9/84
JOR.

Hypothetical Single Dakota Completion
GAVILAN AREA - Rio ARRIBA Co., N.M.
8100' TD.

INITIAL PRODUCTION 15 BOPD
1,507 MCF/B (1-P)
40% -3YR → 9 %/YR (D-P)
OPERATING EXP. 1500 $/mo (4-P)

OIL PRICE $29.00 Tier 3 Less $1.50 Trucking (S)
GAS PRICE 103 (9/84) = $2.92 x 1.175 = $3.43 /mcf (A)
OIL PROD. TAX 7.528 % (E)
GAS PROD TAX 3.778 % GAE + $12.16 ¢/net mcf (C+D)
WPT TAX RATE 84 = 47¢/BO, 85 on - 35¢/BO (E)

YEARS ON Prod.	WI/NI	Annual oil m-bbl Gross/Net	Annual gas-mmcf Gross/Net	Net Revenue - M$ Oil	Net Revenue - M$ Gas	Net Revenue - M$ Total	Prod. Tax M$	Windfall Profits Tax-M$	Operating Expense M$	Investment M$	Interest M$	Annual Cash Flow M$	Cummulative Revenue M$
Cummulative →	2P-3P	8P-	9P-	35	45	55	65	75	85		25 12.5%	95	
0													
1	100/87.5	4.38/3.8	6.6/5.8	105.4	19.8	125.2	9.4	1.8	18.0	501.4	62.7	-468.1	-468.1
2		2.63/2.3	4.0/3.5	63.2	11.9	75.1	5.6	0.8	"	0	58.5	-7.8	-475.9
3		1.58/1.4	2.4/2.1	37.9	7.1	45.1	3.4	0.5	"	0	59.5	-36.3	-512.2
4		1.13/1.0	1.7/1.5	27.2	5.1	32.3	2.4	0.3	"	0	64.0	-52.5	-564.6
5		1.03/0.9	1.6/1.4	24.8	4.7	29.4	2.2	0.3	"	0	70.6	-61.7	-626.3
5 yr Total		10.7/9.4	16.2/14.2	258.5	48.6	307.1	23.0	3.8	90.0	501.4	315.3	-676.3	
6		0.93/0.8	1.4/1.2	22.4	4.2	26.6	2.0	0.3	18.0	0	78.3	-72.0	-698.3
7		0.85/0.7	1.3/1.1	20.4	3.8	24.2	1.8	0.3	"	0	77.3	-83.2	-781.5
8		0.77/0.67	1.2/1.0	18.5	3.5	22.0	1.7	0.2	"	0	97.7	-95.6	-877.0
9		0.70/0.61	1.06/0.9	16.9	3.2	20.0	1.5	0.2	"	0	109.6	-109.3	-986.3
10		0.6/0.6	1.0/0.8	15.3	2.9	18.2	1.4	0.2	"	0	123.3	-124.6	-1110.9
10 year total		14.6/12.8	22.0/19.3	352.0	66.2	418.2	31.3	4.9	180.0	501.4	811.5	-1110.9	—
11													
12													
13													
14													
15													
15 yr Total													
16													
17													
18													
19													
20													
20 yr total													
20 - ∞													

APPLICATION for Jerome P. McHugh
NEW POOL CREATION
Gavilan Greenhorn-Graneros-Dakota Oil Pool
Rio Arriba County, New Mexico
Case No. 8350, Exhibit 9

9/84
JDR.

Typical Dakota Completion - Gavilan Area
Rio Arriba County, New Mexico
Assuming ~~Dakota~~ Commingled w/ Mancos +
Considering only costs incremental to Mancos Compl.

Initial Production 15 BOPD
1.507 MCF/D (1-P)
40%-3yr → 9 %/yr (0-P)
Operating Exp. 750 $/mo (4-P)

Oil Price $29.00 (Tier 3) Less $1.50 Trucking
Gas Price Est. p3 (9/84) = $2.92 * 1.175 = $3.43/mcf
Oil Prod. Tax 7.528% (E)
Gas Prod Tax 3.778% GAR + 12.16 ¢/mcf (C+L)
WPT Tax Rate 84: 47¢/80 85 on = 35¢/80 (E)

Years on Prod.	WI/NI	Annual oil m-bbl Gross/net	Annual gas-mmcf Gross/net	Net Revenue - M$ Oil	Net Revenue - M$ Gas	Net Revenue - M$ Total	Prod. Tax M$	Windfall Profits Tax-M$	Operating Expense M$	Investment M$	Interest M$	Annual Cash Flow M$	Cummulative Revenue M$
Commingled →	2P-3P	8P-	9P-	35	45	55	65	75	85		25 12½%	95	
0													
1	100/87.5	4.38/3.8	6.6/5.8	105.4	19.8	125.2	9.4	1.8	9.0	56.7	7.1	41.2	41.2
2		2.63/2.3	4.0/3.5	63.2	11.9	75.1	5.6	0.8	"	0	0	59.7	100.9
3		1.58/1.4	2.4/2.1	37.9	7.1	45.1	3.4	0.5	"	0	0	32.2	133.1
4		1.13/1.0	1.7/1.5	27.2	5.1	32.3	2.4	0.3	"	0	0	20.5	153.7
5		1.03/0.9	1.6/1.4	24.8	4.7	29.4	2.2	0.3	"	0	0	17.9	171.5
5 yr Total		10.7/9.4	16.2/14.2	258.5	48.6	307.1	23.0	3.8	45.0	56.7	7.1	171.5	171.5
6		0.93/0.8	1.4/1.2	22.4	4.2	26.6	2.0	0.3				15.3	186.8
7		0.85/0.7	1.3/1.1	20.4	3.8	24.2	1.8	0.3				13.1	200.0
8		0.77/0.67	1.2/1.0	18.5	3.5	22.0	1.7	0.2				11.1	211.1
9		0.70/0.61	1.06/0.9	16.9	3.2	20.0	1.5	0.2				9.3	220.4
10		0.6/0.6	1.0/0.8	15.3	2.9	18.2	1.4	0.2				7.7	228.1
10 year total		14.6/12.8	22.0/19.3	352.0	66.2	418.2	31.3	4.9	90.0	56.7	7.1	228.1	
11		0.58/0.5	0.9/0.8	14.0	2.6	16.6	1.2	0.2	9.0	0	0	6.2	234.2
12		0.5/0.5	0.8/0.7	12.7	2.4	15.1	1.1	0.2	"	0	0	4.8	239.1
13		0.5/0.4	0.7/0.6	11.6	2.2	13.7	1.0	0.1	"	0	0	3.6	242.6
14		0.4/0.4	0.7/0.6	10.5	2.0	12.5	0.9	0.1	"	0	0	2.4	245.0
15		0.4/0.3	0.6/0.5	9.6	1.8	11.4	0.9	0.1	"	0	0	1.4	246.4
15 yr Total		17.1/14.9	25.7/22.5	410.3	77.1	487.5	36.5	5.7	135.0	56.7	7.1	246.4	
16		0.3/0.3	0.5/0.4	7.2	1.4	8.6	0.6	0.1	9.0	0	0	-1.2	245.3
17		0.3/0.2	0.4/0.4	6.6	1.2	7.8	0.6	0.1	"	0	0	-1.9	243.4
18													
19													
20													
20 yr total													
20-∞													
Total													

— Present worth of Dakota commingled w/ Mancos —

Midyear Factors
SPPWF = $1/(1+i)^n$

Years on Prod.	Present Worth @ 5% SPPWF	Present Worth @ 12½% SPPWF			Present Worth @ 25% SPPWF	Present Worth @ 50% SPPWF	Years on Prod.
0	1.00	1.0			1.0	1.0	0
1	0.97590	0.94281	38.8	38.8	0.89443	0.81650	1
2	0.92943	0.83085	50.0	88.9	0.71554	0.54433	2
3	0.88517	0.74494	24.0	112.9	0.52743	0.36289	3
4	0.84301	0.66216	13.6	126.4	0.45795	0.24192	4
5	0.80288	0.58859	10.5	137.0	0.36636	0.16128	5
6	0.76464	0.52319	8.0	144.98	0.29309	0.10752	6
7	0.72823	0.46506	6.4	151.1	0.23447	0.07168	7
8	0.69355	0.41339	4.6	155.7	0.18757	0.04779	8
9	0.66053	0.36745	3.4	159.1	0.15006	0.03186	9
10	0.62907	0.32663	7.5	161.6	0.12005	0.02124	10
11	0.59912	0.29033	1.8	163.4	0.09604	0.01416	11
12	0.57059	0.25808	1.2	164.6	0.07683	0.00944	12
13	0.54342	0.22940	0.8	165.5	0.06146	0.00629	13
14	0.51754	0.20391	0.5	165.9	0.04917	0.00420	14
15	0.49290	0.18125	0.3	166.2	0.03934	0.00280	15
16	0.46942	0.16111			0.03147	0.00186	16
17	0.44707	0.14321			0.02518	0.00124	17
18	0.42578	0.12730			0.02014	0.00083	18
19	0.40551	0.11516			0.01611	0.00055	19
20	0.38620	0.10058			0.01289	0.00037	20

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Dakota Completion - Gavilan Area
Rio Arriba County, New Mexico
Assuming Dakota is Dually completed w/ Mancos + considering only costs incremental to single Mancos.

Initial Production 15 BOPD
1.507 MCF/B (I-P)
40%-3yr → 9 %/yr (D-P)
Operating Exp. 1500 $/mo (4-P)

Oil price Tier 3 - 29.00 less $1.50/bbl Truck. [illegible]
Gas price Sect 103 (9/84) = 2.92 x 1.175 = 3.43/MCF (F)
Oil Prod. Tax 7.528% (F)
Gas Prod Tax 3.778% GAR + 12.16¢/net MCF (C+[illegible])
WPT Tax Rate 84 = 47¢/BO 85 on - 35¢/BO (E)

Years on Prod.	WI/NI	Annual oil M-bbl Gross/Net	Annual Gas-MMCF Gross/Net	Net Revenue - M$ Oil	Gas	Total	Prod. Tax M$	Windfall Profits Tax-M$	Operating Expense M$	Investment M$	Interest M$	Annual Cash Flow M$	Cummulative Revenue M$
Cummulation →	20-3P	8P-	9P-	35	45	55	65	75	85		25 12½%	95	
0													
1	100/87.5	4.38/3.8	6.6/5.8	105.4	19.8	125.2	9.4	1.8	18.0	267.9	33.5	-205.4	-205.4
2		2.63/2.3	4.0/3.5	63.2	11.9	75.1	5.6	0.8	"	0	25.7	25.0	-180.4
3		1.58/1.4	2.4/2.1	37.9	7.1	45.1	3.4	0.5	"	0	22.6	0.7	-179.7
4		1.13/1.0	1.7/1.5	27.2	5.1	32.3	2.4	0.3	"	0	22.5	-10.9	-190.7
5		1.03/0.9	1.6/1.4	24.8	4.7	29.4	2.2	0.3	"	0	23.8	-15.0	-205.6
5 yr Total		10.7/9.4	16.2/14.2	258.5	48.6	307.1	23.0	3.8	90.0	267.9	128.1	-205.6	—
6		0.93/0.8	1.4/1.2	22.4	4.2	26.6	2.0	0.3	18.0	0	25.7	-19.4	-225.0
7		0.85/0.7	1.3/1.1	20.4	3.8	24.2	1.8	0.3	"	0	28.1	-24.0	-249.0
8		0.77/0.67	1.2/1.0	18.5	3.5	22.0	1.7	0.2	"	0	31.1	-29.0	-278.0
9		0.70/0.61	1.06/0.9	16.9	3.2	20.0	1.5	0.2	"	0	34.8	-34.0	-312.5
10		0.6/0.6	1.0/0.8	15.3	2.9	18.2	1.4	0.2	"	0	39.1	-40.4	-352.8
10 year total		14.6/12.8	22.0/19.3	352.0	66.2	418.2	31.3	4.9	180.0	267.9	286.8	-352.8	—
11													
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15 yr Total													
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