

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 #	300225-D
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Requested Operator Guidance:

Well Name & Number	Lease	Bost Farm	Well No.	39N - 8C - L
Well API Number	05-123-51451			
Job Date	1/6/22	Time on	16:45	24 hr time
Job Type	New Well Surface			
Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear	9	temp deg F	
Slurry Description				
a) Purpose	Surface - 9 5/8" 36# CSG, 12 1/4" hole			
b) Cement Class	Type I / II			
c) Cement Yield	1.61	cuft / sk		
d) Cement Density	13.9	PPG		
e) Number of sks	501	sks (94# equiv)		
f) Mix Fluid Type				
	Water / Cement	8.5	Gal / sk	
g) Slurry mixed	142.0	BBLs slurry		
h) Additives used	1.50%	CaCl2	3.00%	Bentonite
Total Water Used	245.1	BBLs H2O		
i) Displacement Fluid Vol	123.7	BBLs H2O		
j) Method of Placement				
k) Set Depth	1,658	feet (ft)		
l) Stage tool depth	n/a			
m) Float Collar Depth	1,600	feet (ft)		
n) Designed Top of Cement	n/a	to surface		
o) Centralizer depths	0	feet (ft)		

Charts - (pressure, density, pump rate)

Landed Plug @ 1720 psi Final Lift Pressure @ 400 psi

Cement Density (as weighed during job) @ 13.9 PPG

Job notes

a) Plug down	Y / N	Time	19:28	24 hr time
b) Floats held	Y / N		1/6/22	
c) Full Returns	Y / N	Lost Circulation	Y / N	
d) Cement to surface	Y / N	2.0	BBLs to surface	
e) If no returns, top off	n/a	BBLs		
f) Top off detail				
g) Additional Detail	Switched pumps during displacement @ 65 BBLs because centrifugal pump froze up. Finished displacement and landed at calculated cumulative total of 124 BBLs			

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PDC Energy

Surface Cement Job Graph - Part 1

COMPANY DETAILS

Date	1/6/22	API #	05-123-51451	Well No.	39N - 8C - L
County	Weld	State	CO	Lease	Bost Farm

Client PDC Energy

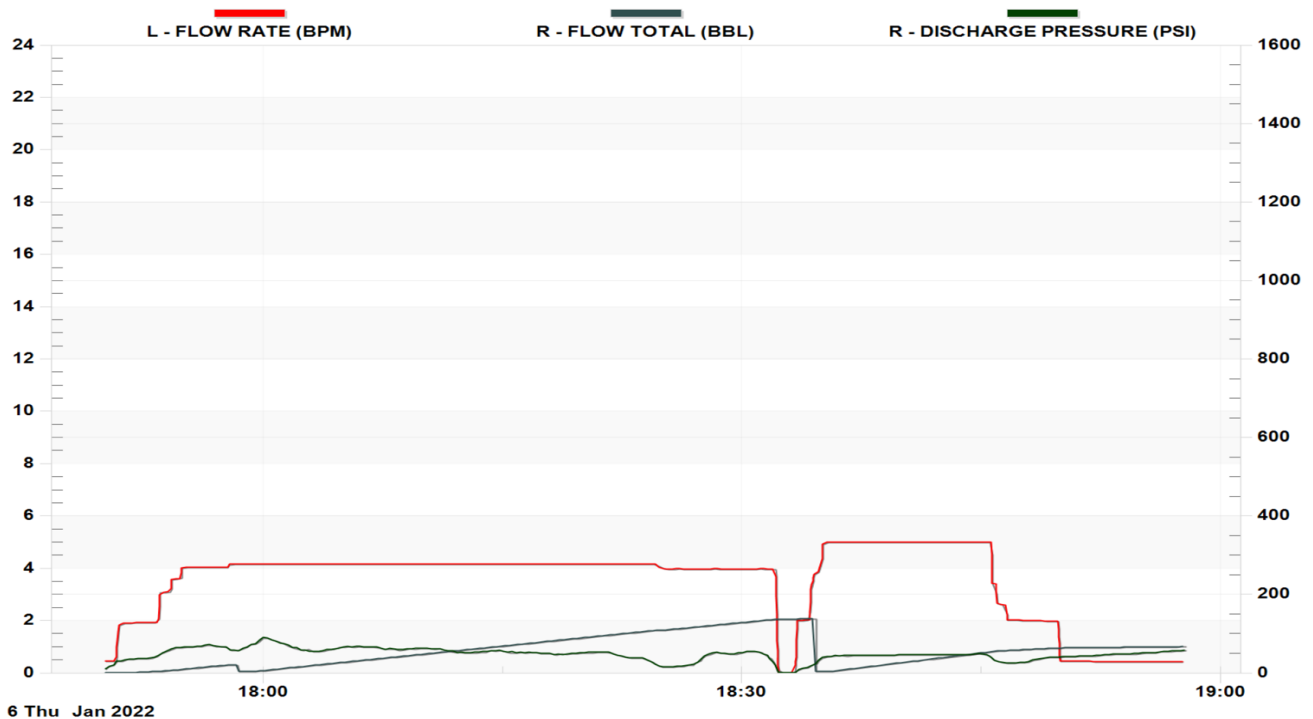
Contact / email _____

JOB DETAILS

TIME ON	16:45	24 hr	Depth	1,658	ft.	Pressure Test @	1,720	psi
START TIME	17:50	1/6/22	Bottom of Surface	1,658	ft.	10 min	1,715	psi
END TIME	20:14	1/6/22	Plug Landed @	1,600	ft.	20 min	1,708	psi
			Plug Landed @	19:28	24 hr	30 min	1,700	psi

SUMMARY GRAPH

The graph below represents the 1st Segment of the Cement Job through 65 BBLs of displacement with first cement pump



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PDC Energy

Surface Casing Pressure Test - Job Graph - Part 2

COMPANY DETAILS

Date	1/6/22	API #	05-123-51451	Well No.	39N - 8C - L
County	Weld	State	CO	Lease	Bost Farm

Client PDC Energy

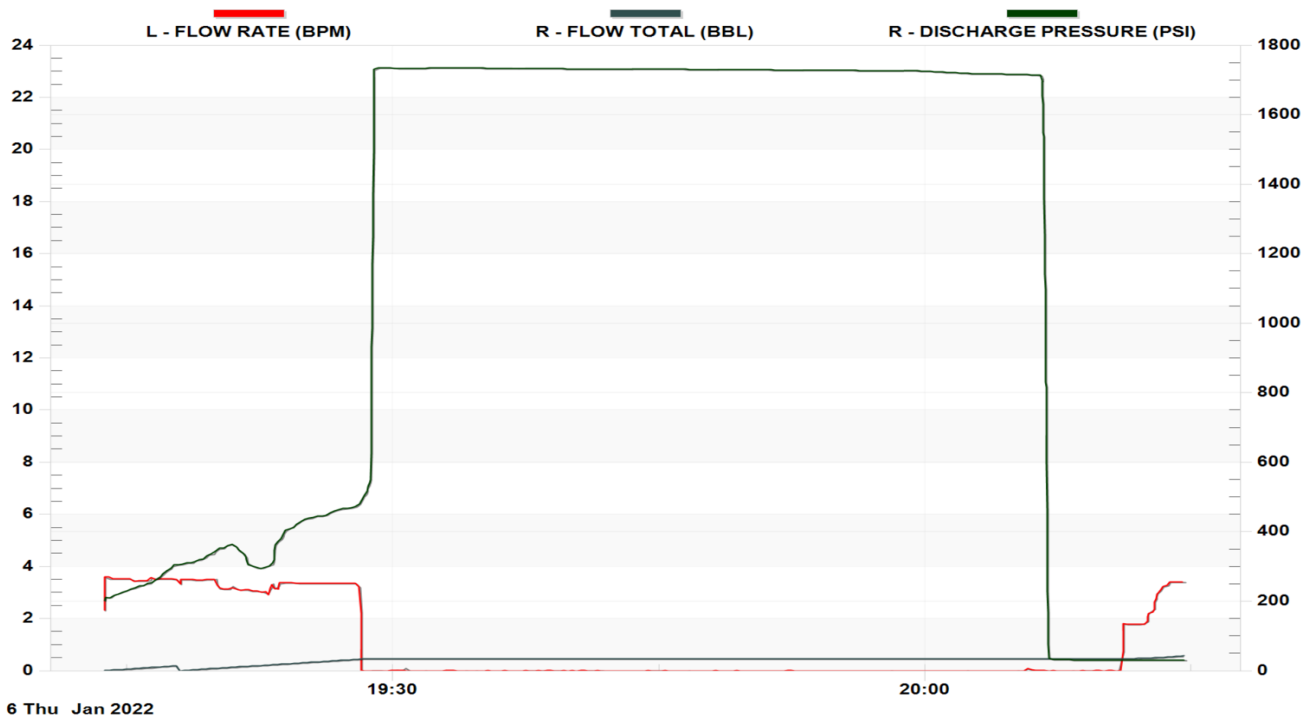
Contact / email _____

JOB DETAILS

TIME ON	16:45	24 hr	Depth	1,658	ft.	Pressure Test @	1,720	psi
START TIME	17:50	1/6/22	Bottom of Surface	1,658	ft.	10 min	1,715	psi
END TIME	20:14	1/6/22	Plug Landed @	1,600	ft.	20 min	1,708	psi
			Plug Landed @	19:28	24 hr	30 min	1,700	psi

SUMMARY GRAPH

The graph below represents the Final Segment of the Cement Job - finishing displacement & complete pressure test





Centralizer Depths

Well Name: Bost Farm 39N-8C-L

Surface, Set Depth: 1,657.7ftKB

API 05123514510000		Surface Legal Location SWNW 7 5N 66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,874.00	Original KB Elevation (ft) 4,902.00	KB-Ground Distance (ft) 28.00	Spud Date 4/27/2022 06:00	Rig Release Date 5/2/2022 06:00	On Production Date	Abandon Date			

Casing Run Tally												
Run #	Ref #	Item Des	OD (in)	Wt (lb/ft)	Grade	Run?	Len (ft)	Centralized?	Ext Jw/ry	Connections	Top (ftKB)	Cum Len (ft)
2	1	Casing Joints	9 5/8	36.00	J-55	Yes	41.56	Yes			1,614.3	43.41
6	5	Casing Joints	9 5/8	36.00	J-55	Yes	41.55	Yes			1,448.1	209.60
10	9	Casing Joints	9 5/8	36.00	J-55	Yes	41.58	Yes			1,281.9	375.85
14	13	Casing Joints	9 5/8	36.00	J-55	Yes	41.53	Yes			1,115.6	542.08
18	17	Casing Joints	9 5/8	36.00	J-55	Yes	41.54	Yes			949.4	708.31
22	21	Casing Joints	9 5/8	36.00	J-55	Yes	41.59	Yes			783.1	874.65
26	25	Casing Joints	9 5/8	36.00	J-55	Yes	41.15	Yes			617.2	1,040.47
30	29	Casing Joints	9 5/8	36.00	J-55	Yes	41.56	Yes			451.5	1,206.19
34	33	Casing Joints	9 5/8	36.00	J-55	Yes	41.56	Yes			285.3	1,372.38
37	36	Casing Joints	9 5/8	36.00	J-55	Yes	41.53	Yes			160.7	1,497.00
39	38	Casing Joints	9 5/8	36.00	J-55	Yes	41.55	Yes			77.6	1,580.15