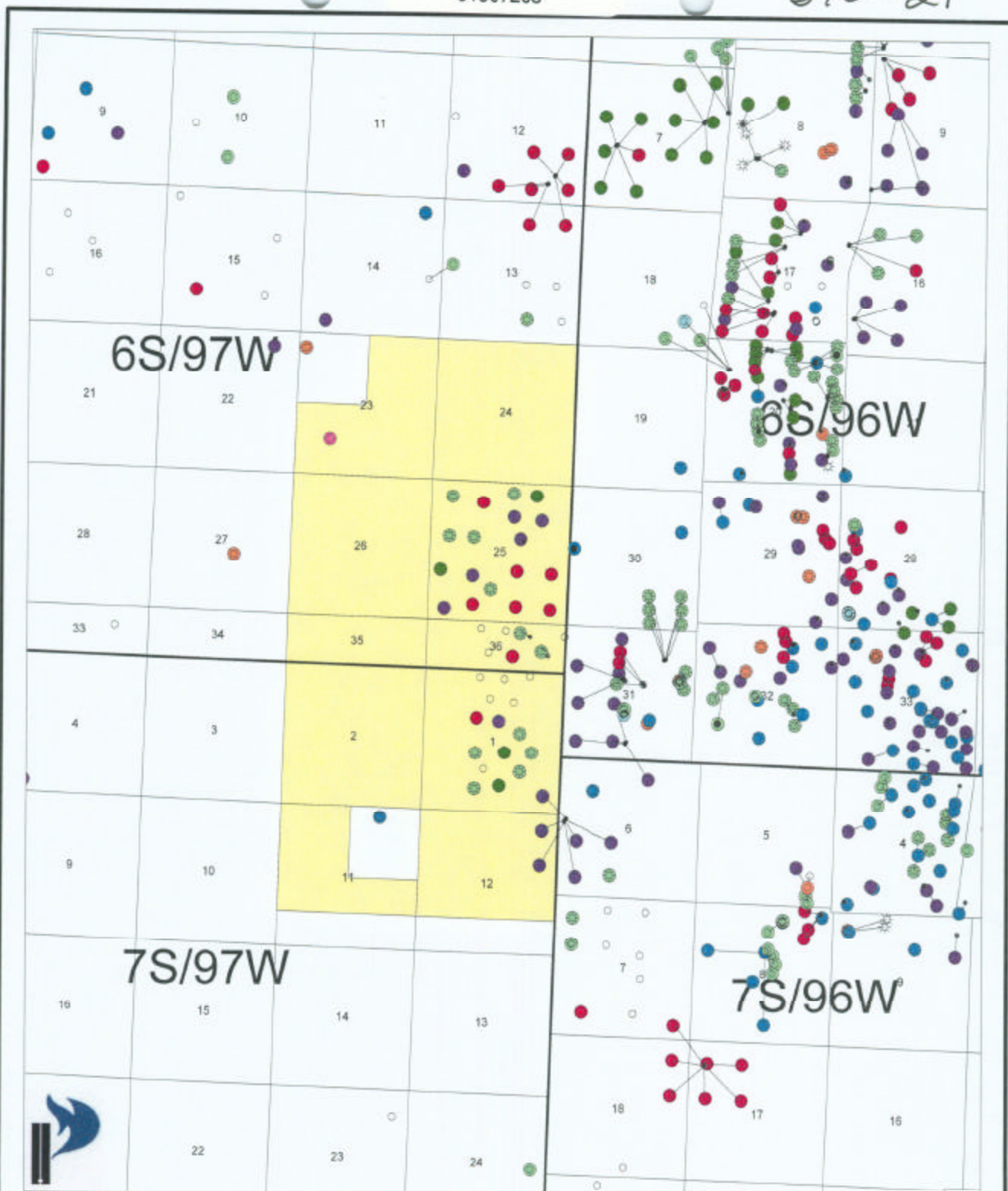




01367268

510-21

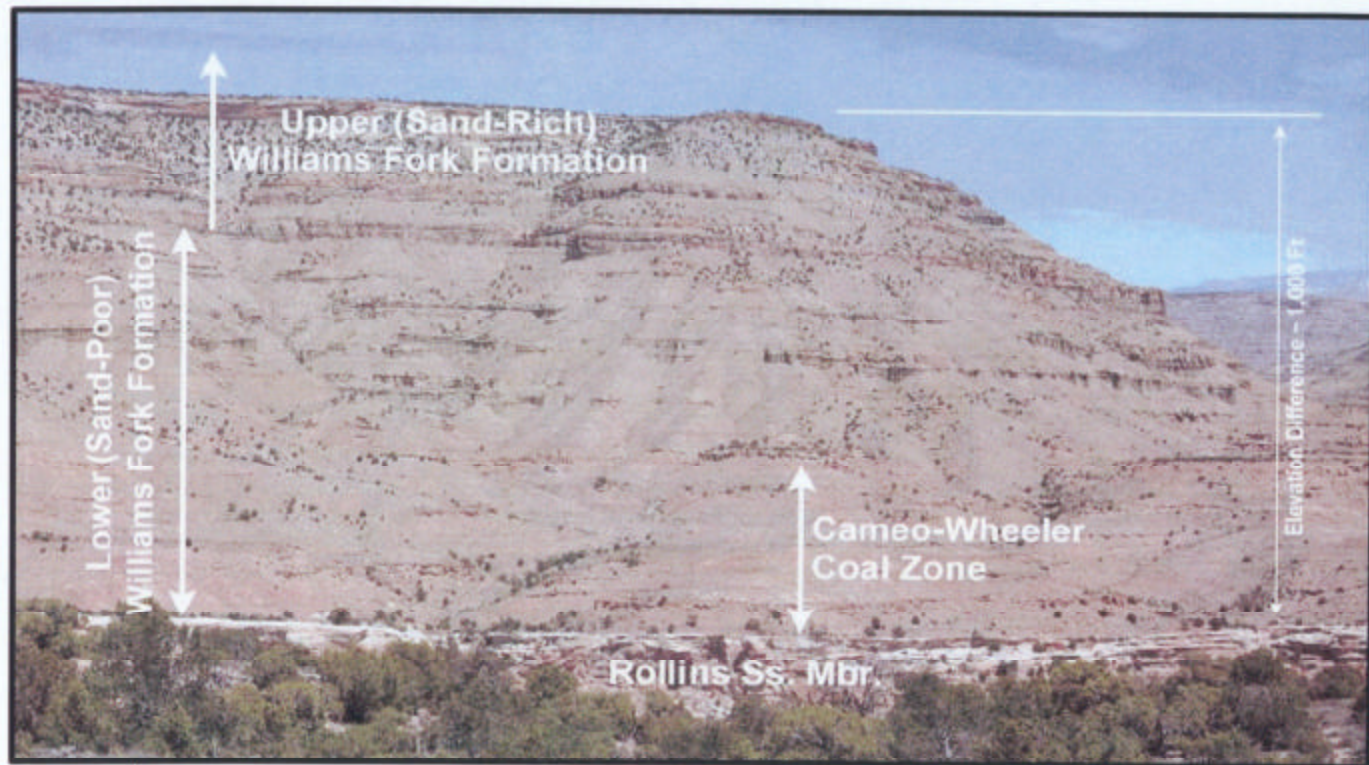
**Legend**

- | | |
|--------------|------------------------|
| Spud in 2006 | Spud from 2000 to 2002 |
| Spud in 2005 | Spud from 1993 to 1999 |
| Spud in 2004 | Spud from 1985 to 1992 |
| Spud in 2003 | Spud before 1985 |

Petroleum Development Corporation**Application Lands**

Cause 510
Docket 0603-AW-06
Exhibit L-1

Garfield County, Colorado
Administrative Hearing
April 13, 2006



Mesaverde outcrop near Cameo, Colorado illustrating the discontinuous nature of the Williams Fork Sandstones. The lower two-thirds of the outcrop is comprised of a sand-poor interval where there is significant discontinuity of individual sandstone bodies. The upper one-third of the outcrop is comprised of more laterally continuous sandstone bodies in a more sand-rich environment of deposition.

From Cole, Rex and Cunnella, Steve, 2003 RMAG-AIPG Field Trip Guidebook, Stratigraphic Architecture and Reservoir Characteristics of the Mesaverde Group, Southern Piceance Basin, Colorado

Petroleum Development Corporation

Mesaverde Outcrop, Coal Canyon

Cause 510

Docket 0603-AW-06

Exhibit G-1

Garfield County, Colorado

Administrative Hearing

April 13, 2006



Landsat Digital Mosaic of the Mississippi River Valley Illustrating Meanderbelt Complexes

From Atlas of North America, Space Age Portrait of a Continent
Published by National Geographic Society

Petroleum Development Corporation

Landsat Image - Mississippi River

Cause 510

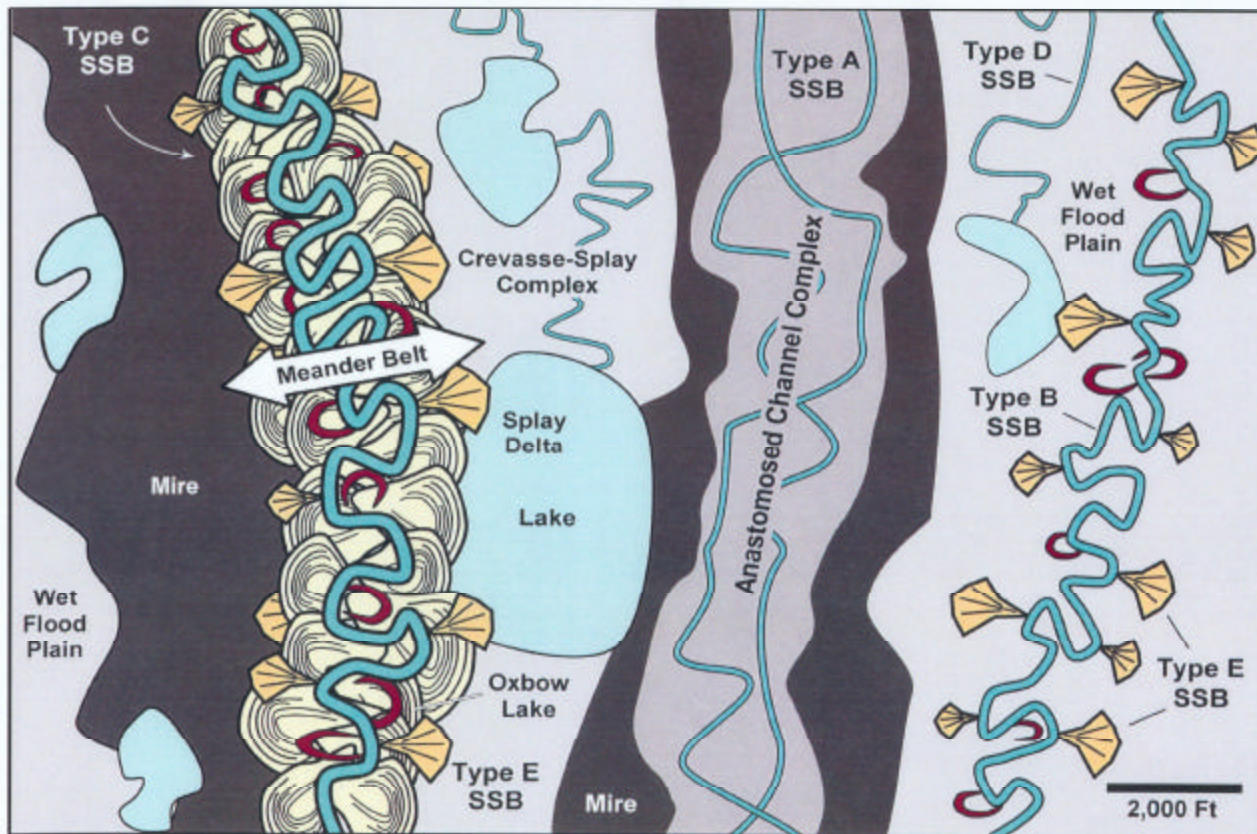
Docket 0603-AW-06

Exhibit G-2

Garfield County, Colorado

Administrative Hearing

April 13, 2006



Sand-Body Types and Depositional Models from the Lower Williams Fork Formation, Coal Canyon, Colorado

(Cole, Rex D. and Cumella, Stephen P., 2005 RMAG Mountain Geologist Vol. 42 No. 3)

Petroleum Development Corporation

Depositional Model for Wms Fk

Cause 510

Docket 0603-AW-06

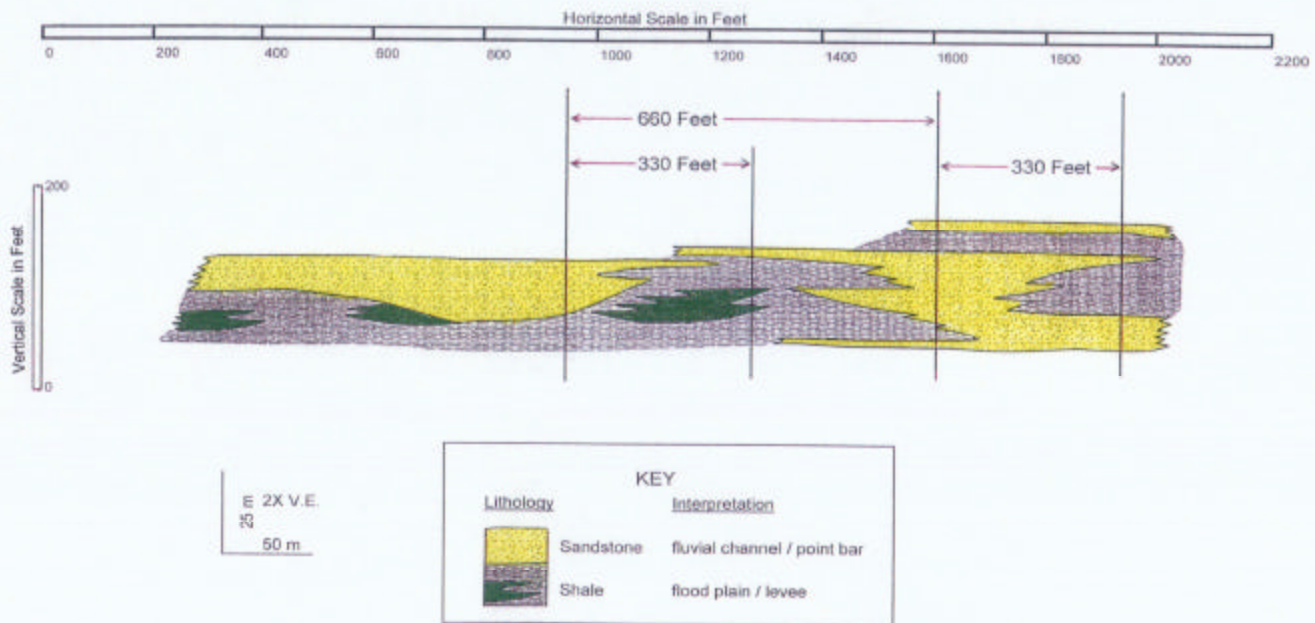
Exhibit G-3

Garfield County, Colorado

Administrative Hearing

April 13, 2006

Rifle Gap Williams Fork Outcrop Diagram

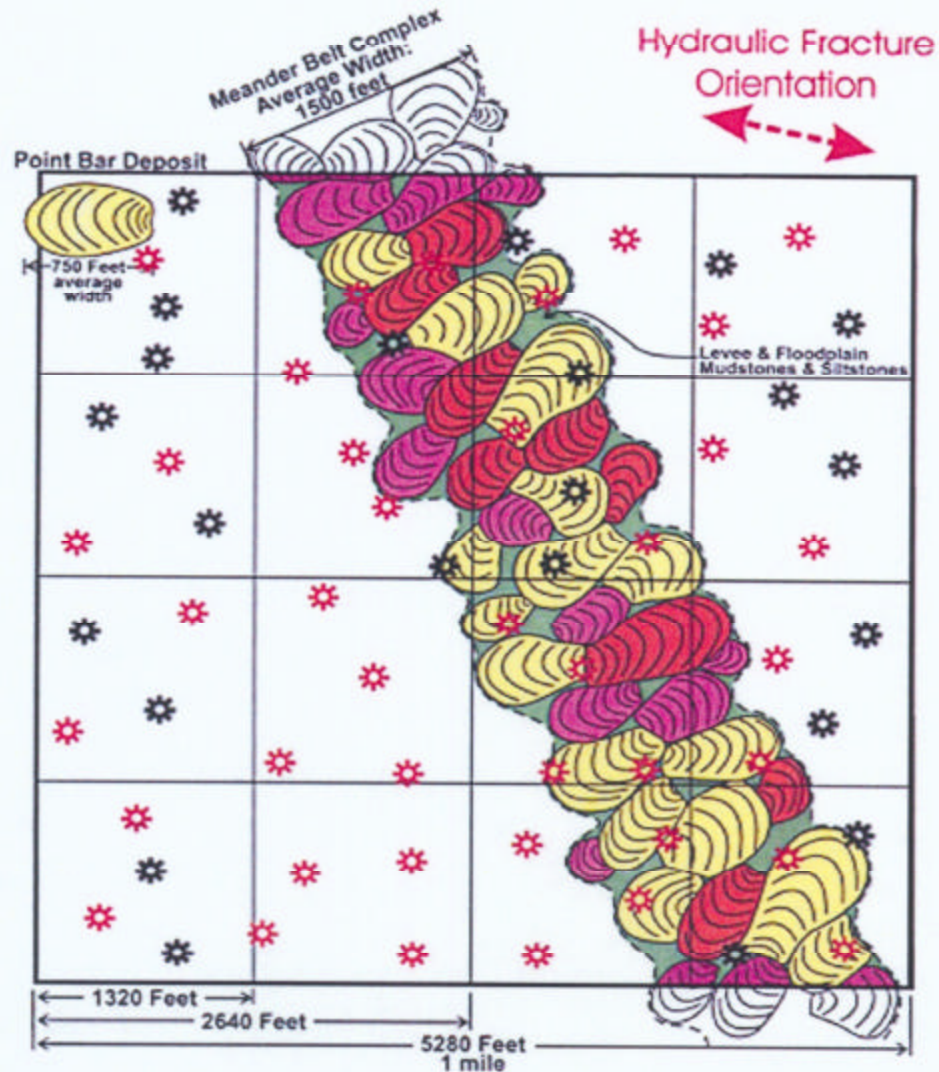


Stratigraphic diagram based upon examination of Williams Fork outcrop in Rifle Gap, approximately 20 miles east of application area, illustrating the reservoir heterogeneity of the Williams Fork sandstones. 660 feet approximates the distance between wells drilled on 10-acre spacing, if drilled within the centers of qtr/qtr/qtr sections.

Modified from Lorenz, John, 1982, Sedimentology of the Mesaverde Formation at Rifle Gap, Colorado..., Sandia National Laboratories Report SAND 82-0604)

Petroleum Development Corporation	
Rifle Gap Outcrop Diagram	
Cause 510	Garfield County, Colorado
Docket 0603-AW-06	Administrative Hearing
Exhibit G-7	April 13, 2006

Compartmentalization of Hypothetical Meanderbelt Section 20, T6S-R94W, Rulison Field



Section Drilled on 10-Acre Well Density

- ✱ — Existing Gas Well
- ✱ — Undrilled Gas Well
- Point Bar Sandstone Deposit
- Meander Belt Complex
- Drained Reservoir
- Partially to Poorly Drained Reservoir
- Undrained Reservoir

EXHIBIT B9

Docket # 0304-AW-03



Petroleum Development Corporation

Reservoir Compartmentalization

Cause 510

Docket 0603-AW-06

Exhibit G-8

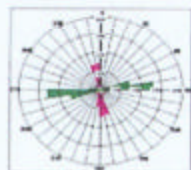
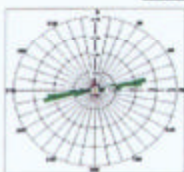
Garfield County, Colorado

Administrative Hearing

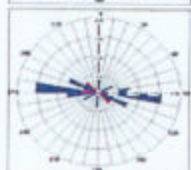
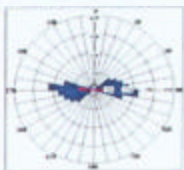
April 13, 2006

FMI and Microseismic Results

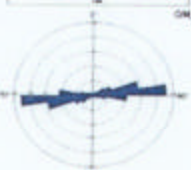
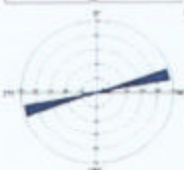
Grand Valley



Drilling Induced Fractures

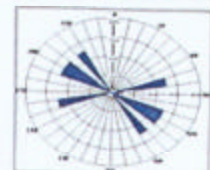
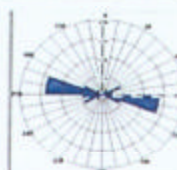
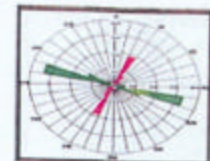


Natural Fractures



Hydraulic Fractures

Rulison



FMI and Microseismic confirm both hydraulic and natural fracture orientations are approximately the same



Exhibit: D-4
Docket #: 0304-AW-03

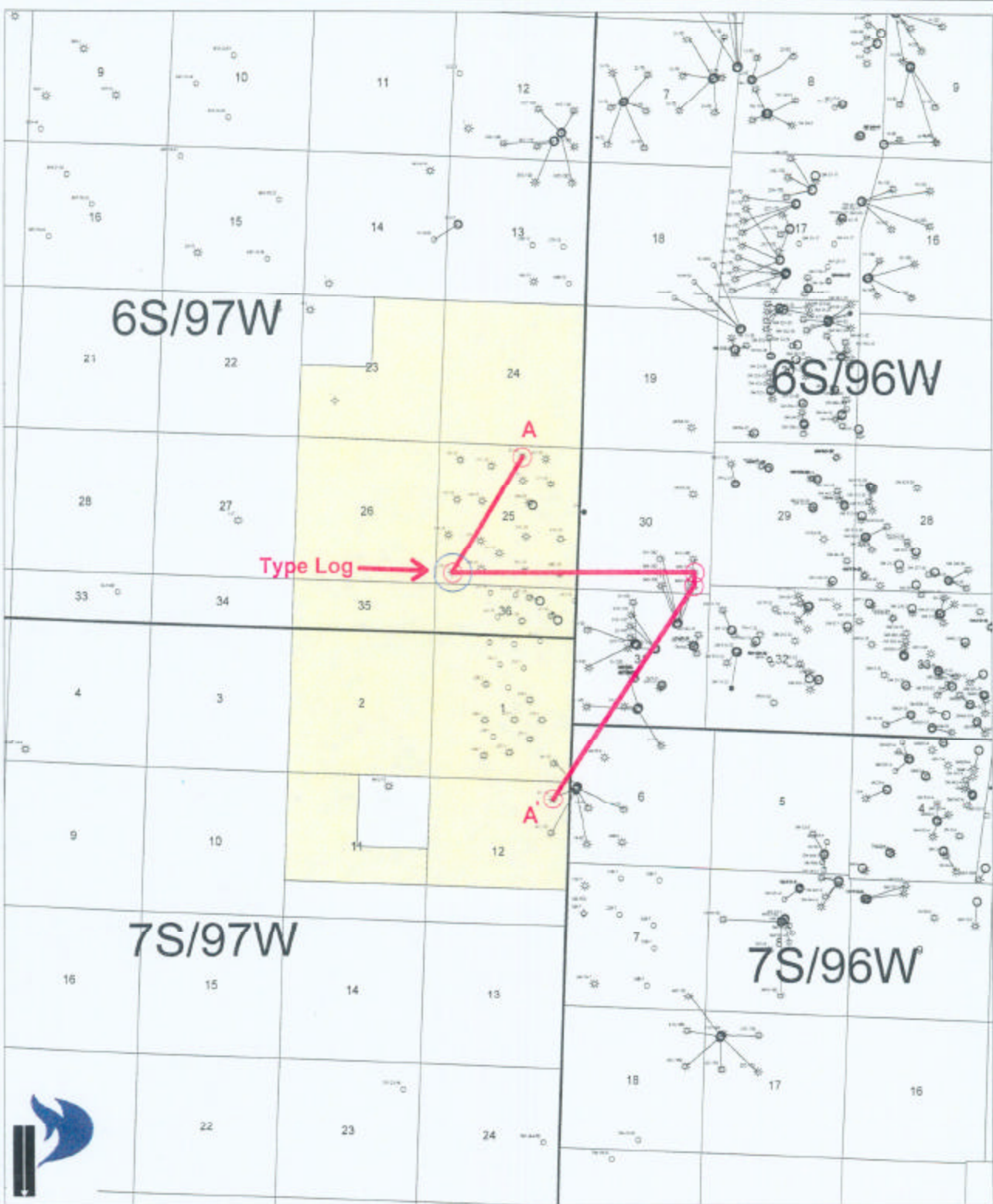


The high degree of anisotropy of Natural, Drilling Induced, and Hydraulic Fractures, which all are oriented approximately the same, further enhances the highly compartmentalized nature of the Williams Fork reservoir. Development can readily be conducted on well spacings of significantly less distance than the average width of sand bodies, especially when wells are oriented perpendicular to the fracture network.

Petroleum Development Corporation FMI and Microseismic Results

Cause 510
Docket 0603-AW-06
Exhibit G-9

Garfield County, Colorado
Administrative Hearing
April 13, 2006



Logs used for Cross Section



Type Log



Petroleum Development Corporation

Type Well Location and Cross Section

Cause 510
Docket 0603-AW-06
Exhibit G-10

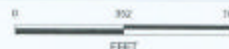
Garfield County, Colorado
Administrative Hearing
April 13, 2006

Grand Valley 10-Acre Pilot SE/4 33-T6S-R96W

Well Name



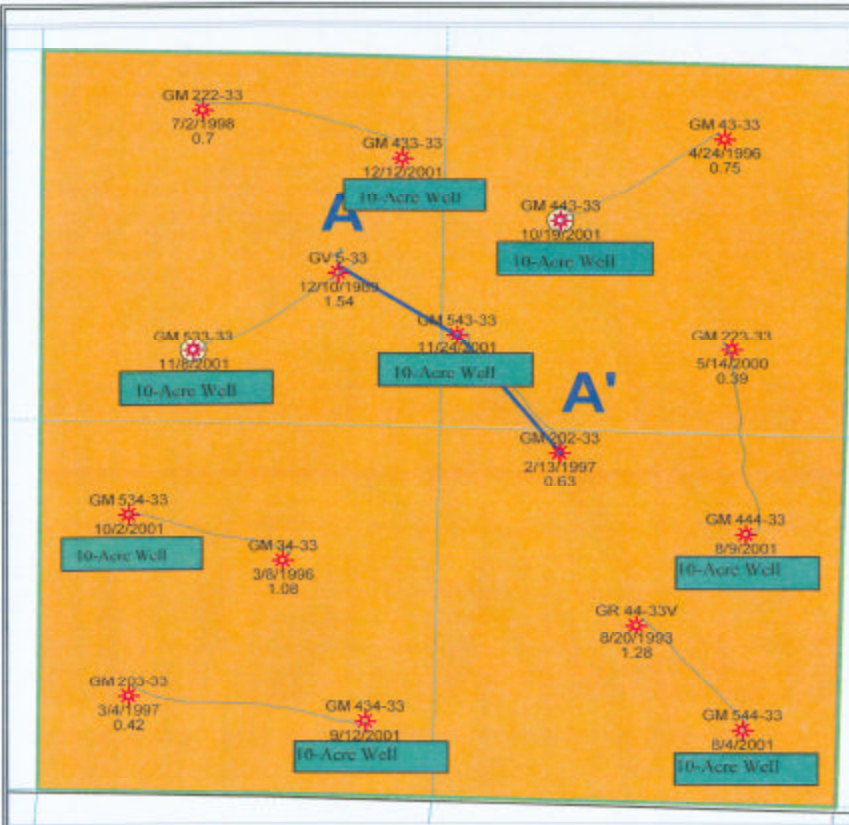
Spud Date
Cum Prod (BCF)



POSTED WELL DATA

WELL NAME
WELL - SPUD DATE
WELL - CUM PROD (BCF)

ATTRIBUTE MAP



Petroleum Development Corporation

Well Location Map
Grand Valley 10-Acre Pilot

Cause 510
Docket 0603-AW-06
Exhibit E-1

Garfield County, Colorado
Administrative Hearing
April 13, 2006

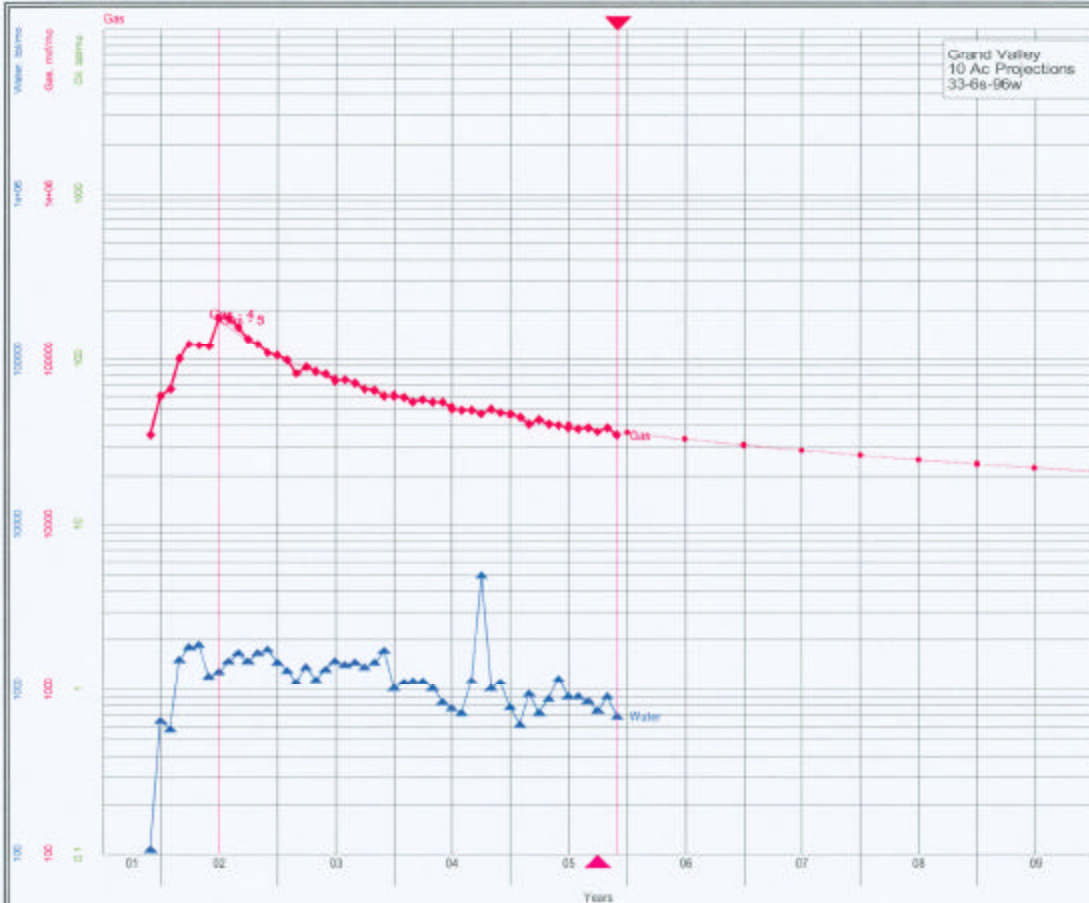


Gas, mcf/mo	Gas - 3
Qual= Gas - 3	
Ref= 12/2005	
Cum= 11606960	
Rem= 3663019	
EUR= 15269999	
Yrs= 32.081	
Qref= 25049.5	
De= 8.506595	
Dmin= 7.000	
b= 1.700000	
Qab= 2400.0	
Water, bbl/m	
Ref= 12/2005	
Cum= 137481	



Petroleum Development Corporation

Grand Valley Pilot, 20-Acre and 10-Acre Rate Projections	
Cause 510	Garfield County, Colorado
Docket 0603-AW-06	Administrative Hearing
Exhibit E-5	April 13, 2006



Oil, bbl/mo
Ref= 12/2005
Cum= 0

Gas, mcf/mo
Qual= Gas - 5
Ref= 12/2005
Cum= 3565155
Rem= 4394170
EUR= 7959325
Yrs= 33.832
Qref= 36981.1
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Dm= 7.000
b= 1.297376
Qab= 2400.0

Water, bbl/mo
Ref= 12/2005
Cum= 59797



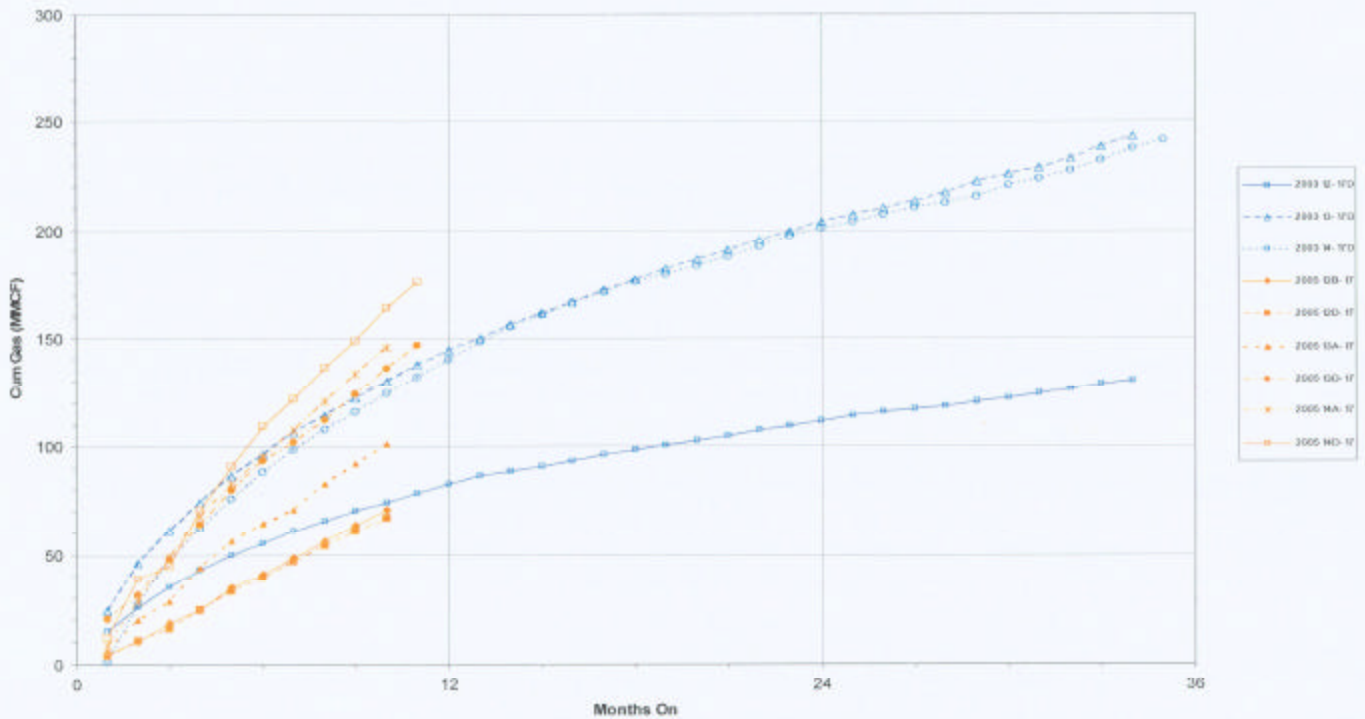
Petroleum Development Corporation

Grand Valley Pilot, Rate Projection
for 10-Acre Wellbores

Cause 510
Docket 0603-AW-06
Exhibit E-6

Garfield County, Colorado
Administrative Hearing
April 13, 2006

W/2 W/2 Section 17-T6S-96W
Well Cumulative Gas Vs Months On Production



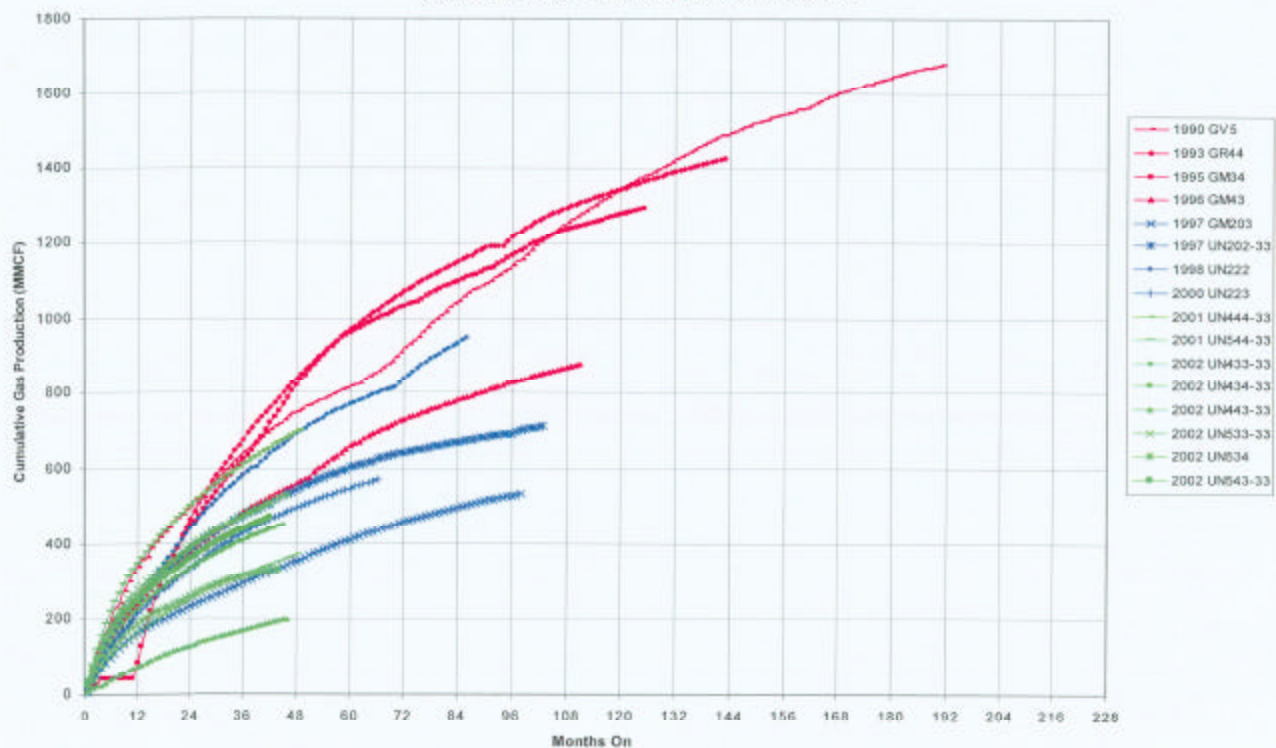
Petroleum Development Corporation

W/2 W/2, 17-6S-96W,
Well Cumulative Production Versus Time

Cause 510
Docket 0603-AW-06
Exhibit E-9

Garfield County, Colorado
Administrative Hearing
April 13, 2006

Grand Valley 10-Acre Pilot Area
S33-T6S-R96W
Cumulative Gas Production Versus Months On



Petroleum Development Corporation

Grand Valley Pilot,
Well Cumulative Production Versus Time

Cause 510

Docket 0603-AW-06

Exhibit E-4

Garfield County, Colorado

Administrative Hearing

April 13, 2006