

ESTIMATE OF OIL RESERVES

WELL NAME AND #: Harton State #1-7
LOCATION: Sec. 7-13S-36E
COUNTY, STATE: Lea Co., New Mexico

FIELD: S.W. Tatums
ZONE: Canyon "A" & "B"
PERFS: 10876-82' & 11058-80'

RESERVOIR DATA

Porosity (\emptyset): 0.0125 %
Water Saturation (Sw): 0.29 %
FVF (Boi) 1.63 BBL/STB
Est. Recovery Efficiency: 0.18 %
Oil Gravity: 44 API
Net Effective Pay: 160 FEET
Initial GOR: 1200 SCF/BBL
BHT: 170 F
Specific Gravity of Gas: 0.85
Depletion Mechanism: * SG
Cum. Oil Production: 19064 BBLS.

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case No. 11986 Exhibit No. 5

Submitted by: Saba Energy of Texas, Incorporated

Hearing Date: June 11, 1998

CALCULATIONS

40 ACRE DRAINAGE

Oil in Place = $7758 \text{ Bbls/ac.ft.} \times (\text{Drainage Area Ac.}) \times \text{Net Pay ft} \times \emptyset \times (1-S_w) \times 1/\text{Boi} = \text{S.T.B.}$
Oil in Place = **270,340 S.T.B.**

Gross Oil Reserves = $(\text{O.I.P.}) \times (\text{Recovery Efficiency}) = \text{S.T.B.}$
Gross Oil Reserves = **48,661 S.T.B.**

Percent Recovery To Date = $\text{Cumulative Oil Produced} / (\text{O.I.P.})$
% Recovery To Date = **7.05%**

Gross Gas Reserves = $(\text{S.T.B.}) \times (\text{GOR}) \times (1/1000) = \text{MCF}$
Gross Gas Reserves = **58,393 MCF**

80 ACRE DRAINAGE

Oil in Place = $7758 \text{ Bbls/ac.ft.} \times (\text{Drainage Area Ac.}) \times \text{Net Pay ft} \times \emptyset \times (1-S_w) \times 1/\text{Boi} = \text{S.T.B.}$
Oil in Place = **540,680 S.T.B.**

Gross Oil Reserves = $(\text{O.I.P.}) \times (\text{Recovery Efficiency}) = \text{S.T.B.}$
Gross Oil Reserves = **97,322 S.T.B.**

Percent Recovery To Date = $\text{Cumulative Oil Produced} / (\text{O.I.P.})$
% Recovery To Date = **3.53%**

Gross Gas Reserves = $(\text{S.T.B.}) \times (\text{GOR}) \times (1/1000) = \text{MCF}$
Gross Gas Reserves = **116,787 MCF**

* SG = Solution Gas: WD = Water Drive: GC = Gas Cap