With 5½" - 14 & 15.5# J-55 casing on btm. @ 3372' and approx. 1500' of gassy oil in the hole, 50 bbls. of saturated brine was run inside the 5½" csg. and allowed to equalize. Contractor then pulled:

8-5/8" csg. from 990'
10-3/4" csg. from 550'
13-3/8" csg. from 105' (2 jts. of 13-3/8" stuck and left in hole from about 20 - 87').

At 2 A.M. August 17, 1957, cementing operations were commenced to cement the 5½" casing @ 3372' and to circulate cement to the surface. Shortly after circulation was gained at the surface, the oil and gas being displaced headed and sprayed over the rig and cementing equipment and was ignited. Four B J Service trucks, one Rowland Trucking Co. water truck and the cable tool rig were destroyed. Two B J Service men have died.

Fire in the cellar lasted only a few minutes, since oil and gas in the annulus was present in a limited quantity. The 5½" casing was in tension within a few inches of btm. while cement was being pumped, and during the fire it dropped back to btm. due to the threads of the 10' pup joint in the elevators pulling out of the collar in the cellar. The csg. does not appear to be damaged. (3)

On August 19, 1957, a steel measuring line found cement inside the 5½" casing @ 255' and stopped outside the 5½" casing @ 240'. Calculations for the theoretical fill obtained by the cement pumped in are as follows:

Casing volume 255 - 3372' (3117'):

3117' x .1366 C.F./Lineal ft. = 426 C. F. of cmt. inside 5½" csg.

(Volume factor adjusted for 10% 15.5# & 90% 14# csg).

Volume of annular space:

5½" csg. in 8" hole 990 - 3372' (2382'):

2382' x .1841 C.F./Lineal ft. = 438 C.F.

5½" csg. in 10" hole 550-990' (440'):

440' x .3804 C.F./Lineal Ft. = 167 C. F.

5½" csg. in 13" hole 105-550' (445'):

445' x .7567 C.F./Lineal ft. = 337 C. F.

Total Volume from top cmt. inside 5½" csg. up to 105' on outside 5½" csg. 1368 C.F.

Also 5½" - 14 & 15.5# J-55 casing in btm @ 3372' and approx. 2500' of gassy oil in the hole, no bottom. A saturated brine was run inside the 5½" csg. and allowed to equalize. Conductor then pulled.

6-5/8" csg. from 990'
10-3/4" csg. from 550'
13-3/8" csg. from 105' (2 jts. of 13-3/8" stuck and left in hole from about 20 - 87').

At 2 A.M. August 17, 1957, cementing operations were commenced to cement the 5½" casing @ 3372' and to circulate cement to the surface. Shortly after circulation was gained at the surface, the oil and gas being displaced headed and sprayed over the rig and cementing equipment and was ignited. Four B J Service trucks, one Rowland Trucking Co. water truck and the cable tool rig were destroyed. Two B J Service men have died.

Fire in the cellar lasted only a few minutes, since oil and gas in the annulus was present in a limited quantity. The 5½" casing was in tension within a few inches of btm. while cement was being pumped, and during the fire it dropped back to btm. due to the threads of the 10' pup joint in the elevators pulling out of the collar in the cellar. The csg. does not appear to be damaged. (?)

On August 19, 1957, a steel measuring line found cement inside the 5½" casing @ 255' and stopped outside the 5½" casing @ 240'. Calculations for the theoretical fill obtained by the cement pumped in are as follows:

<u>Casing volume 255 - 3372' (3117'):</u>

3117' x .1366 C.F./Lineal ft. = 426 C. F. of cmt. inside 5½" csg.

(Volume factor adjusted to 10% 15.5# & 90% 14# csg).

<u>Volume of annular space:</u>

5½" csg. in 8" hole 990 - 3372' (2382'):

2382' x .1841 C.F./Lineal ft. = 438 C.F.

5½" csg. in 10" hole 550-990' (440'):

440' x .3804 C.F./Lineal ft. = 167 C. F.

5½" csg. in 13" hole 105-550' (445'):

445' x .7567 C.F./Lineal ft. = <u>337</u> C. F.

Total Volume from top cmt. inside 5½" csg. up to 105' in outside 5½" csg. 1368 C.F.