

# Cement Verification Report - Cementer's Well Service, Inc.

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COGCC Operator Guidance

RULE #308.A.B(2)A.ii



CLIENT: PDC - Petroleum Development Corp	Cementor's FIELD TICKET #	210186
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## Requested Operator Guidance:

1) Well Name & Number	Lease	Chalk	Well No.	05N
2) Well API Number	05-123-48618			
3) Job Date	10/15/20	Time on	23:00	24 hr time
4) Job Type	New Well Surface			
5) Cementing Company	Cementor's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296	
6) Ambient conditions	clear / rain / snow / other		temp deg F	
7) Slurry Description				
a) Purpose	Surface - 9 5/8" CSG, 12 1/4" hole			
b) Cement Class	Type I / II			
c) Cement Yield	1.61	cuft / sk		
d) Cement Density	13.9	PPG		
e) Number of sks	580	sks (94# equiv)		
f) Cement Volume (dry)	580	cuft (ft^3)		
g) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
h) Slurry mixed	166.3	BBLs slurry		
i) Additives used	1.50%	CaCl2		
	3.00%	Bentonite		
j) Displacement Fluid Vol	134.8	BBLs H2O		
k) Method of Placement				
l) Set Depth	1,785	feet (ft)		
m) Stage tool depth	n/a			
n) Float Collar Depth	1,744	feet (ft)		
o) Designed Top of Cement	n/a	to surface		
p) Centralizer depths				feet (ft)
8) Charts - (pressure, density, pump rate)				
Landed Plug @	750	psi	Final Lift Pressure @	500 psi
Cement Density (as weighed during job) @	13.8	PPG		
9) Job notes				
a) Plug down	<input checked="" type="radio"/> Y / <input type="radio"/> N	Time	1:07	24 hr time on 10/16/20
b) Floats held	<input checked="" type="radio"/> Y / <input type="radio"/> N			
c) Full Returns	<input checked="" type="radio"/> Y / <input type="radio"/> N	Lost Circulation	<input checked="" type="radio"/> Y / <input type="radio"/> N	
d) Cement to surface	<input checked="" type="radio"/> Y / <input type="radio"/> N	10.0	BBLs to surface	
e) If no returns, top off	BBLs			
f) Top off detail				

Chalk 05N Centralizer Depths					
Length	Centralized?	Cum Length	Top Depth		
40.97	Yes	1,437.48	347.4		
40.93	Yes	1,236.06	548.8		
37.55	Yes	1,037.59	747.3		
38.78	Yes	839.77	945.1		
40.95	Yes	639.85	1,145.1		
41.01	Yes	443.96	1,340.9		
37.85	Yes	239.15	1,545.8		
40.97	Yes	42.82	1,742.1		