

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 #	300325-D
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Requested Operator Guidance:

Well Name & Number	Lease	Bernhardt	Well No.	04NA
Well API Number	05-123-51138			
Job Date	6/30/22	Time on	7:30	24 hr time
Job Type	New Well Surface			
Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear	75	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	785	sks (94# equiv)		
f) Mix Fluid Type				
Water / Cement	8.5	Gal / sk		
g) Slurry mixed	225.0	BBLs slurry		
h) Additives used	1.5%	CaCl2	3.0%	Bentonite
Total Water Used	313.9	BBLs H2O		
i) Displacement Fluid Vol	125.0	BBLs H2O		
j) Method of Placement				
k) Set Depth	1,659	feet (ft)		
l) Stage tool depth	n/a			
m) Float Collar Depth	1,617	feet (ft)		
n) Designed Top of Cement	n/a	to surface		
o) Centralizer depths	0	feet (ft)		

Charts - (pressure, density, pump rate)

Landed Plug @ 1653 psi Final Lift Pressure @ 320 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	10:11	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		6/30/22	
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	45.0	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	6/30/22	API #	05-123-51138	Well No.	04NA
County	Weld	State	CO	Lease	Bernhardt

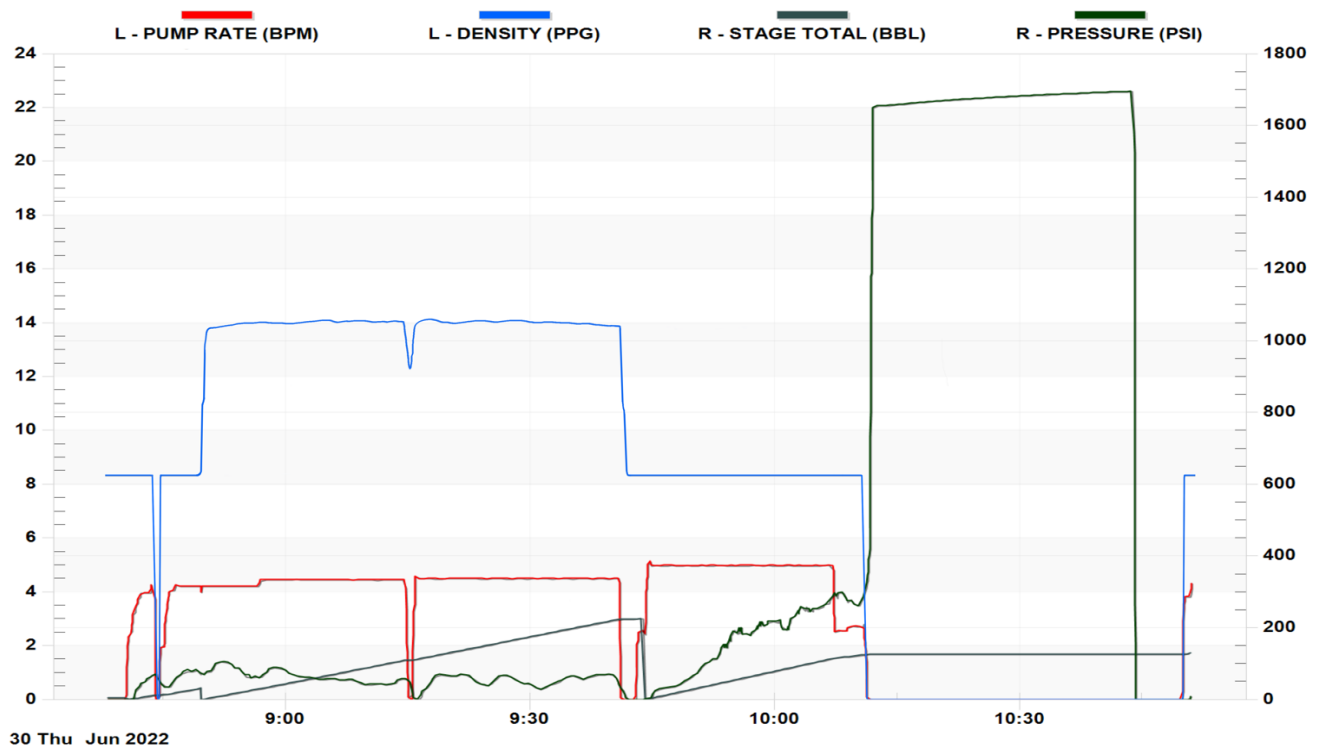
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	7:30	24 hr	Depth	1,669	ft.	Pressure Test @	1,653	psi
START TIME	8:38	6/30/22	Bottom of Surface	1,659	ft.	10 min	1,672	psi
END TIME	10:51	6/30/22	Plug Landed @	1,617	ft.	20 min	1,685	psi
			Plug Landed @	10:11	24 hr	30 min	1,694	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 04NA Surface, Set Depth: 1,659.3ftKB

API 05123511380000		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) 4,749.00	KB-Ground Distance (ft) 13.00	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	42.17	Yes		LT&C	1,615.3	44.02
3		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	1,573.1	86.17
4		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	1,531.0	128.32
8		Casing Joints	9 5/8	36.00	J-55	Yes	42.23	Yes		LT&C	1,362.2	297.12
12		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	1,193.5	465.79
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	1,024.8	634.52
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	856.1	803.20
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	688.1	971.18
28		Casing Joints	9 5/8	36.00	J-55	Yes	41.18	Yes		LT&C	521.1	1,138.22
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	354.7	1,304.57
36		Casing Joints	9 5/8	36.00	J-55	Yes	41.50	Yes		LT&C	187.8	1,471.48
40		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	20.5	1,638.80
41		Pup Joint	9 5/8	36.00	J-55	Yes	6.00	Yes		LT&C	14.5	1,644.80