

## Cementing Systems

**Spacer System: 20 bbls .**

**CW-100 Chemical Wash**

**Lead System: 750 sks.**

**Class B + 3% D79 + 1% S1 + 0.2% D46**

Mix Weight	:	11.4	PPG
Yield	:	2.88	cu.ft./sk.
Mix Water	:	17.71	gal./sk.
Fluid Loss	:	N/C	cc/30 minutes
Thickening Time	:	5:00	hours:minutes
Comp. Strength	:	300	psi in 48 hrs.

**Tail System: 275 sks.**

**50:50 Poz:Class B + 2.75% D20 + 0.2% D167 + 0.2% D46 + 0.25 pps D29**

Mix Weight	:	12.4	PPG
Yield	:	1.6	cu.ft./sk.
Mix Water	:	8.29	gal./sk.
Fluid Loss	:	372	cc/30 minutes
Thickening Time	:	4:30	hours:minutes
Comp. Strength	:	1,200	psi in 48 hrs.

### Notice:

Performance parameters for cement systems recommended are typically taken from existing laboratory data. In some cases, data exist which duplicate the recommended systems and job environment, but when those data do not exist, extrapolations are made from data which most closely match the anticipated conditions. Sufficient lead-time should always be allowed, so that pilot samples/field blends can be run to verify system performance parameters, before actually pumping the job.

This quote is valid for a period of thirty days from the date submitted. These prices are estimates based on current price structure and will vary somewhat with the materials, equipment, and time actually required at the time of service. The discount shown will be applicable to the most current Dowell price book in effect at the time of service. Not included are the costs of fluid storage, oil, water, (or transportation thereof) except as listed. Dowell does not offer these services.

The cement slurry data presented are from systems previously tested in Dowell laboratories. Thickening time tests should be run when field mix water is available and final temperatures are known. Mud\Cement compatibility tests should be run when final mud systems are in use. These tests could cause quantity variations of the materials recommended, thereby affecting the price of the job.

In the interest of safety, a pre-job tailgate safety meeting will be held with your representative and other on-location personnel to familiarize everyone with existing hazards and safety procedures. During this meeting a designated wash-up area will be assigned for our cementing unit to dispose of our cement slurry and drilling mud displacement fluid.

Thank you for considering Dowell for this work. Please do not hesitate to call with any questions or concerns.

Duane Gonzalez  
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