

# 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 #	300321-D
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## Requested Operator Guidance:

Well Name & Number	Lease	California Federal	Well No.	16N		
Well API Number	05-123-51104					
Job Date	6/17/22	Time on	10:15	24 hr time		
Job Type	New Well Surface					
Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296			
Ambient conditions	clear	78	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	771	sks (94# equiv)				
f) Mix Fluid Type						
Water / Cement	8.5	Gal / sk				
g) Slurry mixed	220.8	BBLs slurry				
h) Additives used	1.5%	CaCl2	3.0%	Bentonite		
Total Water Used	342.1	BBLs H2O				
i) Displacement Fluid Vol	126.1	BBLs H2O				
j) Method of Placement						
k) Set Depth	1,675	feet (ft)				
l) Stage tool depth	n/a					
m) Float Collar Depth	1,631	feet (ft)				
n) Designed Top of Cement	n/a	to surface				
o) Centralizer depths	0	feet (ft)				

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

Landed Plug @ 1655 psi Final Lift Pressure @ 300 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	12:51	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		6/17/22	
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	40.0	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

## Cement Job Graph

### COMPANY DETAILS

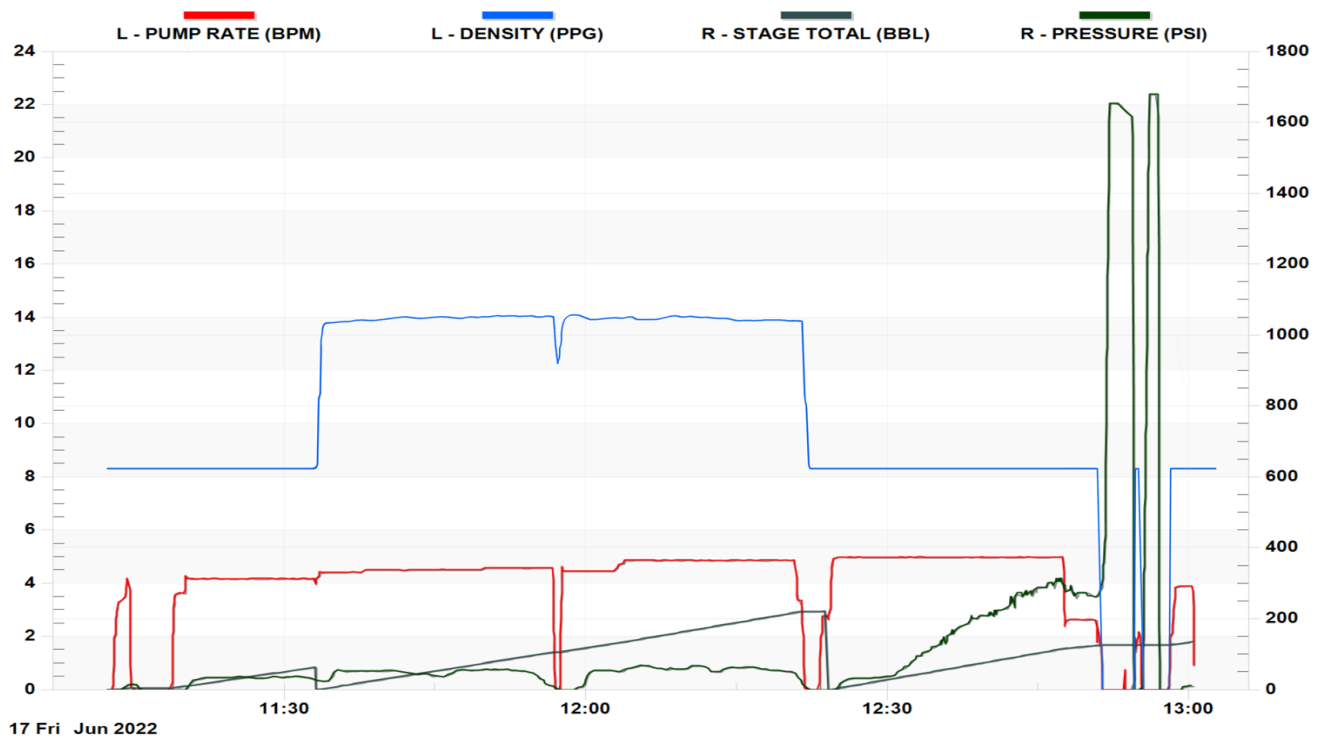
Date	6/17/22	API #	05-123-51104	Well No.	16N
County	Weld	State	CO	Lease	California Federal

Client PDC Energy \*Landing joint had a bad seal so pressure test was redone @  
Contact / email 17:20 with a new landing joint

### JOB DETAILS

TIME ON	10:15	24 hr	Depth	1,675	ft.	Pressure Test @	-	psi
START TIME	11:12	6/17/22	Bottom of Surface	1,675	ft.	10 min	-	psi
END TIME	13:00	6/17/22	Plug Landed @	1,631	ft.	20 min	-	psi
			Plug Landed @	12:51	24 hr	30 min	-	psi

### SUMMARY GRAPH



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## Surface Casing Pressure Test

### COMPANY DETAILS

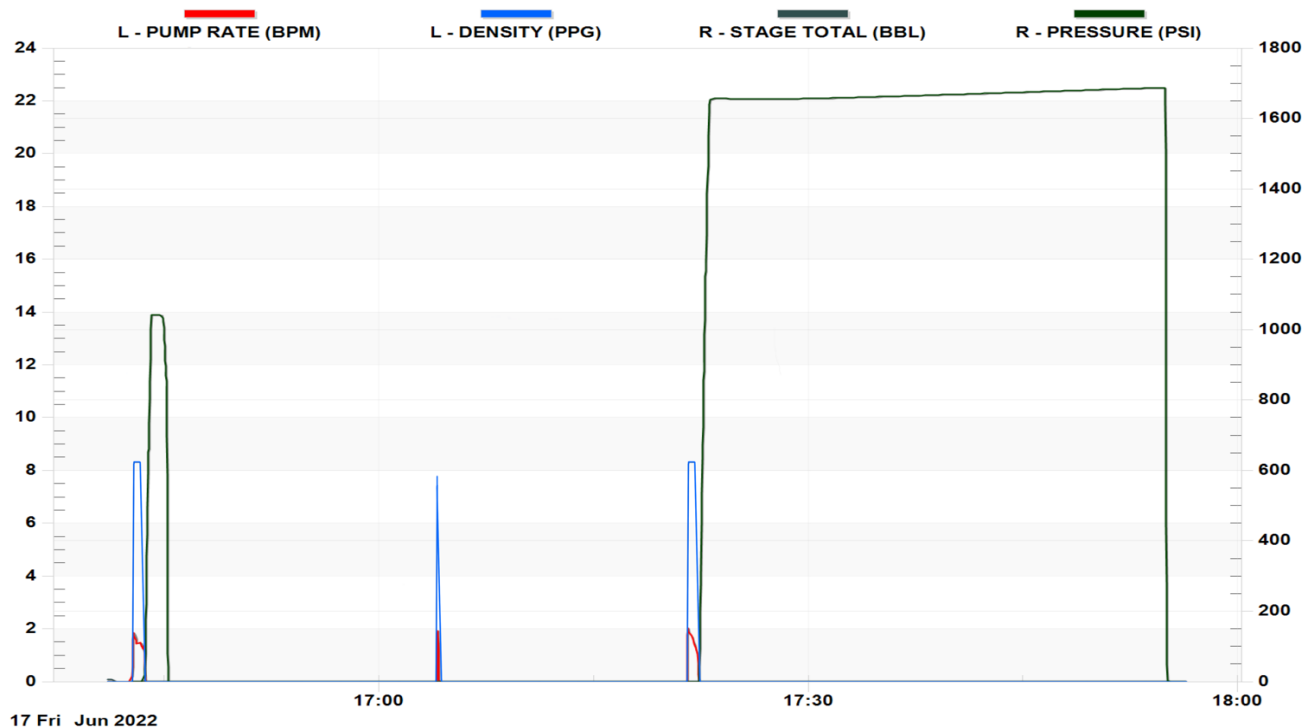
Date	6/17/22	API #	05-123-51104	Well No.	16N
County	Weld	State	CO	Lease	California Federal

Client PDC Energy \*pressure test graph only. Cement job graph on previous page  
Contact / email

### JOB DETAILS

TIME ON	10:15	24 hr	Depth	1,675	ft.	Pressure Test @	1,655	psi
START TIME	16:41	6/17/22	Bottom of Surface	1,675	ft.	10 min	1,660	psi
END TIME	17:56	6/17/22	Plug Landed @	1,631	ft.	20 min	1,672	psi
			Plug Landed @	17:20	24 hr	30 min	1,687	psi

### SUMMARY GRAPH





## Centralizer Depths

Well Name: California Federal 16N

Surface, Set Depth: 1,674.9ftKB

API 05123511040000		Surface Legal Location SWSE 14 7N 66W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal					
Ground Elevation (ft) 4,900.00		Original KB Elevation (ft) 4,905.00		KB-Ground Distance (ft) 5.00		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 Jw/ry	Connections	Top (ftKB)	Cum Len (ft)
2		Casing Joints	9 5/8	36.00	J-55	Yes	43.05	Yes		LT&C	1,630.0	44.90
3		Casing Joints	9 5/8	36.00	J-55	Yes	39.87	Yes		LT&C	1,590.1	84.77
4		Casing Joints	9 5/8	36.00	J-55	Yes	43.18	Yes		LT&C	1,547.0	127.95
8		Casing Joints	9 5/8	36.00	J-55	Yes	43.20	Yes		LT&C	1,374.2	300.72
12		Casing Joints	9 5/8	36.00	J-55	Yes	36.05	Yes		LT&C	1,208.6	466.31
16		Casing Joints	9 5/8	36.00	J-55	Yes	43.21	Yes		LT&C	1,035.8	639.15
20		Casing Joints	9 5/8	36.00	J-55	Yes	43.24	Yes		LT&C	864.0	810.91
24		Casing Joints	9 5/8	36.00	J-55	Yes	43.10	Yes		LT&C	692.0	982.87
28		Casing Joints	9 5/8	36.00	J-55	Yes	43.35	Yes		LT&C	520.4	1,154.47
32		Casing Joints	9 5/8	36.00	J-55	Yes	43.35	Yes		LT&C	355.6	1,319.26
36		Casing Joints	9 5/8	36.00	J-55	Yes	43.06	Yes		LT&C	183.4	1,491.50
40		Casing Joints	9 5/8	36.00	J-55	Yes	43.10	Yes		LT&C	12.5	1,662.40