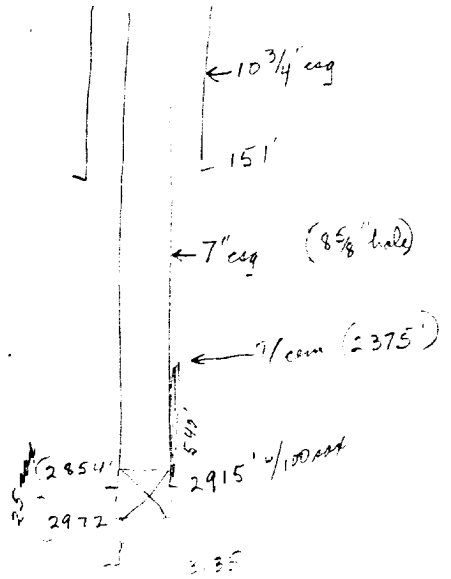
3-Y Phelps Dodge

$10\frac{3}{4}$" csg = 1.9 lin ft/cu ft
7" csg = 4.8 lin ft/cu ft
$8\frac{5}{8}$" hole = 2.11 to lin ft/cu ft
$10\frac{3}{4}$" csg - 7" csg ann = 3.6 ft/ft
$8\frac{5}{8}$" hole - 7" csg ann = 7.2 ft/ft



cement on 7" csg: 100 sax

$\frac{1.14 \text{ cf}}{\text{sack}} \times \frac{7.2 \text{ ft}}{\text{cf}} \times .66 = 540'$

2224' of 7" not cemented
no pf.

Prop. Plugging

cut & pull 7" from ± 2375'
set plug @ ± 2375' to 2330' (25 sax)
set plug @ ± 2165' to 2115' (25 sax)
set plug @ ± 810' to 720' (50 sax)
set plug @ 180' to 132' (25 sax)
~~30' of 8 5/8" hole~~ 18' of $10\frac{3}{4}$"
5 sacks @ ± 11' to surf

---

or perf @ ± 2200' & cmt to ± 1700'
Est 2100' of $8\frac{5}{8}$" hole - 7" csg annulus

$= \frac{7.2 \times .66}{4.75 \times 1.14} \times 2100' = 390$ sax

---

$8\frac{5}{8}$" hole - 7" csg ann = 7.2 ft/cuft × .66 filling = 4.75 ft/cuft
1 sack = 1.14 cuft, so 1 sack covers 1.14 × 4.75 = 5.4 ft.
2100' requires $\frac{2100}{5.4}$ = 390 sax