

Economic Comparisons-W/2-Section 12-T29N-R13W

San Juan County, NM

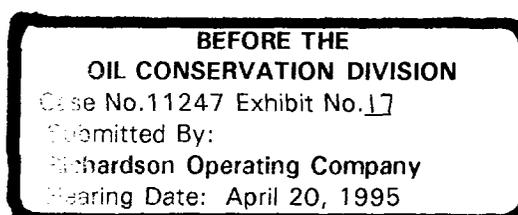
The following parameters were held constant, both for ROPCO and Amoco:

Working Interest	100%
Net Revenue Interest	80%
First day of Production	January 1, 1996
State, Severance and Ad Valorem Tax	8.26%
Escalation of operating costs	3% annually after 12/96
Water Injection Costs (\$/bbl)	1.25
Gas Price (\$/MCF)	1.39, escalated 3% annually after 12/96

Performance:	Pictured Cliffs	P. Cliffs & Fruitland C.
Gas initial Rate (MCF/day)	600	850
Gas annual decline rate	10%	10%
Initial water production rate (bbl/day)	60	75
Water annual decline rate	10%	10%

The values that varied between ROPCO and Amoco are:

- Drilling and completion costs
- Operating costs
- Compression



A: Pictured Cliffs

The cost to drill and complete a Pictured Cliffs well is \$123,272 for ROPCO and \$186,260 for Amoco, as taken from ROPCO's adjusted actual costs (E/2-12) and Amoco's AFE. See Appendix I for tabulation of monthly lease operating costs.

Case 1: Compressors are rented, maintenance free. Monthly rental payment is \$1,646 for ROPCO (bid received) and \$2,500 for Amoco (from AFE).

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	1,793,491	1,644,490	149,001
Life of Project to Economic Limit (yrs, mos)	19, 1	15, 1	4, 0
Net Cash Flow (Undiscounted)	\$1,122,858	\$752,576	\$370,282
Net Cash Flow (Discounted at 10%)	\$647,115	\$445,488	\$201,627
Profit / Investment Ratio	9.11	4.04	5.07
Total Capital Expenses	\$123,272	\$186,260	(\$62,988)

Case 2: Compressors are purchased and financed over 4 years at 9% annually. The purchase prices are \$85,000 for ROPCO (bid received) and \$120,000 for Amoco. For Amoco, an additional run was made with 5 years of financing at 9% annually (from AFE).

	ROPCO	AMOCO	Variance
	4 year plan	4 year plan	
Gas Reserves (MCF)	1,945,447	1,902,962	42,485
Life of Project to Economic Limit (yrs, mos)	26, 4	23, 8	2, 8
Net Cash Flow (Undiscounted)	\$1,475,492	\$1,221,232	\$254,260
Net Cash Flow (Discounted at 10%)	\$725,403	\$580,123	\$145,280
Profit / Investment Ratio	11.97	6.56	5.41
Total Capital Expenses	\$123,272	\$186,260	(\$62,988)

Case 3: Both ROPCO and Amoco buy used compressors for \$65,000 (from Amoco AFE, plus \$35,000 to bring to -0- hours). ROPCO and Amoco differ only in drilling, completing and operating costs. Reliable compressors, for the size anticipated, are not generally available at this price.

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	1,945,447	1,902,962	42,485
Life of Project to Economic Limit (yrs, mos)	26, 4	23, 8	2, 8
Net Cash Flow (Undiscounted)	\$1,514,127	\$1,302,546	\$211,581
Net Cash Flow (Discounted at 10%)	\$745,739	\$635,380	\$110,359
Profit / Investment Ratio	8.04	5.18	2.86
Total Capital Expenses	\$188,272	\$251,260	(\$62,988)

B: Pictured Cliffs and Fruitland Coal Commingled Completion

The cost to drill and complete a Pictured Cliffs-Fruitland Coal well is \$177,379 for ROPCO and \$230,760 for Amoco, as taken from ROPCO's adjusted actual costs (E/2-12) and Amoco's AFE. See Appendix I for tabulation of monthly lease operating costs.

Case i: Compressors are rented, maintenance free. Monthly rental payment is \$1,646 for ROPCO (bid received) and \$2,500 for Amoco (from AFE).

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	2,664,670	2,518,257	146,413
Life of Project to Economic Limit (yrs, mos)	22, 7	18, 7	4, 0
Net Cash Flow (Undiscounted)	\$1,953,016	\$1,507,601	\$445,415
Net Cash Flow (Discounted at 10%)	\$1,061,496	\$856,272	\$205,224
Profit / Investment Ratio	11.01	6.53	4.48
Total Capital Expenses	\$177,379	\$230,760	(\$53,381)

Case ii: Compressors are purchased and financed over 4 years at 9% annually. The purchase prices are \$85,000 for ROPCO (bid received) and \$120,000 for Amoco. For Amoco, an additional run was made with 5 years of financing at 9% annually (from AFE).

	ROPCO 4 year plan	AMOCO 4 year plan	Variance
Gas Reserves (MCF)	2,813,064	2,771,902	41,162
Life of Project to Economic Limit (yrs, mos)	29, 9	27, 2	2, 7
Net Cash Flow (Undiscounted)	\$2,408,177	\$2,131,456	\$276,721
Net Cash Flow (Discounted at 10%)	\$1,149,181	\$1,011,177	\$138,004
Profit / Investment Ratio	13.58	9.24	4.34
Total Capital Expenses	\$177,379	\$230,760	(\$53,381)

Case iii: ROPCO and Amoco buy used compressors for \$65,000 each (from Amoco AFE, plus \$35,000 to bring to -0- hours). ROPCO and Amoco differ only in drilling, completing and operating costs. Reliable compressors, for the size anticipated, are not generally available at this price.

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	2,813,064	2,771,902	41,162
Life of Project to Economic Limit (yrs, mos)	29, 9	27, 2	2, 7
Net Cash Flow (Undiscounted)	\$2,446,812	\$2,212,770	\$234,042
Net Cash Flow (Discounted at 10%)	\$1,169,517	\$1,066,434	\$103,083
Profit / Investment Ratio	10.09	7.48	2.61
Total Capital Expenses	\$242,379	\$295,760	(\$53,381)

C: Additional Case Comparisons

ROPCO purchases \$85,000 compressor and finances over 4 years at 9% annually. Amoco buys new compressor and leases it to all interest owners for \$2,500/mo, maintenance free. The following economic comparison does not reflect Amoco's actual profits (which are considerably more favorable), but is a reflection of economics for all other interest owners under Amoco's operatorship.

Pictured Cliffs Completion

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	1,945,447	1,644,490	300,957
Life of Project to Economic Limit (yrs, mos)	26, 4	15, 1	11, 3
Net Cash Flow (Undiscounted)	\$1,475,492	\$752,576	\$722,916
Net Cash Flow (Discounted at 10%)	\$725,403	\$445,488	\$279,915
Profit / Investment Ratio	11.97	4.04	7.93
Total Capital Expenses	\$123,272	\$186,260	(\$62,988)

Pictured Cliffs-Fruitland Coal Commingled Completion

	ROPCO	AMOCO	Variance
Gas Reserves (MCF)	2,813,064	2,518,257	294,807
Life of Project to Economic Limit (yrs, mos)	29, 9	18, 7	11, 2
Net Cash Flow (Undiscounted)	\$2,408,177	\$1,507,601	\$900,576
Net Cash Flow (Discounted at 10%)	\$1,149,181	\$856,272	\$292,909
Profit / Investment Ratio	13.58	6.53	7.05
Total Capital Expenses	\$177,379	\$230,760	(\$53,381)

Case 4: Subject to being named operator of both the Pictured Cliffs well and the Pictured Cliffs/Fruitland Coal well, ROPCO would set centralized compression. See Appendix I for drilling, completing and operating costs:

Pictured Cliffs Completion

	ROPCO
Gas Reserves (MCF)	1,963,357
Life of Project to Economic Limit (yrs, mos)	27, 8
Net Cash Flow (Undiscounted)	\$1,582,931
Net Cash Flow (Discounted at 10%)	\$775,525
Profit / Investment Ratio	13.27
Total Capital Expenses	\$119,272

Pictured Cliffs-Fruitland Coal Commingled Completion

	ROPCO
Gas Reserves (MCF)	2,830,797
Life of Project to Economic Limit (yrs, mos)	31, 1
Net Cash Flow (Undiscounted)	\$2,529,717
Net Cash Flow (Discounted at 10%)	\$1,200,078
Profit / Investment Ratio	14.59
Total Capital Expenses	\$173,379

APPENDIX I

OPERATING COSTS CALCULATIONS

Cases (1) and (i), compressors are rented, maintenance free.

	ROPCO	AMOCO
Overhead	450	500
Pumper	275	275
Compressor Rental	1,646	2,500
District Office	0	300
TOTAL	2,371	3,575

Cases (2) and (ii), compressors are purchased and financed over a period of years.

	ROPCO 4 year plan	AMOCO 4 year plan	AMOCO 5 year plan
Overhead	450	500	500
Pumper	275	275	275
Compressor Monthly Payment*	2,115	2,986	2,500
Compressor Maintenance	400	400	400
District Office	0	300	300
TOTAL	3,240	4,461	3,975

* This expense takes effect only for the period over which the purchase is financed.

Cases (3) and (iii), used compressors are purchased.

	ROPCO	AMOCO
Overhead	450	500
Pumper	275	275
Compressor Maintenance	400	400
District Office	0	300
TOTAL	1125	1475

Cases (4) and (iv), ROPCO named Operator of both wells, compression centralized.

ROPCO drilling/completing costs: \$119,272 PC, \$173,379 PC/FC

(ROPCO actual adjusted E/2-12, less 1/2 El Paso hookup, plus \$2,500 additional flowline per well)

	ROPCO
Overhead	450
Pumper	275
Compressor Monthly Payment*	1493
Compressor Maintenance	250
District Office	0
TOTAL	2468

* This expense is split between the two wells, and takes effect only for the period over which the purchase is financed.