

File 2/4-EAX

2/2/72

To. Fred Kumpf

From G.W. Berk

Ref Attached sketch 2/4-EAX  
Test string.

Max Surface pressure with 0 psi  
on annulus. 9662 psi

Max Surface pressure with 3000 psi  
on annulus. 12,200 psi

This does not consider surface  
equipment. Assuming allowable  
of 14000 psi on bombs they will  
fail with surface pressure of 9320 psi

Well 2/8-8AX

3 1/2" 12.85# N-80 Tubing

Burst - 3 1/2" 12.85# N-80 Tubing

Allowable 12,200 psi

Burst - 3 1/2" 9.2# N-80 Tubing

Allowable  $8030 + 8600 (.742 - .45)$

$$8030 + 2511 = \underline{10,541}$$

Collapse 7" 29# N-80

Allowable  $6626 + 10,400 (.742 - .45)$

$$6626 + 3036 = \underline{9662}$$

TS casing is not perforated

Burst of 7" 29# N-80

Allowable  $7300 + 10,400 (0.69^* - 0.45)$

$$7300 + 2496 = \underline{9796}$$

\* Est. Form gradient

3 1/2" 9.3# N-80 Tubing

Mud .742 psi / ft  
Water .45 psi / ft

- ± 10,400