

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 #	300332-D
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Requested Operator Guidance:

Well Name & Number		Lease	Bernhardt		Well No.	11C
Well API Number		05-123-51135				
Job Date		7/5/22		Time on	7:00 24 hr time	
Job Type		New Well Surface				
Cementing Company		Cementer's Well Service, Inc		Contact	Nate Kvamme - 303-324-4296	
Ambient conditions		clear		79	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		664 sks (94# equiv)				
f) Mix Fluid Type						
Water / Cement		8.5 Gal / sk				
g) Slurry mixed		190.1 BBLs slurry				
h) Additives used		1.5% CaCl2		3.0% Bentonite		
Total Water Used		289.9 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 @ 1665 psi Final Lift Pressure @ 400 psi

Cement Density (as weighed during job) @ 13.9 PPG

Job notes

a) Plug down	<div><div>Y</div><div>N</div></div>	Time	9:04	24 hr time
b) Floats held	<div><div>Y</div><div>/</div><div>N</div></div>		7/5/22	
c) Full Returns	<div><div>Y</div><div>/</div><div>N</div></div>	Lost Circulation	<div><div>Y</div><div>(N)</div></div>	
d) Cement to surface	<div><div>Y</div><div>/</div><div>N</div></div>	25.0	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	7/5/22	API #	05-123-51135	Well No.	11C
County	Weld	State	CO	Lease	Bernhardt

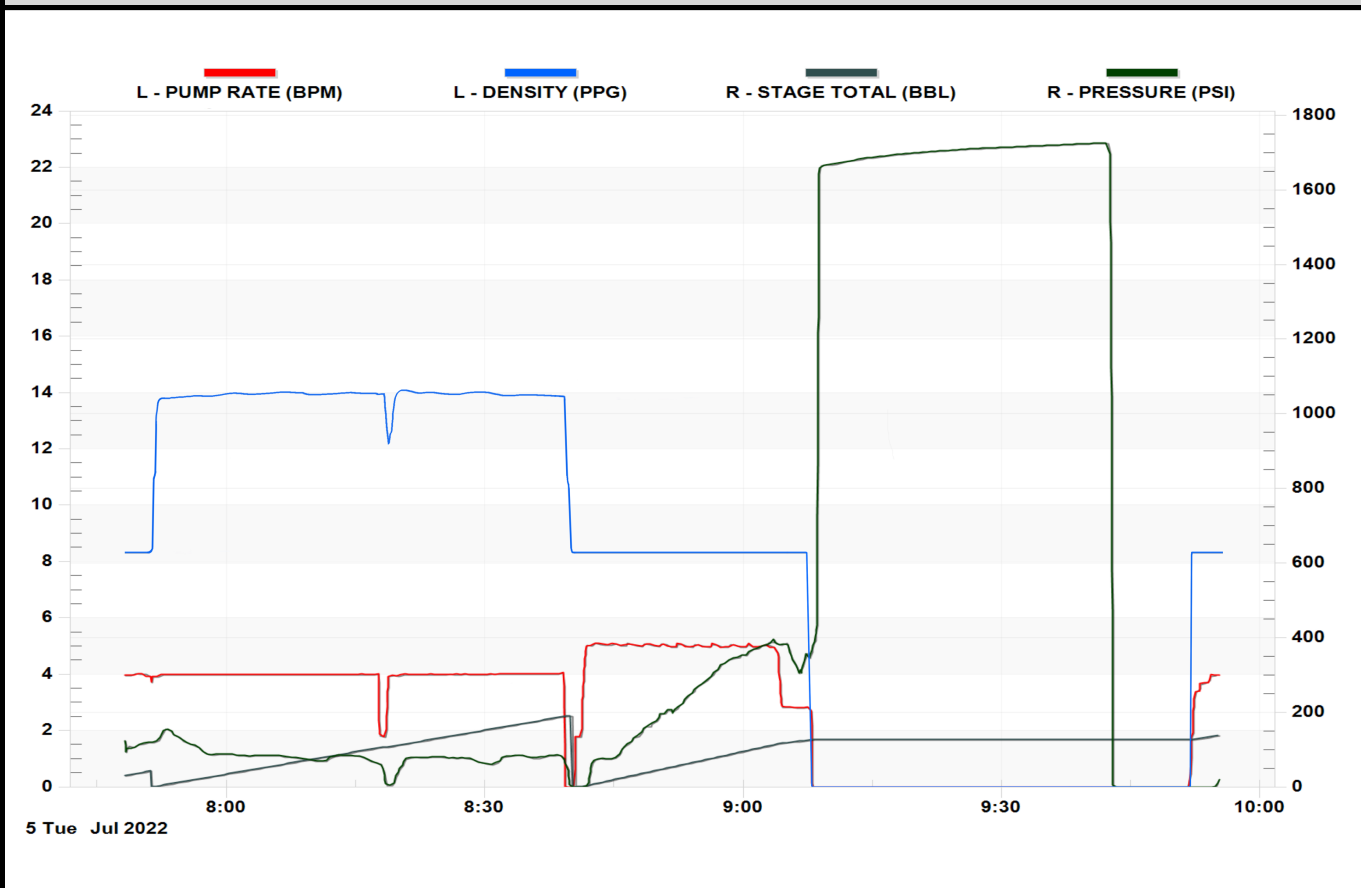
Client PDC Energy

Contact / email

JOB DETAILS

TIME ON	7:00	24 hr	Depth	1,676	ft.	Pressure Test @	1,665	psi
START TIME	7:35	7/5/22	Bottom of Surface	1,666	ft.	10 min	1,699	psi
END TIME	9:55	7/5/22	Plug Landed @	1,624	ft.	20 min	1,714	psi
			Plug Landed @	9:04	24 hr	30 min	1,725	psi

SUMMARY GRAPH





Centralizer Depths

Well Name: Bernhardt 11C Surface, Set Depth: 1,666.1ftKB

API 05123511350000		Surface Legal Location NWNW 18 4N 66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,735.00	Original KB Elevation (ft) 4,748.00	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	41.49	Yes		LT&C	1,622.8	43.34
3		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	1,580.6	85.49
4		Casing Joints	9 5/8	36.00	J-55	Yes	42.19	Yes		LT&C	1,538.4	127.68
8		Casing Joints	9 5/8	36.00	J-55	Yes	42.14	Yes		LT&C	1,369.8	296.35
12		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	1,201.1	464.97
16		Casing Joints	9 5/8	36.00	J-55	Yes	42.18	Yes		LT&C	1,032.5	633.58
20		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	863.9	802.22
24		Casing Joints	9 5/8	36.00	J-55	Yes	42.14	Yes		LT&C	695.2	970.86
28		Casing Joints	9 5/8	36.00	J-55	Yes	42.17	Yes		LT&C	526.5	1,139.61
32		Casing Joints	9 5/8	36.00	J-55	Yes	42.21	Yes		LT&C	357.8	1,308.35
36		Casing Joints	9 5/8	36.00	J-55	Yes	41.87	Yes		LT&C	189.3	1,476.82
39		Casing Joints	9 5/8	36.00	J-55	Yes	42.15	Yes		LT&C	62.7	1,603.44