

# 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 #	300326-D
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## Requested Operator Guidance:

Well Name & Number		Lease	Bernhardt		Well No.	05C
Well API Number		05-123-51139				
Job Date		7/1/22		Time on	2:15	24 hr time
Job Type		New Well   Surface				
Cementing Company		Cementer's Well Service, Inc		Contact	Nate Kvamme - 303-324-4296	
Ambient conditions		clear		68	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		225.1    BBLs slurry				
h) Additives used		1.5%    CaCl2		3.0%	Bentonite	
Total Water Used		314.4    BBLs H2O				
i) Displacement Fluid Vol		125.5    BBLs H2O				
j) Method of Placement						
k) Set Depth		1,667    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				

## Charts - (pressure, density, pump rate)

Landed Plug @ 1642 psi Final Lift Pressure @ 300 psi

Cement Density (as weighed during job) @ 13.9 PPG

## Job notes

a) Plug down	<div><div></div>Y</div> N	Time	4:43	24 hr time
b) Floats held	<div><div></div>Y</div> / N		7/1/22	
c) Full Returns	<div><div></div>Y</div> / N	Lost Circulation	Y <div><div></div>N</div>	
d) Cement to surface	<div><div></div>Y</div> / 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	7/1/22	API #	05-123-51139	Well No.	05C
County	Weld	State	CO	Lease	Bernhardt

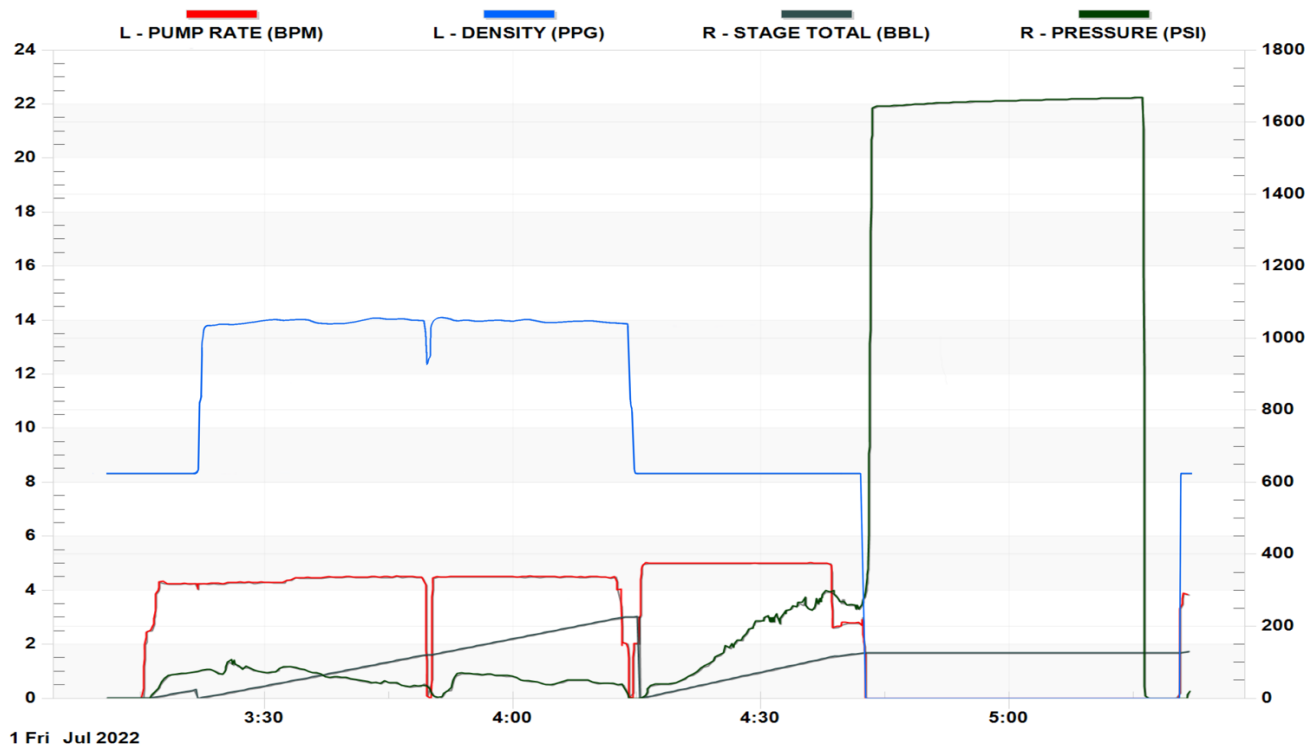
Client PDC Energy

Contact / email

### JOB DETAILS

TIME ON	2:15	24 hr	Depth	1,677	ft.	Pressure Test @	1,642	psi
START TIME	3:10	7/1/22	Bottom of Surface	1,667	ft.	10 min	1,655	psi
END TIME	5:21	7/1/22	Plug Landed @	1,624	ft.	20 min	1,662	psi
			Plug Landed @	4:43	24 hr	30 min	1,667	psi

### SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 05C                      Surface, Set Depth: 1,666.7ftKB

API 05123511390000		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	42.20	Yes		LT&C	1,622.7	44.05
3		Casing Joints	9 5/8	36.00	J-55	Yes	42.20	Yes		LT&C	1,580.5	86.25
4		Casing Joints	9 5/8	36.00	J-55	Yes	41.50	Yes		LT&C	1,539.0	127.75
8		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	1,370.2	296.50
12		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	1,201.5	465.22
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	1,032.8	633.94
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	864.0	802.70
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	695.3	971.42
28		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	526.6	1,140.08
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.14	Yes		LT&C	357.9	1,308.79
36		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	189.2	1,477.49
39		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	62.7	1,604.01