

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

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COGCC Operator Guidance

RULE #308.A.B(2)A.ii



| | | |
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| CLIENT: PDC - Petroleum Development Corp | Cementer's FIELD TICKET # | 210191 |
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Requested Operator Guidance:

| | | | | |
|--|--|------------------|--|------------|
| 1) Well Name & Number | Lease | Chalk | Well No. | 04C |
| 2) Well API Number | 05-123-48616 | | | |
| 3) Job Date | 10/15/20 | Time on | 7:00 | 24 hr time |
| 4) Job Type | New Well Surface | | | |
| 5) Cementing Company | Cementer's Well Service, Inc | Contact | Nate Kvamme - 303-324-4296 | |
| 6) Ambient conditions | clear / rain / snow / other | | temp deg F | |
| 7) Slurry Description | | | | |
| a) Purpose | Surface - 9 5/8" 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 | 580 | sks (94# equiv) | | |
| f) Cement Volume (dry) | 580 | cuft (ft^3) | | |
| g) Mix Fluid Type | | | | |
| Water / Cement | 8.5 | Gal / sk | | |
| h) Slurry mixed | 166.3 | BBLs slurry | | |
| i) Additives used | 1.50% | CaCl2 | | |
| | 3.00% | Bentonite | | |
| j) Displacement Fluid Vol | 135.9 | BBLs H2O | | |
| k) Method of Placement | | | | |
| l) Set Depth | 1,800 | feet (ft) | | |
| m) Stage tool depth | n/a | | | |
| n) Float Collar Depth | 1,759 | feet (ft) | | |
| o) Designed Top of Cement | n/a | to surface | | |
| p) Centralizer depths | | | | feet (ft) |
| 8) Charts - (pressure, density, pump rate) | | | | |
| Landed Plug @ | 900 | psi | Final Lift Pressure @ | 670 psi |
| Cement Density (as weighed during job) @ | 13.8 | PPG | | |
| 9) Job notes | | | | |
| a) Plug down | <input checked="" type="radio"/> Y / <input type="radio"/> N | Time | 9:00 | 24 hr time |
| b) Floats held | <input checked="" type="radio"/> Y / <input type="radio"/> N | | | |
| 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 | 15.0 | BBLs to surface | |
| e) If no returns, top off | BBLs | | | |
| f) Top off detail | | | | |

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|------------------------------|--------------|------------|-----------|--|
| Chalk 04C Centralizer Depths | | | | |
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| | | | | |
| Length | Centralized? | Cum Length | Top Depth | |
| 40.96 | Yes | 1,458.12 | 341.4 | |
| 40.98 | Yes | 1,258.48 | 541.0 | |
| 38.35 | Yes | 1,053.58 | 745.9 | |
| 41.00 | Yes | 851.33 | 948.2 | |
| 40.97 | Yes | 646.44 | 1,153.1 | |
| 40.98 | Yes | 444.13 | 1,355.4 | |
| 40.95 | Yes | 241.05 | 1,558.5 | |
| 40.28 | Yes | 42.13 | 1,757.4 | |