

TABLE 1

**CASING AND CEMENTING PROGNOSIS**

SIZE 9-5/8"	DEPTH 400'
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WELL Vale - Slim Exploration
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INTERVAL	WEIGHT LB/FT	GRADE	JOINT TYPE	CALCULATED SAFETY FACTORS		
				BURST	COLL.	TENSION
0-300' 400'-500'	36	K-55	Buttress	3.9	High	High
<b>DESIGN CONDITIONS</b>						
Surface Burst Pressure	500	psi	Outside mud wt. (collapse)	15.5	ppg	
Inside Mud Weight (Burst)	15.5	ppg	Inside mud wt. (collapse)	8.6	ppg	
Outside Mud Weight (Burst)	--	ppg	Form. press. grad. at shoe (collapse)	--	ppg	

**CEMENT PROGRAM**

<b>SLURRY DESCRIPTION AND PROPERTIES</b>			
SLURRY DESCRIPTION: Class "G" cement, 40% Silica Flour, 3% Gel, 1% CFR-3.			
Use 1:1 Perlite and 40% Silica flour on lead slurry if loss circulation poses a problem to using this design.			
		DESIRED TOP: Surface	EXCESS: 100%
SLURRY VOL.- CU. FT.	250 (Lead slurry)	(Tail slurry)	Water (lead/tail)
SLURRY YIELD - CU. FT./SACK	1.53	-	6.05/- Gal/sk
SLURRY DENSITY - PPG	16.17	-	
THICKENING TIME	2-3 hrs.	-	
COMPRESSIVE STRENGTH - PSI (HRS)	2,320 (8 hrs.)	-	
<b>RUNNING AND CEMENTING INSTRUCTIONS</b>			
<b>Shoe, collars</b>			
<ol style="list-style-type: none"> <li>Use Halliburton type float shoe.</li> <li>Use Bakerlock on bottom 3 collars.</li> </ol>			
<b>Centralizers - number, type and spacing</b>			
<ol style="list-style-type: none"> <li>One centralizer above shoe; next, one joint up from shoe; one on the fifth joint (middle of string) and one on the top joint.</li> </ol>			
<b>Preflush, displacement rate, plugs, reciprocation, etc.</b>			
<ol style="list-style-type: none"> <li>Pump 50 cu. ft. of water ahead and 50 cu. ft. of light cement preflush</li> <li>Do not reciprocate casing. Do top job if cement settles.</li> </ol>			
<b>Pressure testing and landing</b>			
<ol style="list-style-type: none"> <li>Do not exceed testing pressure of 500 psi.</li> <li>Have representative from BLM witness test.</li> </ol>			

*should specify  
ensure complet.  
cement grade  
← on bottom.*

# CASING AND CEMENTING PROGNOSIS

SIZE 7" DEPTH 2,000'

WELL  
Vale - Slim  
Exploration

INTERVAL	WEIGHT LB/FT	GRADE	JOINT TYPE	CALCULATED SAFETY FACTORS		
				BURST	COLL.	TENSION
0-2,000'	23	K-55	Buttress	1.63	4.5	7.9
<b>DESIGN CONDITIONS</b>						
Surface Burst Pressure	1,000	psi	Outside mud wt. (collapse)	15.5	ppg	
Inside Mud Weight (Burst)	15.5	ppg	Inside mud wt. (collapse)	8.6	ppg	
Outside Mud Weight (Burst)	--	ppg	Form. press. grad. at shoe (collapse)	--	ppg	

## CEMENT PROGRAM

SLURRY DESCRIPTION AND PROPERTIES			
SLURRY DESCRIPTION: Class "G" cement, 40% Silica Flour, 3% Gel, 1% CFR-3. Tail slurry:			
Class "G" cement, 40% Silica Flour and 0.5% CFR-3. Use 1:1 Perlite and Silica Flour			
lead slurry if loss circulation poses a problem in using this design.			
DESIRED TOP:		Surface	EXCESS: 100%
SLURRY VOL.- CU. FT.	614 (Lead slurry)	20 (Tail slurry)	Water (lead/tail)
SLURRY YIELD - CU. FT./SACK	1.53	1.62	6.05/6.8 Gal/sk
SLURRY DENSITY - PPG	16.17	15.5	
THICKENING TIME	2-3 hrs.	2 hrs.	
COMPRESSIVE STRENGTH - PSI (HRS)	2,320 (8 hrs.)	2,000/8 hrs.	
RUNNING AND CEMENTING INSTRUCTIONS			
<b>Shoe, collars</b>			
1. Use Halliburton type float shoe. 2. Use Bakerlock on bottom 3 collars.			
<b>Centralizers - number, type and spacing</b>			
1. One centralizer above shoe; next one on first collar; then every 90 ft. (or every 3rd joint).			
<b>Preflush, displacement rate, plugs, reciprocation, etc.</b>			
1. Pump 75 cu. ft. of water ahead and 75 cu. ft. of light cement preflush. 2. Do not reciprocate casing. Do top job if cement settles.			
<b>Pressure testing and landing</b>			
1. Do not exceed testing pressure of 1,000 psi. 2. Have representative from B.L.M. witness test.			