Williams Production RMT Company

Increased Well Density in Trail Ridge Field

Docket #: 0512-AW -22

Cause: 510

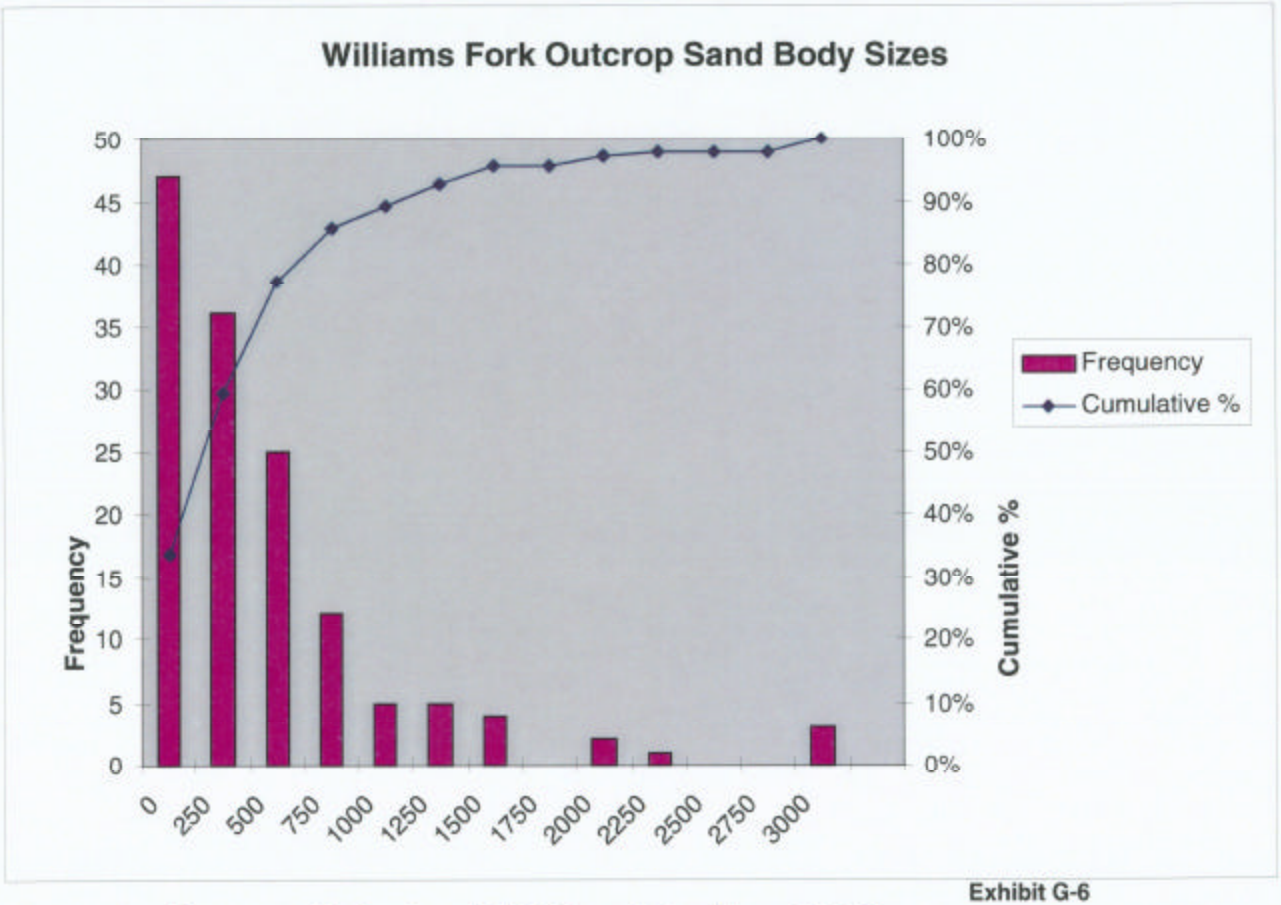
November 22, 2005 (Administrative Hearing)

1. Land

2. Geology

3. Engineering

4. Resumes



Average Extents of 136 Sand Bodies=682 ft

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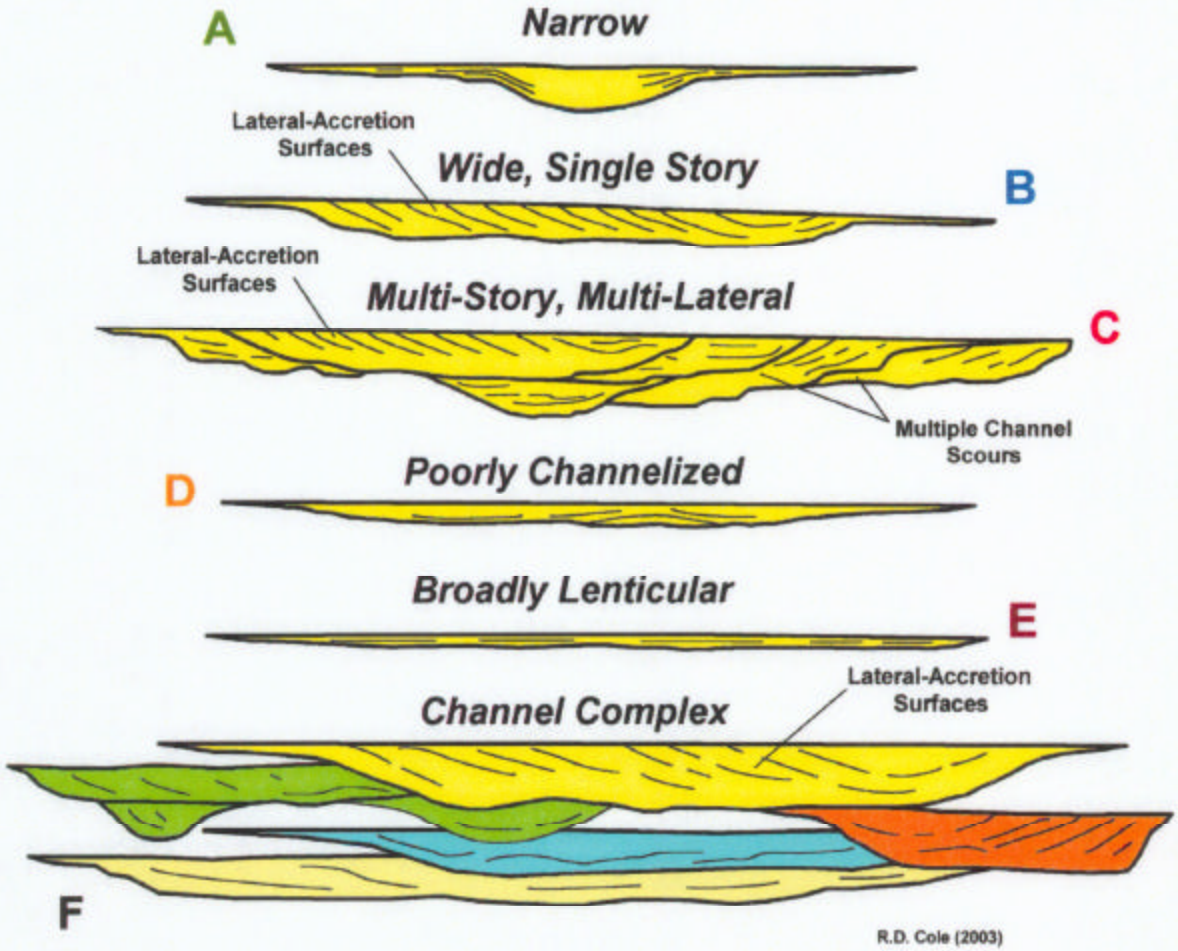

General Statistics

	N	Average Thickness (Ft) Min	Max	Mean	S.Dev.	Apparent Width (Ft) Min	Max	Mean	S.Dev.
Type A	9	3.5	21.0	9.2	6.6	46.4	290.5	98.5	74.0
Type B	30	4.1	18.0	8.8	3.5	112.0	2,316.3	505.1	450.3
Type C	55	4.5	29.0	13.8	5.1	139.7	2,791.1	814.8	545.3
Type D	14	2.5	9.1	5.4	1.9	72.9	510.4	234.8	152.5
Type E	28	0.5	6.5	2.8	1.5	40.1	843.3	275.7	201.9

Figure 30. Classification of fluvial sandbodies in the Coal Canyon and Main Canyon areas. Types A through E occur in the lower (sand-poor) Williams Fork Formation, whereas type F occurs in the upper (sand-rich) Williams Fork. Statistical data were not collected for the type F sandbodies during this study. Sandbody models modified from Hirst (1991).

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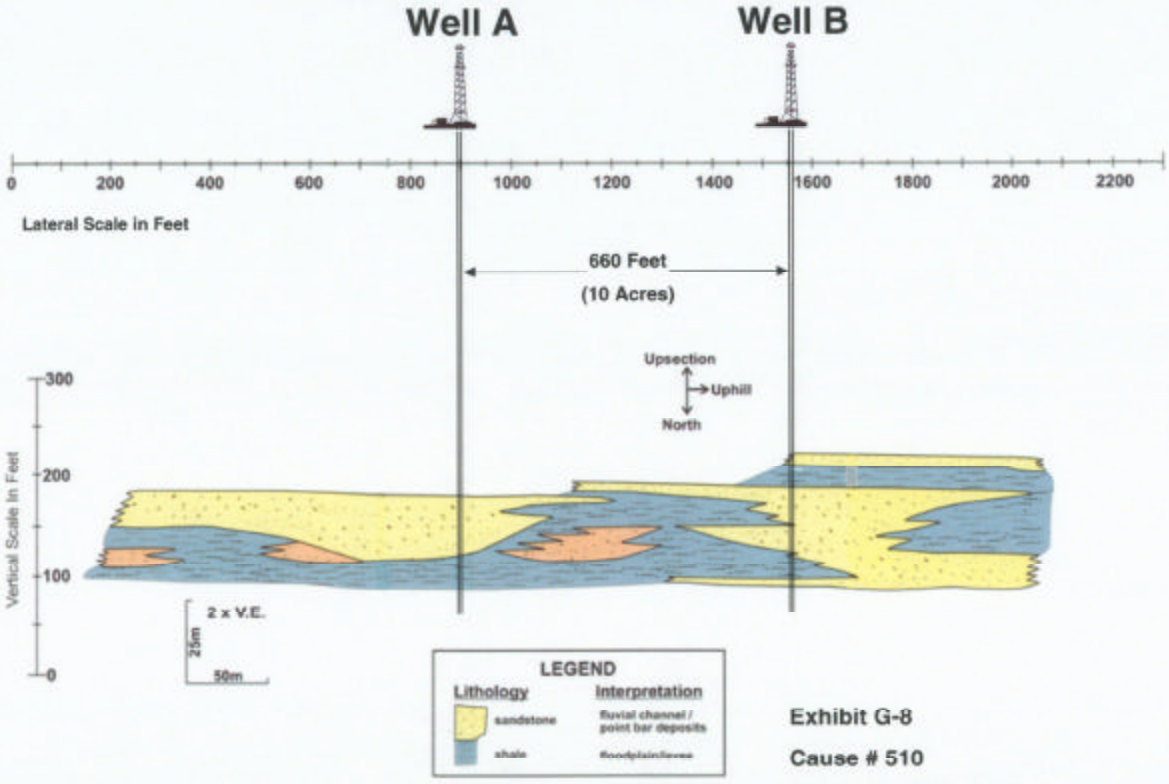
Modified from Cole 2003

Williams Fork Sandstone Bodies With Hypothetical 10-Acre Wells



Outcrop of lens 8, west side of Rifle Gap, modified from Lorenz, 1982 (Pg. 28, Fig. 12).

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10-Acre Pilot Summary

	Grand Valley	Rulison	Total
Acres:	160	160	320
Existing Wells: (20-Acre Well Density)	8	8	16
Wells Drilled: (10-Acre Well Density)	8	8	16
Pressure Tests: (Individual Sands)	95	124	219
Microseismic Monitored Hydraulic Fracs:	6	8	14

Other Tests: 4 Production Logs, 7 RFT tests, 4 FMI logs

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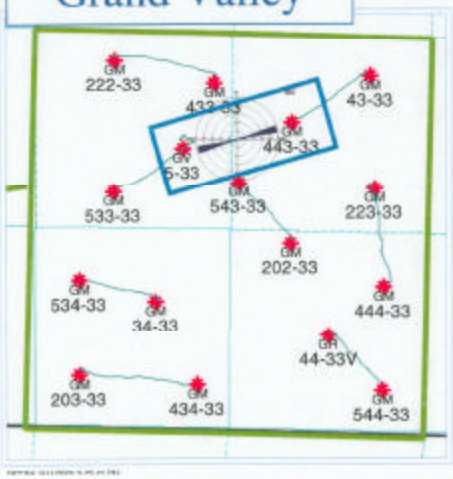
Orientation is Critical

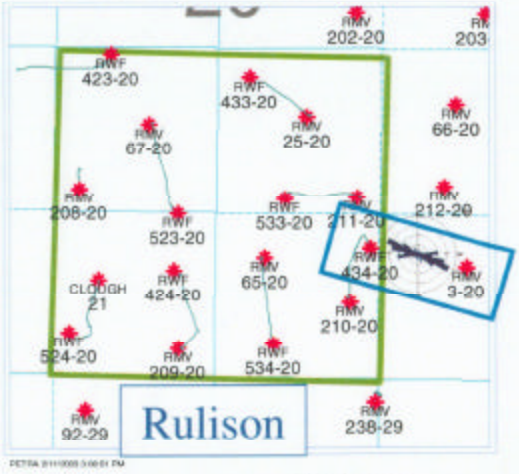
Grand Valley



One well in each pilot was on direct fracture orientation to a parent well.

(GM 443-33 and RWF 434-20)

- Those 2 wells on exact orientation were poorer performers and measured significant depletion
- All other 10-Acre wells (including those as close as 300 feet off orientation) performed at field average



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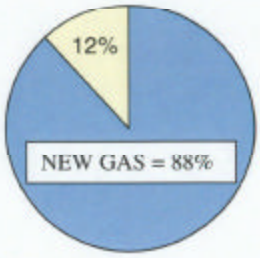
Grand Valley Pressure Testing Summary

Type of Test	# of Tests	No Depletion	Partially Depleted
20-acre Pilot Pressure Tests	7	6 86%	1 14%
Total 10-acre Pilot Pressure Tests	95	78 82%	17 18%
10-acre Pilot Pressure Tests (Without "Orientation Well")	75	66 88%	9 12%

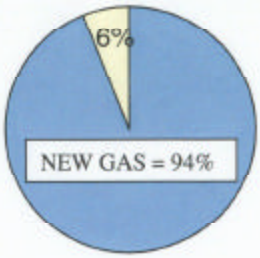
Grand Valley Reserves



Rulison Pressure Testing Summary

Type of Test	# of Tests	No Depletion	Partially Depleted
20-acre Pilot Pressure Tests	7	7 100%	0 0%
Total 10-acre Pilot Pressure Tests	124	109 88%	15 12%
10-acre Pilot Pressure Tests (Without "Orientation Well")	98	92 94%	6 6%

Rulison Reserves



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No Depletion: Virgin Reservoir Pressure or slightly less than virgin reservoir pressure (gas is not being effectively produced from offset wells)

Partially Depleted: Less than 75% of virgin reservoir pressure (gas from some sand bodies is being produced from offset wells)

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Pressure Test Summary – Grand Valley and Rulison Fields

- Minimal amount of depletion measured
- Significant depletion seen when wells are on exact orientation with old parent wells
- Pressure test results conform to geologic model
- Even with some pressure reduction, 10-Acre wells will still produce significant incremental gas reserves at economic rates (see production results)

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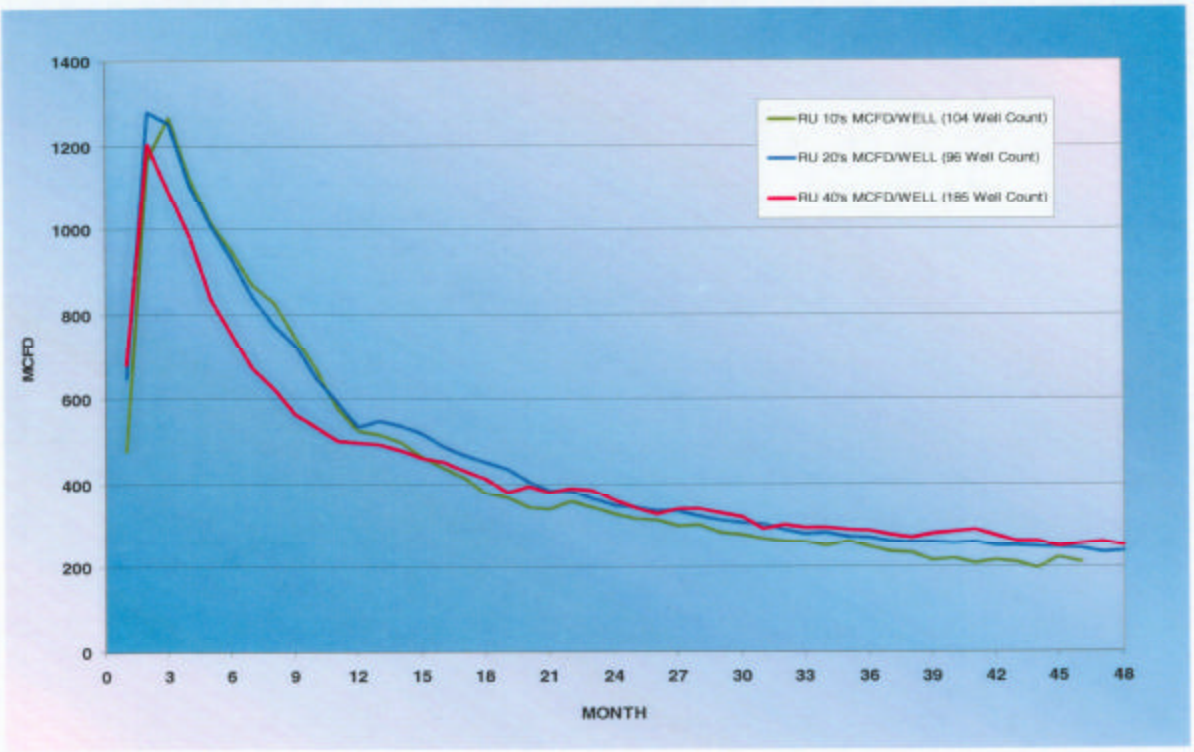
Rulison Average Monthly Production Comparison



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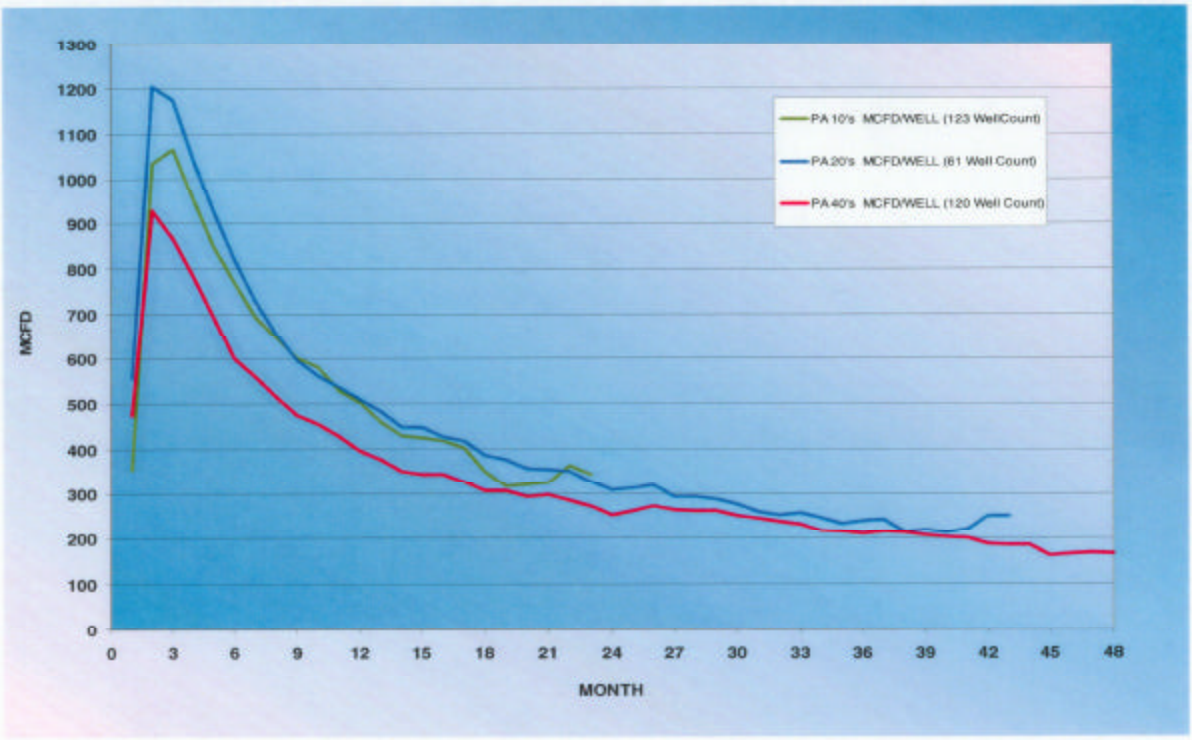
Parachute Average Monthly Production Comparison



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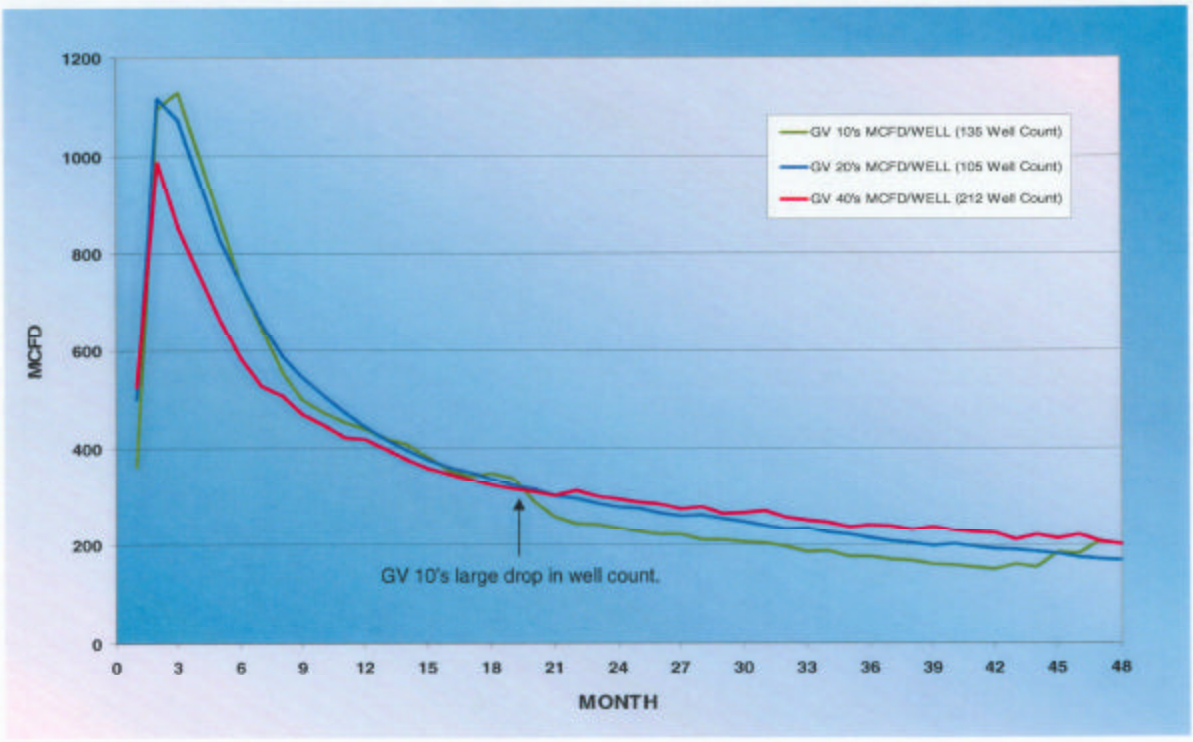
Grand Valley Average Monthly Production Comparison



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Summary Of Gas In Place And Recoverable Gas

Field Average GIP

GAS IN PLACE PER 640 ACRES-WILLIAMS FORK

USGS 1987 Report	110.9 BCF	} Independent Research Reports
MWX Project - Rulison	120.9 BCF	
GRI 1999 Report	70 – 170 BCF	

Barrett 1995 GIP Analysis 87.0 BCF Grand Valley/Parachute
93 Well Survey 122.0 BCF Rulison

Grand Valley 2002 Analysis 105.0 BCF
Parachute 2002 Analysis 120.0 BCF
Rulison 2002 Analysis 135.0 BCF

Recovery Factors at Different Well Densities

Well Density	Grand Valley @1.30 BCF/Well	Parachute @1.40 BCF/Well	Rulison @1.60 BCF/Well
640 Acres	1%	1%	1%
320 Acres	2%	2%	2%
160 Acres	5%	5%	5%
80 Acres	10%	9%	10%
40 Acres	20%	19%	19%
20 Acres	40%	37%	38%
10 Acres*	79%	75%	76%

* Application Density

Pilot Area GIP

GAS IN PLACE PER 160 ACRES - WILLIAMS FORK

Grand Valley 26.3 BCF
Rulison 33.8 BCF

Grand Valley Pilot:
EUR From Parent Wells (20-Acre Density):
11.3 BCF (43% Recovery)
EUR From 10-Acre Wells (10-Acre Density):
8.7 BCF + 11.3 BCF = 20.1 BCF (76% Recovery)

Rulison Pilot:
EUR From Parent Wells (20-Acre Density):
12.1 BCF (36% Recovery)
EUR From 10-Acre Wells (10-Acre Density):
10.2 BCF + 12.1 BCF = 22.3 BCF (66% Recovery)

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Summary Of Well Economics – Trail Ridge Field

Assumptions:
Estimated Ultimate Recovery: 1.2 Bcf (Range: 0.9 – 1.5 Bcf)
Total Capital Cost/Well: $1,840,000
Monthly Operating Cost/Well: $1,750
Working Interest: 100%
Net Revenue Interest: 84%
Tailgate Pricing: $6.40/Mcf

Economic Calculations:
After-Tax Payout: 2.4 Years
After-Tax Rate-of-Return: exceeds Williams' internal hurdle rate

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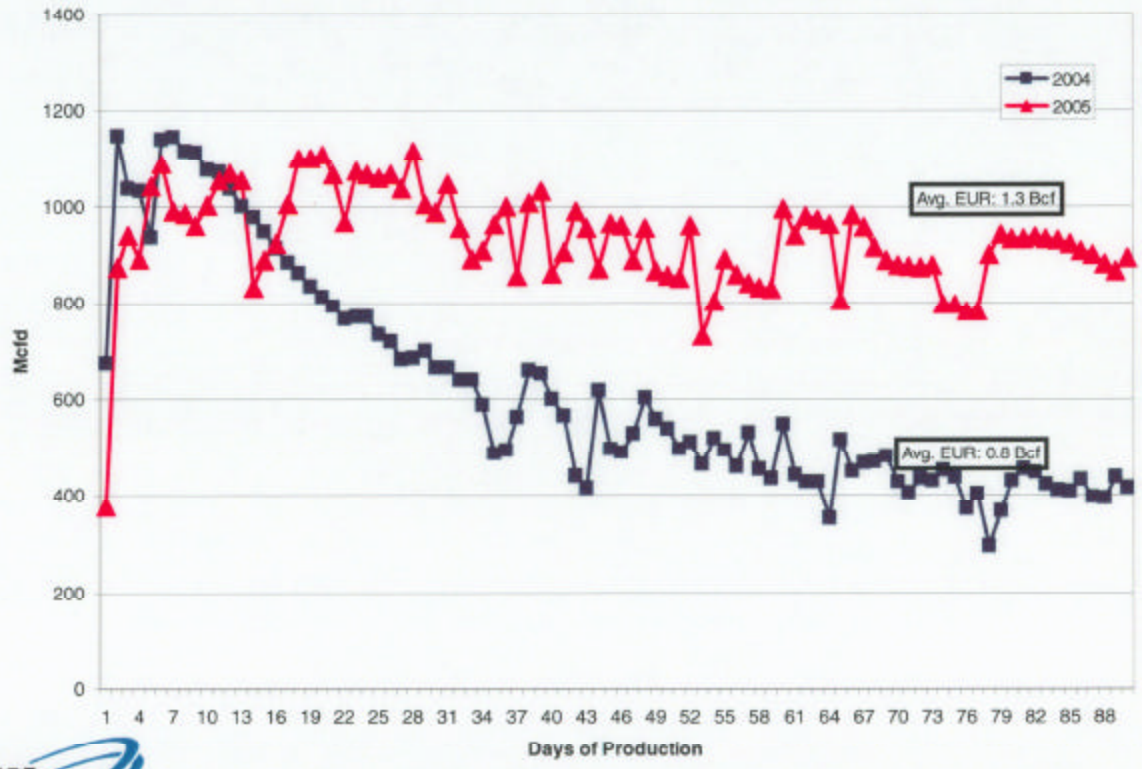
Trail Ridge Field Production Results – 2004/2005



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