

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	Cementor's FIELD TICKET #	300329-D
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Requested Operator Guidance:

Well Name & Number	Lease	Bernhardt	Well No.	08C		
Well API Number	05-123-51142					
Job Date	7/3/22	Time on	4:00	24 hr time		
Job Type	New Well Surface					
Cementing Company	Cementor's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296			
Ambient conditions	clear	69	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	665	sks (94# equiv)				
f) Mix Fluid Type						
Water / Cement	8.5	Gal / sk				
g) Slurry mixed	190.6	BBLs slurry				
h) Additives used	1.5%	CaCl2	3.0%	Bentonite		
Total Water Used	290.1	BBLs H2O				
i) Displacement Fluid Vol	125.5	BBLs H2O				
j) Method of Placement						
k) Set Depth	1,666	feet (ft)				
l) Stage tool depth	n/a					
m) Float Collar Depth	1,624	feet (ft)				
n) Designed Top of Cement	n/a	to surface				
o) Centralizer depths	0	feet (ft)				

Charts - (pressure, density, pump rate)

Landed Plug @ 1707 psi Final Lift Pressure @ 400 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	6:30	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		7/3/22	
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	20.0	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	7/3/22	API #	05-123-51142	Well No.	08C
County	Weld	State	CO	Lease	Bernhardt

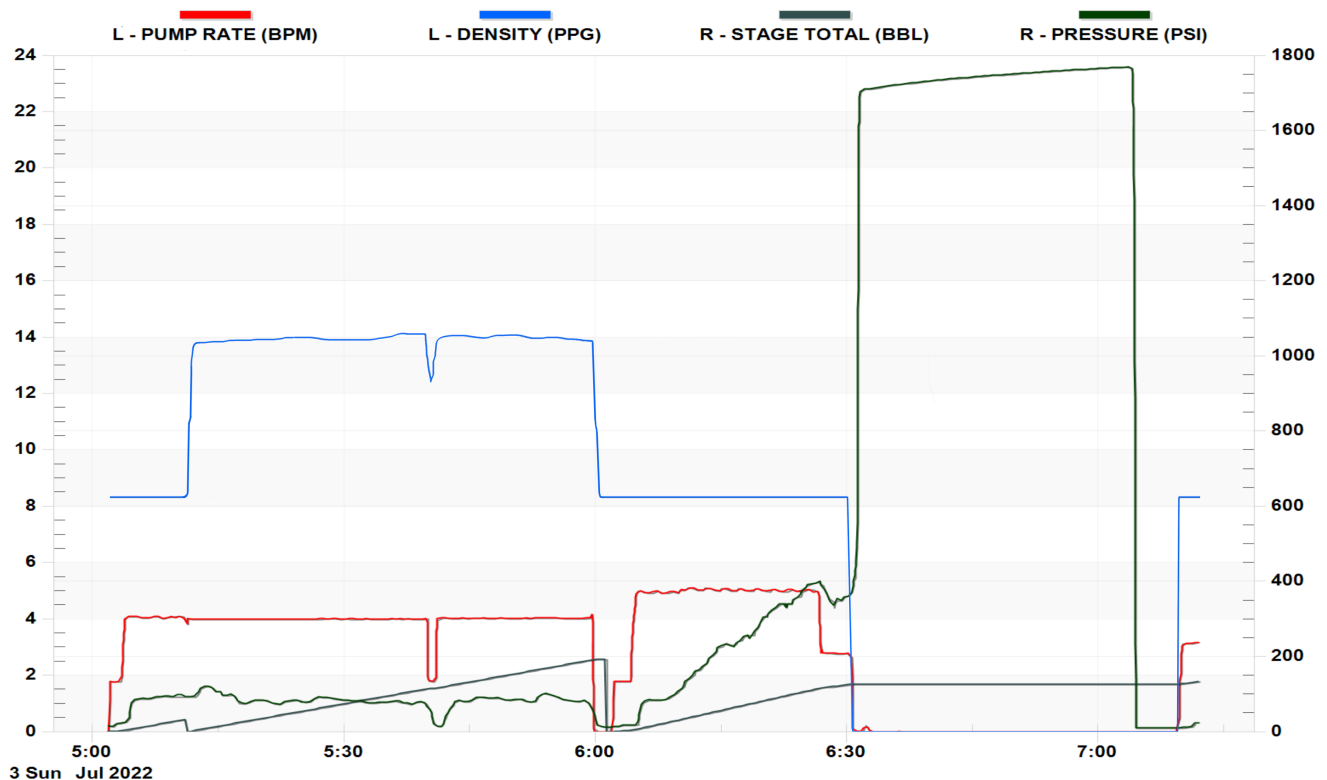
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	4:00	24 hr	Depth	1,676	ft.	Pressure Test @	1,707	psi
START TIME	4:49	7/3/22	Bottom of Surface	1,666	ft.	10 min	1,734	psi
END TIME	7:12	7/3/22	Plug Landed @	1,624	ft.	20 min	1,753	psi
			Plug Landed @	6:30	24 hr	30 min	1,767	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 08C Surface, Set Depth: 1,666.4ftKB

API 05123511420000		Surface Legal Location NWNW 18 4N 66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,736.00	Original KB Elevation (ft) 4,739.00	KB-Ground Distance (ft) 3.00	Spud Date		Rig Release Date		On Production Date		Abandon Date

Casing Run Tally												
Run #	Ref #	Item Des	OD (in)	Wt (lb/ft)	Grade	Run?	Len (ft)	Centralized?	Ext Jwlry	Connections	Top (ftKB)	Cum Len (ft)
2		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	1,622.4	44.03
3		Casing Joints	9 5/8	36.00	J-55	Yes	41.69	Yes		LT&C	1,580.7	85.72
4		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	1,538.5	127.91
8		Casing Joints	9 5/8	36.00	J-55	Yes	42.16	Yes		LT&C	1,369.7	296.76
12		Casing Joints	9 5/8	36.00	J-55	Yes	42.16	Yes		LT&C	1,201.0	465.43
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.20	Yes		LT&C	1,032.7	633.79
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	864.1	802.39
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.16	Yes		LT&C	695.4	971.05
28		Casing Joints	9 5/8	36.00	J-55	Yes	42.16	Yes		LT&C	526.7	1,139.78
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	357.9	1,308.51
36		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	189.2	1,477.24
39		Casing Joints	9 5/8	36.00	J-55	Yes	42.20	Yes		LT&C	62.7	1,603.74