

Wolf Creek Unit 9 D2 and D3

Surface Casing Cement Volumes/Design

Designed Depth	1200'
Hole Size	13.5"
Casing Size	9 5/8"
Annulus Capacity	.0870 bbl/ft

Cement Design

Cement to surface Use 50% excess.

1000' Lead 200' Tail

Lead Cement - 35/65 Poz G (BJ's A-Serv Lite blend) 6% gel, 3% CaCl .25 lbs/sk cellflake.

13 ppg, 1.77 cf/sk yield.

Tail Cement – G/2% CaCL, .25 lbs/sk cellflake

15.6 ppg, 1.2 cf/sk yield

Lead

$1000' \times .0870 = 87 \text{ bbl.}$ Or $87 \text{ bbl} / .1781 \text{ cf/bbl} = 488.49 \text{ cf}$

Adding in excess (50%) $1.5 \times 488.49 \text{ cf} = 732.74 \text{ cf}$

Converting to sacks $732.74 \times 1.77 \text{ yeild} = 413.98 \text{ sacks}$ rounding up to 415 sacks

Tail

$1000' \times .0870 = 17.4 \text{ bbl.}$ Or $17.4 \text{ bbl} / .1781 \text{ cf/bbl} = 97.7 \text{ cf}$

Adding in excess (50%) $1.5 \times 97.7 \text{ cf} = 146.55 \text{ cf}$

Converting to sacks $146.55 \times 1.20 \text{ yeild} = 122.13 \text{ sacks}$ rounding up to 125 sacks

Lead: 415 sacks (130.8 bbl) Tail 125 sacks (26.7 bbl)