

CASING DESIGN WORKSHEET

07-Dec-90

WELL: RED HILLS #3
 FIELD: RED HILLS
 COUNTY: LEA
 STATE: NEW MEXICO

Mud Weight: 15 PPG
 CALCULATED: Mud Grad: 0.779 psi/foot
 Shoe Depth: 14,500 feet
 Surf. Temp: 74 deg F
 Temp. Grad: 0.8 deg/100'
 CALCULATED: BHP: 11,295 psi
 " Max. SICP: 8,379 psi
 " Int. Grad: 0.201 psi/foot

STRING: TUBING
 OD(in): 2-7/8"

----- CASING DATA -----							---- STANDARD API RATINGS ----		
SECT	BOTTOM	IOP	LENGTH	WT (# ft)	GRADE	THREAD	Body MYS	BURST	COLLAPSE
1	14,500	0	14,500	3.7	L-80	AB-IJ-3SS	198	15,000	15,300
2									
3									
4									
5									
6									

-----TENSION DATA (kips)-----			-----COLLAPSE DATA (psi)-----			-----BURST DATA (psi)-----			
SECT	LOAD (Cum.)	RATED	S.F.	ACTUAL	DERATED	S.F.	ACTUAL	RATED	S.F.
1	126.1	198	1.57	11,300	15,300	1.35	11,295	15,000	1.33
2									
3									
4									
5									
6									

COST INFORMATION:

SECT	SIZE (OD)	WT (# ft)	GRADE	THREAD	COST Ft	COST
1	2-7/8"	3.7	L-80	AB-IJ-3SS	\$12.85	\$186,348
2						
3						
4						
5						
6						

 TOTAL: \$186,348

NOTES:

- 1) Pipe Body MYS is shown is kips.
- 2) Tensile load is determined using air weights.
- 3) Rated tensile strength is the lower value of body or joint strength.
- 4) Collapse strength is derated due to tensile load using the Westcott, Dunlop, & Kemler "Maximum Energy Strain Model".
- 5) Max SICP & Burst Pressures are calculated as BHP, less the hydrostatic pressure of a 0.65 SG dry gas column.