

### CASING PROGRAM

<u>INTERVAL</u>	<u>LENGTH</u>	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>OPTIMUM MAKE-UP TORQUE</u>
0-325	325	9-5/8	36. #	K-55	STC 4230
0-5400	5400	7	23. #	K-55	STC 3090 LTC 3410
5250-7000	1750	4-1/2	10.5#	K-55	STC 1460
7000-7885	885	4-1/2	11.6#	K-55	STC 1700 LTC 1800

### MUD PROGRAM

0-325'	Spud mud.
325-5400'	Low solid, fresh water mud. (Water and Benex.) Mud up prior to running casing.
5400'-T D	Gas

### EVALUATION

#### Cores and DST's:

NONE.

#### Deviation Surveys

1. Survey surface hole at 100' intervals. Maximum allowable deviation at 500' is 1-1/2°
2. From surface to the Mancos formation, deviation surveys must be taken every 500'. In the Mancos/Gallup zones, surveys to be each 250'. Record all surveys in IADC Report book. Maximum allowable change in deviation is 1° per 100'. Maximum deviation allowable is 50.

#### Samples:

As requested by Wellsite Geological Engineer

#### Logs:

- |                 |                         |
|-----------------|-------------------------|
| 1. GR/INDUCTION | T D - Intermediate shoe |
| 2. GR/FDC/Cal   | T.D. - minimum          |

### BLOWOUT EQUIPMENT

11" - 3000 BOP with rotating head to comply with TOC requirements as shown in BOE arrangement, Figure C. Preventers must be checked for operation every 24 hours with each check recorded on the IADC Drilling Report Sheet.