sub>5</sub>	15
370	Communication Equipment	R <sub>2</sub>	25
371	Miscellaneous Equipment	R <sub>4</sub>	18

Schedule No. 14

**GAS TRANSMISSION NORTHWEST**

**DETERMINATION OF THE DEPRECIATION RATE  
TRANSMISSION PLANT  
Economic Life -- 26 years**

Account No.	Description	Gross Depreciable Plant Investment 12/31/2005 \$	Accumulated Reserve for Depreciation 12/31/2005 \$	Net Depreciable Plant 12/31/2005 \$	Average Remaining Life Years	Indicated Depreciation Expense \$	Depreciation Rate %
<b>Transmission Plant</b>							
266.2	Rights-of-Way	11,593,225	5,350,731	6,242,493	23.6	264,512	
366.1	Structures - Compressor Equipment	69,318,273	33,144,027	36,174,246	23.4	1,545,908	
366.2	Structures - Meter and Regulator	4,357,911	1,710,535	2,647,376	25.2	105,055	
366.3	Structures - Other	9,039,389	4,801,363	4,238,026	22.6	187,523	
367	Mains	959,735,798	357,739,974	601,995,824	22.5	26,755,370	
368	Compressor Stations	481,860,280	233,927,868	247,932,413	19.3	12,846,239	
369	Meas. & Regulating Sta. Equip.	15,206,140	11,655,658	3,550,482	6.4	554,763	
370	Communication Equipment	21,191,399	12,091,005	9,100,394	14.0	650,028	
371	Other Equipment	5,283,283	4,748,590	534,693	5.9	90,626	
	Subtotal	1,577,585,699	665,169,752	912,415,947		43,000,024	
	Additions	33,621,232	-	33,621,232	25.5	1,318,480	
	Retirements	2,762,133	(2,762,133)	-			
	Total	1,608,444,798	662,407,619	946,037,179		44,318,504	2.76
266.2	Rights-of-Way	11,593,225	5,615,243	5,977,981	22.8	262,192	
366.1	Structures - Compressor Station	69,318,273	34,689,935	34,628,338	22.6	1,532,227	
366.2	Structures - M&R Station	4,357,911	1,815,590	2,542,321	24.4	104,193	
366.3	Structures - Other	9,039,389	4,988,886	4,050,503	21.8	185,803	
367	Mains	959,735,798	384,495,344	575,240,454	21.7	26,508,777	
368	Compressor Stations	481,860,280	246,774,107	235,086,174	18.5	12,707,361	
369	Meas. & Regulating Sta. Equip.	15,206,140	12,210,421	2,995,719	5.6	534,950	
370	Communication Equipment	21,191,399	12,741,033	8,450,366	13.2	640,179	
371	Other Equipment	5,283,283	4,839,216	444,067	5.1	87,072	
	Total Plant Additions (2006-2007)	67,242,464	1,318,480	65,923,984	24.7	2,668,987	
	Total Plant Retirements (2006-2007)	5,524,266					
	Total	1,639,303,897	709,488,256	935,339,907		45,231,742	2.76%
266.2	Rights-of-Way	11,593,225	5,877,436	5,715,789	22.0	259,809	
366.1	Structures - Compressor Station	69,318,273	36,222,162	33,096,110	21.8	1,518,170	
366.2	Structures - M&R Station	4,357,911	1,919,783	2,438,128	23.6	103,310	
366.3	Structures - Other	9,039,389	5,174,689	3,864,700	21	184,033	
367	Mains	959,735,798	411,004,121	548,731,677	20.9	26,255,104	
368	Compressor Stations	481,860,280	259,481,467	222,378,813	17.7	12,563,775	
369	Meas. & Regulating Sta. Equip.	15,206,140	12,745,371	2,460,769	4.8	512,660	
370	Communication Equipment	21,191,399	13,381,213	7,810,187	12.4	629,854	
371	Other Equipment	5,283,283	4,926,288	356,995	4.3	83,022	
	Total Plant Additions (2006-2008)	100,863,696	3,987,467	96,876,229	23.9	4,053,399	
	Total Plant Retirements (2006-2008)	8,286,399					
	Total	1,670,162,996	754,719,997	923,729,397		46,163,136	2.76%

Composite Depreciation Rate =	2.76%
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## Schedule No. 15

**General Plant Depreciation**  
Recommended Depreciation Rates

Account Number	Description	Depreciation Rate %
391	Office Furniture and Equipment	
	Office Furniture	6.67
	Computer Equipment	33.33
	PCs and Laptops	33.33
	Computer Software	20.00
	Office Equipment	6.67
392	Transportation Equipment	18.00
394	Tools, Shop, and Garage Equipment	4.00
396	Power Operated Equipment	4.00
397	Communication Equipment	10.00

Schedule No. 16

# Gas Transmission Northwest

## Transmission

### DETERMINATION OF THE REMAINING LIFE OF FACILITIES SUBJECT TO NORMAL RETIREMENT

		Normal Retirements			Total	Estimated Negative Salvage	Number of Years Remaining in Service	Weight
		Acct 367	Acct 368	Acct 369				
1	2006	6,693,777	1,989,063	442,956	9,125,795	2,435,758	0.5	4,562,898
2	2007	6,826,353	1,994,040	454,811	9,275,205	2,483,682	1.5	13,912,807
3	2008	6,950,934	2,030,753	536,191	9,517,878	2,537,785	2.5	23,794,694
4	2009	7,080,463	2,120,684	679,977	9,881,124	2,602,173	3.5	34,583,934
5	2010	7,210,536	2,289,217	818,890	10,318,643	2,667,739	4.5	46,433,892
6	2011	7,347,431	2,569,489	834,014	10,750,934	2,723,072	5.5	59,130,139
7	2012	7,471,492	2,986,462	737,010	11,194,964	2,763,193	6.5	72,767,264
8	2013	7,613,948	3,582,883	683,989	11,880,820	2,818,618	7.5	89,106,148
9	2014	7,745,689	4,384,913	749,329	12,879,931	2,888,609	8.5	109,479,413
10	2015	7,890,294	5,421,078	810,641	14,122,014	2,967,302	9.5	134,159,129
11	2016	8,035,309	6,699,598	761,805	15,496,712	3,037,767	10.5	162,715,479
12	2017	8,183,763	8,226,543	666,525	17,076,831	3,108,831	11.5	196,383,553
13	2018	8,337,244	9,979,006	595,273	18,911,523	3,189,048	12.5	236,394,032
14	2019	8,494,812	11,922,278	502,285	20,919,375	3,271,904	13.5	282,411,564
15	2020	8,650,652	13,999,213	362,586	23,012,451	3,351,223	14.5	333,680,533
16	2021	8,818,739	16,127,408	228,246	25,174,393	3,436,496	15.5	390,203,085
17	2022	8,981,515	18,230,599	138,594	27,350,708	3,524,774	16.5	451,286,688
18	2023	9,160,893	20,197,177	84,504	29,442,575	3,620,397	17.5	515,245,068
19	2024	9,327,041	21,924,957	49,911	31,301,909	3,708,953	18.5	579,085,312
20	2025	9,506,152	23,330,877	27,599	32,864,628	3,797,082	19.5	640,860,238
21	2026	9,680,982	24,348,052	13,930	34,042,963	3,876,976	20.5	697,880,752
22	2027	9,867,515	24,919,853	6,307	34,793,675	3,952,784	21.5	748,064,018
23	2028	10,050,271	25,029,089	2,501	35,081,861	4,018,477	22.5	789,341,869
24	2029	10,234,278	24,675,057	841	34,910,176	4,075,599	23.5	820,389,124
25	2030	10,412,973	23,875,014	234	34,288,222	4,122,069	24.5	840,061,443
26	2031	10,602,068	22,691,387	56	33,293,511	4,164,558	25.5	848,984,519
27	2032	10,781,986	21,198,476	5	31,980,466	4,197,665	26.5	847,482,355
28	2033	10,963,994	19,459,545	1	30,423,539	4,226,589	27.5	836,647,335
29	2034	11,150,259	17,561,721	0	28,711,980	4,253,825	28.5	818,291,441
30	2035	11,323,949	15,583,398	0	26,907,347	4,275,050	29.5	793,766,742
30 Year Total		265,395,311	399,347,830	10,189,010	674,932,151	102,097,997	18.40	12,417,105,467
26 Year Total		221,175,124	325,544,691	10,189,004	556,908,818	85,144,868	16.38	9,120,917,595
24 Year Total		200,160,083	278,978,289	10,188,714	489,327,086	76,858,240	15.19	7,431,871,633

Schedule No. 17

**GAS TRANSMISSION NORTHWEST**  
**Transmission Plant**  
**DETERMINATION OF NEGATIVE SALVAGE COST OF FINAL CLOSURE**

	Gross Plant	Normal Retirements	Total Norm Ret To Gross Plant	Gross Plant Subject to Final Retirement	Gross Salvage	Demolition/Abandon	Adj Cost of Final Retirement	Adj Gross Salvage Amount	Line Pack Credit	Negative Salvage Cost Final Retirement	Contingency @ 10%	Total Neg Salv Cost Final Retirement
	\$	\$		\$	\$	\$	\$	\$		\$	\$	\$
Mains	959,735,798	221,175,124	0.23	738,560,674	-	233,064,000	179,353,428	-	-	179,353,428	-	179,353,428
Compressors	481,860,280	325,544,691	0.68	156,315,590	-	53,276,200	17,282,812	-	-	17,282,812	-	17,282,812
Meters	15,206,140	10,189,004	0.67	5,017,136	-	6,103,000	2,013,633	-	-	2,013,633	-	2,013,633
										198,649,872		198,649,872
	1,456,802,218	556,908,818			-	292,443,200	198,649,872	-	-	198,649,872	-	198,649,872

*Included in  
DR&R Est.*

Line Pack Credit

Note:

The Column headed Gross Plant Subject to Final Retirement reflects the amount of plant, reduced by interim retirements, that will be subject to GTN Witness King's decommissioning costs.

The Column headed Adj Cost of Final Retirement reflects GTN Witness King's decommissioning costs of remaining plant after interim retirements are deducted.

Interim retirement negative salvage costs differ somewhat from terminal negative salvage costs.

## Schedule No. 18

**GAS TRANSMISSION NORTHWEST****Transmission Plant****AVERAGE REMAINING LIFE OF NEGATIVE SALVAGE OF PLANT SUBJECT TO RETIREMENT**

	Net Negative Salvage Cost	Average Number of Years to Retirement	Weight	
			Direct	Reciprical
	\$	Years		
Interim Retirements	85,144,868	16.38	1,394,481,997	5,198,811.09
Final Closure	198,649,872	26	5,164,896,679	7,640,379.70
Total and Composite Direct Wt.	283,794,740	23.11	6,559,378,676	12,839,190.80
Reciprical Wt.		22.10		

**Schedule No. 19**

**GAS TRANSMISSION NORTHWEST**

**DETERMINATION OF NEGATIVE SALVAGE RATE**  
**Transmission Plant**

<b>1</b>	<b>Total Depreciable Transmission Plant (\$)</b>	<b>1,577,585,699</b>
<b>2</b>	<b>Negative Salvage (\$)</b>	<b>283,794,740</b>
<b>3</b>	<b>Accumulated Reserve for Negative Salvage (\$)</b>	<b>13,958,172</b>
<b>4</b>	<b>Unaccrued Negative Salvage (\$)</b>	<b>269,836,568</b>
<b>5</b>	<b>Average Remaining Life (Years)</b>	<b>23.1</b>
<b>6</b>	<b>Annual Accrual (\$)</b>	<b>11,674,612</b>
<b>7</b>	<b>Negative Salvage Rate (%)</b>	<b>0.74%</b>

Table 1

**Relationship Between Discovered Resources and Ultimate Potential Gas Resources in the WCSB**  
*Volumes in Bcf*  
**Year-end 2003**

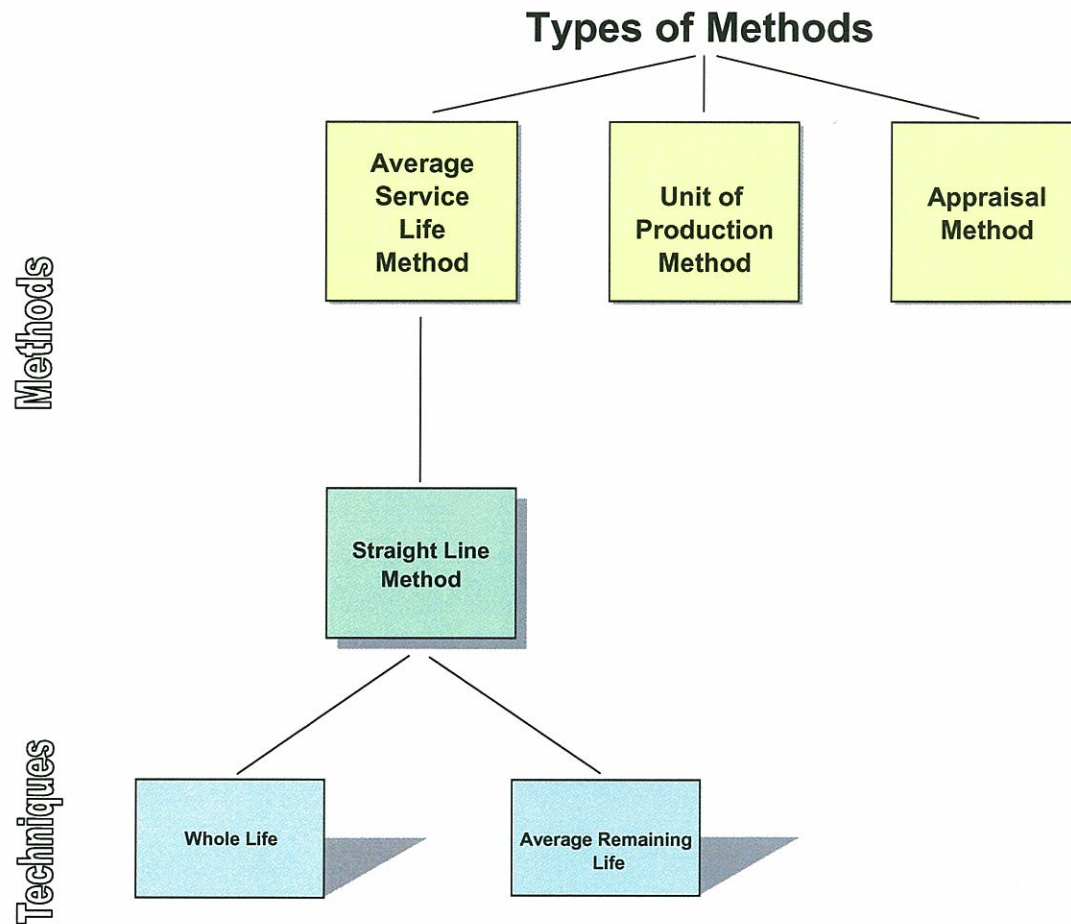
	<b>Discovered Marketable Resources</b>	<b>Undiscovered Resource</b>	<b>Ultimate Resource Potential</b>
<b>WCSB Conventional</b>			
Alberta	161,241	61,557	222,798
British Columbia	24,531	26,448	50,978
Saskatchewan	8,591	462	9,053
Southern Territories	1,030	5,929	6,958
<b>Total</b>	<b>195,392</b>	<b>94,395</b>	<b>289,787</b>

Discovered Marketable Resources includes cumulative production and remaining proved reserves.

Source: AEUB, Alberta's Ultimate Potential for Conventional Natural Gas

Figure 1

## Accepted Methods for Accruing Depreciation on Utility Properties



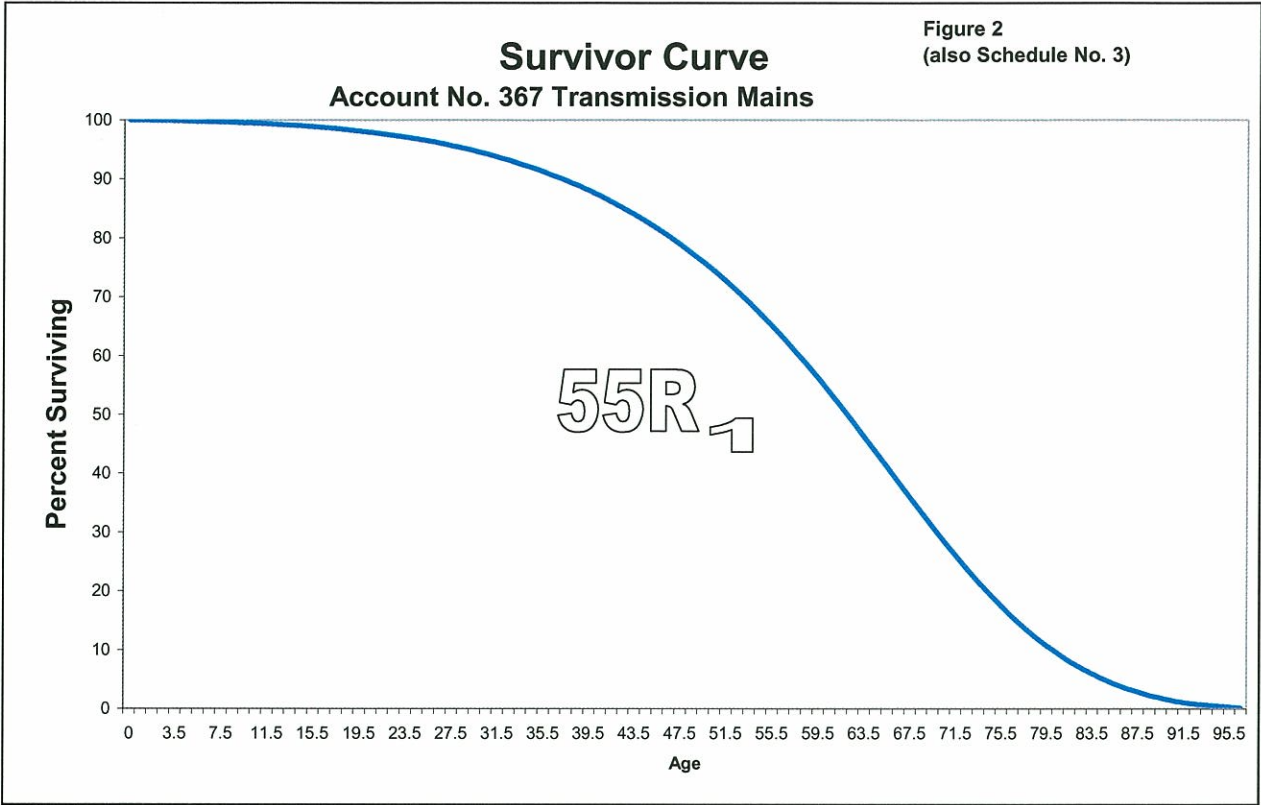


Figure 3

# Economic and Depreciable Life

## Economic Life

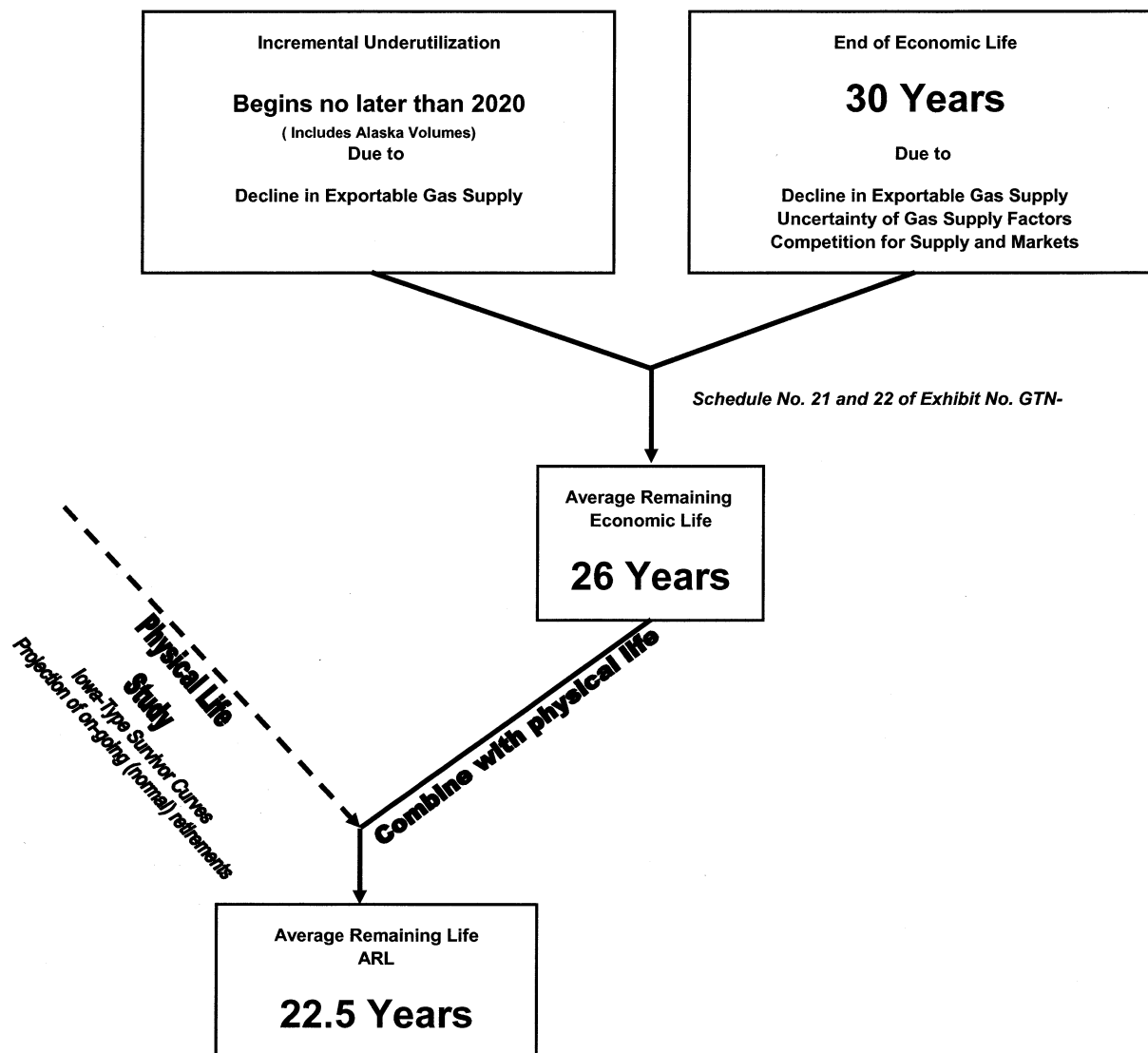
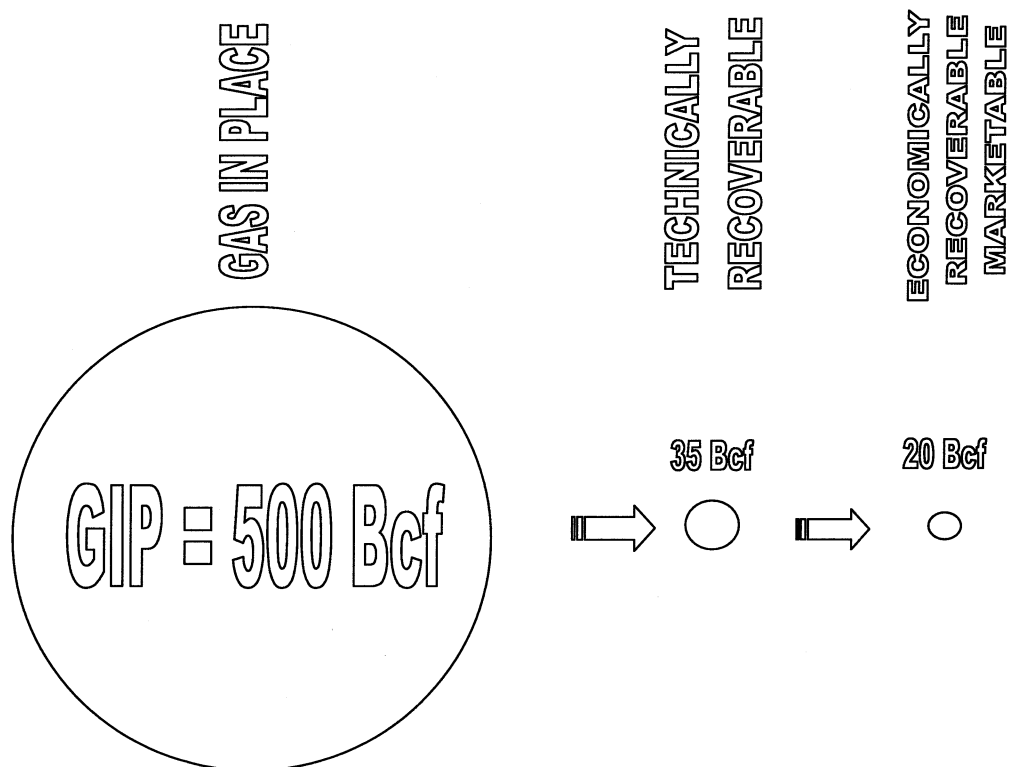


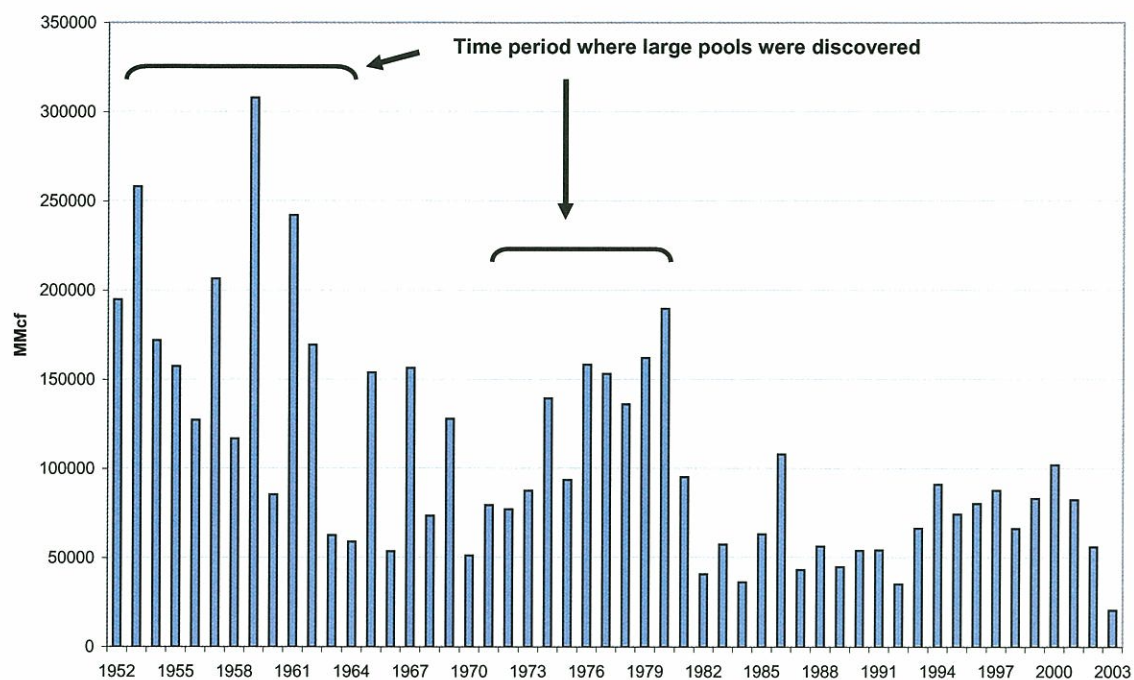
Figure 4

Diagram of the Relationship Between the Volume of Gas Resources  
Example: WCSB Coalbed Methane and Tight Gas Sands



Initial Established Reserve by Year of Discovery - Raw Gas

Figure 5



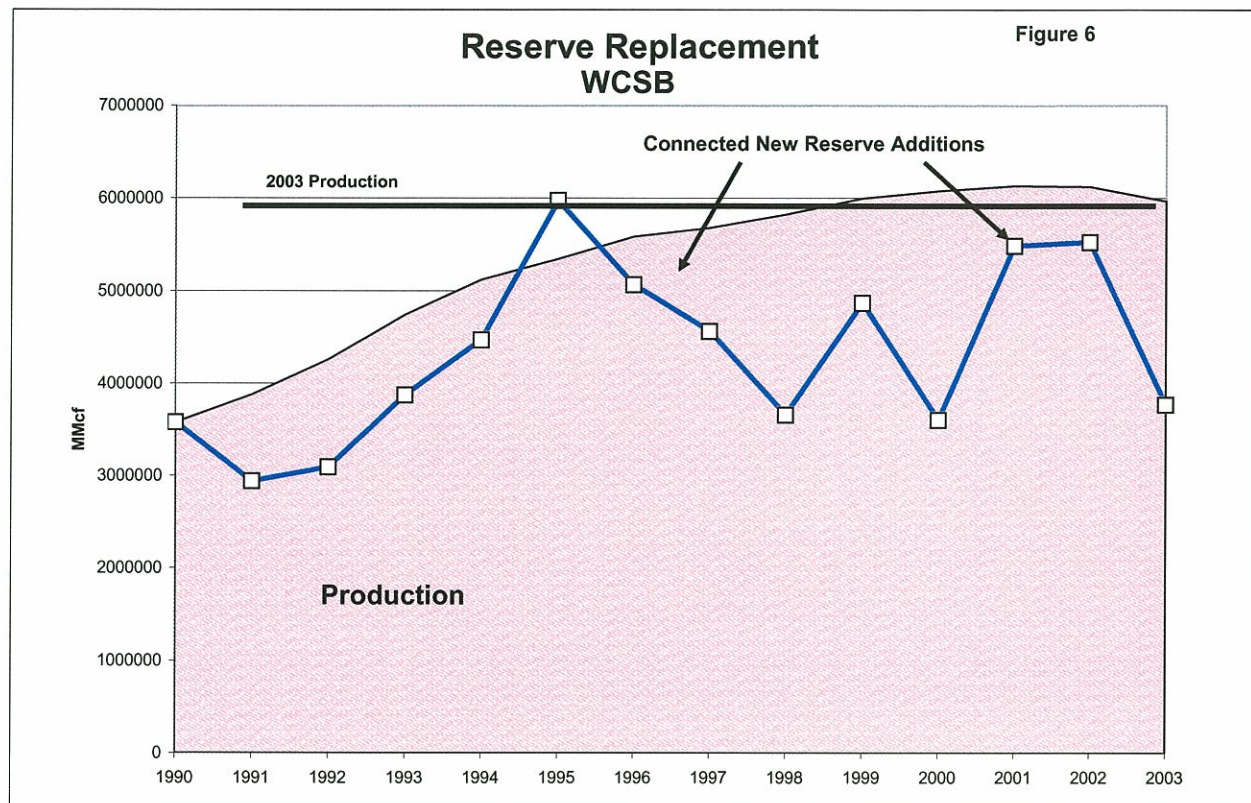
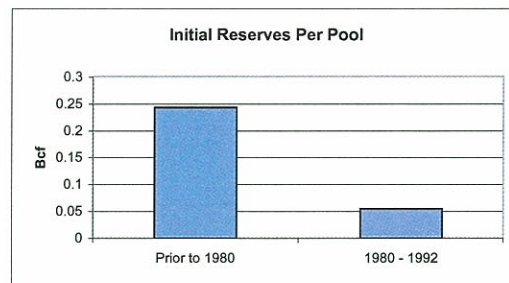
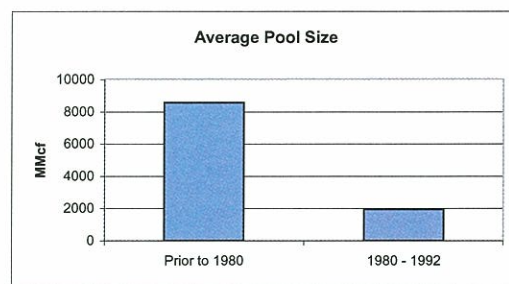
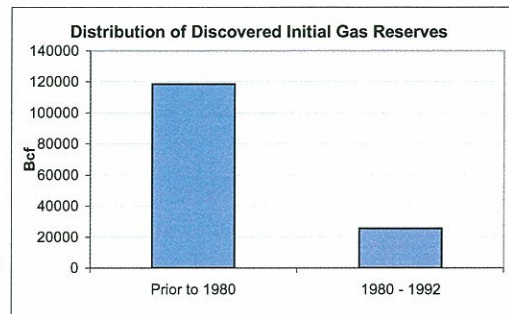


Figure 7

### WCSB Initial Established Reserves by Discovery Year

	Prior to 1980	1980 - 1992
Number of Pools	486,434	462,783
Initial Reserves (Bcf)	118,396	25,416
Average Pool Size (MMcf)	8,578	1,942
Initial Reserves per Pool (Bcf)	0.24	0.05

Source: Canadian Energy Supply and Demand 1993 - 2010, Technical Report, NEB



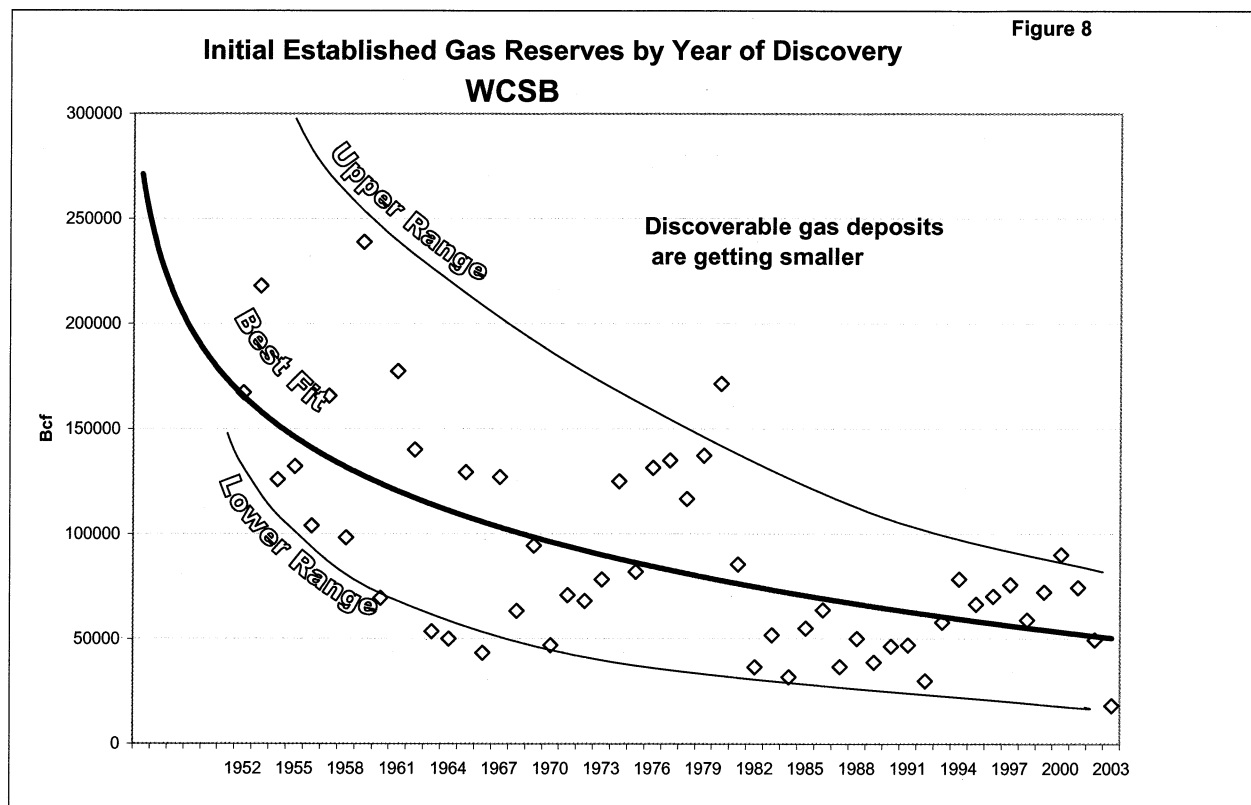
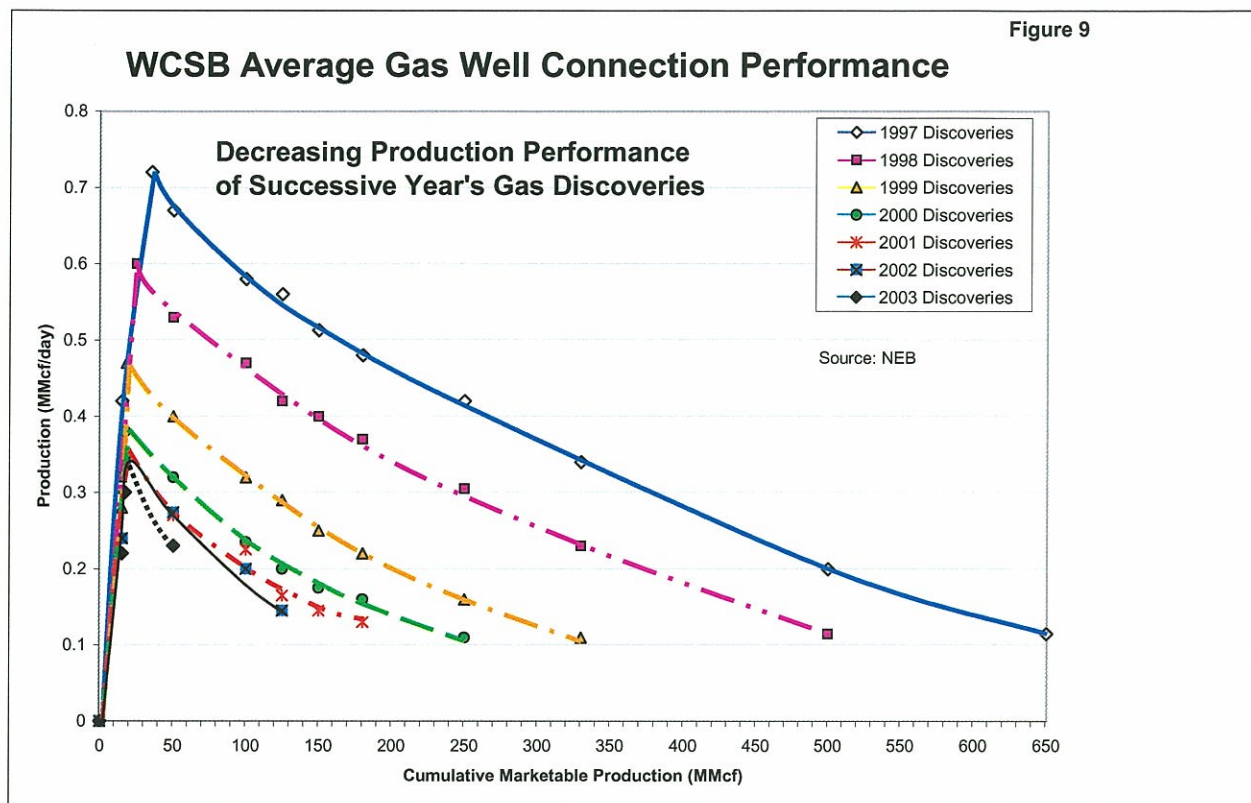
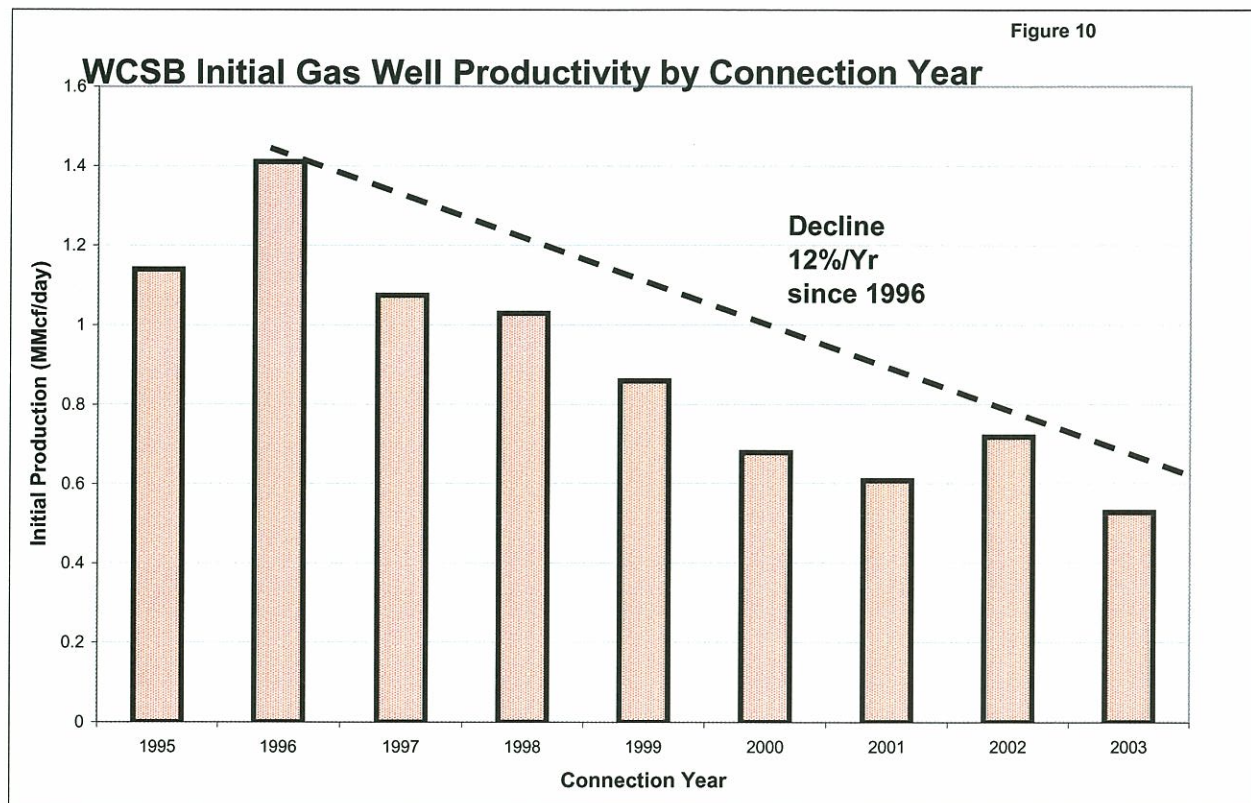
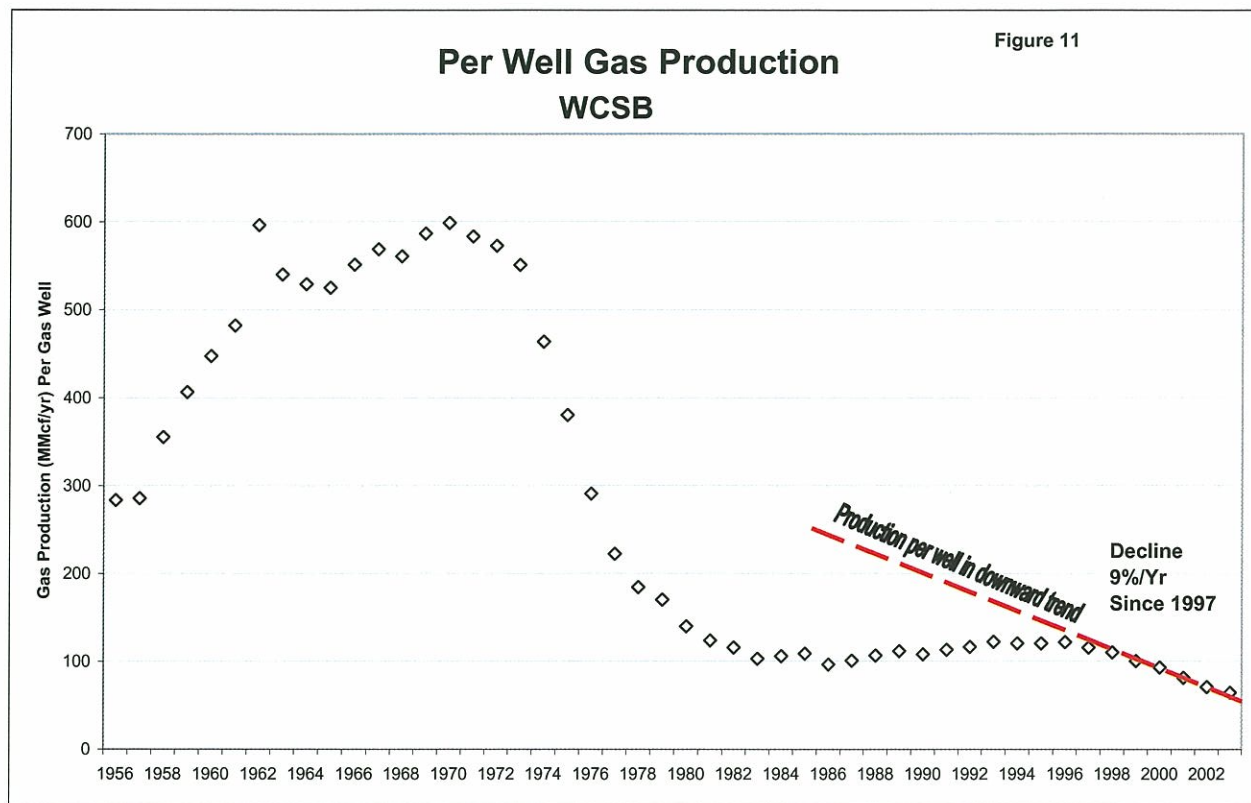


Figure 9







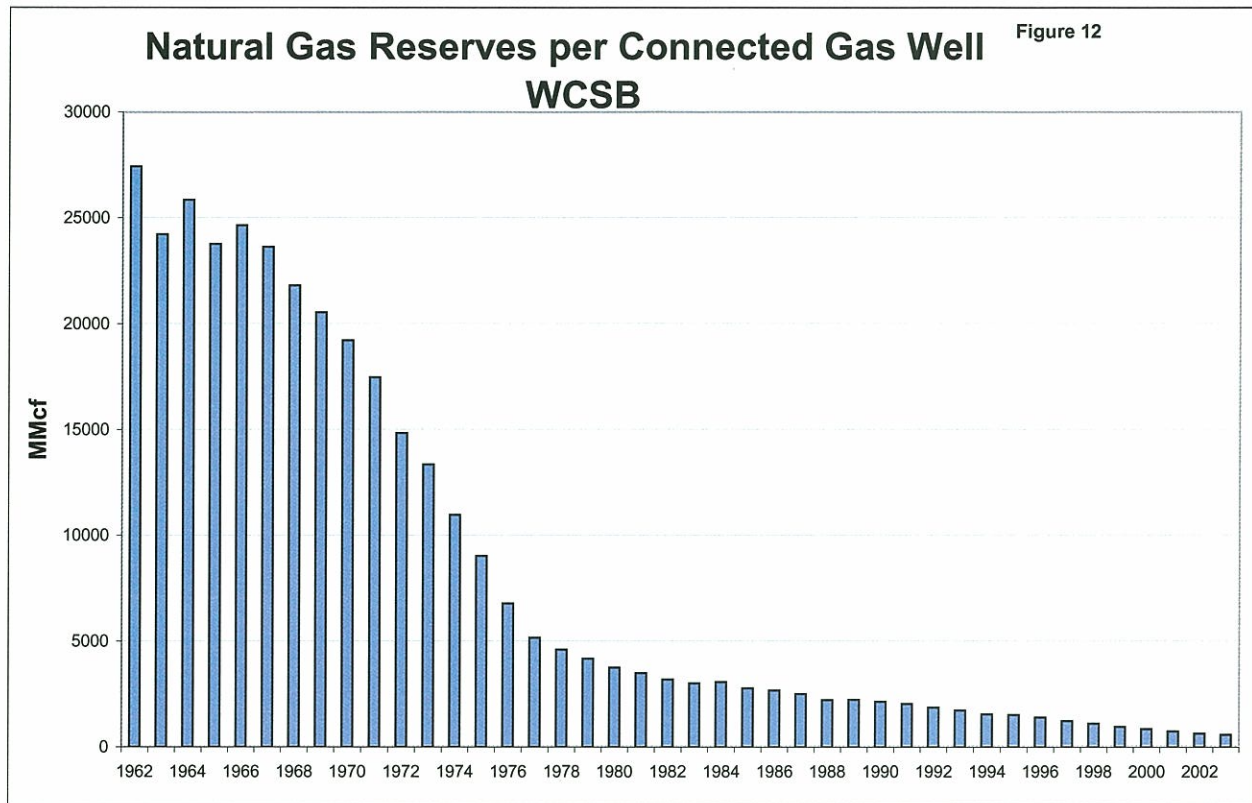
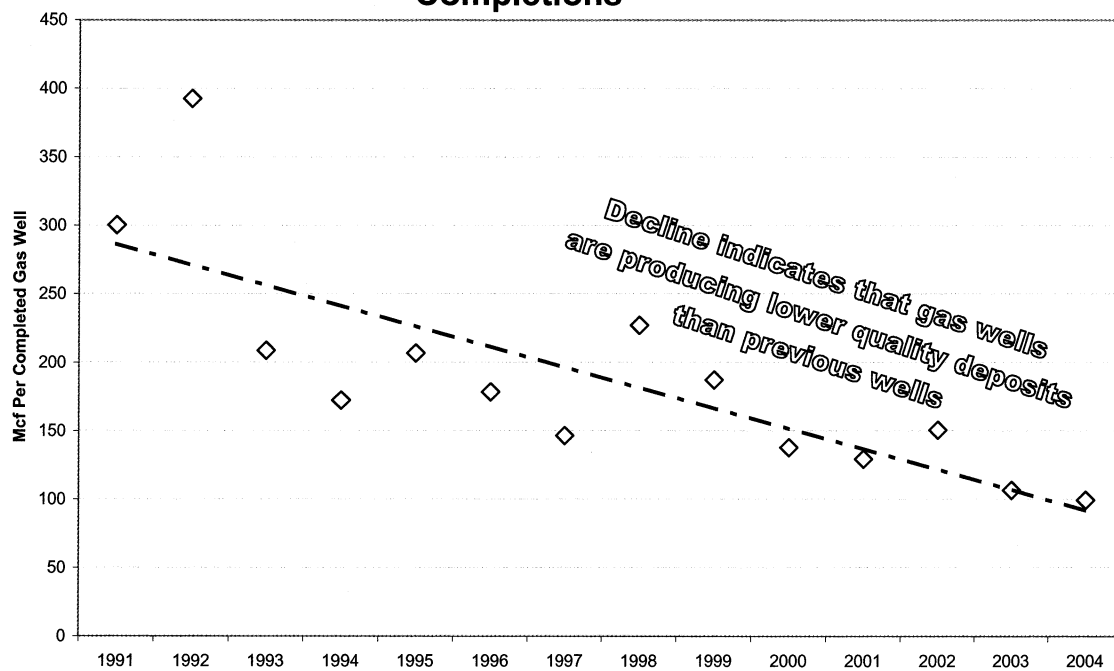


Figure 13

### WCSB Gas Production Response to Increases in Gas Well Completions



## WCSB Gas Production Response to Increased Drilling Figure 14

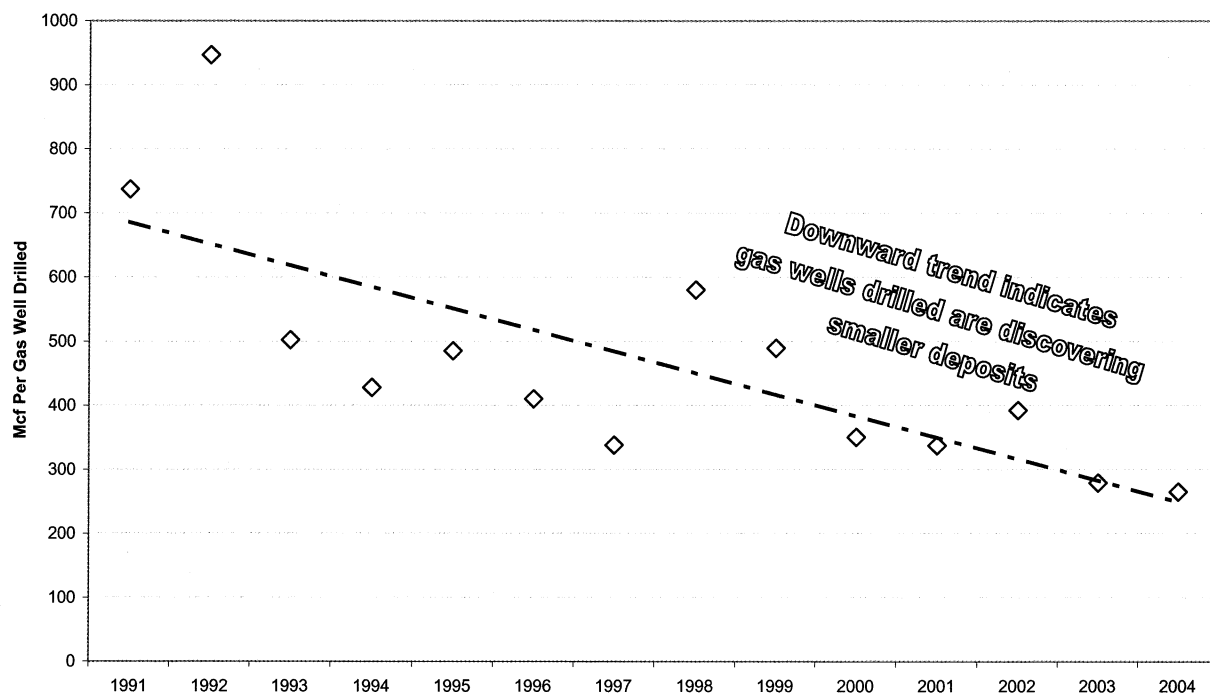
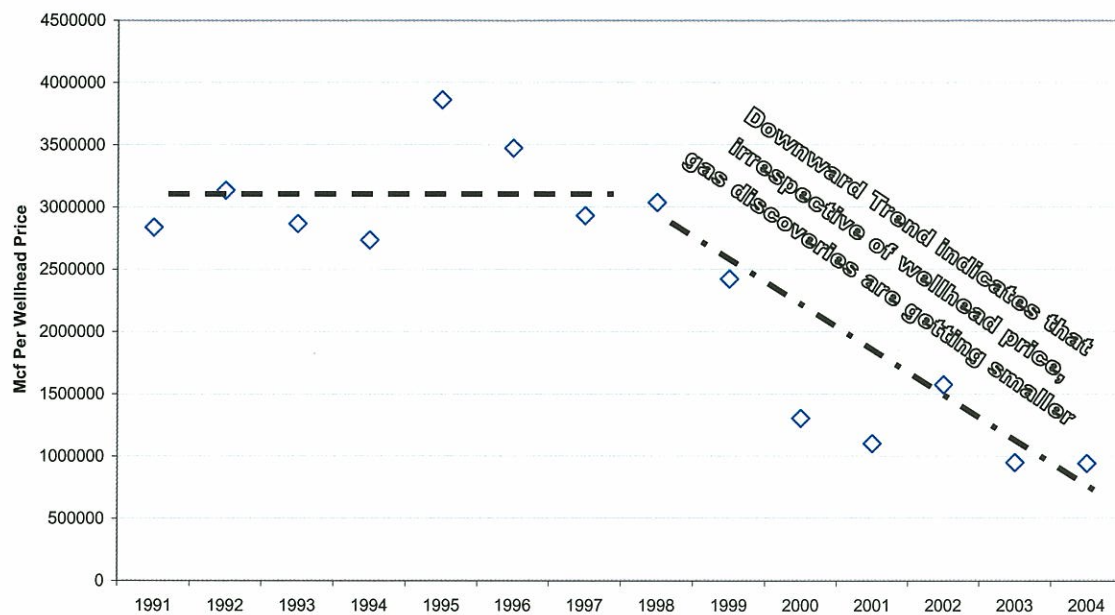


Figure 15

## WCSB Gas Production Response to Increases in Wellhead Price



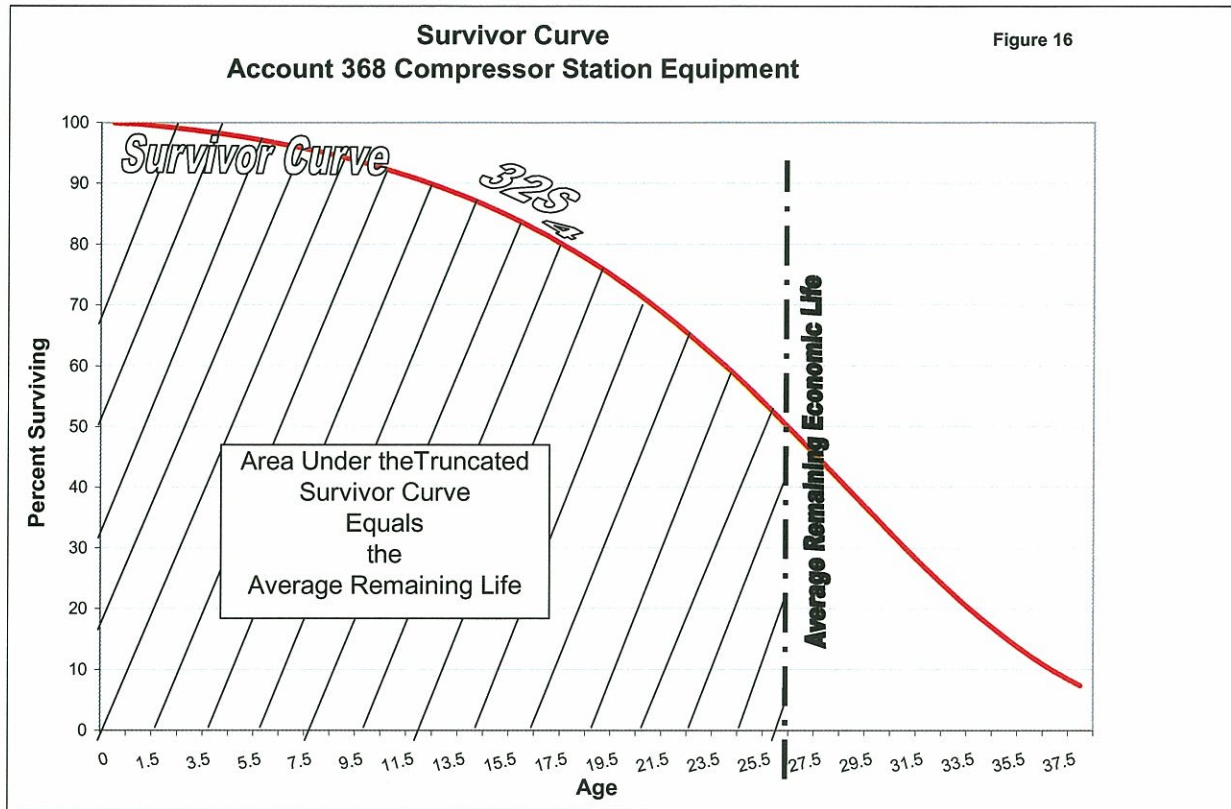


Figure 17

Depreciation Analysis

