Original Gas In Place and Volumetric Calculations

Yates Lagarto AMZ State #1

Initial Reservoir Pressure :	4130 psia
Reservoir Temperature :	187 degrees F
Gas Formation Volume Factor :	0.00406 (cu. ft/SCF)
Gas Compressibility Factor :	0.92
Estimated Ultimate Recovery :	1.79×10^9 SCF
Estimated Recovery Factor :	0.80
Average Porosity :	12%
Average Reservoir Thickness :	12 ft

$$OGIP = 1.79 \times 10^9 / 0.8$$
$$2.24 \times 10^9 \text{ SCF}$$

$$A = (OGIP^* Bgi) / (43,560 * h * Phi * (1-Sw))$$

$$\frac{(2.24 \times 10^9)\ (0.00406)}{(43,560)\ (12)\ (0.12)\ (1-0.19)}$$

179 Acres

Yates Tenneco ADP State #1

Initial Reservoir Pressure :	4130 psia
Reservoir Temperature :	187 degrees F
Gas Formation Volume Factor :	0.00406 (cu. ft/SCF)
Gas Compressibility Factor :	0.92
Estimated Ultimate Recovery :	1.060×10^9 SCF
Estimated Recovery Factor :	0.80
Average Porosity :	12%
Average Reservoir Thickness :	8 ft

$$OGIP = 1.060 \times 10^9 / 0.8$$
$$1.325 \times 10^9 \text{ SCF}$$

$$A = (OGIP^* Bgi) / (43,560 * h * Phi * (1-Sw))$$

$$\frac{(1.325 \times 10^9)\ (0.00406)}{(43,560)\ (8)\ (0.12)\ (1-0.19)}$$

158 Acres

BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico

Case Nos. 12128 and 12130 Exhibit No. 10

Submitted by: Yates Petroleum Corporation

Hearing Date: April 1, 1999