

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 #	300331-D
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Requested Operator Guidance:

Well Name & Number		Lease	Bernhardt		Well No.	10N
Well API Number		05-123-51140				
Job Date		7/4/22		Time on	12:10 24 hr time	
Job Type		New Well Surface				
Cementing Company		Cementer's Well Service, Inc		Contact	Nate Kvamme - 303-324-4296	
Ambient conditions		clear		82	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		668 sks (94# equiv)				
f) Mix Fluid Type						
Water / Cement		8.5 Gal / sk				
g) Slurry mixed		191.5 BBLs slurry				
h) Additives used		1.5% CaCl2		3.0%	Bentonite	
Total Water Used		290.9 BBLs H2O				
i) Displacement Fluid Vol		125.7 BBLs H2O				
j) Method of Placement						
k) Set Depth		1,669 feet (ft)				
l) Stage tool depth		n/a				
m) Float Collar Depth		1,626 feet (ft)				
n) Designed Top of Cement		n/a to surface				
o) Centralizer depths		0 feet (ft)				

Charts - (pressure, density, pump rate)

Landed Plug @ 1642 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	14:08	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		7/4/22	
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	7/4/22	API #	05-123-51140	Well No.	10N
County	Weld	State	CO	Lease	Bernhardt

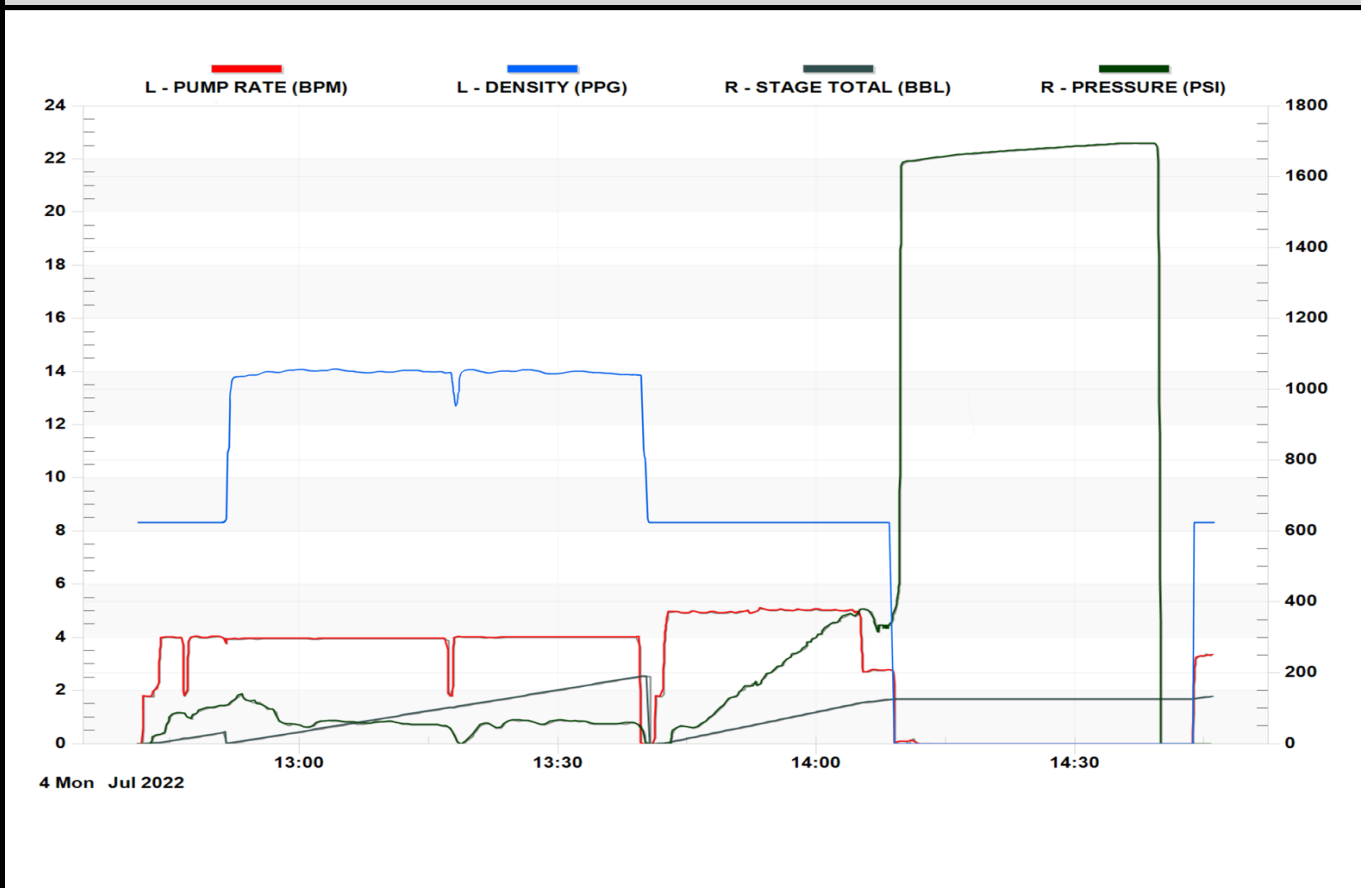
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	12:10	24 hr	Depth	1,679	ft.	Pressure Test @	1,642	psi
START TIME	12:41	7/4/22	Bottom of Surface	1,669	ft.	10 min	1,667	psi
END TIME	14:46	7/4/22	Plug Landed @	1,626	ft.	20 min	1,684	psi
			Plug Landed @	14:08	24 hr	30 min	1,684	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 10N Surface, Set Depth: 1,668.5ftKB

API 05123511400000		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) 4,764.00	KB-Ground Distance (ft) 28.00		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	42.14	Yes		LT&C	1,639.6	43.99
3		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	1,597.4	86.16
4		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	1,555.3	128.31
8		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	1,386.6	297.01
12		Casing Joints	9 5/8	36.00	J-55	Yes	42.16	Yes		LT&C	1,218.3	465.29
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	1,049.6	633.99
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	880.9	802.70
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	711.3	972.33
28		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	542.5	1,141.06
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	373.0	1,310.62
36		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	204.3	1,479.34
39		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	77.7	1,605.88