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Apache "13" Federal No. 5
Drilling Program
Page 3
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- (B) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) A mud logging unit will be continuously monitoring drilling penetration rate and hydrocarbon shows from 3600' to TD.

## 8. Logging, Testing and Coring Program:

- (A) Drillstem tests will be run on the basis of drilling shows.
- (B) The electric logging program will consist of GR-AIT/BHC Sonic, GR-Compensated Neutron-Density from TD to 3845' and GR/CNL to surface. Selected SW cores will be taken in zones of interest.
- (C) No conventional coring is anticipated.
- (D) Further testing procedures will be determined after the 5-1/2" production casing has been cemented at TD based on drill shows, and log evaluation, and drill stem test results.

## 9. <u>Abnormal Conditions, Pressures, Temperatures, & Potential Hazards</u>:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 122°F and estimated maximum bottomhole pressure (BHP) is 3500 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area.

## 10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is December 1, 1993. Once commenced, the drilling operation should be finished in approximately 25 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

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