Pressure data show the Gaucho Unit wells are in communication

The attached map shows the location of the Gaucho Unit wells, which share a common reservoir. The first well drilled was the Gaucho Unit #1 (1650' FNL and 1650' FEL Sec. 29. T22S, R34E), which spudded May 31, 1996, and was completed in October of the same year. The well's initial bottom hole pressure was 8407 psi and is the first point (leftmost) on the P/Z curve attached.

The second well drilled was the Gaucho Unit #2Y (1650' FSL and 1725' FWL, Sec 29, T22S, R34E) which was spudded April 4, 1997, and completed in July of 1997. During completion wireline parted and left the strip gun and approximately 11,000 feet of wireline in the tubing. Due to this a bottom hole pressure was not taken.

The third well drilled in the common reservoir was the Gaucho 21 Federal #1 (1980' FSL and 660' FWL, Sec 21, T22S, R34E) which was spudded August 8, 1998, and completed in December, 1998, with an initial bottom hole pressure of 5741 psi. This is the second data point on the attached P/Z curve.

The fourth well drilled was the Gaucho Unit #3 (660' FSL and 1650' FWL, Sec 20, T22S, R34E) which was spudded January 17, 1999 and completed in April, 1999, with an initial bottom hole pressure of 5185 psi. The Gaucho Unit #3 is the third data point on the attached P/Z curve.

Subsequent pressures have been taken from the Gaucho Unit #3 and the Gaucho 21 Federal #1 wells and are listed on the P/Z curve. The cumulative production shown on the curve is the total production from the Gaucho Unit #1, #2Y, #3 and the Gaucho 21 Federal #1. These points clearly define a straight line, which indicates that the wells are pressure connected and draining a common reservoir. These wells were drilled on 320-acre spacing and drain greater than 320 acres.

Well Name:

Gaucho Unit Wells - Common Reservoir

Field:

Bell Lake North

Formation:

Morrow

Location:

Lea Co., NM

Gas Gravity :	0.500	
	0.590	
Misc Gas ? (yes=1):	1	
Reservoir Temp:	192	°F
Surface Temp :	70	°F
Depth of Zone :	12,955	feet
Tubing Diameter :	1.995	inches

% N2	0.41	%
% CO2	0.48	%
% H2S	0.00	%

	Cumulative			Measured			
	Prod	Measured	Calculated	SIBHP	Calculated		
Date	(Mmcf)	SITP (psi)	SITP (psi)	(psi)	SIBHP (psi)	Z Factor	BHP/Z
10/28/96	-		6,876	8,407	n/a	1.2703	6,618
11/24/98	7,210		4,482	5,741	n/a	1.0615	5,408
4/13/99	9,006		4,004	5,185	n/a	1.0223	5,072
7/19/99	11,291		3,461	4,537	n/a	0.9807	4,626
7/24/99	11,391		3,444	4,516	n/a	0.9795	4,610
7/19/00	18,147		2,356	3,141	n/a	0.9170	3,425
			n/a		n/a		

Remarks

#1 BHPBU 10/28/96
"21" #1 BHPBU 11/24/98
"3" BHPBU 4/13/99
"21" #1 BHPBU 7/19/99
"3" BHPBU 7/24/1999
"3" BHPBU 7/19/2000

DATE	ВНР
10/28/96	8,407
11/24/98	5,741
4/13/99	5,185
7/19/99	4,537
7/24/99	4,516
7/19/00	3,141

