BASS ENTERPRISES

Operator: BASS ENTERPRISES	Well Name: JRU #70
Project ID:	Location: EDDY OC., NM

Design Parameters:

Mud weight (10.00 ppg): 0.519 psi/ft
Shut in surface pressure   : 3517 psi
Internal gradient (burst) : 0.074 psi/ft
Annular gradient (burst) : 0.519 psi/ft
Tensile load is determined using air weight
Service rating is "Sweet"

Design Factors:

Collapse   : 1.000
Burst   : 1.00
8 Round   : 1.60 (J)
Buttress   : 1.60 (J)
Other   : 1.60 (J)
Body Yield : 1.60 (B)

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	3,800	9.625	36.00	K-55	ST&C	3,800	8.765	

	Collapse Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	S.F.	Tension Load (kips)	Tension Strgth (kips)	S.F.
1	1974	2020	1.023	3517	3520	1.00	136.80	423	3.09 J

Prepared by : *BJL, Midland, TX*
Date   : 05-05-1994
Remarks   :
  Minimum segment length for the 3,800 foot well is 1,000 feet.
  SICP is based on the ideal gas law, a gas gravity of 0.60, and a mean gas
    temperature of 134°F (Surface 74°F , BHT 112°F & temp. gradient 1.000°/100 ft.)
  Surface/Intermediate string:
    Next string will set at 12,000 ft. with 9.50 ppg mud (pore pressure of 5,922
    psi.) The frac gradient of 1.000 psi/ft at 3,800 feet results in an injection
    pressure of 3,800 psi Effective BHP (for burst) is 3,800 psi, the
    BHP load is 1,826 psi (using an annular mud of 10.00 ppg) and the differential
    gradient is -0.440 psi/ft.

NOTE :   The design factors used in this casing string design are as shown above. As a general guide-
line, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with
evacuated casing), 1.0 - Burst, 1.3 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body
Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and
Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.
Costs for this design are based on a 1987 pricing model. (Version 1.06)