

Rusty Chacra Area Tight Gas Hearing Exhibit #3

Summary of Geology

The Rusty Chacra Area is located six miles south of the town of Counselor in Sandoval Co., New Mexico. Geologically, the area is located on the Chaco Slope of the southern San Juan Basin. Gas production is from a buildup of transitional shaly sands and siltstones which are interpreted to be of a prodelta low-energy origin. This productive zone which is called the "Chacra" is the time-stratigraphic equivalent of the upper Unnamed Tongue of the Cliffhouse beach sandstone. Structural dip to the north-east of about 100 feet per mile is of little consequence as this is a stratigraphic trap. The sandstones are gray to light gray, fine grained, silty, shaly, and slightly to moderately calcitic.

The fine grained and clay filled nature of the sands results in low porosity and permeability and commercial production when obtained is only achieved through extensive fracturing and reservoir treatment.

SUMMARY OF RESERVOIR DATA

RUSTY CHACRA AREA

Exhibit 6

Reservoir Temperature	160 degrees F
Average Reservoir Pressure	460 psia
Average Depth to Top of Chacra	1658'
Average Porosity	11%
Average Permeability	0.07 md
Average Unstimulated Flow Rate	TSTM
Average 3 hr. Potential Test Rate	594 MCFD
Crude Oil Production	None

OIL CONSERV	MINER STAMETS ATION DIVISION BIT NO
CASE NO.	7300
Submitted by	Dome
Hearing Date_	7/2/81

Exhibit D