

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

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COGCC Operator Guidance **RULE #308.A.B(2)A.ii**



<b>CLIENT:</b> PDC - Petroleum Development Corp	Cementer's FIELD TICKET #	<b>300005</b>
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**Requested Operator Guidance:**

1) Well Name & Number	Lease	Huron	Well No.	3N
2) Well API Number	05-123-49583			
3) Job Date	11/18/20	Time on	8:30	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	590	sks (94# equiv)		
f) Cement Volume (dry)	590	cuft (ft^3)		
g) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
h) Slurry mixed	169.1	BBLs slurry		
i) Additives used	1.50%	CaCl2	3.00%	Bentonite
Total Water Used				
j) Displacement Fluid Vol	126.2	BBLs H2O		
k) Method of Placement				
l) Set Depth	1,689	feet (ft)		
m) Stage tool depth	n/a			
n) Float Collar Depth	1,633	feet (ft)		
o) Designed Top of Cement	n/a	to surface		
p) Centralizer depths	40, 243, 444, 647, 848, 1049, 1248, 1449,			feet (ft)
8) Charts - (pressure, density, pump rate)				
Landed Plug @	900	psi	Final Lift Pressure @	670 psi
Cement Density (as weighed during job) @	13.9	PPG		
9) Job notes				
a) Plug down	<input checked="" type="radio"/> Y / <input type="radio"/> N	Time	11:00	24 hr time
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	28.0	BBLs to surface	
e) If no returns, top off	BBLs			
f) Top off detail				



## Centralizer Depths

**Well Name: Huron 3N**

**Surface, Set Depth: 1,688.5ftKB**

API 05123495830000		Surface Legal Location SESE 22 5N 64W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,598.00	Original KB Elevation (ft) 4,626.00	KB-Ground Distance (ft) 28.00	Spud Date 2/25/2021 15:30	Rig Release Date 2/28/2021 09:00	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	40.53	Yes		LT&C	1,646.1	42.38
7		Casing Joints	9 5/8	36.00	J-55	Yes	40.98	Yes		LT&C	1,443.2	245.28
12		Casing Joints	9 5/8	36.00	J-55	Yes	40.49	Yes		LT&C	1,241.9	446.58
17		Casing Joints	9 5/8	36.00	J-55	Yes	40.50	Yes		LT&C	1,039.6	648.88
22		Casing Joints	9 5/8	36.00	J-55	Yes	40.40	Yes		LT&C	838.4	850.14
27		Casing Joints	9 5/8	36.00	J-55	Yes	40.55	Yes		LT&C	637.5	1,051.01
32		Casing Joints	9 5/8	36.00	J-55	Yes	39.29	Yes		LT&C	438.1	1,250.40
37		Casing Joints	9 5/8	36.00	J-55	Yes	39.38	Yes		LT&C	236.8	1,451.69