

GRARIDGE CORPORATION

Caprock Field, Lea County, New Mexico

Estimated Future Waterflood Oil Production for one 80-Acre 5-spot
Assuming Same Displacement Efficiency in Each Case

<u>Years after Start of Flood</u>	<u>With 400 B/D Intake Rate per Injection Well</u>		<u>With 80 B/D Intake Rate per Injection Well</u>	
	<u>Barrels Per Year</u>	<u>Cumulative Barrels</u>	<u>Barrels Per Year</u>	<u>Cumulative Barrels</u>
1	56,100	56,100	0	0
2	43,700	99,800	700	700
3	12,000	111,800	20,800	21,500
4	7,100	118,900	18,700	40,200
5	5,300	124,200	16,000	56,200
6	4,000	128,200	13,500	69,700
7	3,200	131,400	10,600	80,300
8	2,700	134,100	8,000	88,300
9	2,300	136,400	6,400	94,700
10	1,900	138,300	4,900	99,600
11			3,900	103,500
12			3,000	106,500
13			2,200	108,700
14	<i>10 foot pay</i>		1,700	110,400
15			1,200	111,600

GRARIDGE CORPORATION

EX 4

Projected Valuations of 1760 Acres of Caprock Queen Field, Lea County, New Mexico
Valuations do not include Acquisition Costs, Depletion, Income Taxes or Salvage Values

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
CASE NO. 1324
EXHIBIT No. 4

Based on Average Intake Rate of 400 Barrels per Injection Well per Day

Years from Start of Flood	Estimated Future Oil Production			Deduct Estimated Expenses			Net		Value		
	Gross Barrels Per Day	Gross Barrels Net (.82)	Income* From Oil Sales	Production Tax	Direct Lease		Not Discounted	Discount Factor	Present Worth		
					Expense and Overhead	Development Costs					
1	504,600	1,382	413,800	\$ 1,200,000	\$ 55,700	\$ 85,500	\$ 704,000	\$ 845,200	\$ 354,800	.9717	\$ 344,800
2	1,464,700	4,013	1,201,100	3,483,200	161,600	132,000		293,600	3,189,600	.9167	2,923,900
3	408,100	1,118	334,600	970,300	45,000	132,000		177,000	793,300	.8648	686,000
4	187,700	514	153,900	446,300	20,700	132,000		152,700	293,600	.8159	239,500
5	128,300	352	105,200	305,100	14,200	132,000		146,200	158,900	.7697	122,300
6	96,900	265	79,500	230,600	10,700	132,000		142,700	87,900	.7261	63,800
7	76,200	209	62,500	181,300	8,400	132,000		140,400	40,900	.6850	28,000
8	62,800	172	51,500	149,400	6,900	132,000		138,900	10,500	.6462	6,800
Totals	2,929,300		2,402,100	\$6,966,200	\$323,200	\$1,009,500	\$704,000	\$2,036,700	\$4,929,500		\$4,415,100

Based on Average Intake Rate of 80 Barrels per Injection Well per Day

1	0	0	0	\$ 0	\$ 0	\$ 24,000	\$ 498,000	\$ 522,000	(\$ 522,000)	.9717	(\$ 507,200)
2	5,100	14	4,200	12,200	600	30,000		30,600	(18,400)	.9167	(16,900)
3	295,700	810	242,500	703,300	32,600	80,000		112,600	590,700	.8648	510,800
4	442,400	1,212	362,800	1,052,100	48,800	105,600		154,400	897,700	.8159	732,400
5	372,500	1,021	305,500	886,000	41,100	105,600		146,700	739,300	.7697	569,000
6	317,300	869	260,200	754,600	35,000	105,600		140,600	614,000	.7261	445,800
7	256,000	701	209,900	608,700	28,200	105,600		133,800	474,900	.6850	325,300
8	195,400	535	160,200	464,600	21,600	105,600		127,200	337,400	.6462	218,000
9	152,500	418	125,100	362,800	16,800	105,600		122,400	240,400	.6097	146,600
10	120,000	329	98,400	285,400	13,200	105,600		118,800	166,600	.5751	95,800
11	93,200	255	76,400	221,600	10,300	105,600		115,900	105,700	.5426	57,400
12	71,500	196	58,600	169,900	7,900	105,600		113,500	56,400	.5119	28,900
13	53,900	148	44,200	128,200	5,900	105,600		111,500	16,700	.4829	8,100
Totals	2,375,500		1,948,000	\$5,649,400	\$262,000	\$1,190,000	\$498,000	\$1,950,000	\$3,699,400		\$2,614,000

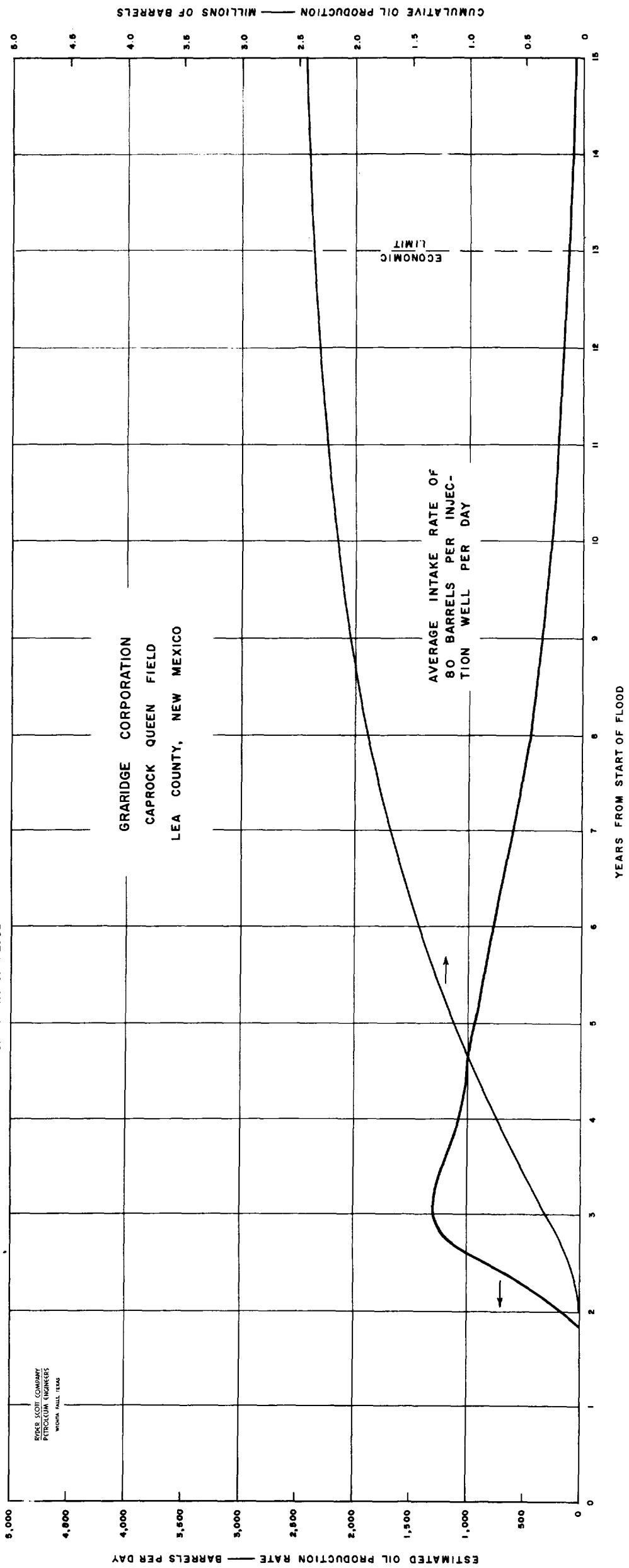
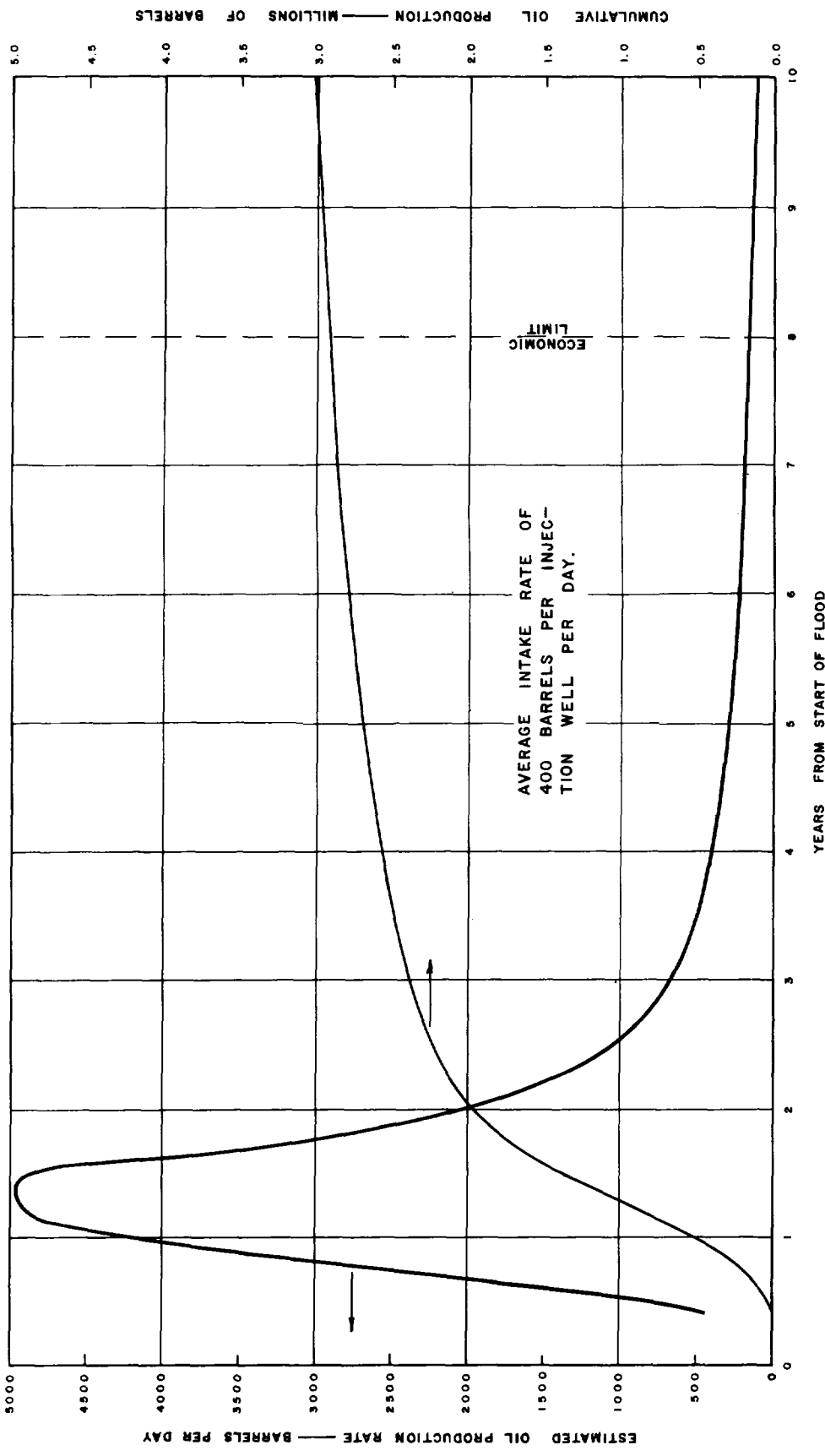
* \$2.90 per barrel

Graridge Ex 3

ESTIMATED WATERFLOOD OIL PRODUCTION

SAME SAND — 10 FEET
SAME AREA — 1760 ACRES
SAME RATE OF DEVELOPMENT
SAME DISPLACEMENT EFFICIENCY
DIFFERENT RATES OF WATER
INJECTION

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
Case 1324 EXHIBIT No. 3



245

GRARIDGE CORPORATION

Caprock Queen Field, Lea County, New Mexico

Estimated Waterflood Oil Production and Cost Data for 1760 Acres
and 10 Feet of Pay Sand - Assuming the Same Displacement Efficiency

	<u>Faster Flood</u> 400 b/d Water <u>Injection Rate</u>	<u>Slower Flood</u> 80 b/d Water <u>Injection Rate</u>
Cumulative Gross Oil Production (barrels)	2, 900, 000	2, 400, 000
Cumulative Gross Oil Production (barrels/acre)	1, 660	1, 350
Economic Life (years)	8	13
Cumulative Net Oil Production (barrels)	2, 400, 000	1, 900, 000
Yearly Operating Costs (at peak rates)	\$ 132, 000	\$ 106, 000
Total Development Costs	\$ 704, 000	\$ 498, 000
Average Cost of Operating (\$/net bbl.)	\$ 0. 42	\$ 0. 61
Total Development Costs (\$/acre)	\$ 400	\$ 280
Average Total Costs (\$/net bbl.)	\$ 0. 85	\$ 1. 00
Cash Realization at Economic Limit	\$4, 900, 000	\$3, 700, 000
Present Worth of Total Reserves	\$4, 400, 000	\$2, 600, 000
Average Cash Realization (\$/net bbl.)	\$ 2. 05	\$ 1. 90
Average Present Worth (\$/net bbl.)	\$ 1. 84	\$ 1. 34

Loss in Present Worth Value if Operated at a Slower Rate
instead of Faster Rate is \$1, 800, 000 or \$0. 50 per net barrel.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
EXHIBIT No. 5
CASE 1324

Bradford Ex 6

