

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 Energy	Cementer's FIELD TICKET #	300381-D
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Requested Operator Guidance:

Well Name & Number	Lease	Steamboat	Well No.	2N
Well API Number	05-123-51305			
Job Date	10/10/22	Time on	20:30	24 hr time
Job Type	New Well Surface			
Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear	62	temp deg F	
Slurry Description				
a) Purpose	Surface - 9 5/8" 36# CSG, 13 1/2" hole			
b) Cement Class	ASTM C150 Type II			
c) Cement Yield	1.61	cuft / sk		
d) Cement Density	13.9	PPG		
e) Number of sks	695	sks (94# equiv)		
f) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
g) Slurry mixed	199.1	BBLs slurry		
h) Additives used	1.5%	CaCl2	3.0%	Bentonite
Total Water Used	287.4	BBLs H2O		
i) Displacement Fluid Vol	126.8	BBLs H2O		
j) Method of Placement				
k) Set Depth	1,697	feet (ft)		
l) Stage tool depth	n/a			
m) Float Collar Depth	1,640	feet (ft)		
n) Designed Top of Cement	n/a	to surface		
o) Centralizer depths	0	feet (ft)		

Charts - (pressure, density, pump rate)

Landed Plug @ 1643 psi Final Lift Pressure @ 450 psi

Cement Density (as weighed during job) @ 13.9 PPG

Job notes

a) Plug down	<input checked="" type="radio"/> Y <input type="radio"/> N	Time	22:22	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		10/10/22	
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	32.0	BBLs to surface	
e) If no returns, top off	n/a	BBLs		
f) Top off detail				
g) Additional Detail				

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PDC Energy

Surface Cement Job Graph & Casing Pressure Test

COMPANY DETAILS

Date	10/10/22	API #	05-123-51305	Well No.	2N
County	Weld	State	CO	Lease	Steamboat

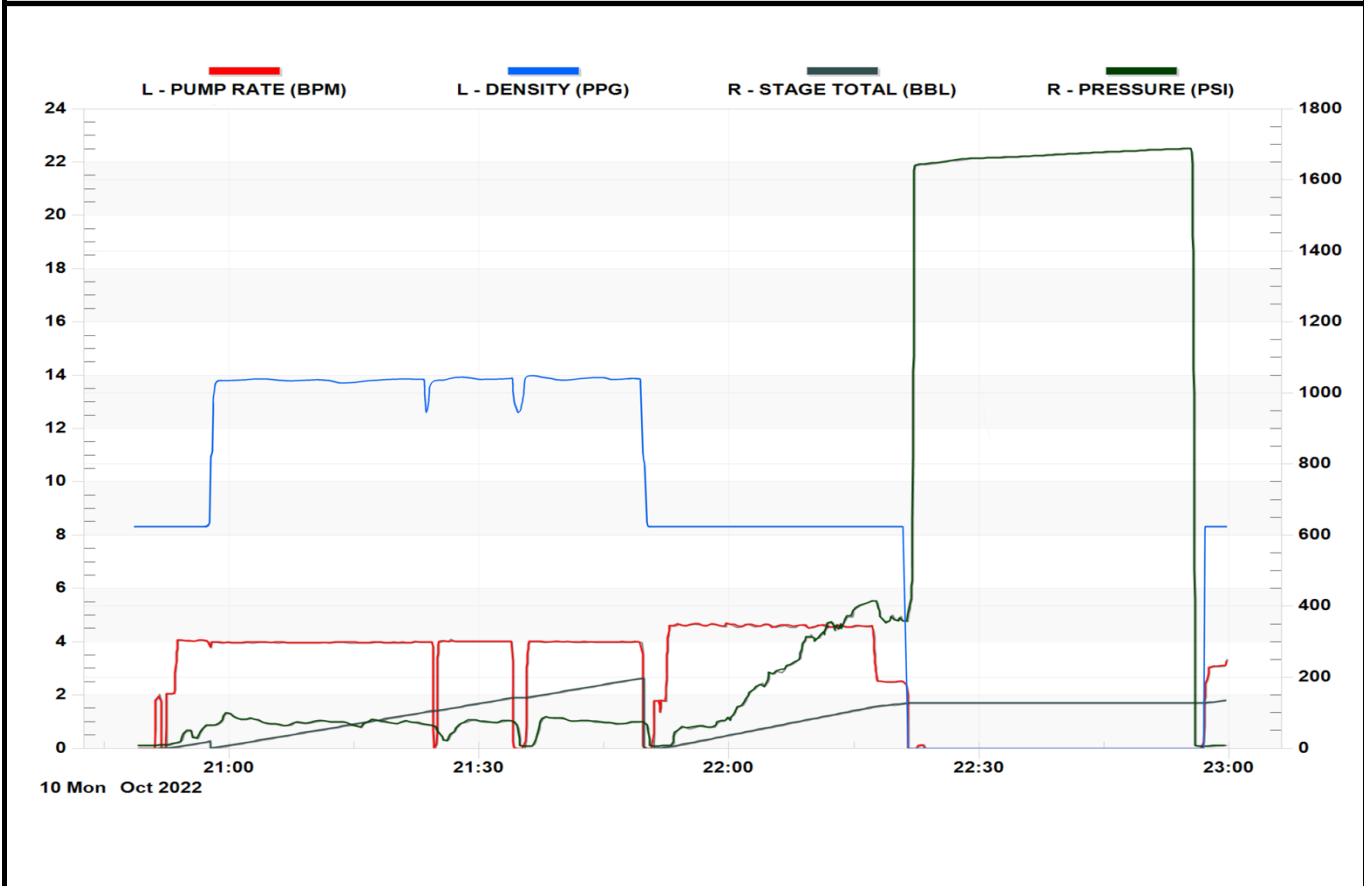
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	20:30	24 hr	Depth	1,707	ft.	Pressure Test @	1,643	psi
START TIME	20:49	10/10/22	Bottom of Surface	1,697	ft.	10 min	1,664	psi
END TIME	22:59	10/10/22	Plug Landed @	1,640	ft.	20 min	1,677	psi
			Plug Landed @	22:22	24 hr	30 min	1,688	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Steamboat 2N

Surface, Set Depth: 1,696.8ftKB

API 05123513050000		Surface Legal Location NWSE 34 4N 66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal		
Ground Elevation (ft) 4,805.00	Original KB Elevation (ft) 4,833.50	KB-Ground Distance (ft) 28.50	Spud Date 1/4/2023 08:30	Rig Release Date 1/9/2023 06:00	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	41.52	Yes		LT&C	1,653.4	43.37
3		Casing joints	9 5/8	36.00	J-55	Yes	41.18	Yes		LT&C	1,612.3	84.55
4		Casing joints	9 5/8	36.00	J-55	Yes	41.50	Yes		LT&C	1,570.8	126.05
8		Casing joints	9 5/8	36.00	J-55	Yes	41.50	Yes		LT&C	1,404.7	292.07
12		Casing joints	9 5/8	36.00	J-55	Yes	41.51	Yes		LT&C	1,238.7	458.12
16		Casing joints	9 5/8	36.00	J-55	Yes	41.51	Yes		LT&C	1,072.7	624.15
20		Casing joints	9 5/8	36.00	J-55	Yes	41.52	Yes		LT&C	906.6	790.21
24		Casing joints	9 5/8	36.00	J-55	Yes	41.52	Yes		LT&C	740.5	956.26
28		Casing joints	9 5/8	36.00	J-55	Yes	41.53	Yes		LT&C	574.5	1,122.35
32		Casing joints	9 5/8	36.00	J-55	Yes	41.52	Yes		LT&C	409.2	1,287.58
36		Casing joints	9 5/8	36.00	J-55	Yes	41.34	Yes		LT&C	243.5	1,453.31
40		Casing joints	9 5/8	36.00	J-55	Yes	41.51	Yes		LT&C	77.4	1,619.40