

# Cement Verification Report - Cementer's Well Service, Inc.

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COGCC Operator Guidance RULE #308.A.B(2)A.ii

|                    |                              |          |
|--------------------|------------------------------|----------|
| CLIENT: PDC Energy | Cementor's<br>FIELD TICKET # | 300223-D |
|--------------------|------------------------------|----------|

## Requested Operator Guidance:

|                           |  |                 |         |                            |             |
|---------------------------|--|-----------------|---------|----------------------------|-------------|
| Well Name & Number        | Lease                                  | Bost Farm       |         | Well No.                   | 9N - 8B - L |
| Well API Number           | 05-123-51454                           |                 |         |                            |             |
| Job Date                  | 1/5/21                                 |                 | Time on | 5:30                       | 24 hr time  |
| Job Type                  | New Well   Surface                     |                 |         |                            |             |
| Cementing Company         | Cementer's Well Service, Inc           |                 | Contact | Nate Kvamme - 303-324-4296 |             |
| Ambient conditions        | clear                                  |                 | 19      | 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           | 143.4                                  | BBLs slurry     |         |                            |             |
| h) Additives used         | 1.50%                                  | CaCl2           | 3.00%   | Bentonite                  |             |
| Total Water Used          | 245.2                                  | BBLs H2O        |         |                            |             |
| i) Displacement Fluid Vol | 123.8                                  | BBLs H2O        |         |                            |             |
| j) Method of Placement    |  |                 |         |                            |             |
| k) Set Depth              | 1,658                                  | feet (ft)       |         |                            |             |
| l) Stage tool depth       | n/a                                    |                 |         |                            |             |
| m) Float Collar Depth     | 1,601                                  | feet (ft)       |         |                            |             |
| n) Designed Top of Cement | n/a                                    | to surface      |         |                            |             |
| o) Centralizer depths     | 0                                      | feet (ft)       |         |                            |             |

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

Landed Plug @ - psi Final Lift Pressure @ 400 psi

Cement Density (as weighed during job) @ 13.9 PPG

## Job notes

|                           |  |                  |                 |            |
|---------------------------|--|------------------|-----------------|------------|
| a) Plug down              | Y / <u>N</u>   | Time             | 8:00            | 24 hr time |
| b) Floats held            | <u>Y</u> / N   |                  | 1/5/21          |            |
| c) Full Returns           | <u>Y</u> / N   | Lost Circulation | Y / <u>N</u>    |            |
| d) Cement to surface      | <u>Y</u> / N   | 16.0             | BBLs to surface |            |
| e) If no returns, top off | n/a  | BBLs             |                 |            |
| f) Top off detail         |  |                  |                 |            |
| g) Additional Detail      | Plug hung up in head & did not land - Overdisplaced by 8 BBLs, calculated @ 123.8, actual 131.8. |                  |                 |            |
|                           | Confirmed 13 BBLs good cement returns  |                  |                 |            |



## Centralizer Depths

Well Name: Bost Farm 9N-8B-L

Surface, Set Depth: 1,658.4ftKB

|                                   |   |   |                             |                          |                                     |             |                    |                                       |              |
|-----------------------------------|---|---|-----------------------------|--------------------------|-------------------------------------|-------------|--------------------|---------------------------------------|--------------|
| API<br>05123514540000             |   | Surface Legal Location<br>SWNW 7 5N 66W |                             | Field Name<br>Wattenberg |                                     | State<br>CO |                    | Well Configuration Type<br>Horizontal |              |
| Ground Elevation (ft)<br>4,874.00 | Original KB<br>Elevation (ft)<br>4,902.00 | KB-Ground Distance (ft)<br>28.00        | Spud Date<br>5/7/2022 23:30 |                          | Rig Release Date<br>5/12/2022 02:00 |             | 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  | 41.54    | Yes          |           |             | 1,615.0    | 43.39        |
| 6     | 5     | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.60    | Yes          |           |             | 1,448.8    | 209.64       |
| 10    | 9     | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.55    | Yes          |           |             | 1,282.3    | 376.08       |
| 14    | 13    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.55    | Yes          |           |             | 1,116.2    | 542.24       |
| 18    | 17    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.54    | Yes          |           |             | 950.1      | 708.35       |
| 22    | 21    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.53    | Yes          |           |             | 783.9      | 874.53       |
| 26    | 25    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.52    | Yes          |           |             | 617.5      | 1,040.93     |
| 30    | 29    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.51    | Yes          |           |             | 451.4      | 1,207.02     |
| 34    | 33    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.54    | Yes          |           |             | 285.3      | 1,373.15     |
| 37    | 36    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.55    | Yes          |           |             | 160.7      | 1,497.74     |
| 39    | 38    | Casing Joints | 9 5/8   | 36.00      | J-55  | Yes  | 41.55    | Yes          |           |             | 77.6       | 1,580.84     |