

Mobil Producing Texas and New Mexico Inc.  
Humphrey Queen Unit, Well #31  
Langlie-Mattix Pool  
Lea County, New Mexico

The geological data is provided below.

Lithologic Detail

Composition - sand, VF-F grained silty, some laminations,  
calcareous, moderately well consolidated  
dolomite, tan pinpoint and fracture porosity,  
fractures, slightly anhydritic

Type Structure - east, northeast dipping monocline

Average porosity - 13%

Average permeability - 2nd

Geological Name

Queen (Permian)

Thickness

Average effective pay - 35'

Depth

Average depth to top of pay - 3400'

Overlying fresh water zone (aquifers containing concentrations of  
10,000 mg/l or less).

The geological name is Ogallala at a depth of  $\pm 200'$  and there are no  
fresh waters immediately underlying the injection zone.