Floating Equipment or: 13 3/8" casing

	\$229.00
1 Guide Shoe	1 -
	239.00
l Insert Float Valve	
l Centralizer	63.50
— -	15.50
2 Pounds Weld-A	
l Top 5 Wiper Plug	132.00
	\$679.00
	4012.00

9 5/8" INTERMEDIATE CASING AND HOLE DATA:

Hole Depth - 3600' Casing Size - 9 5/8" Casing Depth - 3600' Hole Size - 12 1/4" Fill-up Required - 3600' (circulate cement)

Recommendation:

Install floating equipment, run 9 5/9" casing to bottom and circulate required hours to condition hole for cementing intermediate casing.

Mix 1,635 sacks of the following cement blend:

Halliburton Light Cement containing 5 lbs./sk. Gilsonite, 1/4 lb./sk. Flocele

Slurry Weight:	12.57 lbs./gal.
Slurry Volume:	1.91 cu. ft./sk.
Water Ratio:	9.9 gals./sk.

Tail-in with 200 sacks of the following cement blend:

Class "C" cement

Slurry Weight:		lbs./gal.
Slurry Volume		cu. ft./sk.
Water Ratio:	6.3	gals./sk.

These cement blends were designed to fill from 3600' to ground level. The calculations incorporate 200 percent excess cement over a 9 5/8" x 12 1/4" annulus; however, a fluid caliper plus the indicated excess is recommended for the actual job.

Floating equipment should consist of:

One (1) Guide Shoe One (1) Float Collar with Automatic Fill-up Unit Four (4) Centralizers One (1) EZ Lok Clamp Two (2) Pounds Weld-A One (1) Top 5 Wiper Plug