

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

P.O. BOX 336220 • GREELEY, CO 80633 • (970) 353-7299 • FAX (970) 353-7712

COGCC Operator Guidance

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



CLIENT: PDC - Petroleum Development Corp	Cementer's FIELD TICKET #	300133-D
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Requested Operator Guidance:

1) Well Name & Number	Lease	Sanford	Well No.	04NA
2) Well API Number	05-123-49919-00			
3) Job Date	2/11/21	Time on	20:00	24 hr time
4) Job Type	New Well Surface			
5) Cementing Company	Cementer'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	550	sks (94# equiv)		
f) Cement Volume (dry)	550	cuft (ft^3)		
g) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
h) Slurry mixed	157.7	BBLs slurry		
i) Additives used	1.50%	CaCl2		
	3.00%	Bentonite		
j) Displacement Fluid Vol	136.0	BBLs H2O		
k) Method of Placement				
l) Set Depth	1,800	feet (ft)		
m) Stage tool depth	n/a			
n) Float Collar Depth	1,759	feet (ft)		
o) Designed Top of Cement	n/a	to surface		
p) Centralizer depths	42, 206, 372, 536, 701, 867, 1033, 1198, 1364, 1529, 1654, 1736 feet (ft)			
8) Charts - (pressure, density, pump rate)				
Landed Plug @	850	psi	Final Lift Pressure @	550 psi
Cement Density (as weighed during job) @	13.9	PPG		
9) Job notes				
a) Plug down	Y/N	Time	21:45	24 hr time
b) Floats held	Y/N			
c) Full Returns	Y/N	Lost Circulation	Y/N	
d) Cement to surface	Y/N	18.0	BBLs to surface	
e) If no returns, top off	BBLs			
f) Top off detail				



Centralizer Depths

Well Name: SANFORD 04NA

Surface, Set Depth: 1,799.9ftKB

API 05123499190000		Surface Legal Location NENW 29-5N-66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,905.00	Original KB Elevation (ft) 4,918.00	KB-Ground Distance (ft) 13.00		Spud Date	Rig Release Date	On Production Date		Abandon Date	

Casing Run Tally

Run #	Ref #	Item Des	OD (in)	Wt (lb/ft)	Grade	Run?	Len (ft)	Centralized?	Ext Jw/ry	Connections	Top (ftKB)	Cum Len (ft)
2		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,756.7	43.21
6		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,591.3	208.65
10		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,425.8	374.09
14		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,260.4	539.53
18		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,094.9	704.97
22		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	929.5	870.41
26		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	764.1	1,035.85
30		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	598.6	1,201.29
34		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	433.2	1,366.73
38		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	267.7	1,532.17
41		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	143.6	1,656.25
43		Casing Joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	60.9	1,738.97