

2. Production

Natural Gas and Liquids Production

The information provided below is based on data from the Mineral Revenues Information System (MRIS) of the Alberta Department of Energy. The information is recorded at the point of determination of the Crown royalty. Both natural gas and liquids production data are described as the process quantity or royalty liable volume. The crown royalty rate shown below includes low productivity well allowance (LPWA) adjustment in the previous royalty system (pre-2009). Starting January 1, 2009 with the introduction of Alberta Royalty Framework (ARF) LPWA was eliminated and the average daily productivity (ADP) became an integral part of the royalty formula for methane and ethane. Other natural gas liquids (propane, butane and pentanes plus) have fixed royalty rates as specified in the royalty regulation.

Table 6:

Alberta Natural Gas Royalty Volume					
Year	Total Royalty Liable Volume¹	Crown Share of Total gas²	Crown Volume³	Gross Royalty Volume Net of LPWA⁴	Gross Royalty Rate Net of LPWA
	Col (1)	Col (2)	Col (3)	Col (4)	Col (5)
	Tcf	Out of 100%	Tcf⁵	Tcf	R%⁶
1994	4.68	84.2%	3.94	0.96	24.5%
1995	4.85	84.0%	4.07	0.77	18.9%
1996	5.00	84.1%	4.21	0.88	20.9%
1997	5.06	83.8%	4.24	1.00	23.7%
1998	5.18	83.4%	4.31	1.01	23.3%
1999	5.24	82.7%	4.34	1.12	25.8%
2000	5.22	82.0%	4.28	1.18	27.6%
2001	5.23	82.2%	4.30	1.17	27.3%
2002	5.07	82.0%	4.16	1.12	27.0%
2003	4.92	81.5%	4.01	1.07	26.7%
2004	4.99	80.8%	4.03	1.06	26.2%
2005	4.97	80.6%	4.01	1.02	25.5%
2006	5.02	81.0%	4.06	1.02	25.0%
2007	4.90	81.4%	3.99	0.98	24.6%
2008	4.66	81.6%	3.80	0.92	24.1%
2009	4.36	80.8%	3.52	0.55	15.6%
2010 ⁷	4.17	79.7%	3.32	0.46	13.9%

Source: Alberta Energy

Notes:

- Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production and is different from ERCB marketable gas production. Tcf: Trillion Cubic Feet
- Crown share is the Crown ownership of gas (for example, out of 100% of gas in 1994, 84.2% was produced from Crown land).
- Crown volume is obtained by multiplying total royalty liable volume by Crown share.
- LPWA stands for Low Productivity Well Allowance (has not existed since 2009).
- Column (3) = Column(1)*Column(2)
- Column(5) = Column(4)/Column(3)
- From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction (effective April 1, 2009 to April 30, 2010).

Chart 6 (A)

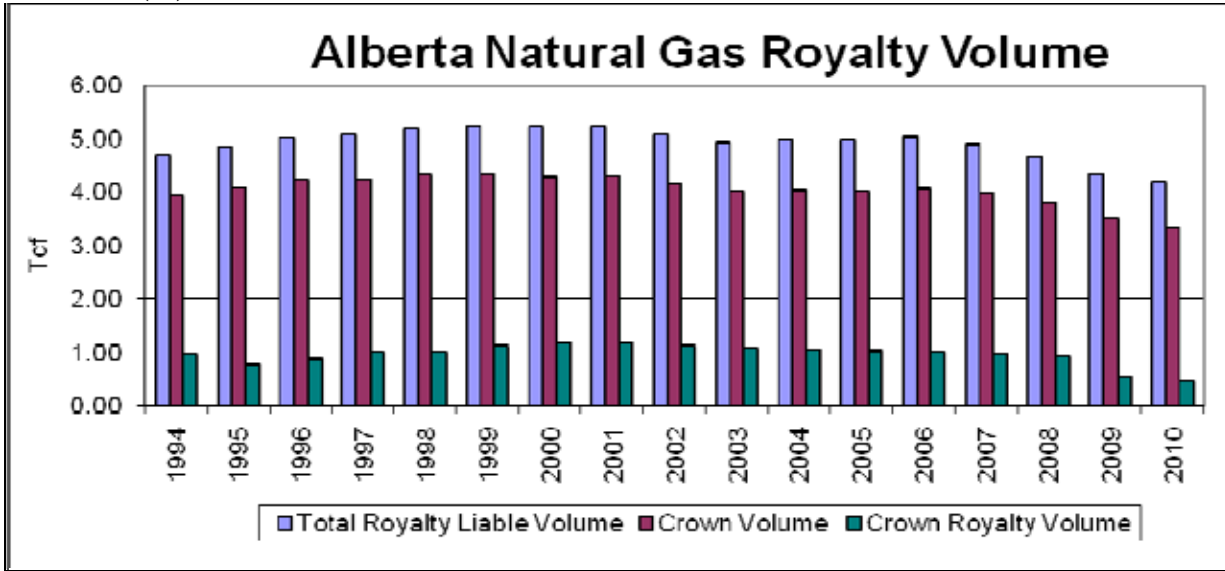


Chart 6(B)

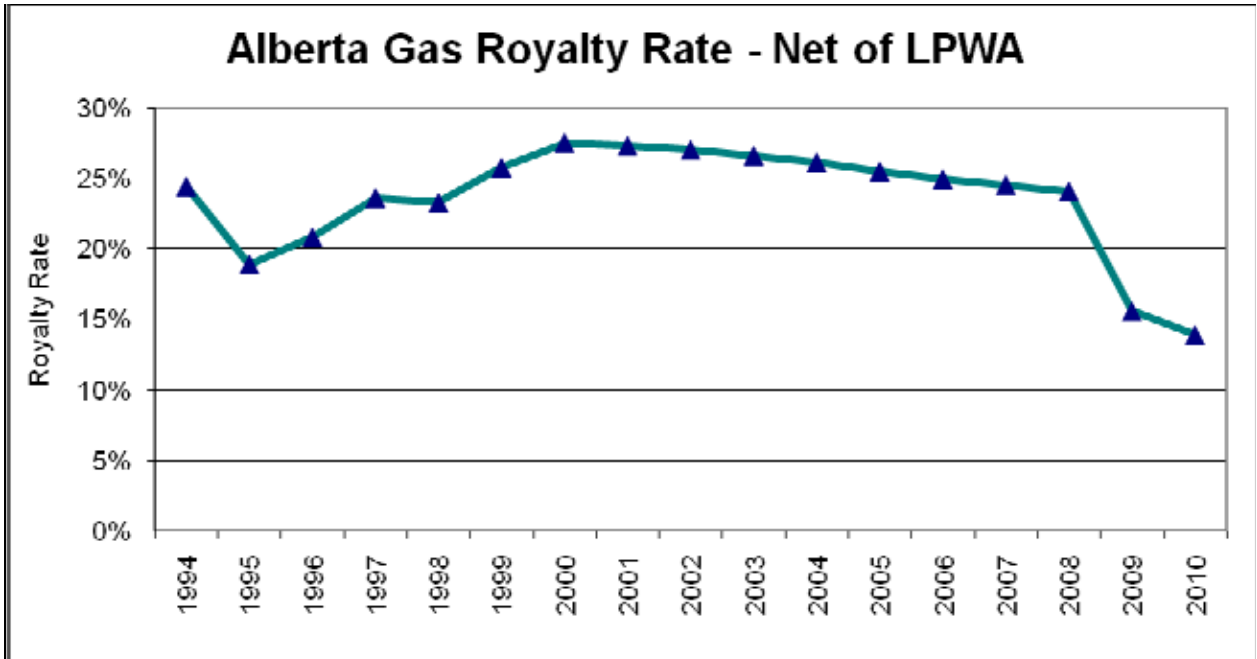


Table 7

Alberta Ethane Royalty Liabile Volume					
Year	Total Royalty Liabile Volume ¹ Million barrels	Crown Share of Total gas ² Million barrels	Crown Volume ³ Million barrels	Gross Royalty Volume Net of LPWA ⁴ Million barrels	Gross Royalty Rate Net of LPWA ⁵
	Col (1)	Col (2)	Col (3)	Col (4)	Col (5)
	Out of 100%				R% ⁶
2002*	4.31	80%	3.44	1.07	31.1%
2003	16.64	78%	12.93	4.00	31.0%
2004	16.56	76%	12.50	3.86	30.9%
2005	19.36	75%	14.51	4.47	30.8%
2006	21.51	82%	17.61	5.25	29.8%
2007	18.63	85%	15.85	4.68	29.6%
2008	16.41	87%	14.35	4.17	29.1%
2009	16.44	85%	14.01	2.73	19.5%
2010 ⁷	16.65	84%	13.92	2.49	17.9%

Source: Alberta Energy

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of ethane
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. LPWA stands for Low Productivity Well Allowance (has not existed since 2009).
5. Column (3) = Column(1)*Column(2)
6. Column (5) = Column(4)/Column(3)
7. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction.

Chart 7 (A)

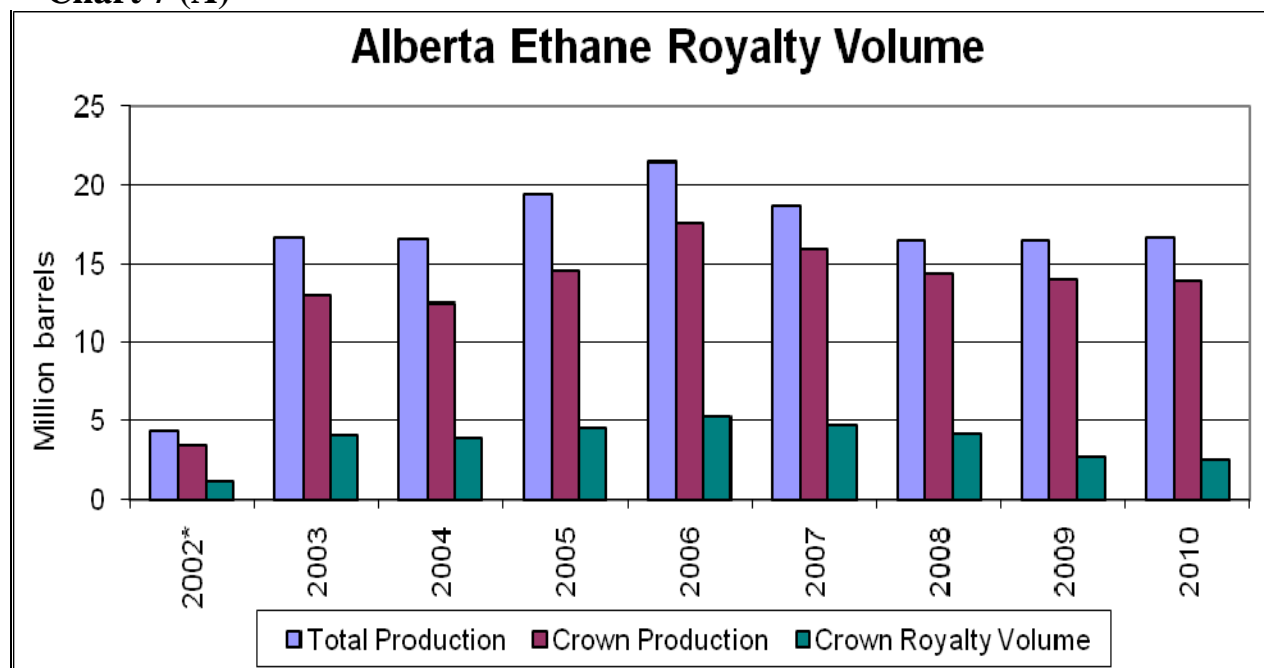


Chart 7 (B)

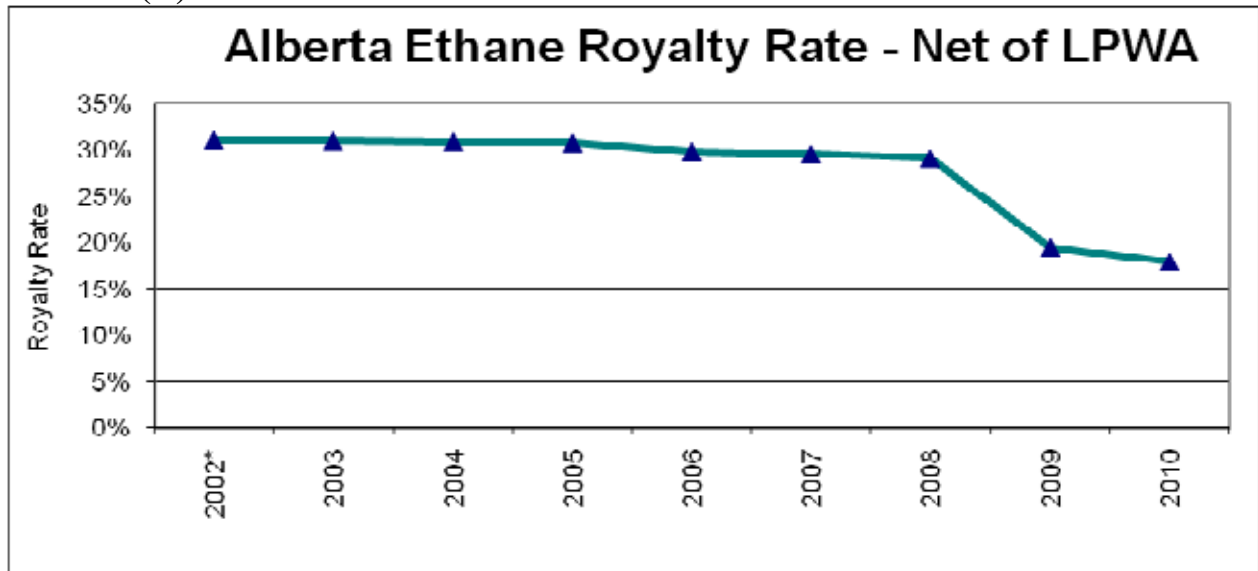


Table 8

Alberta Propane Royalty Liabile Volume					
Year	Total Royalty Liabile Volume ¹	Crown Share of Total gas ²	Crown Volume ³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	Out of 100%	Million barrels ⁴	Million barrels	R% ⁵
1994	30.36	80.2%	24.35	7.30	30.0%
1995	30.90	80.3%	24.81	7.44	30.0%
1996	31.55	79.8%	25.18	7.55	30.0%
1997	32.41	80.7%	26.15	7.85	30.0%
1998	32.99	81.0%	26.73	8.02	30.0%
1999	31.42	82.3%	25.87	7.76	30.0%
2000	30.82	82.5%	25.44	7.63	30.0%
2001	28.53	82.3%	23.48	7.04	30.0%
2002	29.08	83.4%	24.25	7.27	30.0%
2003	28.20	82.2%	23.18	6.95	30.0%
2004	27.20	80.2%	21.80	6.54	30.0%
2005	26.99	80.3%	21.68	6.50	30.0%
2006	27.44	82.9%	22.74	6.82	30.0%
2007	26.17	83.6%	21.88	6.57	30.0%
2008	24.96	85.3%	21.30	6.39	30.0%
2009	23.62	85.5%	20.20	6.06	30.0%
2010 ⁶	24.56	85.8%	21.07	5.99	28.4%

Source: Alberta Energy

Notes:

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of propane.
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.

4. Column (3) = Column(1)*Column(2)
5. Column(5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction.

Chart 8(A)

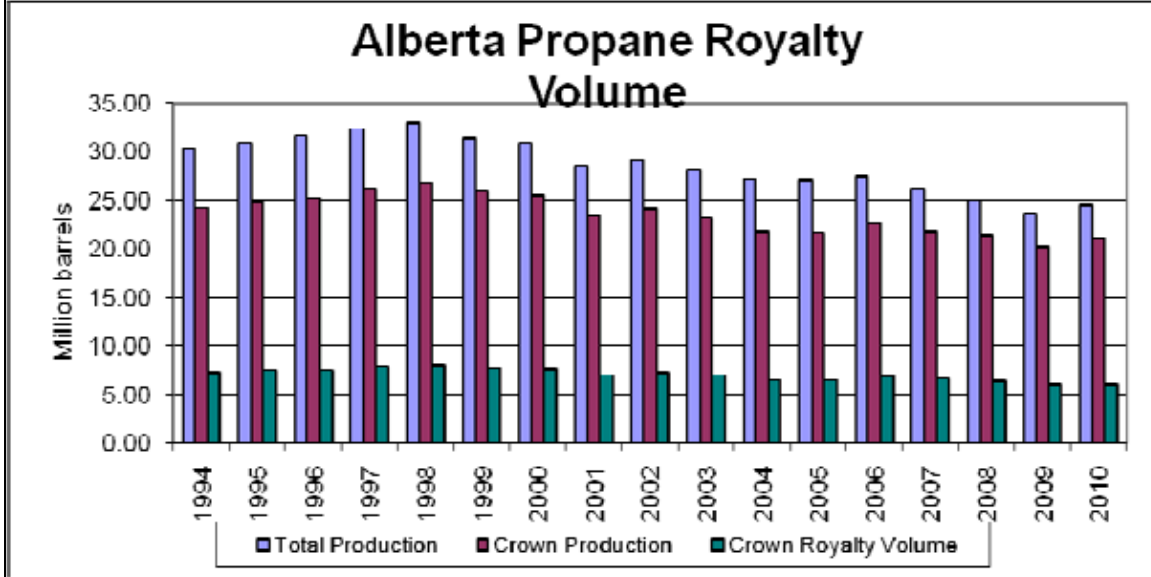


Chart 8(B)

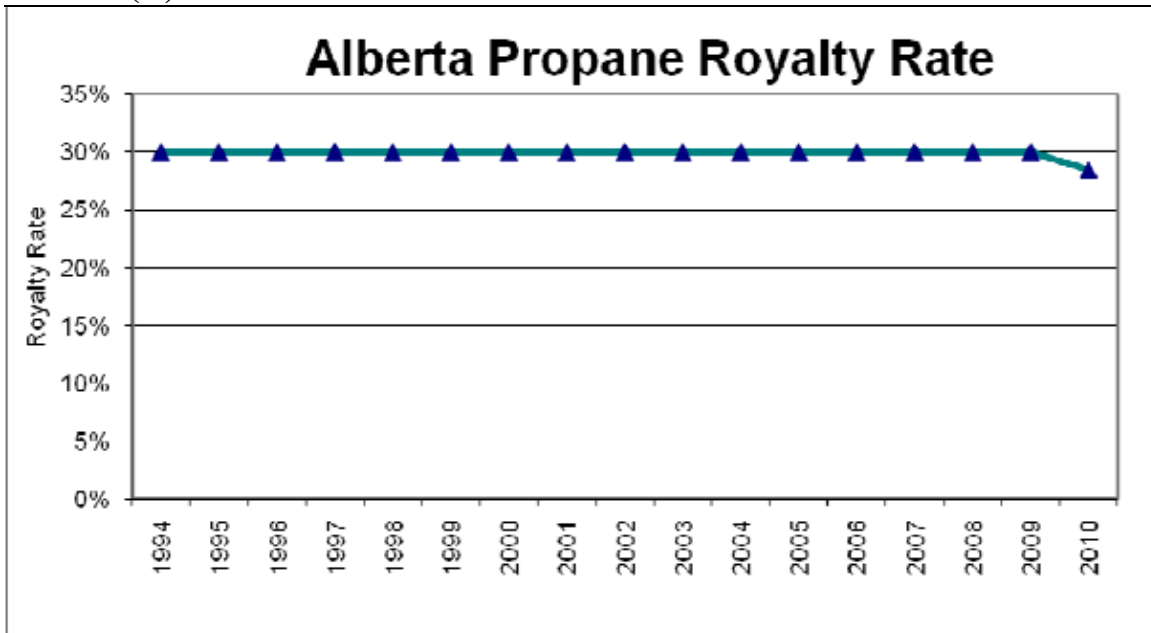


Table 9

Alberta Butane Royalty Volume					
Year	Total Royalty Liabile Volume¹	Crown Share of Total gas²	Crown Volume³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	Out of 100%	Million barrels⁴	Million barrels	R%⁵
1994	22.13	80.9%	17.92	5.37	30.0%
1995	22.87	81.0%	18.53	5.56	30.0%
1996	23.47	80.2%	18.83	5.65	30.0%
1997	24.00	80.8%	19.39	5.82	30.0%
1998	24.32	80.7%	19.63	5.89	30.0%
1999	23.40	81.9%	19.17	5.75	30.0%
2000	22.71	82.3%	18.69	5.61	30.0%
2001	21.56	82.4%	17.76	5.33	30.0%
2002	21.82	82.9%	18.09	5.43	30.0%
2003	21.44	82.0%	17.58	5.27	30.0%
2004	20.95	81.0%	16.97	5.09	30.0%
2005	20.52	81.5%	16.73	5.02	30.0%
2006	20.54	83.2%	17.09	5.13	30.0%
2007	19.94	84.1%	16.78	5.03	30.0%
2008	19.19	85.7%	16.45	4.93	30.0%
2009	17.98	85.7%	15.40	4.62	30.0%
2010 ⁶	17.70	86.0%	15.23	4.33	28.4%

Source: Alberta Energy

Notes:

1. Royalty Liabile volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of Butane
3. Crown volume is obtained by multiplying total royalty liabile volume by Crown share.
4. Column (3) = Column (1) * Column (2)
5. Column(5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction.

**Chart
9(A)**

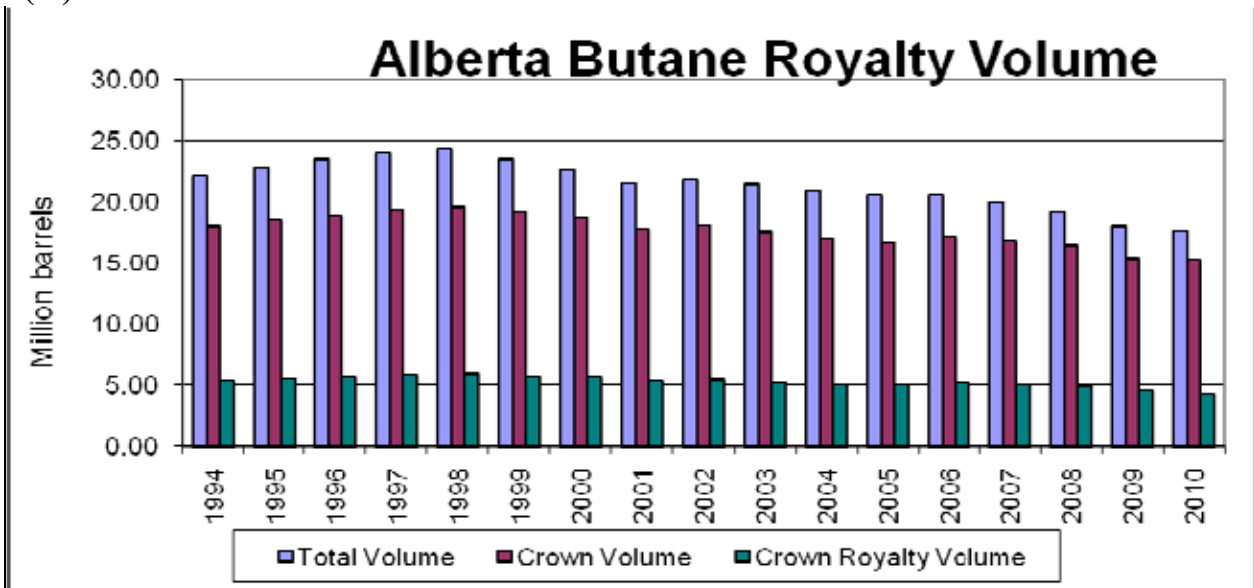


Chart 9(B)

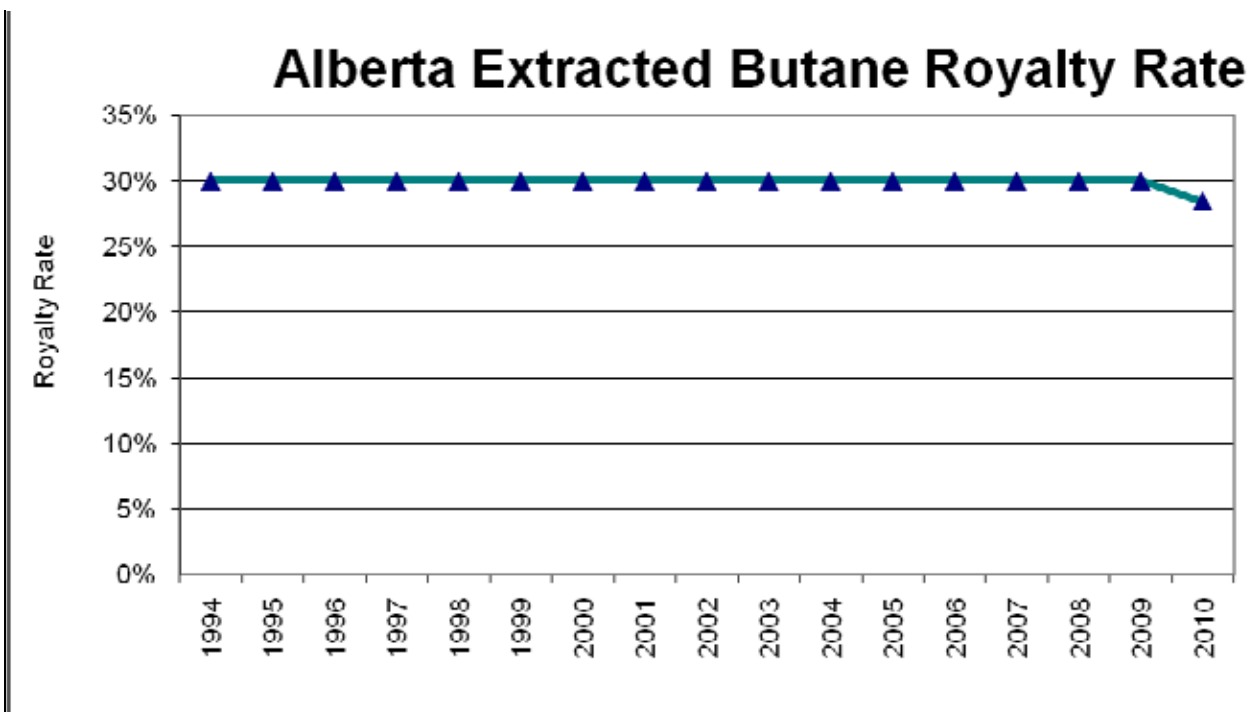


Table 10

Alberta Pentanes Royalty Volume					
Year	Total Royalty Liabile Volume¹	Crown Share of Total Volume²	Crown Volume³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	Out of 100%	Million barrels⁴	Million barrels	R%⁵
1994	45.70	84.7%	38.70	13.08	33.8%
1995	47.50	84.7%	40.21	13.64	33.9%
1996	50.43	83.7%	42.23	14.50	34.3%
1997	50.47	83.9%	42.36	14.50	34.2%
1998	50.78	83.6%	42.47	13.83	32.6%
1999	49.15	84.1%	41.32	13.62	33.0%
2000	46.20	83.8%	38.74	13.54	35.0%
2001	44.61	84.4%	37.64	13.07	34.7%
2002	43.10	85.3%	36.77	12.63	34.4%
2003	41.44	85.1%	35.27	12.21	34.6%
2004	40.97	85.0%	34.84	12.14	34.8%
2005	39.92	86.1%	34.35	12.08	35.2%
2006	39.17	87.2%	34.16	11.99	35.1%
2007	37.63	87.9%	33.07	11.60	35.1%
2008	35.83	88.9%	31.83	11.22	35.2%
2009	33.54	89.3%	29.96	11.98	40.0%
2010 ⁶	33.03	89.5%	29.56	11.01	37.2%

Source: Alberta Energy

Notes:

1. Royalty Liabile volume includes all production even if it has zero royalty rate due zero being non-Crown production.
2. Crown share is the Crown ownership of pentanes
3. Crown volume is obtained by multiplying total royalty liabile volume by Crown share.
4. Column(3) = Column(1)*Column((2)
5. Column (5) = Column (4)/Column (3).
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction

Chart 10(A)

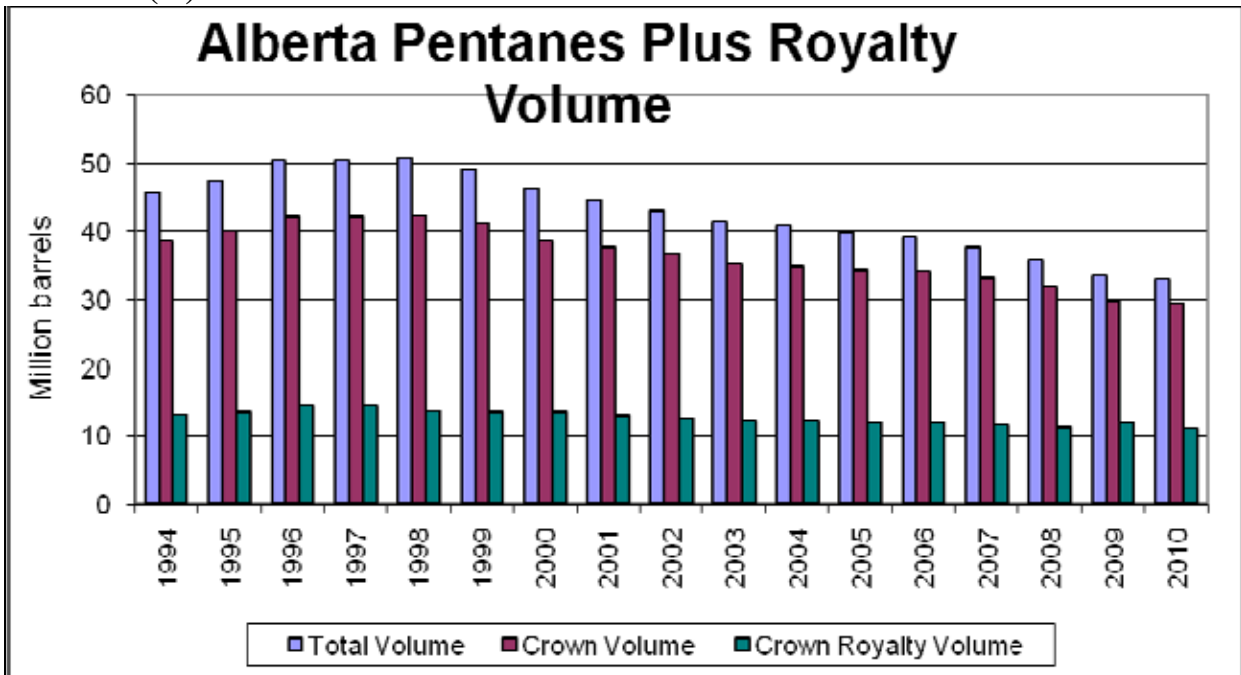


Chart 10(B)

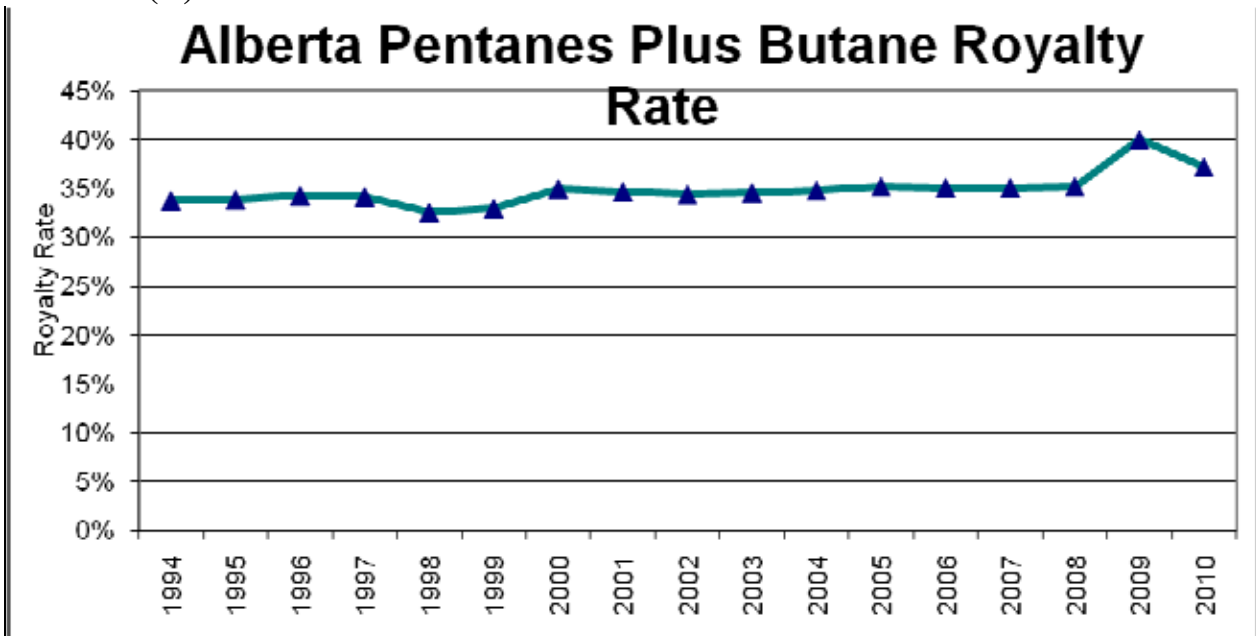


Table 11

Alberta Total Propane, Butane and Pentanes Royalty Liabile Volume¹						
Year	Propane Royalty Liabile Volume¹	Butane Royalty Liabile Volume¹	Pentanes Royalty Liabile Volume¹	Propane Royalty Rate	Butane Royalty Rate	Pentanes Royalty Rate
	Million barrels	Million barrels	Million barrels	R%	R%	R%
1994	30.36	22.13	45.70	30.0%	30.0%	33.8%
1995	30.90	22.87	47.50	30.0%	30.0%	33.9%
1996	31.55	23.47	50.43	30.0%	30.0%	34.3%
1997	32.41	24.00	50.47	30.0%	30.0%	34.2%
1998	32.99	24.32	50.78	30.0%	30.0%	32.6%
1999	31.42	23.40	49.15	30.0%	30.0%	33.0%
2000	30.82	22.71	46.20	30.0%	30.0%	35.0%
2001	28.53	21.56	44.61	30.0%	30.0%	34.7%
2002	29.08	21.82	43.10	30.0%	30.0%	34.4%
2003	28.20	21.44	41.44	30.0%	30.0%	34.6%
2004	27.20	20.95	40.97	30.0%	30.0%	34.8%
2005	26.99	20.52	39.92	30.0%	30.0%	35.2%
2006	27.44	20.54	39.17	30.0%	30.0%	35.1%
2007	26.17	19.94	37.63	30.0%	30.0%	35.1%
2008	24.96	19.19	35.83	30.0%	30.0%	35.2%
2009	23.62	17.98	33.54	30.0%	30.0%	40.0%
2010	24.56	17.70	33.03	28.4%	28.4%	37.2%

Source: Alberta Energy

Notes:

1. Royalty Liabile volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Royalty rates are calculated in the previous tables (8, 9 and 10).

Chart 11(A)

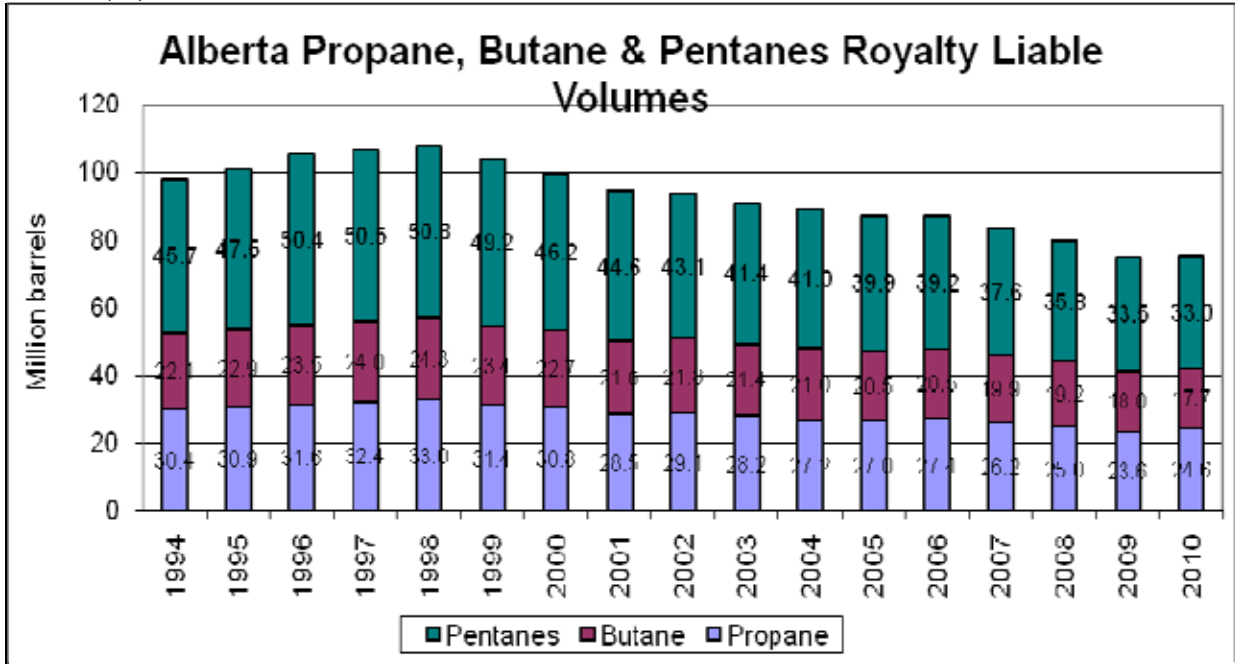


Chart 11(B)

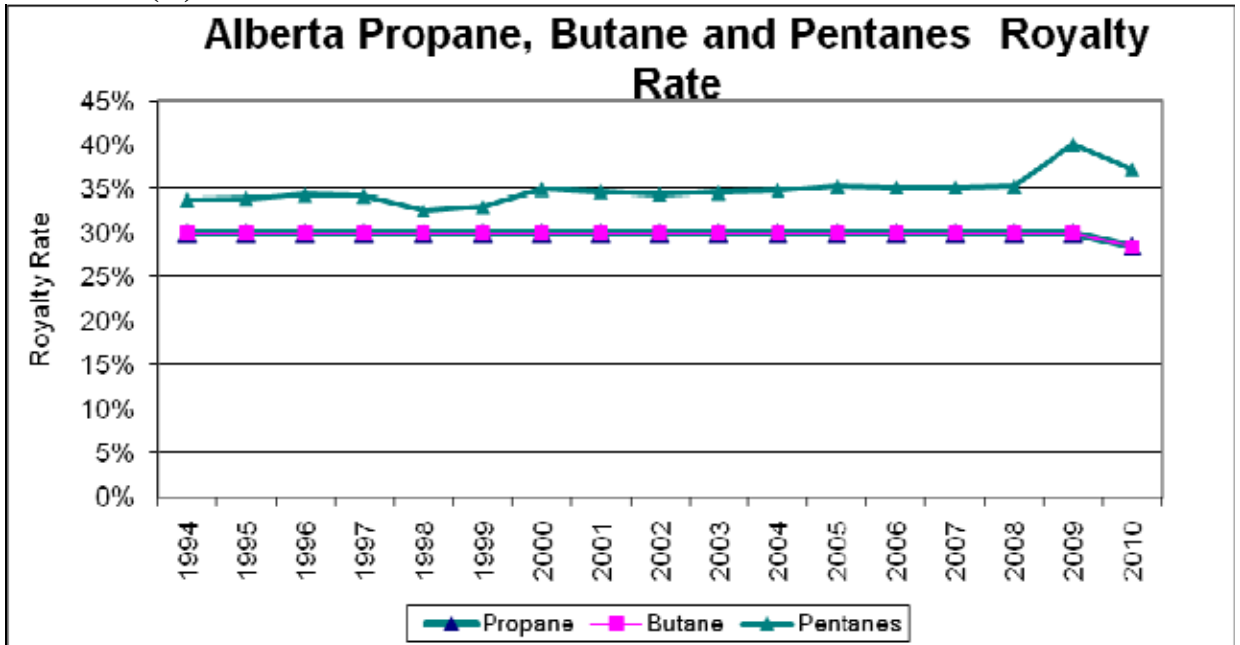


Table 12

Monthly Natural Gas Royalty Volume					
Year/Month	Total Royalty Liable Volume¹	Crown Share of Total volume²	Crown Volume³	Gross Royalty Volume Net of LPWA⁴	Gross Royalty Rate Net of LPWA
	Bcf	Out of 100%	Bcf⁵	Bcf	R%⁶
Jan-07	425	81.2%	345	86	24.8%
Feb-07	382	81.2%	311	77	24.8%
Mar-07	428	81.2%	348	86	24.7%
Apr-07	415	81.7%	339	84	24.8%
May-07	423	81.8%	346	85	24.7%
Jun-07	396	81.8%	324	80	24.5%
Jul-07	406	81.5%	331	81	24.5%
Aug-07	414	81.8%	338	83	24.5%
Sep-07	393	81.6%	321	78	24.4%
Oct-07	412	81.3%	335	82	24.4%
Nov-07	394	81.0%	319	78	24.3%
Dec-07	407	81.2%	330	81	24.4%
Jan-08	400	81.2%	325	79	24.3%
Feb-08	370	81.2%	300	73	24.3%
Mar-08	406	81.4%	331	80	24.3%
Apr-08	396	82.2%	325	79	24.3%
May-08	400	82.1%	328	79	24.2%
Jun-08	377	81.5%	307	74	24.1%
Jul-08	398	82.0%	326	79	24.1%
Aug-08	396	81.7%	323	78	24.0%
Sep-08	379	81.4%	309	74	24.0%
Oct-08	390	81.5%	318	76	23.9%
Nov-08	378	81.4%	307	73	23.9%
Dec-08	375	81.2%	305	73	24.0%
Jan-09	377	81.4%	307	68	22.1%
Feb-09	351	80.9%	284	53	18.6%
Mar-09	386	80.9%	312	52	16.8%
Apr-09	379	81.3%	308	47	15.2%
May-09	377	80.8%	305	43	14.2%
Jun-09	363	80.9%	293	40	13.8%
Jul-09	373	80.9%	302	41	13.6%
Aug-09	368	80.7%	297	39	13.0%
Sep-09	337	80.3%	271	33	12.3%
Oct-09	352	80.1%	282	41	14.4%
Nov-09	347	81.0%	281	43	15.4%
Dec-09	347	79.9%	277	48	17.4%
Jan-10	354	79.8%	283	52	18.4%
Feb-10	324	80.1%	260	46	17.9%
Mar-10	365	80.3%	293	48	16.4%
Apr-10	355	81.0%	287	42	14.5%
May-10 ⁷	361	80.5%	291	37	12.6%
Jun-10	336	80.0%	269	34	12.8%
Jul-10	355	80.3%	285	37	12.9%
Aug-10	355	80.5%	286	36	12.7%
Sep-10	335	79.1%	265	33	12.3%
Oct-10	350	78.6%	275	33	11.9%
Nov-10	332	78.3%	260	31	12.0%
Dec-10	348	78.2%	272	34	12.6%

Source: Alberta Energy

Notes:

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of gas.
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. LPWA stands for Low Productivity Well Allowance (does not exist since 2009).
5. Column (3) = Column(1)*Column(2)
6. Column (5) = Column(4)/Column(3)
7. From May 1, 2010, NWRP is a permanent part of the royalty formula. Before that it was a royalty Reduction.

Chart 12(A)

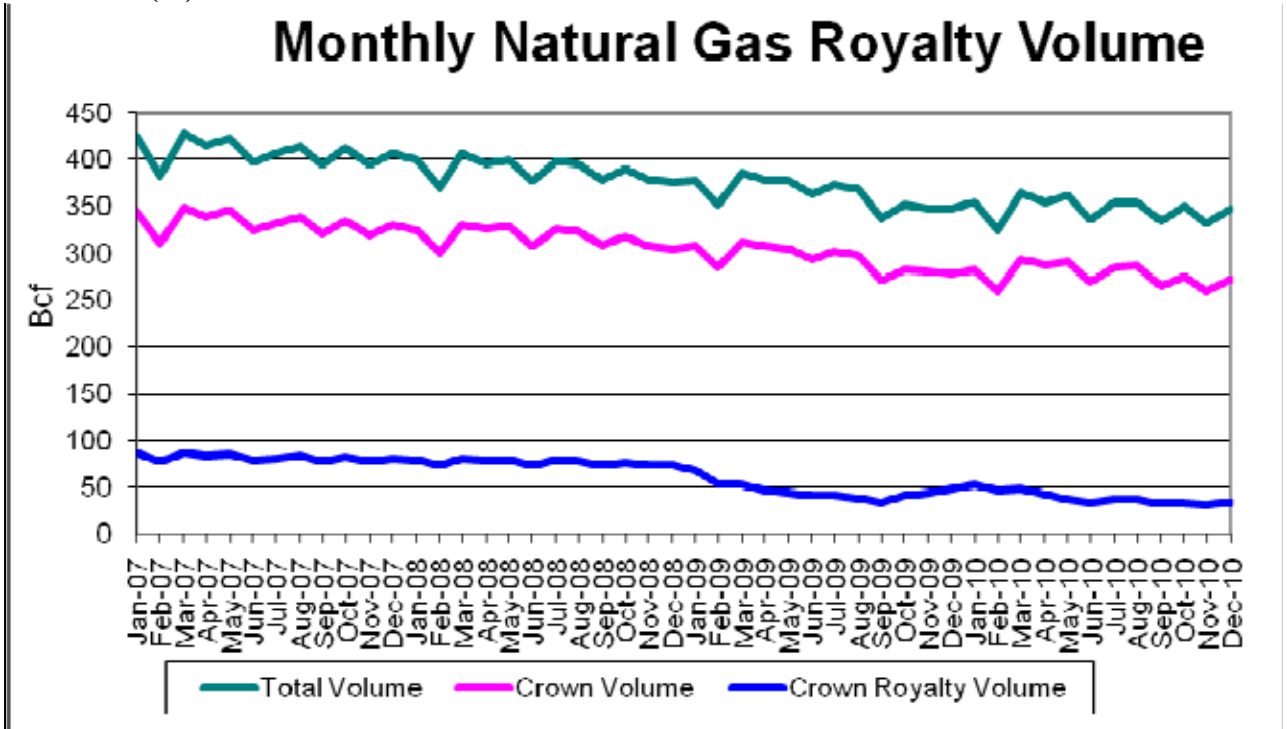


Chart 12(B)

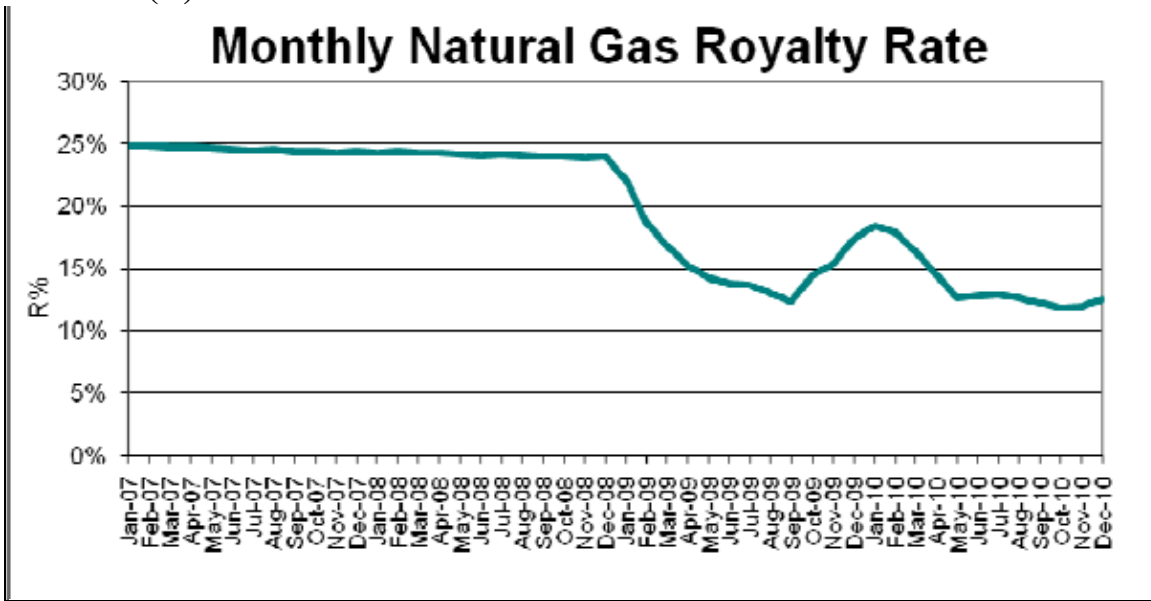


Table 13

Monthly Ethane Royalty Volume						
Year/Month	Total Royalty Liabile Volume ¹	Crown Share of Total volume ²	Crown Volume ³	Gross Royalty Volume Net of LPWA ⁴	Gross Royalty Rate Net of LPWA	
	Millions barrels	Out of Total Volume	Millions barrels ⁵	Millions barrels	R% ⁶	
Jan-07	1.76	84.69%	1.49	0.44	29.8%	
Feb-07	1.59	85.22%	1.35	0.40	29.8%	
Mar-07	1.68	84.77%	1.42	0.42	29.7%	
Apr-07	1.50	84.62%	1.27	0.38	29.7%	
May-07	1.55	84.54%	1.31	0.39	29.7%	
Jun-07	1.33	84.18%	1.12	0.33	29.6%	
Jul-07	1.38	84.45%	1.16	0.34	29.5%	
Aug-07	1.58	85.60%	1.35	0.40	29.5%	
Sep-07	1.55	85.14%	1.32	0.39	29.5%	
Oct-07	1.56	85.60%	1.34	0.39	29.4%	
Nov-07	1.59	86.02%	1.36	0.40	29.2%	
Dec-07	1.59	85.88%	1.36	0.40	29.2%	
Jan-08	1.58	86.45%	1.37	0.40	29.3%	
Feb-08	1.47	86.59%	1.27	0.37	29.3%	
Mar-08	1.62	86.89%	1.41	0.41	29.3%	
Apr-08	1.34	87.70%	1.18	0.34	29.3%	
May-08	1.35	89.39%	1.20	0.35	29.2%	
Jun-08	1.23	86.31%	1.06	0.31	29.3%	
Jul-08	1.39	89.14%	1.24	0.36	29.1%	
Aug-08	1.27	89.52%	1.14	0.33	29.0%	
Sep-08	1.20	87.21%	1.05	0.31	29.1%	
Oct-08	1.35	88.19%	1.19	0.34	28.7%	
Nov-08	1.31	86.05%	1.12	0.32	28.9%	
Dec-08	1.30	85.74%	1.12	0.32	28.7%	
Jan-09	1.29	84.90%	1.09	0.31	28.7%	
Feb-09	1.32	86.55%	1.14	0.28	24.2%	
Mar-09	1.48	87.14%	1.29	0.28	21.9%	
Apr-09	1.39	86.79%	1.20	0.24	19.6%	
May-09	1.22	85.45%	1.04	0.18	17.4%	
Jun-09	1.26	85.48%	1.08	0.18	16.8%	
Jul-09	1.23	85.37%	1.05	0.17	16.7%	
Aug-09	1.37	83.25%	1.14	0.18	15.4%	
Sep-09	1.40	84.71%	1.19	0.17	14.4%	
Oct-09	1.49	84.55%	1.26	0.22	17.5%	
Nov-09	1.47	84.85%	1.25	0.23	18.4%	
Dec-09	1.52	83.98%	1.27	0.28	22.2%	
Jan-10 ⁷	1.50	83.52%	1.26	0.29	23.0%	
Feb-10	1.35	83.54%	1.13	0.26	22.7%	
Mar-10	1.51	84.43%	1.28	0.26	20.0%	
Apr-10	1.48	84.79%	1.26	0.23	18.0%	
May-10	1.48	84.12%	1.25	0.21	17.2%	
Jun-10	1.33	82.51%	1.10	0.19	17.4%	
Jul-10	1.46	83.45%	1.22	0.21	17.2%	
Aug-10	1.45	83.95%	1.21	0.21	17.1%	
Sep-10	1.27	83.16%	1.05	0.17	16.1%	
Oct-10	1.25	81.91%	1.02	0.14	14.1%	
Nov-10	1.24	83.52%	1.03	0.15	15.0%	
Dec-10	1.32	83.75%	1.11	0.17	15.4%	

Source: Alberta
Energy

Notes:

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-C1 production.
2. Crown share is the Crown ownership of ethane.

3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. LPWA stands for Low Productivity Well Allowance (does not exist since 2009).
5. Column (3) = Column(1)*Column(2)
6. Column (5) = Column(4)/Column(3)
7. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction

Chart 13(A)

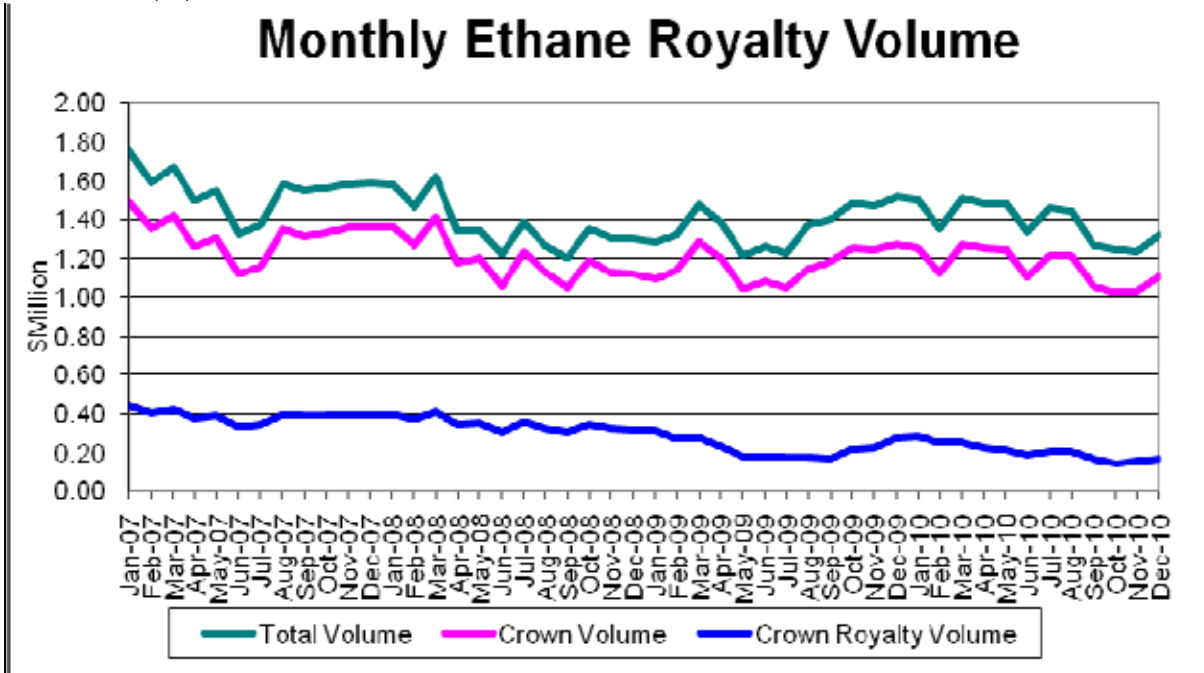
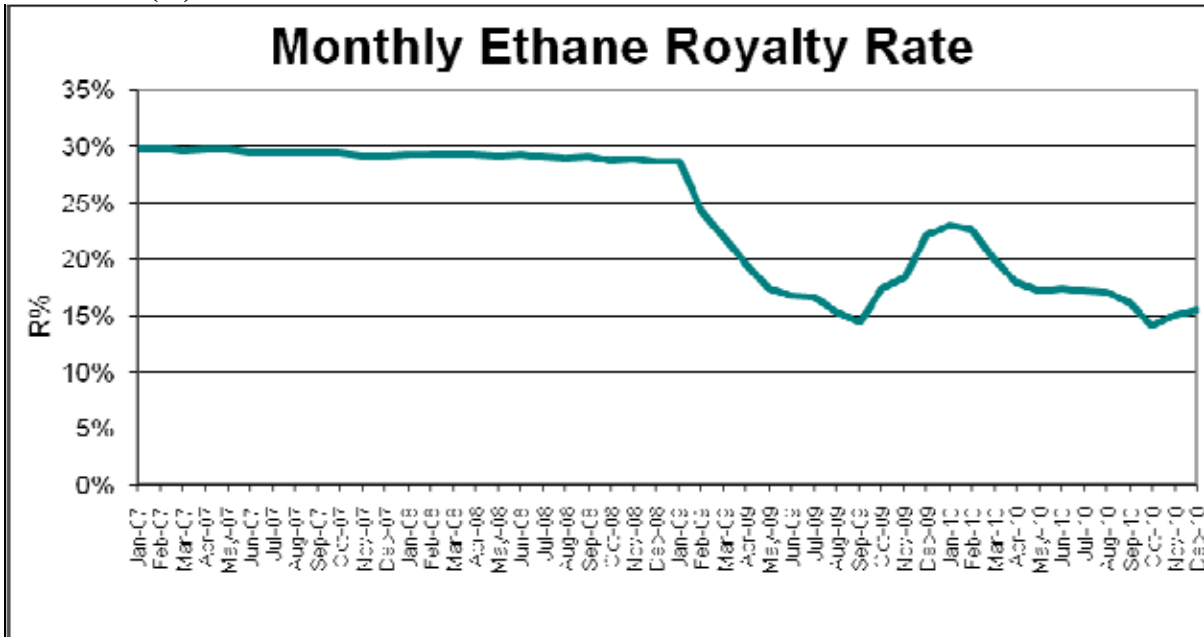


Chart 13(B)



Source : Alberta Energy

1. Royalty Liable volume includes all production even if it has zero royalty rate due to being non-Crown

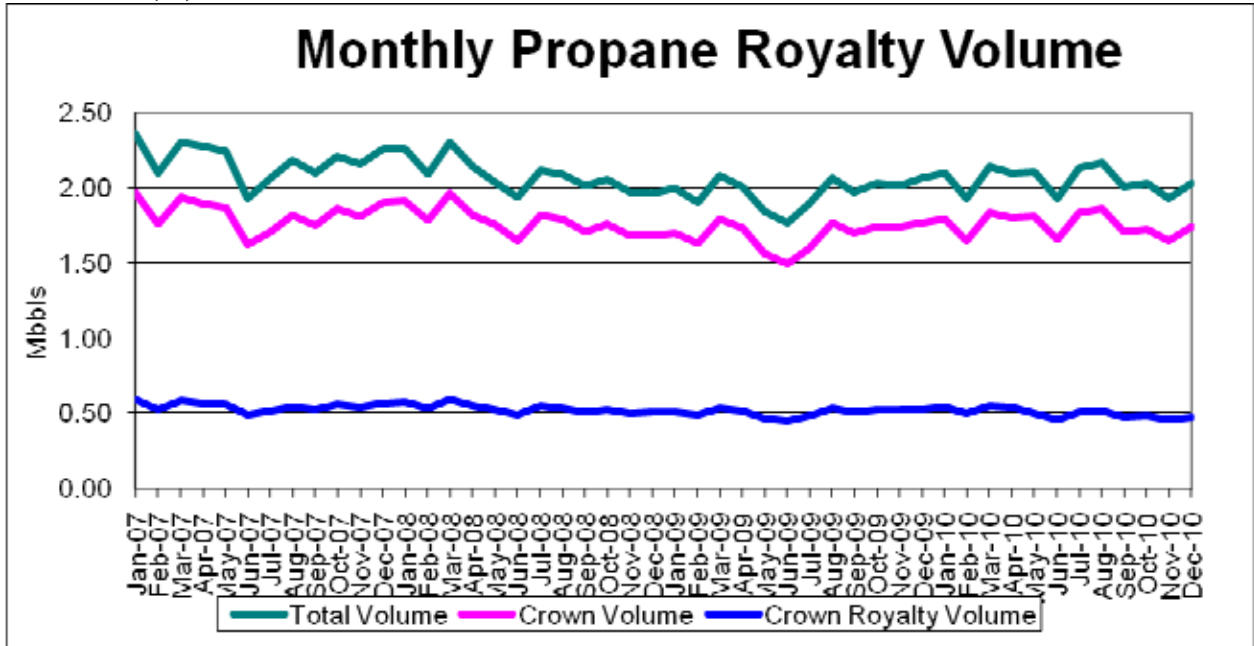
2. Crown share is the Crown ownership of propane
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. Column (3) = Column (1) * Column (2)
5. Column(5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction

Table 14 : Monthly Propane Royalty Volume

(Source: Alberta Energy, similar notes as in the previous table)

Year/Month	Total Royalty Liable Volume ¹	Crown Share of Total gas ²	Crown Volume ³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	% of Total	Million barrels ⁴	Million barrels	R% ⁵
Jan-07	2.36	83.56%	1.97	0.59	30.0%
Feb-07	2.10	74.32%	1.75	0.53	30.0%
Mar-07	2.30	92.16%	1.94	0.58	30.0%
Apr-07	2.27	82.19%	1.89	0.57	30.0%
May-07	2.25	82.15%	1.87	0.56	30.0%
Jun-07	1.93	72.23%	1.62	0.49	30.0%
Jul-07	2.06	88.66%	1.71	0.51	30.0%
Aug-07	2.18	87.98%	1.81	0.54	30.0%
Sep-07	2.10	80.01%	1.75	0.52	30.0%
Oct-07	2.21	88.73%	1.86	0.56	30.0%
Nov-07	2.16	81.75%	1.81	0.54	30.0%
Dec-07	2.26	88.18%	1.90	0.57	30.0%
Jan-08	2.26	84.70%	1.91	0.57	30.0%
Feb-08	2.09	85.13%	1.78	0.53	30.0%
Mar-08	2.30	85.22%	1.96	0.59	30.0%
Apr-08	2.14	85.25%	1.82	0.55	30.0%
May-08	2.04	86.34%	1.76	0.53	30.0%
Jun-08	1.93	84.95%	1.64	0.49	30.0%
Jul-08	2.12	86.04%	1.82	0.55	30.0%
Aug-08	2.09	85.53%	1.79	0.54	30.0%
Sep-08	2.01	84.70%	1.70	0.51	30.0%
Oct-08	2.05	85.53%	1.75	0.53	30.0%
Nov-08	1.97	85.02%	1.68	0.50	30.0%
Dec-08	1.96	85.67%	1.68	0.50	30.0%
Jan-09	1.99	85.43%	1.70	0.51	30.0%
Feb-09	1.90	85.63%	1.63	0.49	30.0%
Mar-09	2.08	86.02%	1.79	0.54	30.0%
Apr-09	2.00	86.40%	1.73	0.52	30.0%
May-09	1.84	84.70%	1.56	0.47	30.0%
Jun-09	1.77	84.29%	1.49	0.45	30.0%
Jul-09	1.89	84.39%	1.60	0.48	30.0%
Aug-09	2.06	85.49%	1.76	0.53	30.0%
Sep-09	1.97	86.16%	1.70	0.51	30.0%
Oct-09	2.03	85.94%	1.74	0.52	30.0%
Nov-09	2.02	86.27%	1.74	0.52	30.0%
Dec-09	2.06	85.56%	1.76	0.53	30.0%
Jan-10 ⁶	2.10	85.45%	1.79	0.54	30.0%
Feb-10	1.92	85.80%	1.65	0.50	30.0%
Mar-10	2.14	85.93%	1.84	0.55	30.0%
Apr-10	2.09	86.17%	1.80	0.54	30.0%
May-10	2.10	86.03%	1.81	0.50	27.6%
Jun-10	1.93	86.00%	1.66	0.46	27.7%
Jul-10	2.13	85.93%	1.83	0.51	27.7%
Aug-10	2.16	86.07%	1.86	0.52	27.8%
Sep-10	2.00	85.44%	1.71	0.47	27.7%
Oct-10	2.03	85.07%	1.73	0.48	27.7%
Nov-10	1.93	85.64%	1.65	0.45	27.6%
Dec-10	2.03	85.76%	1.74	0.47	27.2%

Chart 14(A)



14(B)

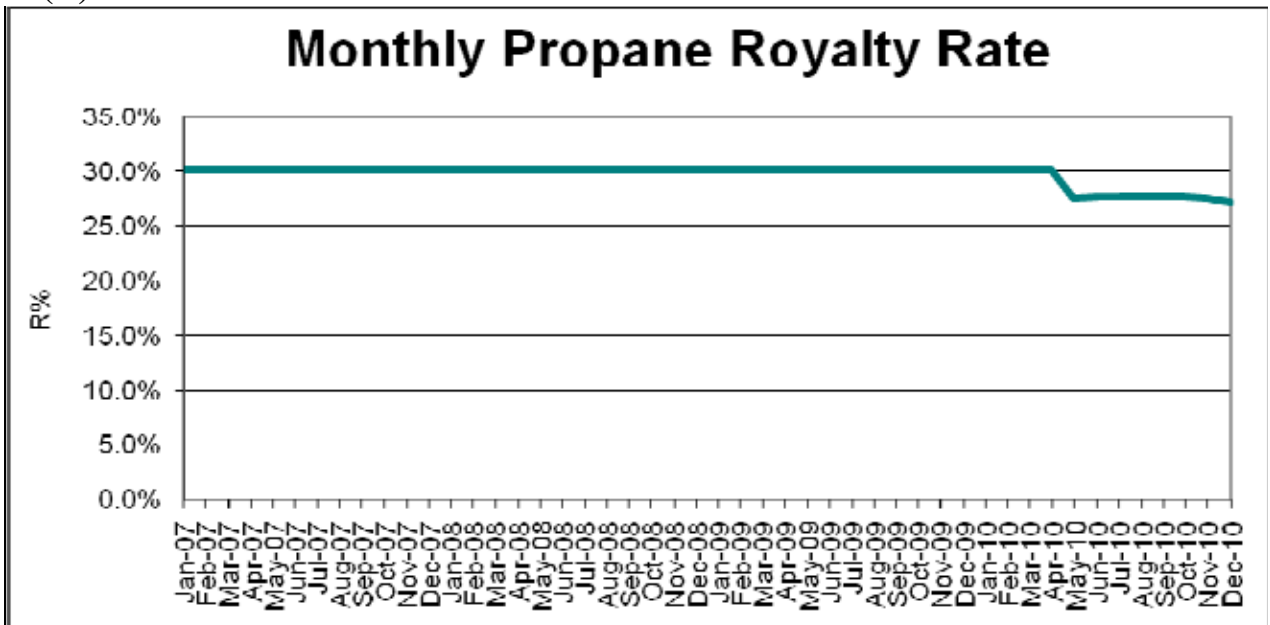


Table 15

Monthly Butane Royalty Volume					
Year/Month	Total Royalty Liabile Volume¹	Crown Share of Total gas²	Crown Volume³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	% of Total	Million barrels⁴	Million barrels	R%⁵
Jan-07	1.73	84.13%	1.46	0.44	30.0%
Feb-07	1.55	84.07%	1.30	0.39	30.0%
Mar-07	1.73	84.13%	1.46	0.44	30.0%
Apr-07	1.70	83.45%	1.42	0.43	30.0%
May-07	1.72	83.93%	1.45	0.43	30.0%
Jun-07	1.53	84.65%	1.29	0.39	30.0%
Jul-07	1.61	83.10%	1.33	0.40	30.0%
Aug-07	1.69	83.82%	1.42	0.43	30.0%
Sep-07	1.64	84.26%	1.38	0.41	30.0%
Oct-07	1.70	84.58%	1.44	0.43	30.0%
Nov-07	1.64	84.46%	1.38	0.42	30.0%
Dec-07	1.70	84.96%	1.45	0.43	30.0%
Jan-08	1.69	85.25%	1.44	0.43	30.0%
Feb-08	1.56	85.54%	1.34	0.40	30.0%
Mar-08	1.74	85.68%	1.49	0.45	30.0%
Apr-08	1.62	85.96%	1.40	0.42	30.0%
May-08	1.55	86.34%	1.33	0.40	30.0%
Jun-08	1.52	85.07%	1.29	0.39	30.0%
Jul-08	1.62	85.80%	1.39	0.42	30.0%
Aug-08	1.63	85.74%	1.39	0.42	30.0%
Sep-08	1.56	85.20%	1.33	0.40	30.0%
Oct-08	1.61	85.84%	1.38	0.41	30.0%
Nov-08	1.57	86.06%	1.36	0.41	30.0%
Dec-08	1.52	86.19%	1.31	0.39	30.0%
Jan-09	1.54	85.80%	1.32	0.40	30.0%
Feb-09	1.46	85.88%	1.25	0.38	30.0%
Mar-09	1.60	86.02%	1.38	0.41	30.0%
Apr-09	1.53	85.83%	1.31	0.39	30.0%
May-09	1.41	84.61%	1.20	0.36	30.0%
Jun-09	1.40	84.63%	1.18	0.36	30.0%
Jul-09	1.48	84.85%	1.25	0.38	30.0%
Aug-09	1.57	85.79%	1.35	0.40	30.0%
Sep-09	1.49	86.22%	1.28	0.39	30.0%
Oct-09	1.49	85.90%	1.28	0.39	30.0%
Nov-09	1.50	86.50%	1.30	0.39	30.0%
Dec-09	1.50	85.87%	1.29	0.39	30.0%
Jan-10 ⁶	1.53	85.76%	1.31	0.39	30.0%
Feb-10	1.41	85.95%	1.21	0.36	30.0%
Mar-10	1.56	86.07%	1.35	0.40	30.0%
Apr-10	1.53	86.43%	1.32	0.40	30.0%
May-10	1.54	86.21%	1.33	0.37	27.5%
Jun-10	1.41	85.97%	1.21	0.33	27.6%
Jul-10	1.52	86.00%	1.31	0.36	27.7%
Aug-10	1.53	86.03%	1.31	0.37	27.8%
Sep-10	1.42	85.84%	1.22	0.34	27.7%
Oct-10	1.46	85.54%	1.25	0.35	27.7%
Nov-10	1.36	86.24%	1.17	0.32	27.5%
Dec-10	1.45	86.05%	1.24	0.34	27.2%

Source: Alberta Energy

Notes:

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of butane.
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. Column (3) = Column(1)*Column(2)
5. Column (5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula before that it was a royalty reduction

Chart 15(A)

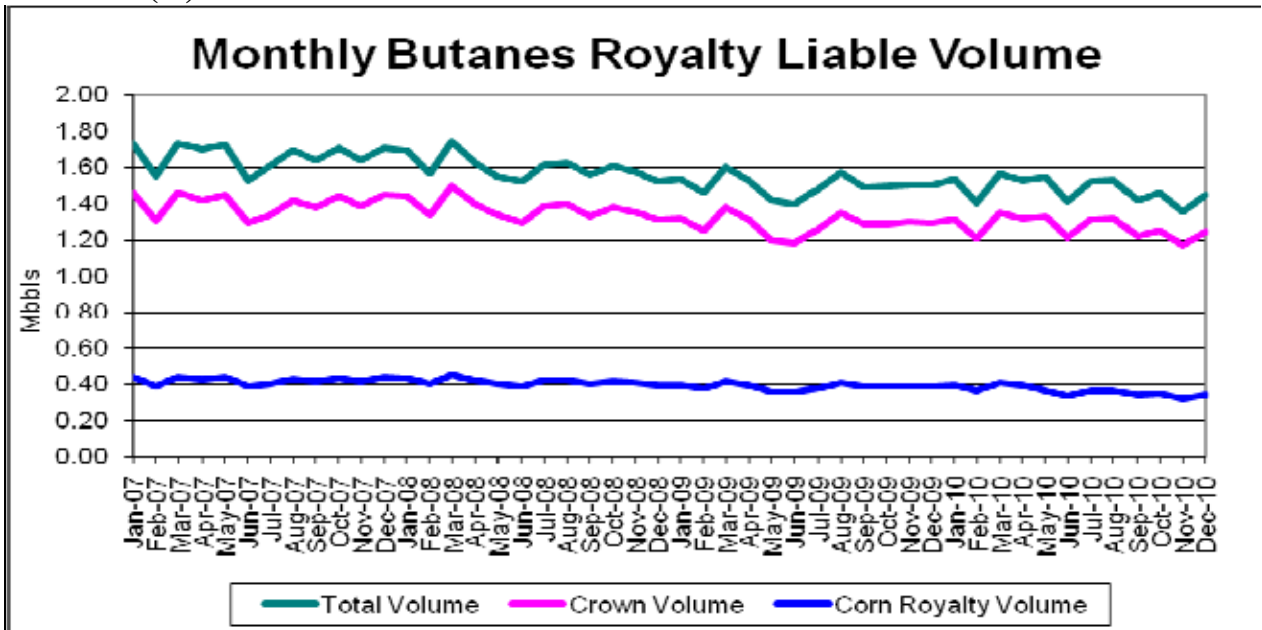


Chart 15(B)

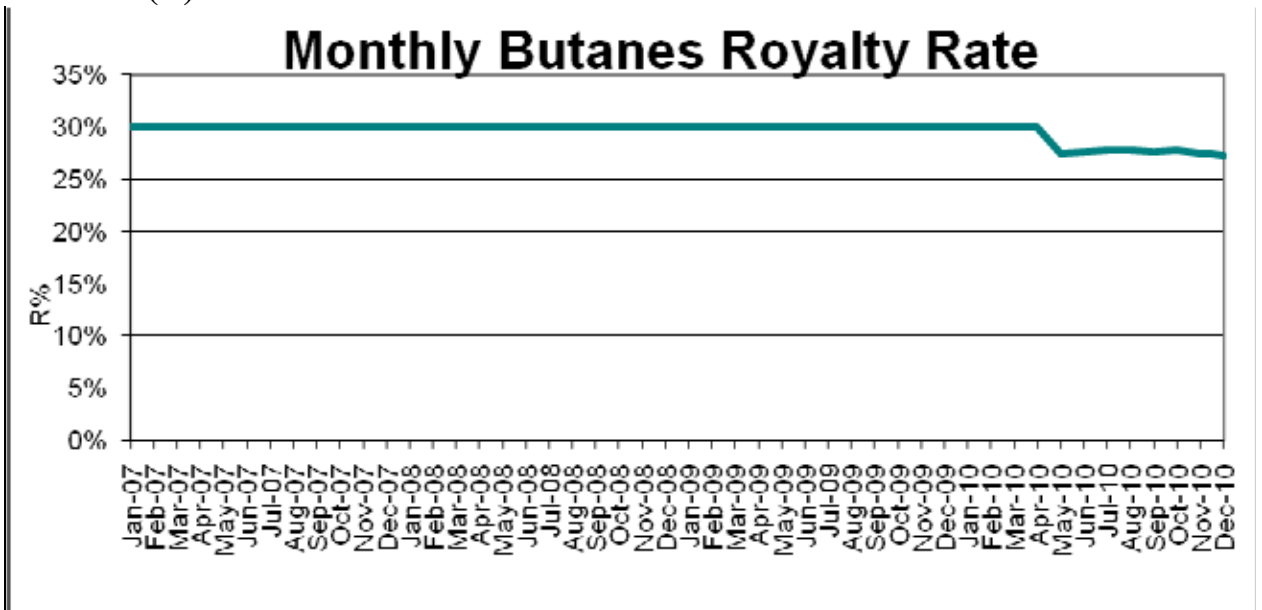


Table 16

Monthly Pentanes Plus Royalty Volume					
Year/Month	Total Royalty Liable Volume¹	Crown Share of Total Volume²	Crown Volume³	Gross Royalty Volume	Gross Royalty Rate
	Million barrels	% of Total	Million barrels⁴	Million barrels	R%⁵
Jan-07	3.25	87.24%	2.83	0.99	34.8%
Feb-07	2.96	87.55%	2.59	0.90	34.9%
Mar-07	3.33	87.53%	2.92	1.02	34.9%
Apr-07	3.23	87.79%	2.84	0.99	35.0%
May-07	3.26	87.81%	2.86	1.00	34.9%
Jun-07	3.04	88.02%	2.67	0.93	35.0%
Jul-07	3.04	87.67%	2.67	0.94	35.3%
Aug-07	3.18	88.50%	2.82	0.99	35.1%
Sep-07	3.08	88.38%	2.72	0.96	35.2%
Oct-07	3.14	87.98%	2.76	0.97	35.2%
Nov-07	2.99	87.85%	2.62	0.93	35.4%
Dec-07	3.14	88.29%	2.77	0.98	35.4%
Jan-08	3.05	88.32%	2.69	0.95	35.4%
Feb-08	2.87	88.23%	2.54	0.90	35.4%
Mar-08	3.21	88.52%	2.84	1.01	35.5%
Apr-08	3.05	89.14%	2.72	0.97	35.6%
May-08	3.07	89.42%	2.74	0.98	35.7%
Jun-08	2.94	88.62%	2.61	0.93	35.8%
Jul-08	3.08	88.89%	2.73	0.98	35.7%
Aug-08	3.04	88.90%	2.70	0.96	35.4%
Sep-08	2.87	88.61%	2.55	0.89	35.1%
Oct-08	2.97	88.91%	2.64	0.92	34.9%
Nov-08	2.86	89.13%	2.55	0.88	34.4%
Dec-08	2.82	89.57%	2.52	0.86	33.9%
Jan-09	2.84	89.22%	2.53	1.01	40.0%
Feb-09	2.69	89.34%	2.40	0.96	40.0%
Mar-09	2.99	89.55%	2.68	1.07	40.0%
Apr-09	2.89	89.49%	2.59	1.03	40.0%
May-09	2.80	89.05%	2.50	1.00	40.0%
Jun-09	2.75	89.29%	2.45	0.98	40.0%
Jul-09	2.87	89.16%	2.56	1.02	40.0%
Aug-09	2.90	89.35%	2.59	1.04	40.0%
Sep-09	2.67	89.51%	2.39	0.96	40.0%
Oct-09	2.74	89.36%	2.44	0.98	40.0%
Nov-09	2.73	89.45%	2.45	0.98	40.0%
Dec-09	2.68	88.93%	2.38	0.95	40.0%
Jan-10	2.75	88.91%	2.45	0.98	40.0%
Feb-10	2.56	89.00%	2.28	0.91	40.0%
Mar-10	2.89	89.13%	2.58	1.03	40.0%
Apr-10	2.84	89.47%	2.54	1.02	40.0%
May-10	2.90	89.77%	2.61	0.92	35.4%
Jun-10	2.73	89.61%	2.45	0.88	35.7%
Jul-10	2.90	89.69%	2.60	0.94	36.0%
Aug-10	2.90	89.60%	2.60	0.94	36.2%
Sep-10	2.67	89.57%	2.39	0.87	36.2%
Oct-10	2.72	89.29%	2.43	0.88	36.2%
Nov-10	2.51	90.19%	2.26	0.81	35.7%
Dec-10	2.65	89.47%	2.37	0.84	35.5%

Source: Alberta Energy

Notes are the same as previous tables

Chart 16(A)

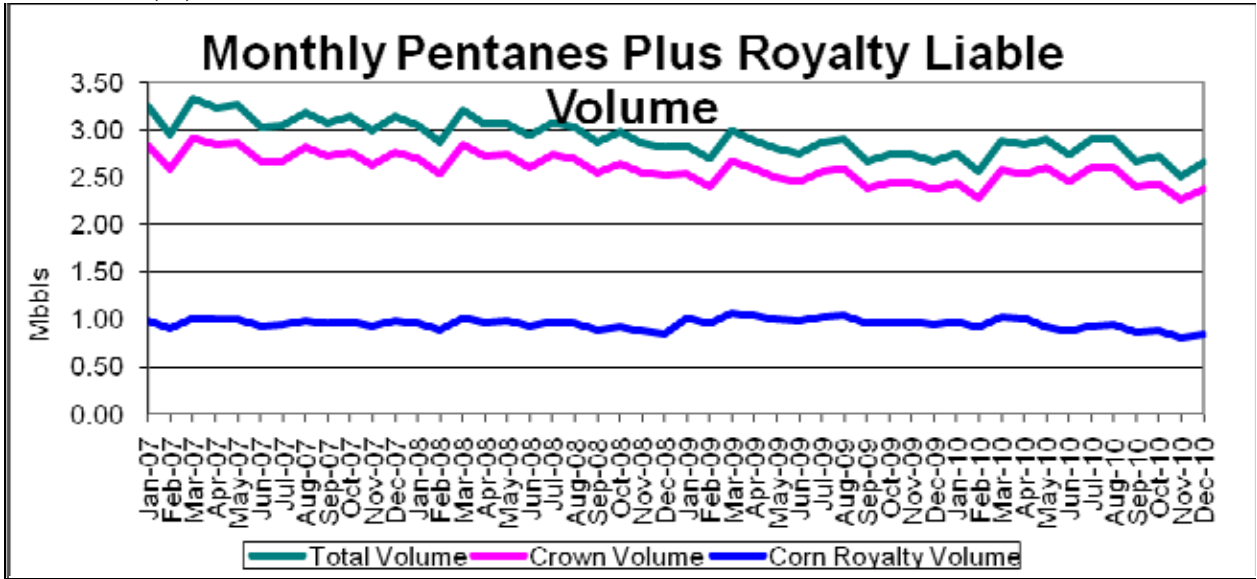


Chart 16(B)

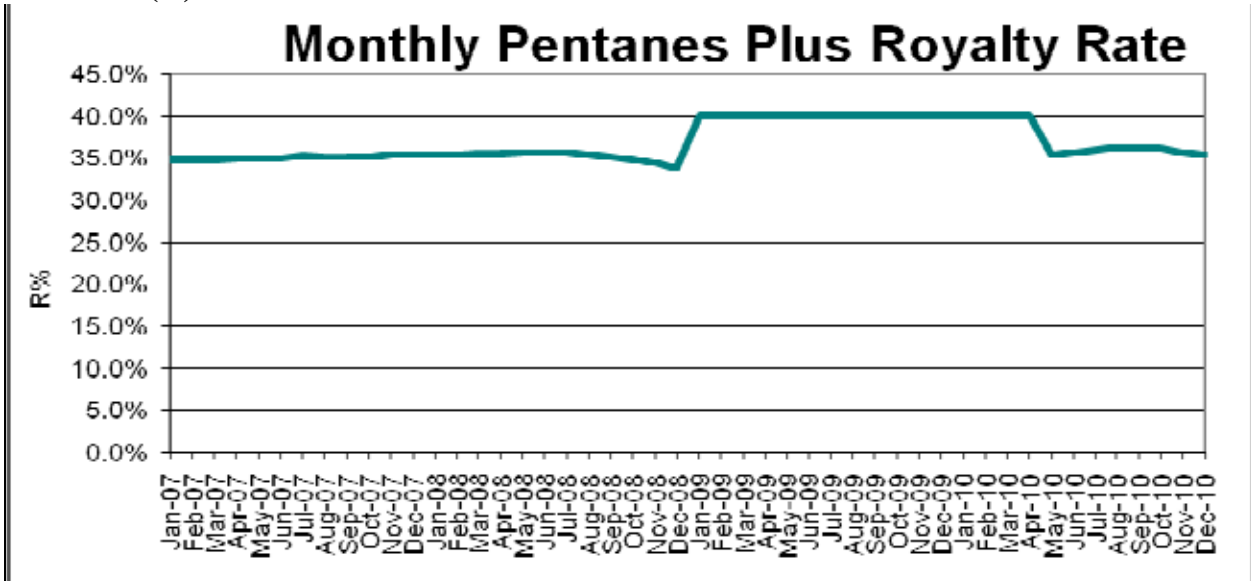


Table 17

Monthly Natural Liquids Royalty Liable Volumes and Crown Royalty Rates						
	Propane	Butane	Pentanes Plus	Propane	Butanes	Pentanes Plus
	Million barrels	Million barrels	Million barrels	R%	R%	R%
Jan-07	2.36	1.73	3.25	30.0%	30.0%	34.8%
Feb-07	2.10	1.55	2.96	30.0%	30.0%	34.9%
Mar-07	2.30	1.73	3.33	30.0%	30.0%	34.9%
Apr-07	2.27	1.70	3.23	30.0%	30.0%	35.0%
May-07	2.25	1.72	3.26	30.0%	30.0%	34.9%
Jun-07	1.93	1.53	3.04	30.0%	30.0%	35.0%
Jul-07	2.06	1.61	3.04	30.0%	30.0%	35.3%
Aug-07	2.18	1.69	3.18	30.0%	30.0%	35.1%
Sep-07	2.10	1.64	3.08	30.0%	30.0%	35.2%
Oct-07	2.21	1.70	3.14	30.0%	30.0%	35.2%
Nov-07	2.16	1.64	2.99	30.0%	30.0%	35.4%
Dec-07	2.26	1.70	3.14	30.0%	30.0%	35.4%
Jan-08	2.26	1.69	3.05	30.0%	30.0%	35.4%
Feb-08	2.09	1.56	2.87	30.0%	30.0%	35.4%
Mar-08	2.30	1.56	3.21	30.0%	30.0%	35.5%
Apr-08	2.14	1.74	3.05	30.0%	30.0%	35.6%
May-08	2.04	1.62	3.07	30.0%	30.0%	35.7%
Jun-08	1.93	1.55	2.94	30.0%	30.0%	35.8%
Jul-08	2.12	1.52	3.08	30.0%	30.0%	35.7%
Aug-08	2.09	1.62	3.04	30.0%	30.0%	35.4%
Sep-08	2.01	1.63	2.87	30.0%	30.0%	35.1%
Oct-08	2.05	1.56	2.97	30.0%	30.0%	34.9%
Nov-08	1.97	1.61	2.86	30.0%	30.0%	34.4%
Dec-08	1.96	1.57	2.82	30.0%	30.0%	33.9%
Jan-09	1.99	1.54	2.84	30.0%	30.0%	40.0%
Feb-09	1.90	1.46	2.69	30.0%	30.0%	40.0%
Mar-09	2.08	1.60	2.99	30.0%	30.0%	40.0%
Apr-09	2.00	1.53	2.89	30.0%	30.0%	40.0%
May-09	1.84	1.41	2.80	30.0%	30.0%	40.0%
Jun-09	1.77	1.40	2.75	30.0%	30.0%	40.0%
Jul-09	1.89	1.48	2.87	30.0%	30.0%	40.0%
Aug-09	2.06	1.57	2.90	30.0%	30.0%	40.0%
Sep-09	1.97	1.49	2.67	30.0%	30.0%	40.0%
Oct-09	2.03	1.49	2.74	30.0%	30.0%	40.0%
Nov-09	2.02	1.50	2.73	30.0%	30.0%	40.0%
Dec-09	2.06	1.50	2.68	30.0%	30.0%	40.0%
Jan-10	2.10	1.53	2.75	30.0%	30.0%	40.0%
Feb-10	1.92	1.41	2.56	30.0%	30.0%	40.0%
Mar-10	2.14	1.56	2.89	30.0%	30.0%	40.0%
Apr-10	2.09	1.53	2.84	30.0%	30.0%	40.0%
May-10	2.10	1.54	2.90	27.6%	27.5%	35.4%
Jun-10	1.93	1.41	2.73	27.7%	27.6%	35.7%
Jul-10	2.13	1.52	2.90	27.7%	27.7%	36.0%
Aug-10	2.16	1.53	2.90	27.8%	27.8%	36.2%
Sep-10	2.00	1.42	2.67	27.7%	27.7%	36.2%
Oct-10	2.03	1.46	2.72	27.7%	27.7%	36.2%
Nov-10	1.93	1.36	2.51	27.6%	27.5%	35.7%
Dec-10	2.03	1.45	2.65	27.2%	27.2%	35.5%

Source: Alberta Energy

Chart 17

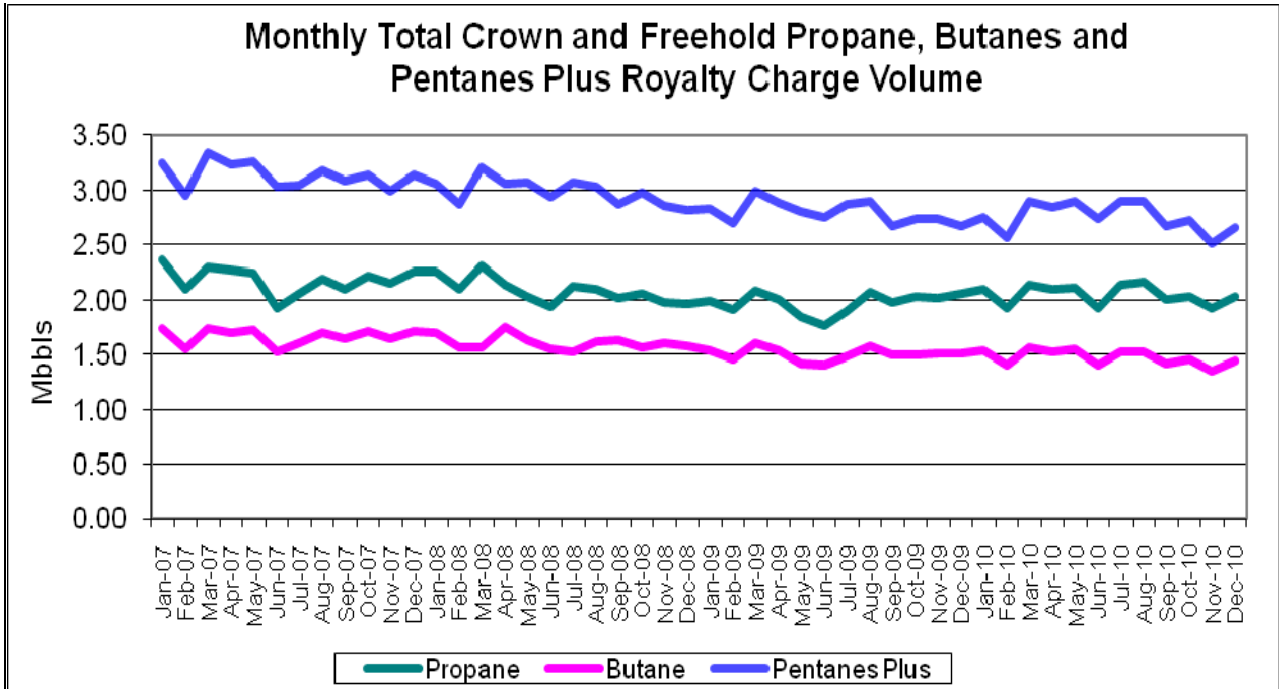


Table 18A

Alberta Royalty Sulphur Production (Thousand Tonnes)					
	Total Royalty Liable Volume¹	Crown Share of Total Volume²	Crown Volume³	Gross Royalty Volume	Gross Royalty Rate
	Sulphur Small Tonne (Thousand Tonnes)	Out 100%	Sulphur Small Tonne⁴	Sulphur Small Tonne	R%⁵
1994	6,375	84.50%	5,387	898	16.67%
1995	6,061	83.76%	5,077	846	16.67%
1996	6,429	83.50%	5,369	895	16.67%
1997	6,398	83.04%	5,313	885	16.67%
1998	6,440	82.23%	5,295	883	16.67%
1999	6,726	81.76%	5,499	917	16.67%
2000	6,516	82.58%	5,380	897	16.67%
2001	6,080	82.29%	5,003	834	16.67%
2002	5,818	81.94%	4,767	795	16.67%
2003	5,666	81.55%	4,621	770	16.67%
2004	5,598	82.60%	4,624	771	16.67%
2005	5,358	83.38%	4,468	745	16.67%
2006	5,168	84.91%	4,388	731	16.67%
2007	4,761	85.66%	4,078	680	16.67%
2008	4,202	86.96%	3,654	609	16.67%
2009	3,565	85.92%	3,063	511	16.67%
2010 ⁶	3,221	84.71%	2,728	451	16.55%

Source: Alberta Energy

Notes:

1. Royalty Liabile volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of sulphur
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. Column (3) = Column (1) * Column (2)
5. Column(5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction

Chart 18A

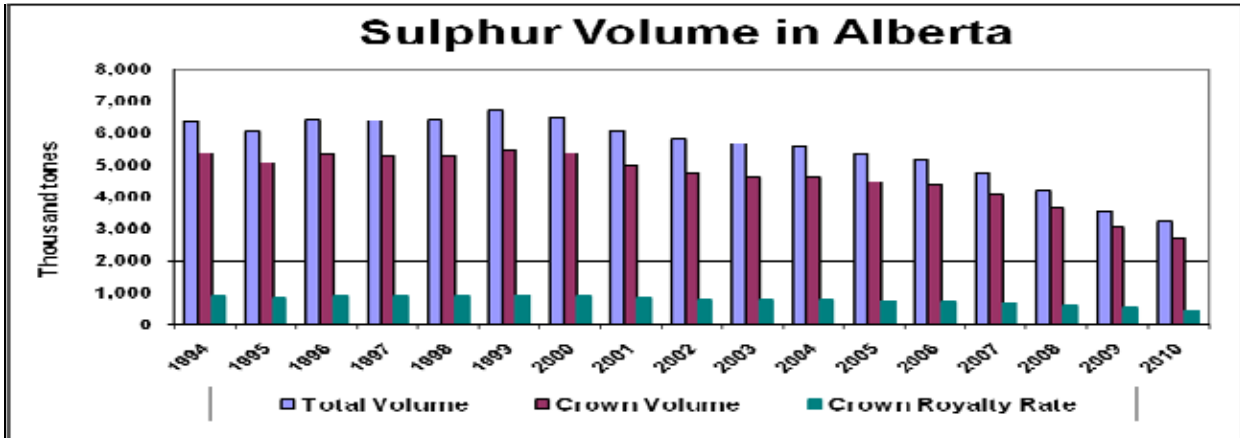


Table 18B

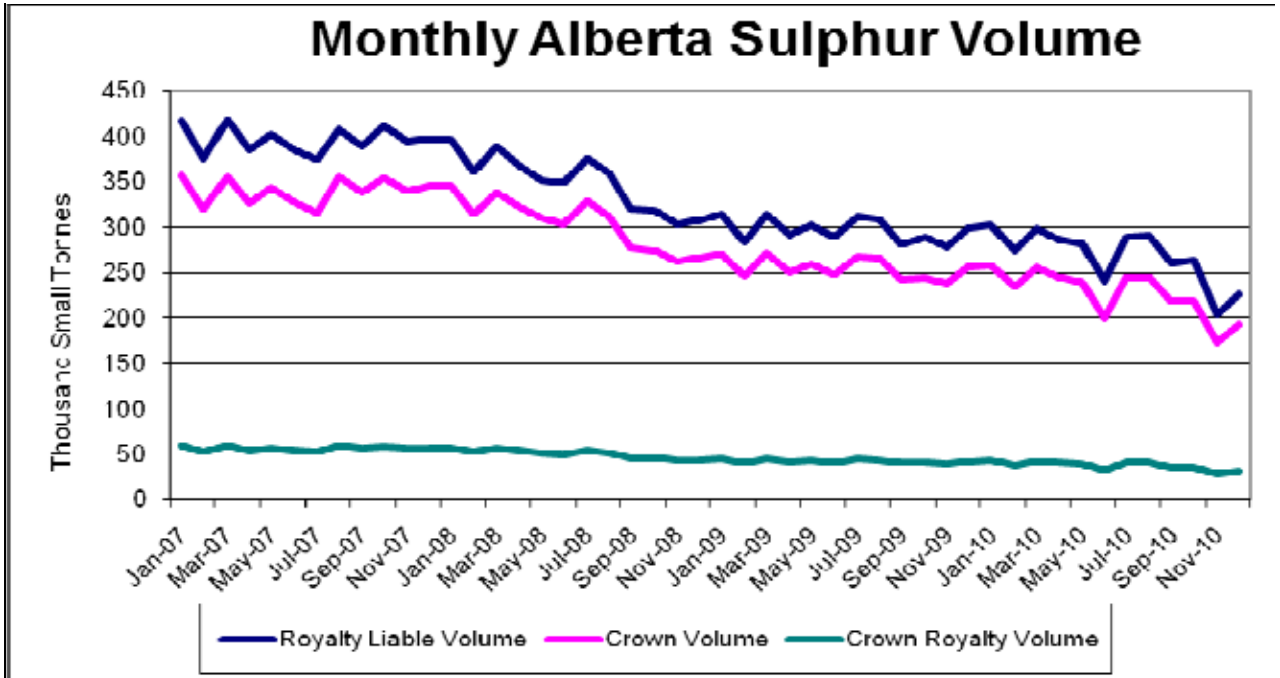
Monthly Sulphur Royalty Volume (Thousand Tonnes)						
Year/Month	Total Royalty Liabile Volume ¹		Crown Share of Total Volume ²	Crown Volume ³	Gross Royalty Volume	Gross Royalty Rate
	Sulphur	Small Tonne	Out 100%	Sulphur Small Tonne ⁴	Sulphur Small Tonne	R% ⁵
Jan-07		417.7	85.61%	357.6	59.6	16.7%
Feb-07		376.1	84.88%	319.2	53.2	16.7%
Mar-07		418.3	85.02%	355.6	59.3	16.7%
Apr-07		384.8	84.71%	325.9	54.3	16.7%
May-07		403.1	85.44%	344.4	57.4	16.7%
Jun-07		385.9	84.91%	327.7	54.6	16.7%
Jul-07		374.3	84.25%	315.3	52.6	16.7%
Aug-07		408.2	87.04%	355.3	59.2	16.7%
Sep-07		388.7	87.18%	338.8	56.5	16.7%
Oct-07		412.5	85.82%	354.0	59.0	16.7%
Nov-07		394.5	85.99%	339.2	56.5	16.7%
Dec-07		396.8	86.92%	344.9	57.5	16.7%
Jan-08		395.6	87.18%	344.9	57.5	16.7%
Feb-08		361.7	86.95%	314.5	52.4	16.7%
Mar-08		389.0	87.01%	338.5	56.4	16.7%
Apr-08		368.5	87.54%	322.6	53.8	16.7%
May-08		352.2	88.01%	310.0	51.7	16.7%
Jun-08		349.6	86.82%	303.5	50.6	16.7%
Jul-08		376.0	87.42%	328.7	54.8	16.7%
Aug-08		360.2	86.50%	311.6	51.9	16.7%
Sep-08		319.3	86.87%	277.4	46.2	16.7%
Oct-08		318.6	86.26%	274.8	45.8	16.7%
Nov-08		304.1	86.17%	262.0	43.7	16.7%
Dec-08		307.5	86.48%	265.9	44.3	16.7%
Jan-09		314.8	86.08%	271.0	45.2	16.7%
Feb-09		284.3	86.49%	245.9	41.0	16.7%
Mar-09		314.0	86.41%	271.3	45.2	16.7%
Apr-09		291.5	86.03%	250.8	41.8	16.7%
May-09		301.9	86.20%	260.2	43.4	16.7%
Jun-09		289.3	85.59%	247.6	41.3	16.7%
Jul-09		311.4	85.94%	267.6	44.6	16.7%
Aug-09		309.4	85.97%	266.0	44.3	16.7%
Sep-09		281.0	86.26%	242.4	40.4	16.7%
Oct-09		288.6	84.64%	244.2	40.7	16.7%
Nov-09		279.1	85.67%	239.1	39.8	16.7%
Dec-09		299.7	85.71%	256.9	42.8	16.7%
Jan-10 ⁶		302.7	85.50%	258.8	43.1	16.7%
Feb-10		274.9	85.12%	234.0	39.0	16.7%
Mar-10		298.1	85.96%	256.3	42.7	16.7%
Apr-10		287.0	85.55%	245.5	40.9	16.7%
May-10		282.7	84.69%	239.5	39.5	16.5%
Jun-10		241.1	83.02%	200.2	33.0	16.5%
Jul-10		289.6	84.71%	245.3	40.5	16.5%
Aug-10		290.3	84.38%	244.9	40.4	16.5%
Sep-10		260.8	83.82%	218.6	36.1	16.5%
Oct-10		263.5	82.92%	218.5	35.9	16.4%
Nov-10		203.9	85.12%	173.5	28.5	16.4%
Dec-10		226.3	85.47%	193.4	31.8	16.4%

Source: Alberta Energy

Notes:

1. Royalty liable volume includes all production even if it has zero royalty rate due to being non-Crown production.
2. Crown share is the Crown ownership of sulphur.
3. Crown volume is obtained by multiplying total royalty liable volume by Crown share.
4. Column (3) = Column(1)*Column(2)
5. Column (5) = Column(4)/Column(3)
6. From May 1, 2010, NWRR is a permanent part of the royalty formula. Before that it was a royalty reduction

Chart 18B:



3. Well Productivity

Productivity Analysis of Gas Producing Wells in Alberta

Productivity is defined as monthly production divided by total producing hours, multiplied by 24.

- Gas wells are conventional gas wells.
- Solution gas is produced from oil wells.
- CBM is natural gas produced from coal seams.

Table 19:

Natural Gas Average Daily Production (ADP) Rate			
	Daily Gas Well Average Productivity	Daily CBM Well Average Productivity	Daily Solution Gas Well Average Productivity
Year	E3M3/Day	E3M3/Day	E3M3/Day
1994	12.89		2.48
1995	12.55		2.33
1996	12.26		2.29
1997	11.60		2.15
1998	11.11		2.08
1999	10.41		2.07
2000	9.34		1.93
2001	8.09		1.79
2002	7.16	1.93	1.70
2003	6.28	1.83	1.63
2004	5.54	2.03	1.63
2005	4.91	2.17	1.58
2006	4.36	2.30	1.48
2007	4.01	2.20	1.33
2008	3.61	2.00	1.18
2009	3.28	1.82	1.13
2010	3.10	1.61	1.08

Source: Alberta Energy

Notes:

- Average daily production (ADP) = (Total production/Total number of hours of production)*24
- Total gas is the sum of gas volumes from gas, CBM and solution gas well events, where a well event means a part of a well completed in a given zone.
- From 2009 solution gas includes energy equivalent volume of oil from oil well events. However, this change of policy is not reflected in this well productivity calculation.

Chart 19:

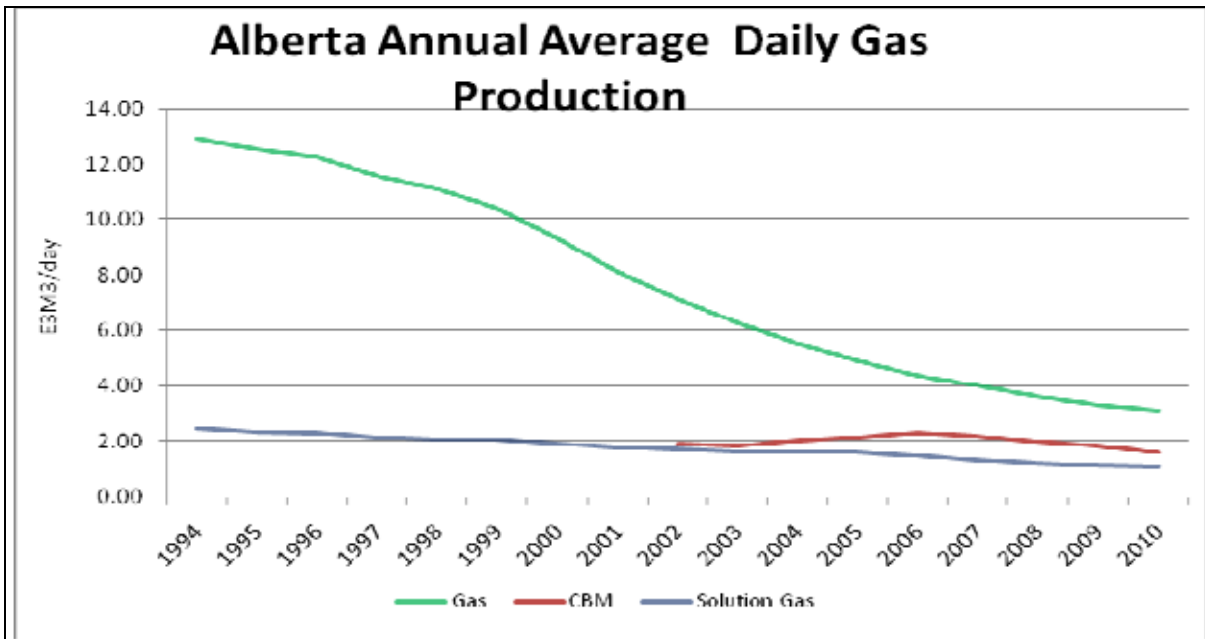


Table 20

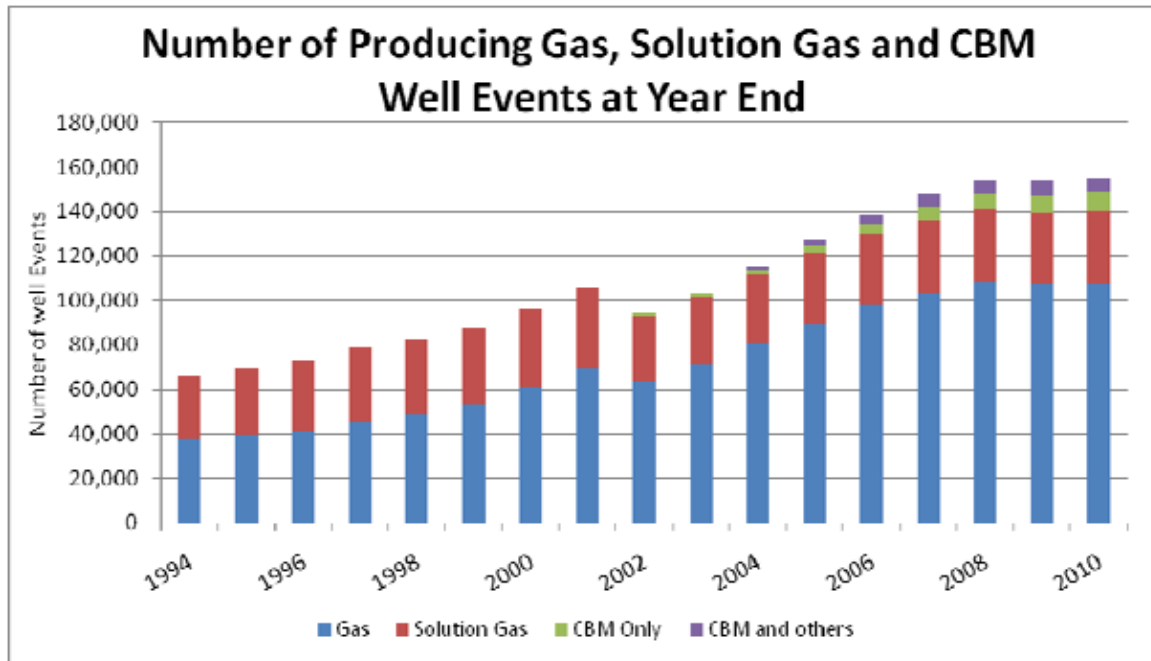
Number of Producing Gas, Solution Gas and CBM Well Events at Year End					
	Gas	Solution Gas	CBM only ¹	CBM Others ²	Total
1994	37,135	28,979			66,114
1995	39,273	30,282			69,555
1996	41,684	31,723			73,407
1997	45,252	34,096			79,348
1998	48,944	33,933			82,877
1999	53,530	33,867			87,397
2000	60,869	35,225			96,094
2001	69,325	36,037			105,362
2002	63,911	29,364	1,251	32	94,558
2003	71,380	29,928	1,645	225	103,178
2004	81,185	30,661	2,358	923	115,127
2005	89,785	31,363	3,350	2,525	127,023
2006	97,735	32,022	4,629	4,240	138,626
2007	103,756	32,389	5,797	5,298	147,240
2008	108,294	32,920	6,969	5,932	154,115
2009	107,232	31,860	7,909	6,609	153,610
2010	107,146	32,910	8,569	6,898	155,523

Source: Alberta Energy

Notes:

1. CBM (Coalbed Methane) production prior to 2002 was insignificant and the number of well events prior to 2002 include CBM and other types of well events.
2. CBM and others include CBM mixed (commingled) and shale gas well events.

Chart 20:



Source: Alberta Energy

Note: CBM others include CBM mixed (commingled) and shale gas

4. Wellhead Production – Mineral Revenue Information System

Table 21:

Alberta Wellhead ¹ Natural Gas Production						
	Gas	Solution Gas	CBM ²	Total	Solution Gas % of Total Gas	CBM % of Total Gas
	Tcf	Tcf	Tcf	Tcf	%	%
1994	4.66	0.68		5.33	12.7%	
1995	4.88	0.67		5.56	12.1%	
1996	5.07	0.69		5.75	12.0%	
1997	5.11	0.68		5.79	11.8%	
1998	5.28	0.67		5.96	11.3%	
1999	5.37	0.66		6.03	10.9%	
2000	5.43	0.65		6.08	10.7%	
2001	5.34	0.63		5.96	10.5%	
2002	5.27	0.60	0.03	5.89	10.1%	0.50%
2003	5.13	0.58	0.03	5.74	10.1%	0.58%
2004	5.13	0.59	0.06	5.78	10.3%	1.04%
2005	5.11	0.58	0.11	5.81	10.1%	1.98%
2006	5.01	0.56	0.21	5.78	9.7%	3.61%
2007	4.95	0.52	0.27	5.74	9.0%	4.73%
2008	4.71	0.46	0.30	5.47	8.4%	5.52%
2009	4.35	0.43	0.32	5.09	8.5%	6.25%
2010	4.12	0.42	0.30	4.85	8.7%	6.27%

Source: Alberta Energy

Notes:

1. Wellhead production includes all producing zones of the well.
2. CBM (Coalbed Methane) production prior to 2002 was insignificant and CBM production includes CBM and CBM & others.

Chart 21A:

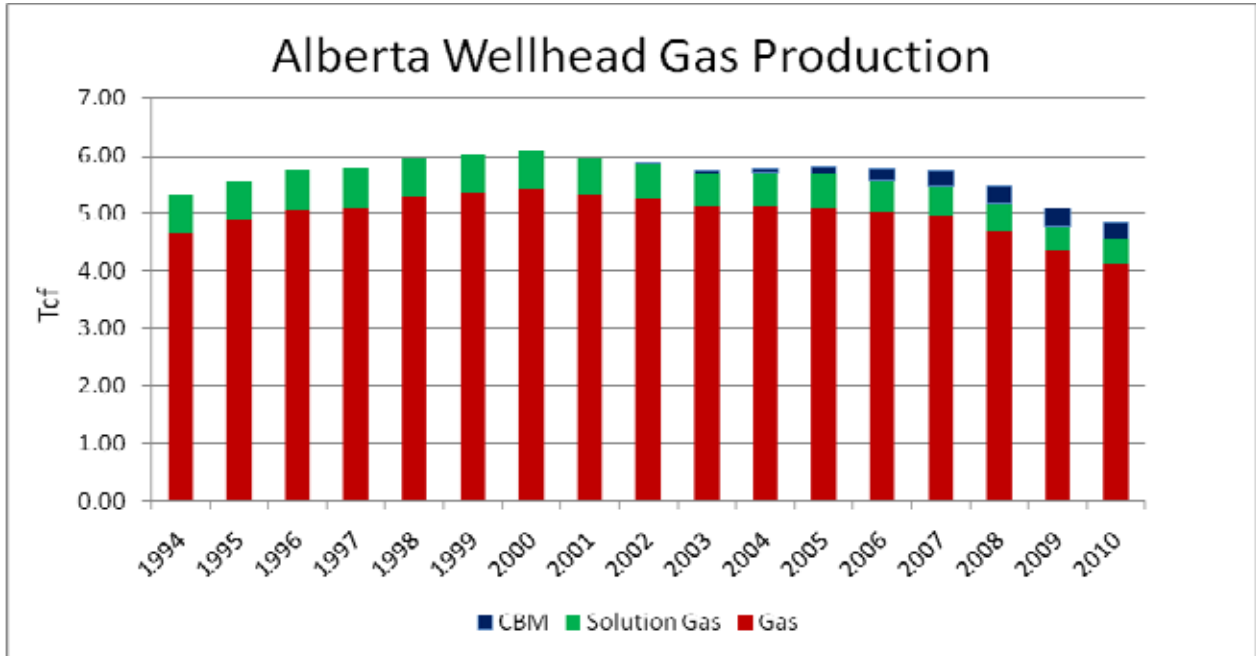


Chart 21B:

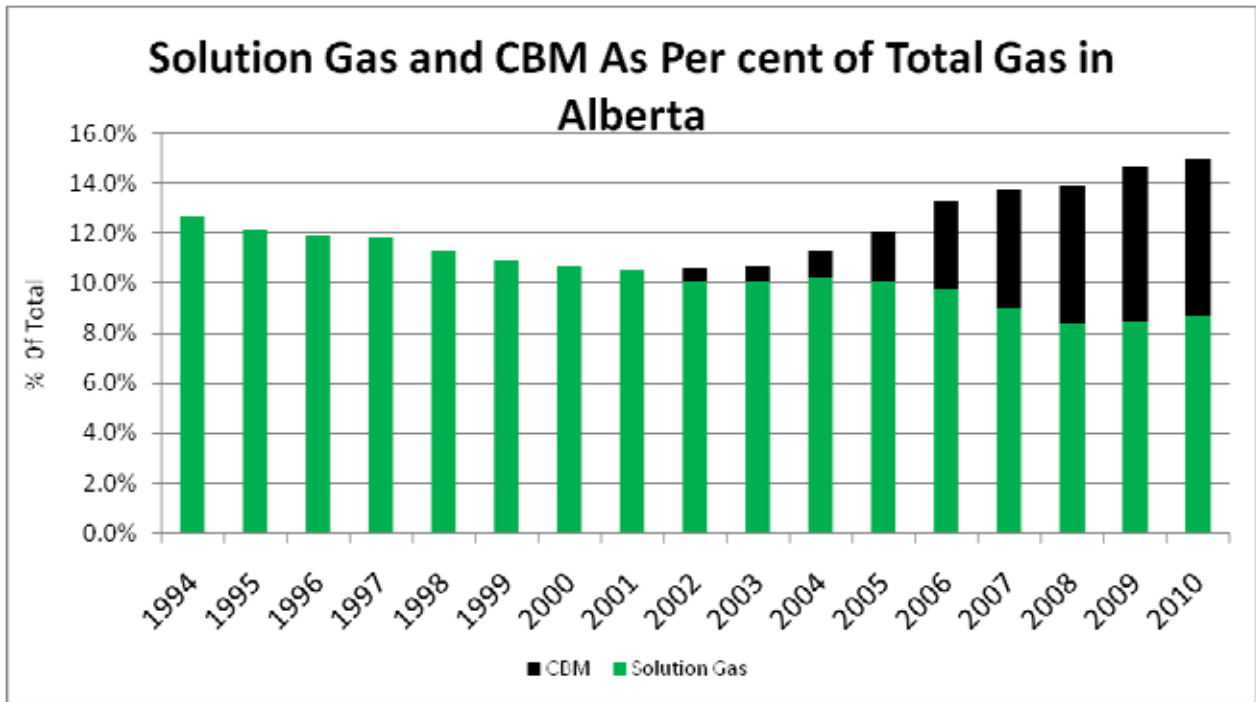
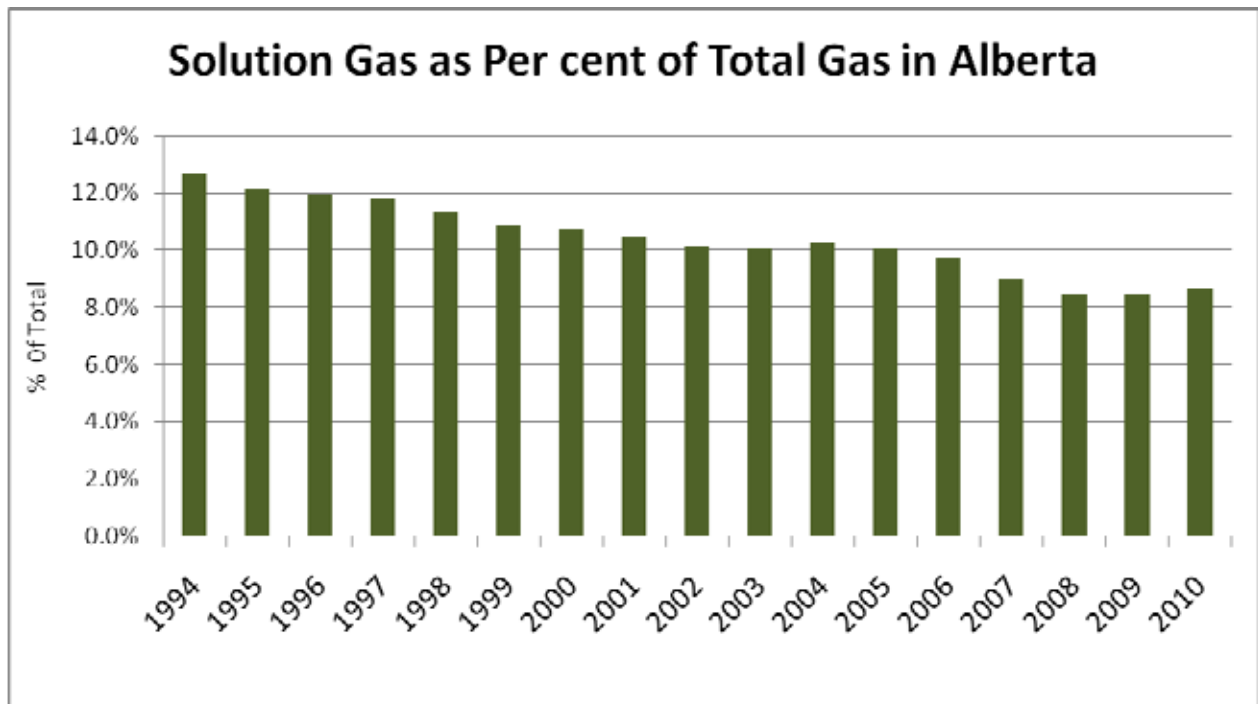


Chart 21C



5. Gas Royalty Breakdown by Productivity Range – 2008, 2009 and 2010 (Gas only)

Table 22

Number of Natural Gas Well Events and Gas Production						
Productivity Range E3M3/Day	Monthly Average Number of Well Events			Total Crown and Freehold Production (Bcf)		
	2008	2009	2010	2008	2009	2010
0.0 ≤ ADP < 0.5	62,438	66,726	71,112	154	171	184
0.5 ≤ ADP < 1.0	32,456	33,175	33,525	289	296	298
1.0 ≤ ADP < 1.5	16,118	15,848	15,644	242	239	237
1.5 ≤ ADP < 2.0	9,701	9,386	8,976	204	198	191
2.0 ≤ ADP < 5.0	22,096	21,340	20,256	831	810	771
5.0 ≤ ADP < 8.0	7,612	7,183	6,772	570	539	512
8.0 ≤ ADP < 16.9	620	520	545	1,007	384	400
16.9 ≤ ADP < 50.0	7,613	6,936	6,155	1,109	913	811
50.0 ≤ ADP < 100.0	3,661	3,191	2,906	462	969	887
ADP ≥ 100	307	282	291	701	660	629
Total	162,621	164,586	166,183	5,569	5,180	4,922

Source: Alberta Energy

Chart 22A

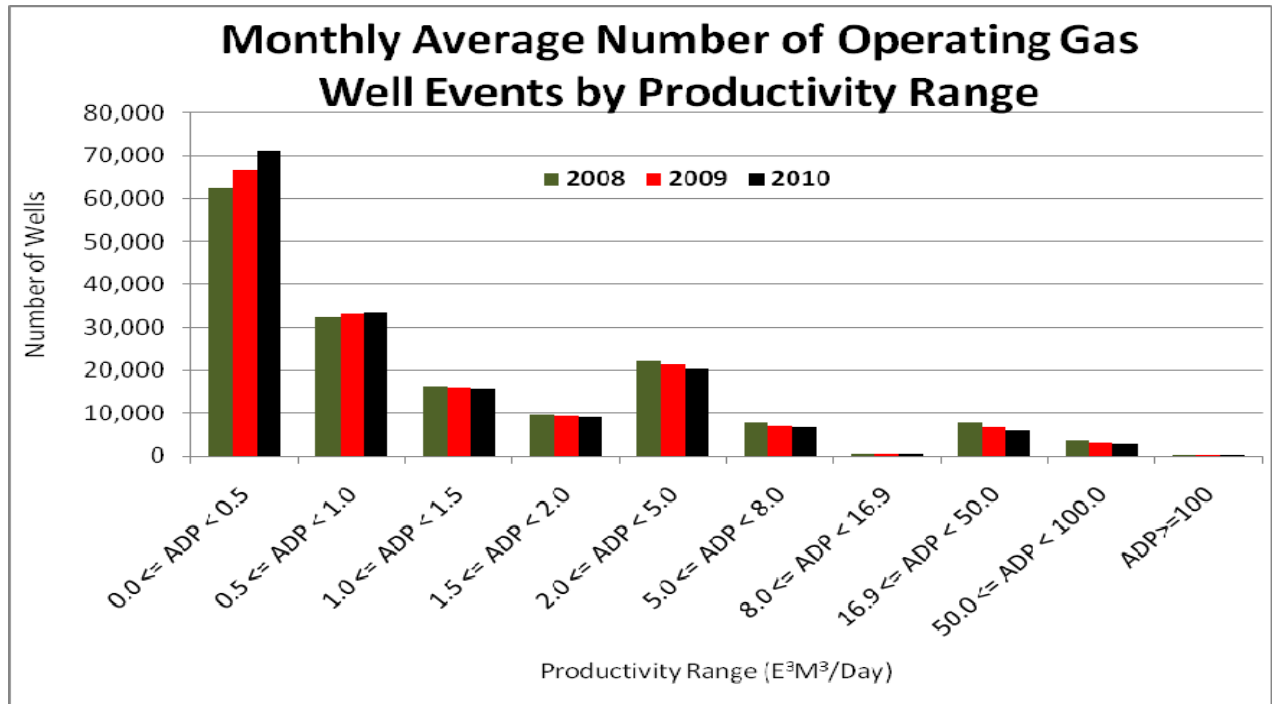


Chart 22B

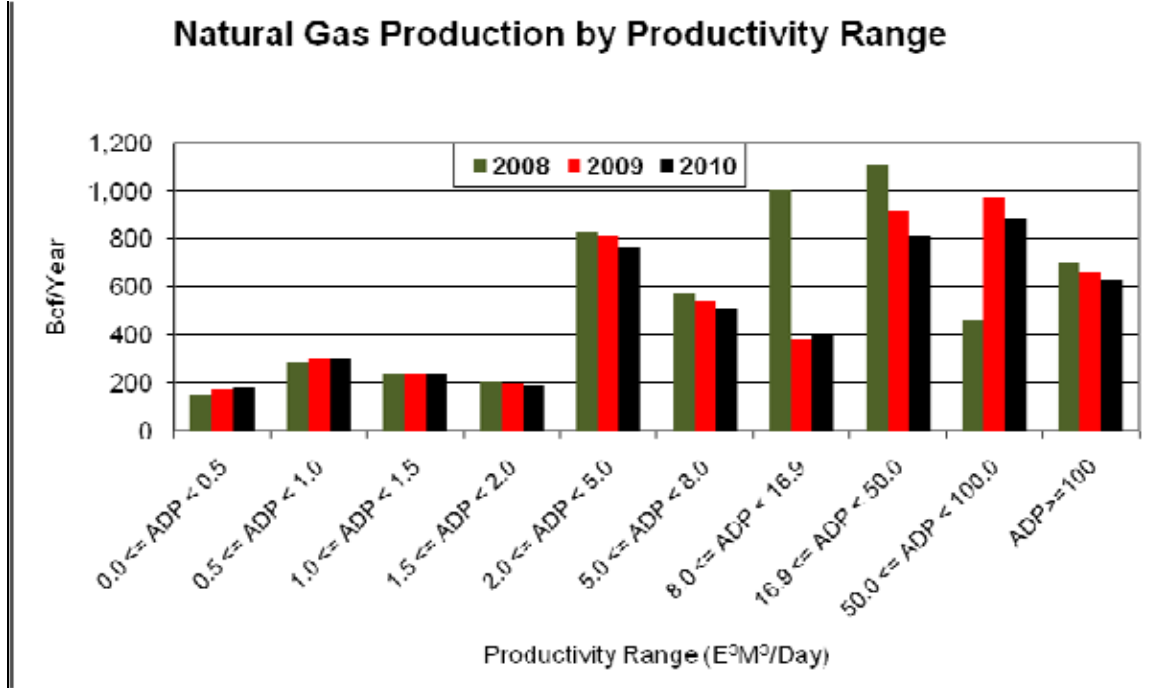


Table 23

Crown Gas Volume, Gross Royalty and Royalty Rate - 2008, 2009 & 2010									
Productivity Range E ³ M ³ /Day	Crown Volume (Bcf)			Gross Royalty (\$Million)			Royalty Rate		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
0.0 ≤ ADP < 0.5	79.7	87.4	93.7	\$80	\$22	\$22	11.90%	6.11%	6.01%
0.5 ≤ ADP < 1.0	156.8	159.5	158.2	\$128	\$37	\$36	9.98%	5.85%	5.84%
1.0 ≤ ADP < 1.5	137.3	132.3	128.2	\$127	\$32	\$30	11.25%	6.08%	6.08%
1.5 ≤ ADP < 2.0	120.3	113.8	110.1	\$122	\$29	\$27	12.39%	6.26%	6.27%
2.0 ≤ ADP < 5.0	543.9	528.0	510.9	\$713	\$148	\$138	15.68%	6.74%	6.67%
5.0 ≤ ADP < 8.0	411.7	392.9	376.8	\$737	\$152	\$131	21.24%	8.80%	8.35%
8.0 ≤ ADP < 16.9	362.0	303.1	315.7	\$933	\$341	\$293	30.19%	26.05%	22.30%
16.9 ≤ ADP < 50.0	763.9	703.2	629.5	\$1,777	\$481	\$376	27.49%	15.66%	14.33%
50.0 ≤ ADP < 100.0	854.6	766.2	699.0	\$2,190	\$753	\$571	30.15%	22.52%	19.47%
ADP ≥ 100	364.5	323.9	295.0	\$908	\$360	\$284	30.10%	26.58%	23.69%
Total	3,795	3,510	3,317	7,715	2,354	1,910			

Source: Alberta Energy

Chart 23A

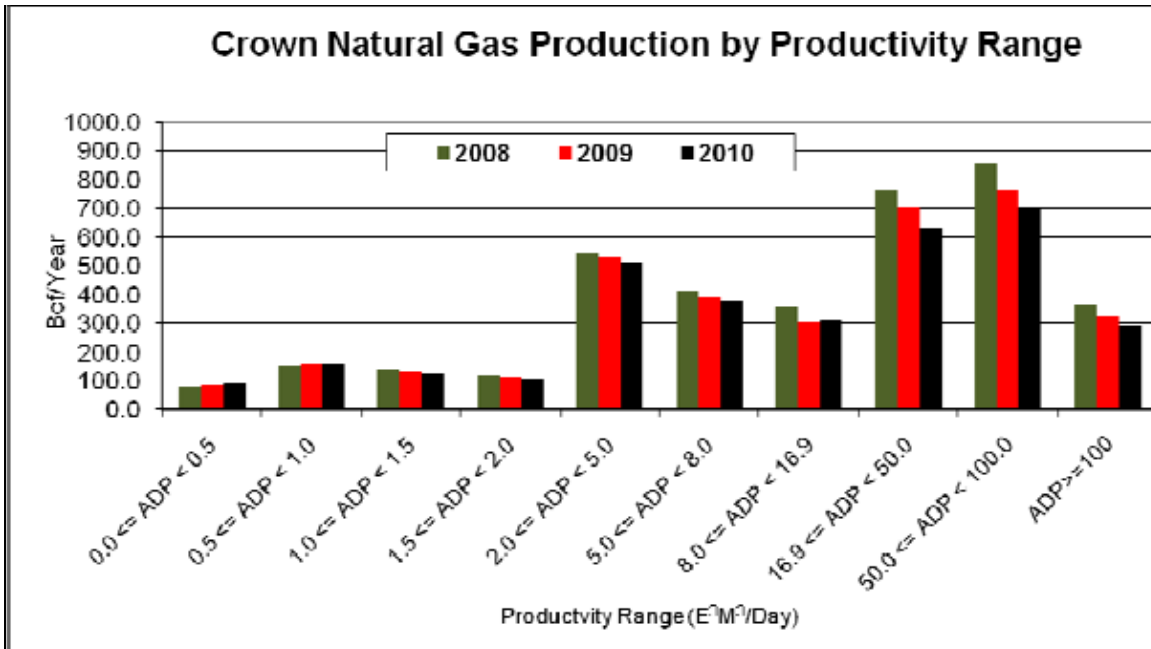


Chart 23B

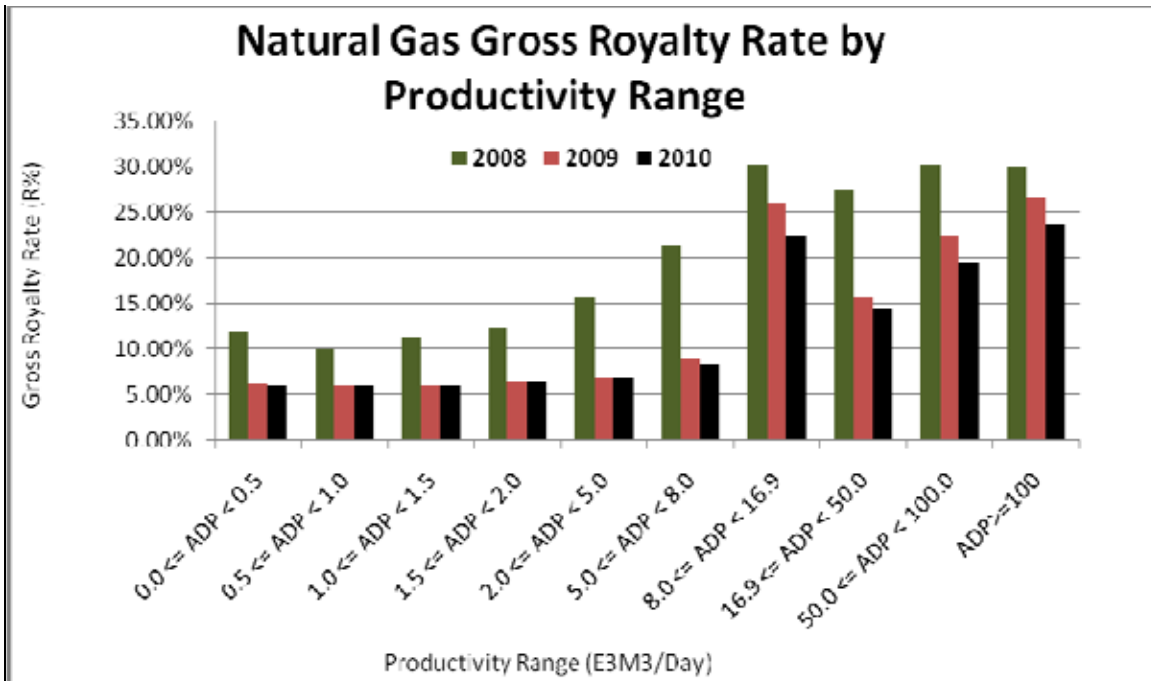


Chart 23C

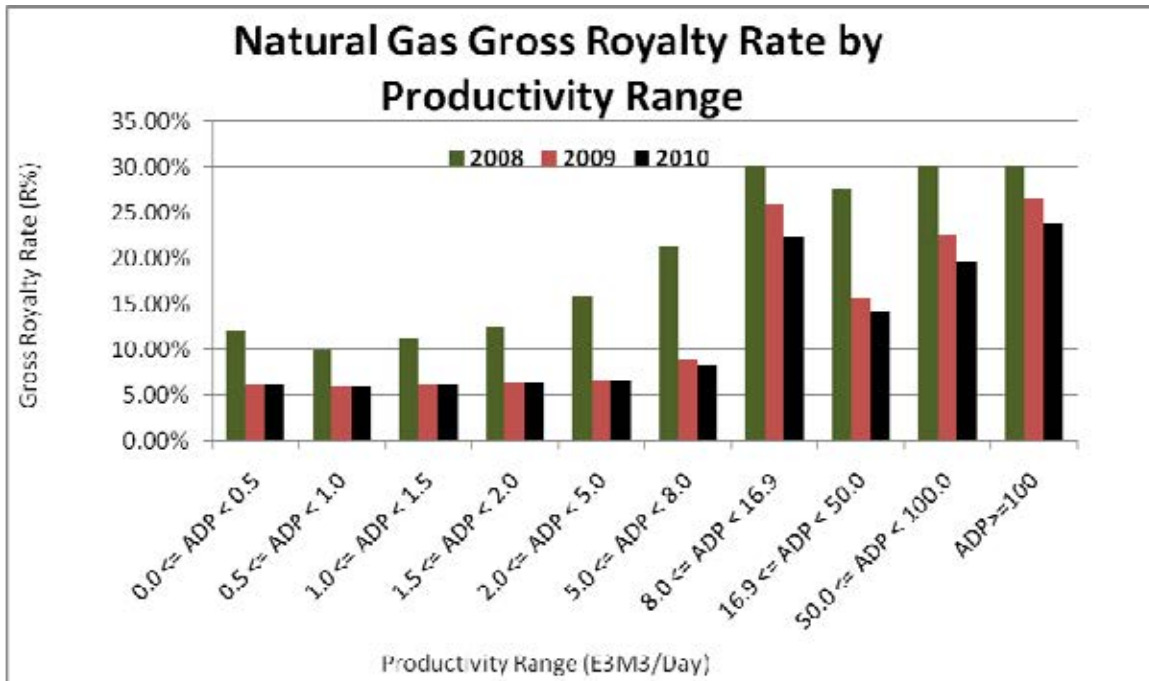


Table 24

Crown Royalty Amounts - 2008, 2009 and 2010			
Productivity Range E3M3/Day	Holiday Amount (\$Million) ¹		
	2008	2009	2010
0.0 <= ADP < 0.5	0.52	0.04	0.09
0.5 <= ADP < 1.0	0.42	0.06	0.09
1.0 <= ADP < 1.5	0.86	0.08	0.13
1.5 <= ADP < 2.0	1.42	0.10	0.17
2.0 <= ADP < 5.0	18.49	0.61	1.02
5.0 <= ADP < 8.0	26.75	0.90	1.63
8.0 <= ADP < 16.9	81.50	35.52	48.38
16.9 <= ADP < 50.0	85.18	6.95	8.56
50.0 <= ADP < 100.0	149.11	41.49	42.54
ADP >= 100	72.94	42.43	45.60
Total	\$437.2	\$128.2	\$148.2

Source: Alberta Energy

1. In 2008 Deep Gas Holiday Program (DGRHP) was the only royalty holiday program for the true vertical depth (TVD) greater than 2,500 metres; since 2009 holiday includes Natural Gas Deep Drilling Program (NGDDP) and New Well Royalty Reduction (NWRR). The NGDDP was modified beginning May 2010.

Chart 24A

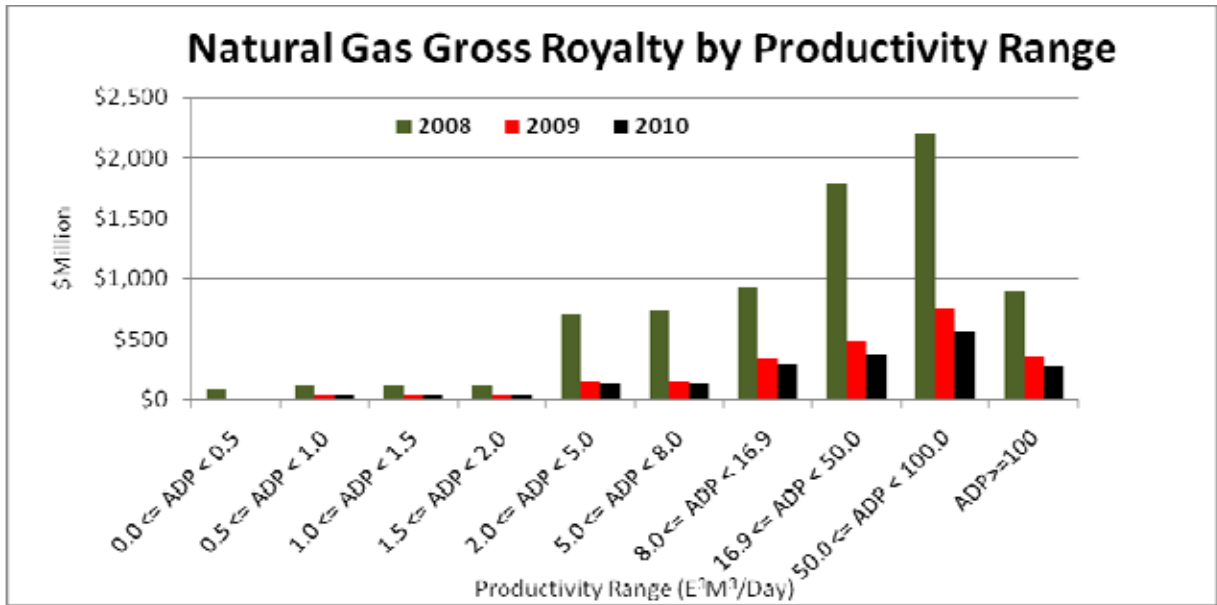


Chart 24B

