Sections
VII thru XII

NMOCD Form C-108 Sections VII thru XII

VII. Data on proposed operation.

1. Proposed average injection rate: 150 BWPD per well
   Proposed maximum injection rate: 300 BWPD per well

2. The system will be a closed system.

3. Proposed average injection pressure: 700 PSI
   Proposed maximum injection pressure: 1000 PSI
   (This complies with the .2 psi/ft injection pressure limitation. If greater pressures are necessary in the future the appropriate step rate tests will be performed and submitted.)

4. The proposed injection fluid is produced water and is compatible with the reservoir fluids in the proposed injection horizon. This is shown on the attached compatibility analysis.

5. A chemical analysis of the formation water in the proposed injection horizon is attached.

VIII. The proposed injection interval is located in the Delaware Sand formation. The Shugart East Field is located within Sections 13 and 24, T-18-S, R-31-E, Eddy County and Sections 18 and 19 T-18-S, R-32-E, Lea County New Mexico. Production is form the lower Guadalupian (Permian) Brushy Canyon Formation of the Delaware Mountain Group.

The Brushy Canyon reservoirs of the Shugart East Field are combination stratigraphic-structural traps. Ten (10) discrete sand packages are draped over a structural high. A depositional model is a sand rich submarine fan/channel complex. The sands are sourced from the north and northeast.

The Shugart East structure is an asymmetrical high with about 75' of closure centered in the NE/4 Section 24, T-18-S, R-31-E. The closure is probably due to differential compaction of the sand thicks versus the surrounding shale interval. The productive interval has a gross thickness of 300 to 400' at a depth of 5000' to 5400'. Individual sand bodies vary in thickness from 10' to over 100'. Porosity in the producing interevals range from 14% to 20% with an average of 17%.

There are no fresh water zones within the area of these injection wells above or below the proposed injection horizon.

IX. It is anticipated the South Taylor 13 #3 will have additional pay perfed and fraced from 5090-5420' prior to conversion to injection.

X. Logs have previously been submitted to the OCD.

XI. There are no fresh water wells of record within one mile of the proposed injection wells.

XII. An examination of this area has determined there are no open faults or other hydrologic connection between the disposal zone and any underground drinking water.