## SINCLAIR OIL & GAS COMPANY

1. 5.02 2.

## OIL RESERVE AND ECOMOMIC DATA VACUUM, MORTH (DEVONIAN) FOOL, LEA COUNTY, NEW MEXICO

- I. Data used in calculating oil reserves for an average well:
  - 1. Average effective porosity, 3.07% (from the core analysis on Sinclair's State Les 403, Well No. 5.)
  - 2. Average connate water saturation, 40% (estimated from the core analysis on Sinclair's State Lea AO3, Well No. 5.)
  - 3. Formation volume factor, 1.24 barrels of reservoir oil per barrel of stock tank oil (from the reservoir fluid sample from Sinclair's State Lea 403, Well No. 4,
  - 4. Average net effective pay thickness, 37 feet (Average perforated interval of seven wells.)
  - Estimated recovery efficiency, 50% of original oil in place (water drive).

## II. Recoverable Oil Reserve:

- Oil in place, 115 barrels per acre-foot.
  Recoverable reserve, 57.5 barrels per acre-foot.
- 3. Recoverable reserve, 2,130 barrels per acre.
- 4. 40 acre oil recovery, 85,000 barrels.
- 5. 80 acre oil recovery, 170,000 barrels.

## III. Economics of 40 and 80 acre spacing:

1. Gross sale price per barrel of oil, \$3.01

2.	Gross value of recoverable reserve	<u>40 acres</u> \$256,000	80 acres \$512,000
3.	Charges against well:		
	Royalty (1/8)	\$32,000	\$64,000
	Direct Taxes (6%)	\$15,3 <b>7</b> 0	\$30,740
	Operating costs (Avg.for life,	-	•
	40¢ per bbl.)	\$34,000	\$68,000
	Cost of drilling & equipping	- · •	
	a well	\$275,000	\$242,000
	Total Costs	\$323,370	\$404,740
	Net profit or loss to operator	-\$67,370	\$107,260