

## Drilling Plan

Grama Ridge Fed, 8817 JV-P, #3

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Depending upon availability at the time that the casing is run, equivalent weights and grades may be substituted.

13-3/8" casing will be cemented with 1500 sx light cement, tailed-in with 400 sx Class "C" cement. Circulated to the surface.

9-5/8" casing will be cemented back to +4000' with 1,600 sx light cement tailed-in with 400 sx Class "C".

7" casing will be cemented with 1,000 sx light, tailed in w/ 400 sx Class "H" to cement back above 9-5/8" shoe.

5" liner will be cemented with 250 sx Class H with sufficient volume to circulate.

Note: All casing strings will be pressure tested to 0.22 psi/ft. of setting depth or 1500 psi (whichever is greater) after cementing and prior to drillout.

5. Pressure Control Equipment: See Attached Diagrams.

6. Mud Program:

Surface to 1,300': Fresh water spud with 35 to 45 sec/1000 cc viscosity. Will keep mud weight as low as possible using solids separation equipment and water. Will maintain fresh gel in system. Mud wt = 9.5/ 9.6

1,300' to 5,300': Brine water. Circulate to reserve pit. Will use lime for pH control in range 10 to 11. Will sweep hole with gel slugs as required for hole cleaning. Mud wt = 10 ppg

5,300' to 11,700': 8.6 to 9.2 ppg controlled brine water. Will use lime for pH control in range 10 to 11. Will sweep hole with salt gel slugs as required for hole cleaning. Will use paper for seepage losses. Will adjust fluid weight as required using brine water.

11,700 to TD: Drill out below 7" casing with premix mud. Mud weight will be adjusted as required by hole conditions. Mud wt = 10.0/ 12.0 ppg.

7. Auxiliary Equipment:

- a) Upper kelly cock valve with handle available.
- b) Lower kelly cock valve with handle available.
- c) Safety valves and subs to fit all drill string connections in use.
- d) Inside BOP or float sub available.
- e) Wear ring in casing head
- f) No floats at bit
- g) Monitoring of mud system will be electronic/ mechanical below 9,500'.

8. Testing Logging and Coring Program:

Drill Stem Tests will only made when samples, drilling time and other data indicate a test is warranted.

It is planned that electric logs will include Gamma Ray-CNL, FDC logs and dual laterologs.

Note: A gamma ray log will be run over the surface casing from its base to the ground surface.

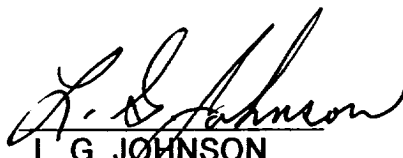
No coring is planned.

9. Abnormal pressure is anticipated in the Atoka and Morrow. BHP=7800 psi (maximum)

10. Anticipated Starting Date:

It is planned to commence drilling operations, upon approval of our BLM permit to last a period of 85 days.

Contact L. G. JOHNSON at 915-682-3753  
With any questions concerning the Drilling Plan.

  
L. G. JOHNSON  
Drilling Superintendent