

Surface Cement Verification Report

Drake 18N

Date: Jul 18, 2023

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

CLIENT: PDC Energy

FIELD TICKET #: 200.00158



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

Job Information

API #:	05-123-51823	Job Type:	New Well -- Surface
Well Owner:	PDC Energy	Cementing Company:	Cementer's Well Service, Inc.
Lease:	Drake	Contact:	Nate Kvamme, 303-324-4296
Well Name:	18N	Ambient Conditions:	Clear
State:	CO	Temperature:	80 deg F
County:	Weld		
Job Date:	Jul 18, 2023		
Time on Location:	Jul 18, 2023, 7:00 PM		

Slurry Description

a) Purpose	Surface
b) Cement Class	ASTM C150 Type II
c) Cement Yield	1.61 cu ft / sk
d) Cement Density	13.9 PPG
e) Number of sks	728 sks
f) Mix Fluid Type	
Water / Cement	8.5 gal/sk
g) Slurry Mixed	208.75 BBLs Cement
h) Additives Used	Gel/Bentonite 3.00 % Calcium Chloride 1.50 %
Total Water Used	295.19 BBLs Water
i) Displacement Fluid Vol	127.85 BBLs Water
j) Method of Placement	N/A
l) Stage Tool Depth	N/A
k) Set Depth	Pipe Landed @ 1,694 ft.
m) Float Collar Depth	Plug Landed @ 1,654 ft.
n) Designed top of Cement	Returns to Surface (+)
o) Centralizer Depths	N/A

Job Notes

a) Plug Down	
Yes @ Jul 18, 2023, 8:56 PM	
Landed Plug @ 1,636 PSI	
Final Lift @ PSI	
b) Floats Held	Yes
c) Full Returns	Yes
Lost Circulation	No
d) Cement to Surface	Yes
	37 BBLs Cement
e) If no returns, top off	
f) Top off Detail	
g) Additional Detail	
Charts -	
(Pressure, Density, Pump Rate & Total BBLs)	
	*see further attached

Cementer's Well Service, Inc.

PDC Energy

Cementer's Job ID: 2084



Centralizer Depths

Well Name: Drake 18N

Surface, Set Depth: 1,708.6ftKB

API 05123518230000	Surface Legal Location NWSW 17 4N 64W	Field Name Wattenberg	State CO	Well Configuration Type Horizontal		
Ground Elevation (ft) 4,736.00	Original KB Elevation (ft) 4,764.50	KB-Ground Distance (ft) 28.50	Spud Date 1/17/2024 05:30	Rig Release Date 1/21/2024 23:30	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	40.62	Yes		LT&C	1,666.6	42.05
4	2	Casing joints	9 5/8	36.00	J-55	Yes	41.16	Yes		LT&C	1,624.1	84.52
5	3	Casing joints	9 5/8	36.00	J-55	Yes	40.55	Yes		LT&C	1,583.5	125.07
9	7	Casing joints	9 5/8	36.00	J-55	Yes	40.44	Yes		LT&C	1,420.1	288.49
13	11	Casing joints	9 5/8	36.00	J-55	Yes	39.89	Yes		LT&C	1,253.8	454.82
17	15	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	1,088.8	619.85
21	19	Casing joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	922.2	786.38
25	23	Casing joints	9 5/8	36.00	J-55	Yes	43.62	Yes		LT&C	749.6	959.03
29	27	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	573.6	1,135.01
33	31	Casing joints	9 5/8	36.00	J-55	Yes	39.98	Yes		LT&C	407.3	1,301.31
37	35	Casing joints	9 5/8	36.00	J-55	Yes	40.40	Yes		LT&C	241.3	1,467.30
41	39	Casing joints	9 5/8	36.00	J-55	Yes	44.00	Yes		LT&C	77.0	1,631.59