Outside Diameter Inches	Weight With Couplings (lbs/ft)	Wall Thickness Inches	O.D. Inches	Coupling Length Inches	Threads Per Inch	Grade Of Casing
6	15.00	0.238	6.625	7	8	F-25
63/8	17.00	0.245	7.390	71/4	8	F-25
7	17.00	0.231	7.656	71/4	8	F-25
7%	20.00	0.250	8,500	71/2	8	F-25
83/8	24.00	0.264	9.625	7%	8	F-25
9%	29.30	0.281	10.625	73/4	8	. F-25
10%	32.75	0.279	11.750	8	8	F-25
11%	38.00	0.300	12.750	8	8	F-25
13%	48.00	0 .330	14.375	8	8	F-25

If casing length exceeds one thousand (1,000) feet, H-grade or better shall be used for thirteen and three-eighths (13%) inch casing.

- 4-15.2. HOLE DIAMETER. In all cases the diameter of the drilled hole shall be at least two (2) inches greater than the outside diameter of the casing.
- 4-16. CASING-CEMENTING-TESTING. The following specifications shall govern casing, cementing, and testing: the casing shoe shall be welded to the casing to assure proper position. The casing shall be landed on a suitable casing seat in the confining formation overlying the artesian aquifer formation and sufficient oil well cement shall be used to obtain circulation to the surface. When circulation to the surface is not obtained, cement shall be placed to the surface behind the casing. Additives of pozzolanic nature may be used above the casing shoe but shall not exceed fifty per cent (50%) by volume. The addition of calcium chloride and/or gel is permissible but shall not in any case exceed two per cent (2%) each by weight. A sufficient amount of cement without additives shall be used to allow neat cement to seal the casing shoe and rise a minimum of fifty (50) feet above the shoe between the casing and the hole. Cement shall be allowed to set a minimum of forty eight (48) hours before drilling is resumed. Sealing off of the formations shall be checked by a method approved by the State Engineer or his authorized representative.
- 4-16.1. CEMENTING. Cementing shall be done by the pump and plug method as follows: after the casing has been run and landed, the pump shall be started and mud circulation shall be maintained for at least thirty (30) minutes with the casing raised slightly in order to equalize the mud pressure inside and outside of the casing. A heavy slurry of oil well cement and water shall be mixed and poured into the top of the casing. If additives are used in the slurry, sufficient neat cement (density fifteen (15) pounds per gallon) shall then be added to seal the casing shoe and rise a minimum of fifty (50) feet above the shoe. A casing plug of standard make shall be placed in the casing above the cement and a swedge nipple screwed onto the top of the casing and connected to the mud pump. Then a mud slurry or water shall be pumped into the casing, forcing the cement and casing plug down the casing. A measuring line shall be run behind the plug so that the driller may know its location at all times. When the plug reaches the