

Attachment to C-108 Form

ARCO's Seven-Rivers Queen Unit

Section

- III. Well Data: See attached well diagram and tabular well data sheet.
- V. Area of Review: See attached map.
- VI. Well Data in Area of Review: See attached tabular well data sheets.
- VII. 1) Proposed average daily rate 357 BWPD  
Proposed average maximum daily rate 400 BWPD
- 2) System is closed
- 3) Proposed average injection pressure 1250 psig.  
Proposed maximum injection pressure 1400 psig.
- 4) Injection water source: Capitan Reef  
Getty's Jal Water Supply  
Compatibility tests (see attached water analysis)  
Reported 11-10-81 (also we have been injecting with no problems  
for ten years)
- VIII. Geologic Data Injection Zone: The injection zone is the unitized interval for the Seven-Rivers Queen Unit which includes the bottom 100 feet of the Seven-Rivers formation and the entire Queen formation. The productive intervals of the Seven-Rivers and Queen formations are fine grained clean to dolomitic sands interbedded with tight dense dolomite and anhydrite stringers. However, the injection zone is the oil productive interval between the GOC at -150 SS and the WOC at -285 SS (135 feet). The injection interval occurs at a depth of 3600 to 3800 feet from the surface.
- The underground source of drinking water overlying the zone of injection is the Ogallala which occurs near the surface and is approximately 100 feet thick. There is no known source of drinking water below the zone of injection.
- IX. The stimulation program used for the injection well is to acidize and then hydraulically fracture with 10,000 gal. carrying 25,000# of sand.
- X. Log and test data to be filed with the Commission upon completion of well.
- XI. See attached water analysis sheets dated 1-24-84 for freshwater wells shown on map.
- XII. Not applicable.
- XIII. Proof of Notice: Copy of application sent to surface owners and offset operators via Certified mail. Proof of publication to be received from Hobbs Daily News Sun.