

# Surface Cement Verification Report

Drake 04NA

Date: Jul 29, 2023

Cementer's Well Service, Inc.  
P.O. BOX 336220 • GREELEY, CO 80633 •  
(970) 690-1100



CLIENT: PDC Energy

FIELD TICKET #: 200.0033.0  
21

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

## Job Information

<b>API #:</b>	05-123-51833	<b>Job Type:</b>	New Well -- Surface
<b>Well Owner:</b>	PDC Energy	<b>Cementing Company:</b>	Cementer's Well Service, Inc.
<b>Lease:</b>	Drake	<b>Contact:</b>	Nate Kvamme, 303-324-4296
<b>Well Name:</b>	04NA	<b>Ambient Conditions:</b>	Clear
<b>State:</b>	CO	<b>Temperature:</b>	90 deg F
<b>County:</b>	Weld		
<b>Job Date:</b>	Jul 29, 2023		
<b>Time on Location:</b>	Jul 29, 2023, 9:00 AM		

## Slurry Description

<b>a) Purpose</b>	Surface
<b>b) Cement Class</b>	ASTM C150 Type II
<b>c) Cement Yield</b>	1.61 cu ft / sk
<b>d) Cement Density</b>	13.9 PPG
<b>e) Number of sks</b>	779 sks
<b>f) Mix Fluid Type</b>	
Water / Cement	8.5 gal/sk
<b>g) Slurry Mixed</b>	223.37 BBLs Cement
<b>h) Additives Used</b>	Gel/Bentonite 3.00 % Calcium Chloride 1.50 %
<b>Total Water Used</b>	305.28 BBLs Water
<b>i) Displacement Fluid Vol</b>	127.62 BBLs Water
<b>j) Method of Placement</b>	N/A
<b>l) Stage Tool Depth</b>	N/A
<b>k) Set Depth</b>	Pipe Landed @ 1,695 ft.
<b>m) Float Collar Depth</b>	Plug Landed @ 1,651 ft.
<b>n) Designed top of Cement</b>	Returns to Surface (+)
<b>o) Centralizer Depths</b>	N/A

## Job Notes

<b>a) Plug Down</b>	
Yes @ Jul 29, 2023, 11:24 AM	
Landed Plug @	1,561 PSI
Final Lift @	340 PSI
<b>b) Floats Held</b>	Yes
<b>c) Full Returns</b>	Yes
<b>Lost Circulation</b>	No
<b>d) Cement to Surface</b>	Yes
	30 BBLs Cement
<b>e) If no returns, top off</b>	
<b>f) Top off Detail</b>	
<b>g) Additional Detail</b>	
<b>Charts -</b>	
<b>(Pressure, Density, Pump Rate &amp; Total BBLs)</b>	
	*see further attached

Cementer's Well Service, Inc.

PDC Energy

Cementer's Job ID: 2098



## Centralizer Depths

**Well Name: Drake 04NA**

**Surface, Set Depth: 1,710.2ftKB**

API 05123518330000		Surface Legal Location SWNW 17 4N 64W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,737.00	Original KB Elevation (ft) 4,765.50	KB-Ground Distance (ft) 28.50	Spud Date 11/17/2023 02:30	Rig Release Date 11/21/2023 02:30	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	1	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,664.8	45.43
4	2	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,619.5	90.74
5	3	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,575.5	134.74
9	7	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,399.5	310.73
13	11	Casing joints	9 5/8	36.00	J-55	Yes	43.97	Yes		LT&C	1,223.5	486.70
17	15	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,047.6	662.64
21	19	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	871.6	838.63
25	23	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	695.5	1,014.65
29	27	Casing joints	9 5/8	36.00	J-55	Yes	43.99	Yes		LT&C	519.6	1,190.62
33	31	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	343.6	1,366.61
37	35	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	167.6	1,542.60
39	37	Casing joints	9 5/8	36.00	J-55	Yes	43.59	Yes		LT&C	80.0	1,630.19