

GEOLOGICAL REPORT
ALLIED CHEMICAL FEDERAL #1

GUADALUPE SERIES (DELAWARE)

The first show in the form of oil on the pits and an excellent gas show was recorded in a drilling break in the Delaware limestone from 1698' to 1705'. Maximum gas readings were C₄ 1100, C₃ 2750, C₂ 3000, C₁ 3600.

The next zone of interest occurred in the Delaware sandstone from 1866' to 1892' where a good sample and gas unit show were observed. A decision was made to drill stem test.

DST No. 1, 1860-1922', open 2', 30" pre-flow - weak blow. Shut-in 60". Reopened tool for 90" flow with weak blow. Shut-in 180". Recovered 400' DF with slight scum oil. Sample chamber: Recovered 2100 cc fresh water and no gas or oil.

30" pre-flow: IFP 40#, FFP 80#; 60" ISIP 661#; 90" flow: IFP 93#, FFP 159#; 180" FSIP 661#; IHP 818#, FHP 818#; BHT 92° F

Drilling was resumed and no appreciable shows were then recorded until reaching 5040'. Gas readings increased significantly at this point and deeper and then faded out at 5250'. Drilling time and samples indicated that the gas was coming from several thin sand zones. This was confirmed by open hole logs run prior to setting intermediate 9 5/8" casing at 5410'.

RECEIVED

JAN 12 1976

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO