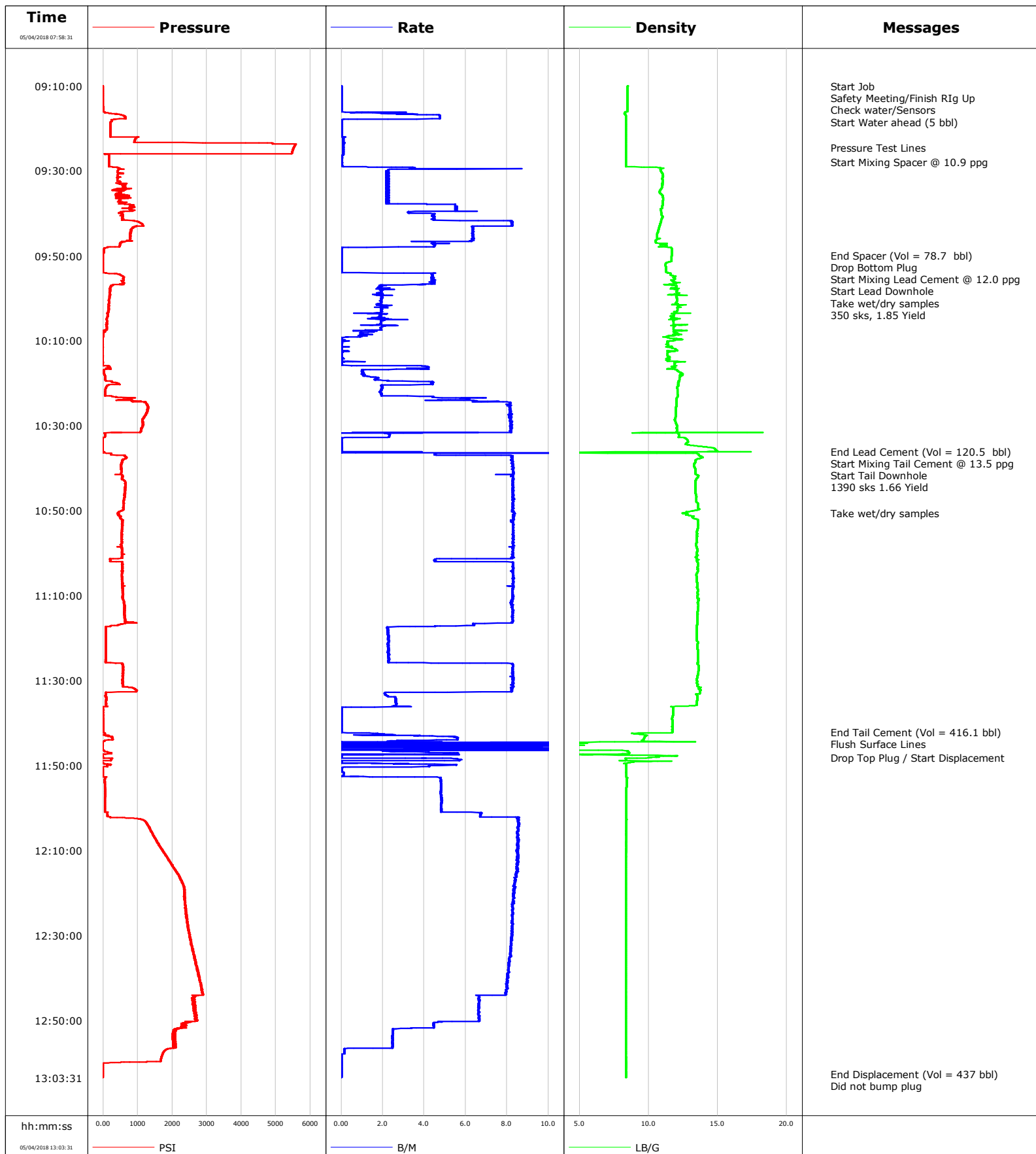


Well Verde 13-12HZ
Field Wattenberg
Engineer Cameron McNutt
Country United States

Client Anadarko
SIR No. DYN2-00255
Job Type Production
Job Date 05-04-2018



Cementing Service Report

| | | | | | | | | | | | | | | | | | |
|--|------------------------|--|---------------------|-------------------------------------|---------------------|-------------------------------------|--------------------------|----------------------|--------------------------|------------------------|--------------------------------|---------------|--|----------------|--|--------|--|
| | | | | Customer Anadarko | | | Job Number DYN2-00255 | | | | | | | | | | |
| Well Verde 13-12HZ | | | Location (legal) | | | Schlumberger Location Cheyenne | | | Job Start May/04/2018 | | | | | | | | |
| Field Wattenberg | | Formation Name/Type | | | Deviation 90 deg | | Bit Size 7.9 in | | Well MD 18713.0 ft | | Well TVD 7358.0 ft | | | | | | |
| County | | State/Province Colorado | | | BHP psi | | BHST 229 degF | | BHCT 229 degF | | Pore Press. Gradient lb/gal | | | | | | |
| Well Master 0631750833 | | API/UWI | | | | | | | | | | | | | | | |
| Rig Name P564 | | Drilled For Oil & Gas | | Service Via Land | | Casing/ Liner | | | | | | | | | | | |
| | | | | | | Depth, ft | | Size, in | | Weight, lb/ft | | Grade | | Thread | | | |
| Offshore Zone | | Well Class New | | Well Type Development | | 1871.0 | | 9.6 | | 36.0 | | J55 | | | | | |
| | | | | | | 18689.0 | | 5.5 | | 17.0 | | P110 | | 8RD | | | |
| Drilling Fluid Type OBM | | Max. Density 9.20 lb/gal | | Plastic Viscosity 70.000 cP | | Tubing/Drill Pipe | | | | | | | | | | | |
| | | | | | | T/D | | Depth, ft | | Size, in | | Weight, lb/ft | | Grade | | Thread | |
| Service Line Cementing | | Job Type Production | | | | | | | | 0.0 | | | | | | | |
| | | | | | | | | | | 0.0 | | | | | | | |
| Max. Allowed Tub. Press psi | | Max. Allowed Ann. Press psi | | WH Connection Double Cement head | | Perforations/Open Hole | | | | | | | | | | | |
| | | | | | | Top, ft | | Bottom, ft | | shot/ft | | No. of Shots | | Total Interval | | | |
| Service Instructions Provide crew, equipment, material to cement 5.5" production casing | | | | | | ft | | ft | | | | | | ft | | | |
| | | | | | | ft | | ft | | | | | | Diameter | | | |
| | | | | | | ft | | ft | | | | | | in | | | |
| | | Treat Down Casing | | Displacement 434.0 bbl | | Packer Type NA | | Packer Depth ft | | | | | | | | | |
| | | Tubing Vol. bbl | | Casing Vol. 435.0 bbl | | Annular Vol. bbl | | Openhole Vol. bbl | | | | | | | | | |
| Casing/Tubing Secured <input checked="" type="checkbox"/> | | 1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/> | | | | Casing Tools | | | | Squeeze Job | | | | | | | |
| Lift Pressure psi | | | | | | Shoe Type Float | | | | Squeeze Type | | | | | | | |
| Pipe Rotated <input type="checkbox"/> | | Pipe Reciprocated <input type="checkbox"/> | | | | Shoe Depth 18689.0 ft | | | | Tool Type | | | | | | | |
| No. Centralizers | | Top Plugs 1 | | Bottom Plugs 1 | | Stage Tool Type | | | | Tool Depth ft | | | | | | | |
| Cement Head Type Double | | | | | | Stage Tool Depth ft | | | | Tail Pipe Size in | | | | | | | |
| Job Scheduled For May/04/2018 05:30 | | Arrived on Location May/04/2018 05:30 | | Leave Location May/04/2018 15:00 | | Collar Type Float | | | | Tail Pipe Depth ft | | | | | | | |
| | | | | | | Collar Depth 18680.0 ft | | | | Sqz. Total Vol. bbl | | | | | | | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | | | | | | | | |
| 05/04/2018 | 07:58:31 | 1 | 0.0 | 0.00 | 0.0 | Check Floats, HELD (3 bbl return) | | | | | | | | | | | |
| 05/04/2018 | 09:10:00 | -6 | 0.0 | 8.48 | 0.0 | Start Job | | | | | | | | | | | |
| 05/04/2018 | 09:12:00 | -6 | 0.0 | 8.47 | 0.0 | Safety Meeting/Finish RIG Up | | | | | | | | | | | |
| 05/04/2018 | 09:14:00 | -6 | 0.0 | 8.46 | 0.0 | Check water/Sensors | | | | | | | | | | | |
| 05/04/2018 | 09:15:00 | 10 | 0.0 | 8.46 | 0.0 | Start Water ahead (5 bbl) | | | | | | | | | | | |
| 05/04/2018 | 09:24:30 | 5517 | 0.1 | 8.36 | 0.0 | Pressure Test Lines | | | | | | | | | | | |
| 05/04/2018 | 09:27:52 | 165 | 0.0 | 8.36 | 0.0 | Start Mixing Spacer @ 10.9 ppg | | | | | | | | | | | |
| 05/04/2018 | 09:49:54 | -8 | 0.0 | 11.69 | 0.0 | End Spacer (Vol = 78.7 bbl) | | | | | | | | | | | |
| 05/04/2018 | 09:49:55 | -8 | 0.0 | 11.68 | 0.0 | Drop Bottom Plug | | | | | | | | | | | |
| 05/04/2018 | 09:50:00 | -8 | 0.0 | 11.69 | 0.0 | Start Mixing Lead Cement @ 12.0 ppg | | | | | | | | | | | |
| 05/04/2018 | 09:54:00 | -4 | 0.0 | 11.41 | 0.0 | Start Lead Downhole | | | | | | | | | | | |
| 05/04/2018 | 10:00:00 | 183 | 1.9 | 12.03 | 0.0 | Take wet/dry samples | | | | | | | | | | | |
| 05/04/2018 | 10:33:16 | -24 | 0.0 | 12.78 | 0.0 | End Lead Cement (Vol = 120.5 bbl) | | | | | | | | | | | |
| 05/04/2018 | 10:34:00 | -23 | 0.0 | 12.81 | 0.0 | Start Mixing Tail Cement @ 13.5 ppg | | | | | | | | | | | |
| 05/04/2018 | 10:36:20 | -31 | 0.0 | 1.84 | 0.0 | Start Tail Downhole | | | | | | | | | | | |
| 05/04/2018 | 10:45:00 | 646 | 8.3 | 13.38 | 0.0 | Take wet/dry samples | | | | | | | | | | | |
| 05/04/2018 | 11:36:29 | -6 | 0.0 | 11.77 | 0.0 | End Tail Cement (Vol = 416.1 bbl) | | | | | | | | | | | |
| 05/04/2018 | 11:38:18 | 0 | 0.0 | 11.75 | 0.0 | Flush Surface Lines | | | | | | | | | | | |
| 05/04/2018 | 11:42:35 | 54 | 1.9 | 9.12 | 0.0 | Drop Top Plug / Start Displacement | | | | | | | | | | | |
| 05/04/2018 | 12:57:00 | 1807 | 0.1 | 8.37 | 0.0 | End Displacement (Vol = 437 bbl) | | | | | | | | | | | |

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| Well Verde 13-12HZ | Field Wattenberg | Job Start May/04/2018 | Customer Anadarko | Job Number DYN2-00255 |
|------------------------------|----------------------------|---------------------------------|-----------------------------|---------------------------------|

Post Job Summary

| Average Pump Rates, bbl/min | | | | | Volume of Fluid Injected, bbl | | | | | |
|---|------------|---|-------------------|---------------------------|-------------------------------|---------------------------|-----------------------|-------------------------------|-------------------|--------|
| Slurry | N2 | | Mud | | Maximum Rate | | Total Slurry 536.0 | Mud | Spacer 78.0 | N2 |
| Treating Pressure Summary, psi | | | | | Breakdown Fluid | | | | | |
| Maximum | Final 0 | Average | Bump Plug to 0 | Breakdown | Type | | Volume bbl | | Density lb/gal | |
| Avg. N2 Percent % | | Designed Slurry Volume 520.9 bbl | | Displacement 437.0 bbl | | Mix Water Temp 60 degF | | Cement Circulated to Surface? | | Volume |
| | | | | | | | | | | bbl |
| Customer or Authorized Representative Jason Laub | | Schlumberger Supervisor Cameron McNutt | | | | Washed Thru Perfs | | To | | |
| | | | | | | | | ft | | |
| Customer or Authorized Representative Jason Laub | | Schlumberger Supervisor Cameron McNutt | | | | Circulation Lost | | Job Completed | | |
| | | | | | | | | X | | |
| | | | | | | - | | - | | |