

# 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 #	300456-D
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**Requested Operator Guidance:**

Well Name & Number	Lease	Hen	Well No.	02N
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Well API Number	05-123-51795
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Job Date	6/12/23	Time on	8:00	6/12/23	24 hr time
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Job Type	New Well Surface
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Cementing Company	Cementer's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296
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Ambient conditions	rain	68	temp deg F
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Slurry Description	
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a) Purpose	Surface - 9 5/8" 36# CSG, 13 1/2" hole
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b) Cement Class	Type I / II
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c) Cement Yield	1.61	cuft / sk
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d) Cement Density	13.9	PPG
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e) Number of sks	822	sks (94# equiv)
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f) Mix Fluid Type	
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Water / Cement	8.5	Gal / sk
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g) Slurry mixed	235.6	BBLs slurry
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h) Additives used	1.50% CaCl2	3.00% Bentonite
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Total Water Used	327.1	BBLs H2O
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i) Displacement Fluid Vol	130.8	BBLs H2O
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j) Method of Placement	
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k) Set Depth	1,733	feet (ft)
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l) Stage tool depth	n/a
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m) Float Collar Depth	1,692	feet (ft)
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n) Designed Top of Cement	n/a	to surface
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o) Centralizer depths	-	feet (ft)
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**Charts - (pressure, density, pump rate)**

Landed Plug @	1,708	psi	Final Lift Pressure @	400	psi
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Cement Density (as weighed during job) @	13.9	PPG
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**Job notes**

a) Plug down	<input checked="" type="radio"/> Y / <input type="radio"/> N	Time	10:24	24 hr time
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b) Floats held	<input checked="" type="radio"/> Y / <input type="radio"/> N		6/12/23
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c) Full Returns	<input checked="" type="radio"/> Y / <input type="radio"/> N	Lost Circulation	<input checked="" type="radio"/> Y / <input type="radio"/> N
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d) Cement to surface	<input checked="" type="radio"/> Y / <input type="radio"/> N	40.0	BBLs to surface
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e) If no returns, top off	n/a	BBLs
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f) Top off detail	
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g) Additional Detail	0
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PDC Energy

## Surface Casing Pressure Test - Cement Job Graph

### COMPANY DETAILS

Date	6/12/23	API #	05-123-51795	Well No.	02N
County	Weld	State	CO	Lease	Hen

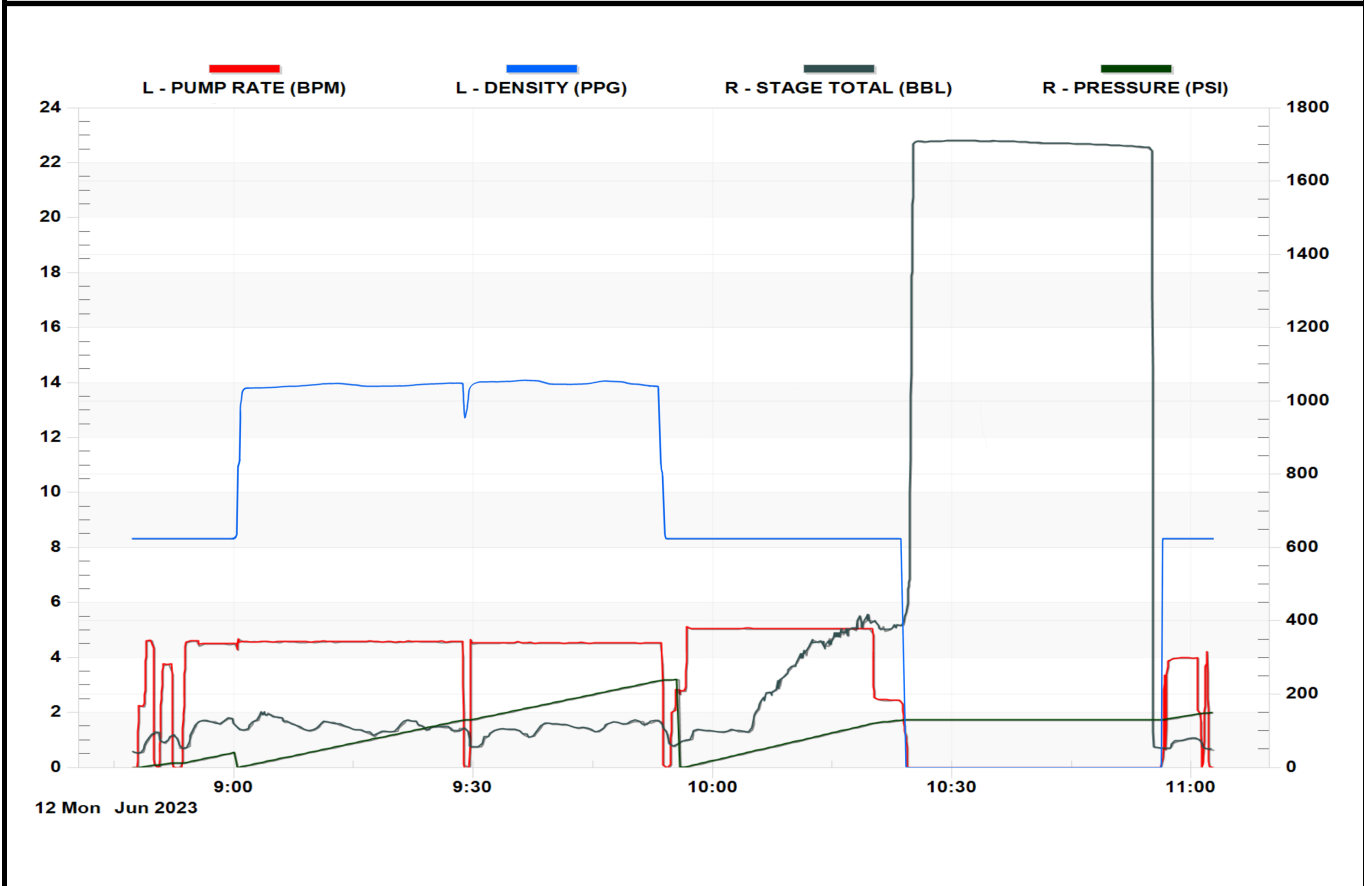
Client PDC Energy

Contact / email \_\_\_\_\_

### JOB DETAILS

TIME ON	8:00	6/12/23	Depth	1,743	ft.	Pressure Test @	1,708	psi
START TIME	8:46	6/12/23	Bottom of Surface	1,733	ft.	10 min	1,706	psi
END TIME	11:02	6/12/23	Plug Landed @	1,692	ft.	20 min	1,704	psi
			Plug Landed @	10:24	24 hr	30 min	1,695	psi

### SUMMARY GRAPH





# Centralizer Depths

Well Name: Hen 02N

Surface, Set Depth: 1,748.5ftKB

API 05123517950000		Surface Legal Location SWNE 8 4N 64W		Field Name Wattenberg		State CO		Well Configuration Type Horizontal	
Ground Elevation (ft) 4,779.00	Original KB Elevation (ft) 4,807.50	KB-Ground Distance (ft) 28.50	Spud Date 8/9/2023 12:00	Rig Release Date 8/12/2023 13:00	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	41.08	Yes		LT&C	1,705.6	42.93
4	2	Casing joints	9 5/8	36.00	J-55	Yes	41.06	Yes		LT&C	1,663.0	85.49
5	3	Casing joints	9 5/8	36.00	J-55	Yes	40.99	Yes		LT&C	1,622.0	126.48
9	7	Casing joints	9 5/8	36.00	J-55	Yes	41.01	Yes		LT&C	1,458.6	289.86
13	11	Casing joints	9 5/8	36.00	J-55	Yes	41.42	Yes		LT&C	1,295.7	452.83
17	15	Casing joints	9 5/8	36.00	J-55	Yes	41.10	Yes		LT&C	1,131.2	617.35
21	19	Casing joints	9 5/8	36.00	J-55	Yes	40.56	Yes		LT&C	968.9	779.63
25	23	Casing joints	9 5/8	36.00	J-55	Yes	41.11	Yes		LT&C	805.6	942.87
29	27	Casing joints	9 5/8	36.00	J-55	Yes	40.95	Yes		LT&C	642.4	1,106.07
33	31	Casing joints	9 5/8	36.00	J-55	Yes	41.03	Yes		LT&C	478.7	1,269.78
37	35	Casing joints	9 5/8	36.00	J-55	Yes	35.71	Yes		LT&C	320.3	1,428.18
41	39	Casing joints	9 5/8	36.00	J-55	Yes	40.40	Yes		LT&C	158.2	1,590.33
43	41	Casing joints	9 5/8	36.00	J-55	Yes	40.46	Yes		LT&C	76.6	1,671.95