

# 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 #	300328-D
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## Requested Operator Guidance:

Well Name & Number	Lease	Bernhardt		Well No.	07NA
Well API Number	05-123-51137				
Job Date	7/2/22		Time on	11:00 24 hr time	
Job Type	New Well Surface				
Cementing Company	Cementer's Well Service, Inc		Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear		77	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	717 sks (94# equiv)				
f) Mix Fluid Type					
	Water / Cement	8.5	Gal / sk		
g) Slurry mixed	205.4	BBLs slurry			
h) Additives used	1.5%	CaCl2	3.0%	Bentonite	
Total Water Used	300.1	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 @ 1662 psi Final Lift Pressure @ 500 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	13:17	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		7/2/22	
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	7/2/22	API #	05-123-51137	Well No.	07NA
County	Weld	State	CO	Lease	Bernhardt

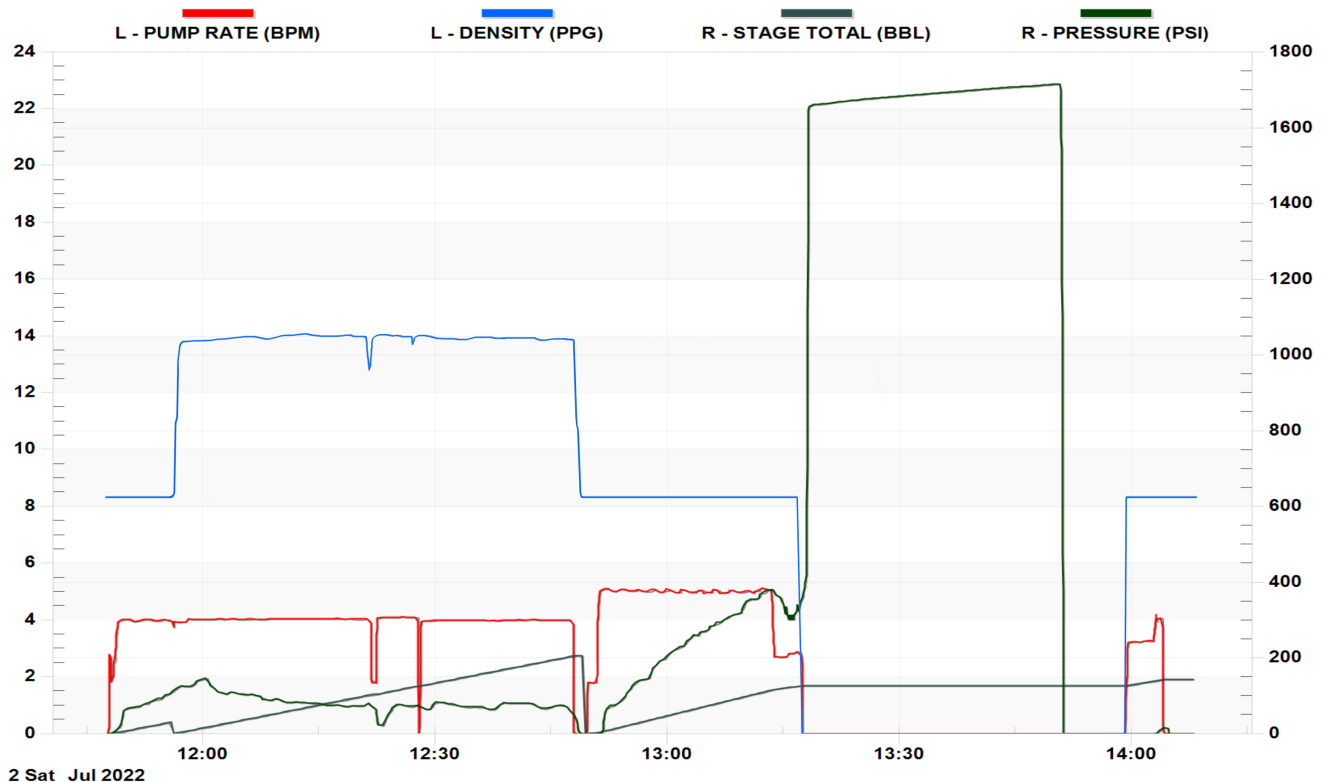
Client PDC Energy

Contact / email

### JOB DETAILS

TIME ON	11:00	24 hr	Depth	1,669	ft.	Pressure Test @	1,662	psi
START TIME	11:47	7/2/22	Bottom of Surface	1,659	ft.	10 min	1,680	psi
END TIME	14:08	7/2/22	Plug Landed @	1,617	ft.	20 min	1,698	psi
			Plug Landed @	13:17	24 hr	30 min	1,711	psi

### SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 07NA                      Surface, Set Depth: 1,658.9ftKB

API 05123511370000		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	41.47	Yes		LT&C	1,615.6	43.32
3		Casing Joints	9 5/8	36.00	J-55	Yes	42.24	Yes		LT&C	1,573.3	85.56
4		Casing Joints	9 5/8	36.00	J-55	Yes	41.48	Yes		LT&C	1,531.9	127.04
8		Casing Joints	9 5/8	36.00	J-55	Yes	41.52	Yes		LT&C	1,364.1	294.83
12		Casing Joints	9 5/8	36.00	J-55	Yes	41.85	Yes		LT&C	1,196.6	462.30
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	1,027.9	631.04
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	859.2	799.72
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.22	Yes		LT&C	690.5	968.44
28		Casing Joints	9 5/8	36.00	J-55	Yes	41.48	Yes		LT&C	524.1	1,134.78
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	355.9	1,303.00
36		Casing Joints	9 5/8	36.00	J-55	Yes	41.49	Yes		LT&C	187.8	1,471.08
39		Casing Joints	9 5/8	36.00	J-55	Yes	42.22	Yes		LT&C	61.9	1,596.97