

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 #	300369-D
--------------------	------------------------------	----------

Requested Operator Guidance:

Well Name & Number	Lease	Steamboat	Well No.	14N
Well API Number	05-123-51304			
Job Date	10/3/22	Time on	23:00	24 hr time
Job Type	New Well Surface			
Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear	55	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	718	sks (94# equiv)		
f) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
g) Slurry mixed	205.7	BBLs slurry		
h) Additives used	1.5%	CaCl2	3.0%	Bentonite
Total Water Used	301.9	BBLs H2O		
i) Displacement Fluid Vol	126.6	BBLs H2O		
j) Method of Placement				
k) Set Depth	1,694	feet (ft)		
l) Stage tool depth	n/a			
m) Float Collar Depth	1,638	feet (ft)		
n) Designed Top of Cement	n/a	to surface		
o) Centralizer depths	0	feet (ft)		

Charts - (pressure, density, pump rate)

Landed Plug @ 900 psi Final Lift Pressure @ 475 psi

Cement Density (as weighed during job) @ 13.9 PPG

Job notes

a) Plug down	(Y) N	Time	2:00	24 hr time
b) Floats held	Y (N)		10/3/22	
c) Full Returns	(Y) N	Lost Circulation	Y (N)	
d) Cement to surface	(Y) / N	43.0	BBLs to surface	
e) If no returns, top off	n/a	BBLs		
f) Top off detail				
g) Additional Detail				

Cementer's Well Service, Inc.

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



PDC Energy

Surface Cement Job Graph & Casing Pressure Test

COMPANY DETAILS

Date	10/3/22	API #	05-123-51304	Well No.	14N
County	Weld	State	CO	Lease	Steamboat

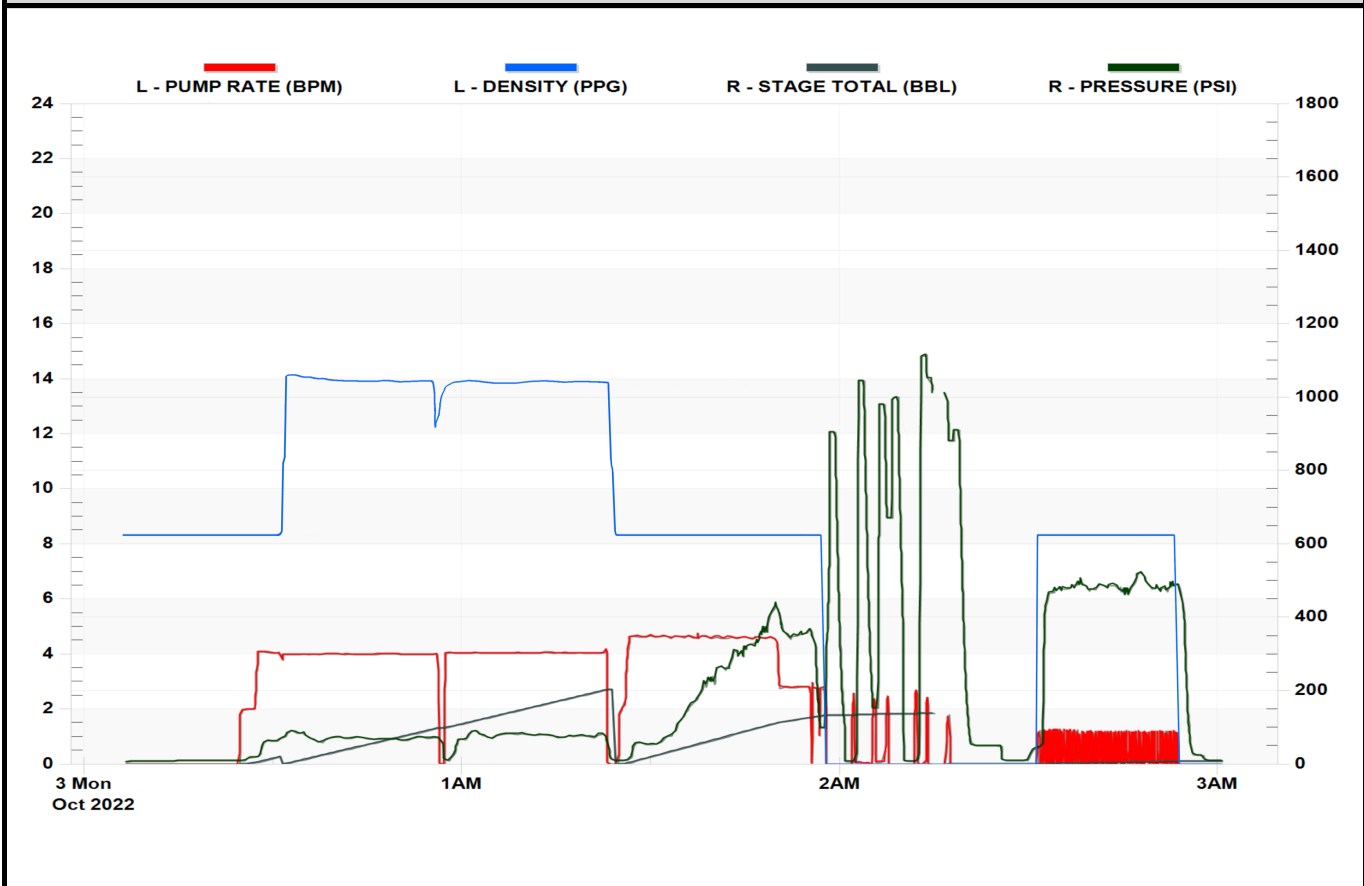
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	23:00	24 hr	Depth	1,704	ft.	Pressure Test @	900	psi
START TIME	0:06	10/3/22	Bottom of Surface	1,694	ft.	10 min	-	psi
END TIME	3:00	10/3/22	Plug Landed @	1,638	ft.	20 min	-	psi
			Plug Landed @	2:00	24 hr	30 min	-	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Steamboat 14N

Surface, Set Depth: 1,693.5ftKB

API 05123513040000		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 2/20/2023 04:30	Rig Release Date 2/24/2023 02:00	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	40.93	Yes		LT&C	1,650.7	42.78
3		Casing joints	9 5/8	36.00	J-55	Yes	41.36	Yes		LT&C	1,609.4	84.14
4		Casing joints	9 5/8	36.00	J-55	Yes	41.10	Yes		LT&C	1,568.3	125.24
8		Casing joints	9 5/8	36.00	J-55	Yes	40.95	Yes		LT&C	1,403.3	290.23
12		Casing joints	9 5/8	36.00	J-55	Yes	41.81	Yes		LT&C	1,235.0	458.55
16		Casing joints	9 5/8	36.00	J-55	Yes	41.33	Yes		LT&C	1,069.4	624.06
20		Casing joints	9 5/8	36.00	J-55	Yes	41.40	Yes		LT&C	904.1	789.43
24		Casing joints	9 5/8	36.00	J-55	Yes	41.40	Yes		LT&C	738.5	955.00
28		Casing joints	9 5/8	36.00	J-55	Yes	41.39	Yes		LT&C	573.5	1,120.04
32		Casing joints	9 5/8	36.00	J-55	Yes	41.31	Yes		LT&C	408.0	1,285.51
36		Casing joints	9 5/8	36.00	J-55	Yes	41.38	Yes		LT&C	242.4	1,451.07
40		Casing joints	9 5/8	36.00	J-55	Yes	41.35	Yes		LT&C	76.9	1,616.60