

9.375" LINER TEST CALCULATIONS

Size	Wt/ft	Grade	Conn	Burst
9.375	39.0	HCQ-125	SLF	9870
16	97.0	Q-125	SLSF	7860

70% Internal Yield of 9.375" Casing = 6909

70% Internal Yield of 16" Casing = 5502

Considering Internal Yield Test @ Mudline

Top of casing TVD= 3602

Test mud weight= 16.0

Pore pressure= 8.6

Differential pressure= $(16 - 8.6) * 0.052 * 3602 =$ 1386

Test pressure= $6909 - 1386 =$ 4116

Considering Internal Yield Test @ Shoe

Btm of casing TVD= 27000

Test mud weight= 16.0

Pore pressure= 16.0

Differential pressure= $(16 - 16) * 0.052 * 27000 =$ 0

Test pressure= $6909 - 0 =$ 6909

However, Considering the MAWP surface:

MAWPsurf + 500 psi= $8078 + 500 \text{ psi} =$ 8578

Liner top test= $(16.5 - 16) * 0.052 * 22300 + 500 =$ 1080

Therefore:

Plan test pressure is lesser of the above= 1080

Shoe Test pressure= $(17.2 - 16) * 0.052 * 27000 + 200 \text{ psi} =$ 1885

Test casing to be greater than minimum test pressure or shoe or future liner top testing

Plan test pressure = 1885

Test casing to	1900	for 30 min. with	16.0	ppg mud
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- Notes:
1. Casing test pressures are based on the lower of MAWP + 500 psi, or 70% internal yield less differential of test mud weight and pore pressure behind casing, or liner top plus 500 psi.
 2. Actual test pressure will be calculated based on actual mud weight

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