estimates of the pressures in the Magenta and Culebra dolomites. The report also provides a maximum permeability for the Culebra dolomite. After 1987, the well was allowed to "build-up" again.

These two "build-up" periods are simply pressure transient test such as the ones run frequently on oil wells. A general analysis of the first "build-up" period indicates that the permeability in the Culebra dolomite is <=0.01 md. Furthermore, if the well had not been disturbed in 1987, the water level would still be below 500'. This is still below the level of 494' that is the level that would be static for the Culebra. However, something did change in 1987 and the well began to "build-up" to a higher fluid level.

Analysis of the second "build-up" indicates that the fluid level is now building to a higher level. The faster "build-up" indicates that the well is now connected to a slightly higher permeability reservoir. The change is almost instantaneous in 1987 after the well was pumped. It is obvious that the well began to build toward the static level of the Magenta dolomite (320'). Consequently, it is my opinion that the Culebra and Magenta dolomites have been hydraulically connected. It is very important to note that the David Ross AIT #1 began injection in July 1991 while the present "build-up" in the P-18 began in 1987.

The next problem is determining where the hydraulic connection occurred. The permeability in the Culebra dolomite would make inter-well communication almost impossible. Consequently, it is my opinion that the addition rise (post 1991) in the second "build-up" period can be attributed to communication between the Magenta and Culebra within the P-18 wellbore.

In summary, the following points are critical to the understanding of this situation.

- The injected fluid in the David Ross AIT Federal #1 is entering and is contained in the Delaware formation.
- The David Ross AIT Federal #1 began injection in July 1991.
- The current "build-up" in the P-18 well began in 1987 (prior to any injection in the David Ross AIT #1).
- The Culebra dolomite has a permeability <=0.01 md in the P-18 well.
- The 1977-1987 "build-up" in the P-18 well was trending towards the head pressure of the Culebra dolomite (494').
- The 1987-present "build-up" in the P-18 well is trending towards the head pressure of the Magenta Dolomite (320').

These points lead to the following conclusions.

- The David Ross AIT Federal #1 is not the source of the increased fluid levels in the P-18 well.
- The increased fluid levels in the P-18 well are most likely the result of communicating the Magenta and Culebra dolomites within the P-18 wellbore.