

Right Hand Canyon 34 Federal #4  
 DRILLING PLAN  
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4. Casing Program (see Exhibit #7)

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight, ppf</u>	<u>Grade</u>	<u>Type</u>
17 1/2"	0-207'	13 3/8"	48	H-40	ST&C
12 1/4"	0-2,784'	8 5/8"	24 & 32	J-55	ST&C
7 7/8"	0-8,500±	7"	26 & 23	L-80 / HCL-80	FL-4S

Cementing Program

13 3/8" Surface Casing (existing)      Cemented to surface -- with 200 sx Class C with 2% CaCl<sub>2</sub>

8 5/8" Intermediate Casing (existing)      Cemented to surface – with 500 sx Class C Incor with 8% gel, 1/4 lb/sx Cello Flakes + 150 sx Class C Incor; ran Temperature Svy which showed TOC at approximately 650' Topped with 1480 sx Class C Incor with 4% CaCl<sub>2</sub>.

5 1/2" Production Casing (proposed)      Cement to 6500' – with 104 sx (15:61:11) Poz (fly ash):Class C:CSE with 2% K Cl<sub>2</sub>, 0.6% FL-25, 0.6% FL-52, 0.3% CD-32, 2 lbs/sx EC-1, 5 lb/sx LCM-1, 1/4 lbs/sx Cello Flakes, 71.3% fresh water + 294 sx (60:40) Poz (fly ash):Class C with 4% MPA-1, 2% NaCl<sub>2</sub>, 0.5% BA-10, 1/4 lb/sx Cello Flakes, 62.9% fresh water + 236 sx (60:40) Poz (fly ash):Class C with 4% MPA-1, 5% NaCl<sub>2</sub>, 1/4 lb/sx Cello Flakes, 60.7% fresh water

The cement volumes for the 7" casing will be revised pending the caliper measurement from the open hole logs.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 8 5/8" casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 8 5/8" shoe plug, the BOP's and Hydril will be function tested.