


EXHIBIT "B"  
GEOLOGICAL REPORT CONCERNING  
THE TWENTY-SEVENTH EXPANSION  
OF THE PICTURED CLIFFS FORMATION IN THE  
EL PASO NATURAL GAS COMPANY  
LINDRITH UNIT

EL PASO NATURAL GAS COMPANY

By:   
D. E. Adams, Director  
Reservoir Engineering Dept.

## EXHIBIT "B"

### GEOLOGICAL SUMMARY PERTAINING TO THE TWENTY-SEVENTH EXPANSION OF THE PICTURED CLIFFS PARTICIPATING AREA WITHIN THE LINDRITH UNIT

#### GENERAL INFORMATION

The Pictured Cliffs Formation within the Lindrith Unit of Rio Arriba County, New Mexico is of upper cretaceous age and is considered to be predominantly sandstone deposited in bands of varying widths. These bands have a northwest-southeast trend and are separated by zones of shaly sandstones and/or bentonitic sandstones. The Pictured Cliffs Formation is erratic in development and abrupt "shale out" of the sand can occur as well as rapid local thickening. This can cause great variance in well potentials as evidenced in the Lindrith Unit area. Enclosed with this report is a structure map, Exhibit "C", Figure No. 1 and an isopach map as Exhibit "C", Figure No. 2.

Effective Date: July 1, 1981

#### Participating Acreage:

SE/4 Section 18, T-24-N, R-2-W	Lindrith Unit #104
SW/4 Section 22, T-24-N, R-3-W	Lindrith Unit #107

The Lindrith No. 104 and No. 107 were tested on June 11, 1981 for initial wellhead shut-in pressures of 972 psia and 994 psia, respectively, and after frac gauges of 250 Mcf/D and 330 Mcf/D, respectively. On the basis of these tests and production data, the acreage is proven commercial and should be admitted to the participating area.

The proposed unit expansion is further substantiated by the isopach, Exhibit "C", Figure No. 2, which shows the above acreage to be located on the established trend of commercial production and to have average net pay of greater than 10 feet.