

## VACUUM GRAYBURG SAN ANDRES UNIT ATTACHMENT VIII TO FORM C-108 APPLICATION FOR AUTHORIZATION TO INJECT AND CARBON DIOXIDE

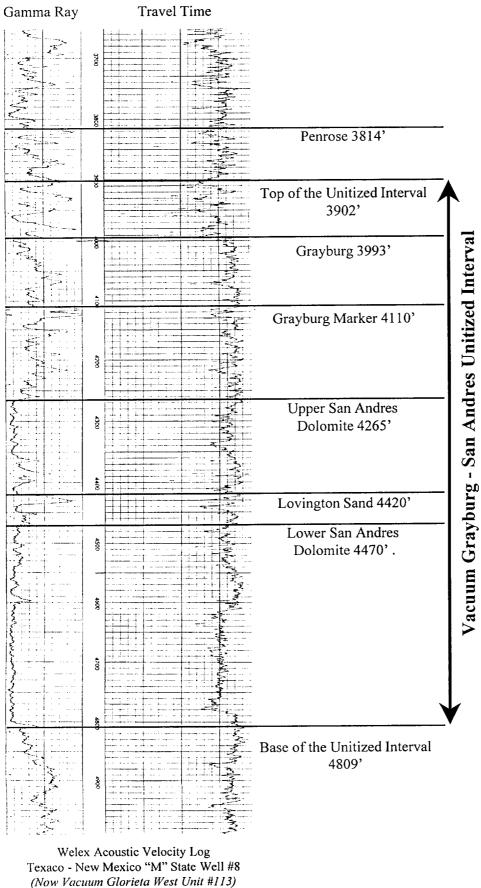
## GEOLOGICAL DATA THE INJECTION ZONES

The unitized interval for the proposed Vacuum Grayburg San Andres Unit is the stratigraphic interval including and correlative to portions of the Grayburg and San Andres Formations found between the depths of 3,902 feet (plus 105 feet sub-sea) and 4,809 feet (minus 802 feet sub-sea) on the Welex Acoustic Velocity Log, dated February 22, 1965, run in Texaco's New Mexico "M" State Well No. 8. The hydrocarbon productive interval which will be flooded is Permian (Guadalupian) in age.

The top of the San Andres ranges in depth from 4240 feet (minus 233 feet sub-sea) to 4810 feet (minus 803 feet sub-sea) and is approximately 910 feet thick. The primary reservoir lithofacies within the San Andres consists of dolomitized subtidal grain dominated carbonates deposited as shoals.

The base of the Ogallala Aquifer is located at approximately 220 feet (plus 3787 feet) and is the primary source for drinking water in the area. The Grayburg-San Andres does not contain faults or fractures that act as conduits for gas, oil or injection fluids to seep into the Ogallala fresh water aquifers above the injection zone within the proposed Vacuum Grayburg San Andres Unit boundaries. No contamination of the Ogallala Aquifer through faults or fracture zones in the Vacuum Grayburg San Andres interval has been observed in the area.

## Exhibit C Vacuum Grayburg-San Andres Unit Type Log



API # 3002521107 KB = 4007