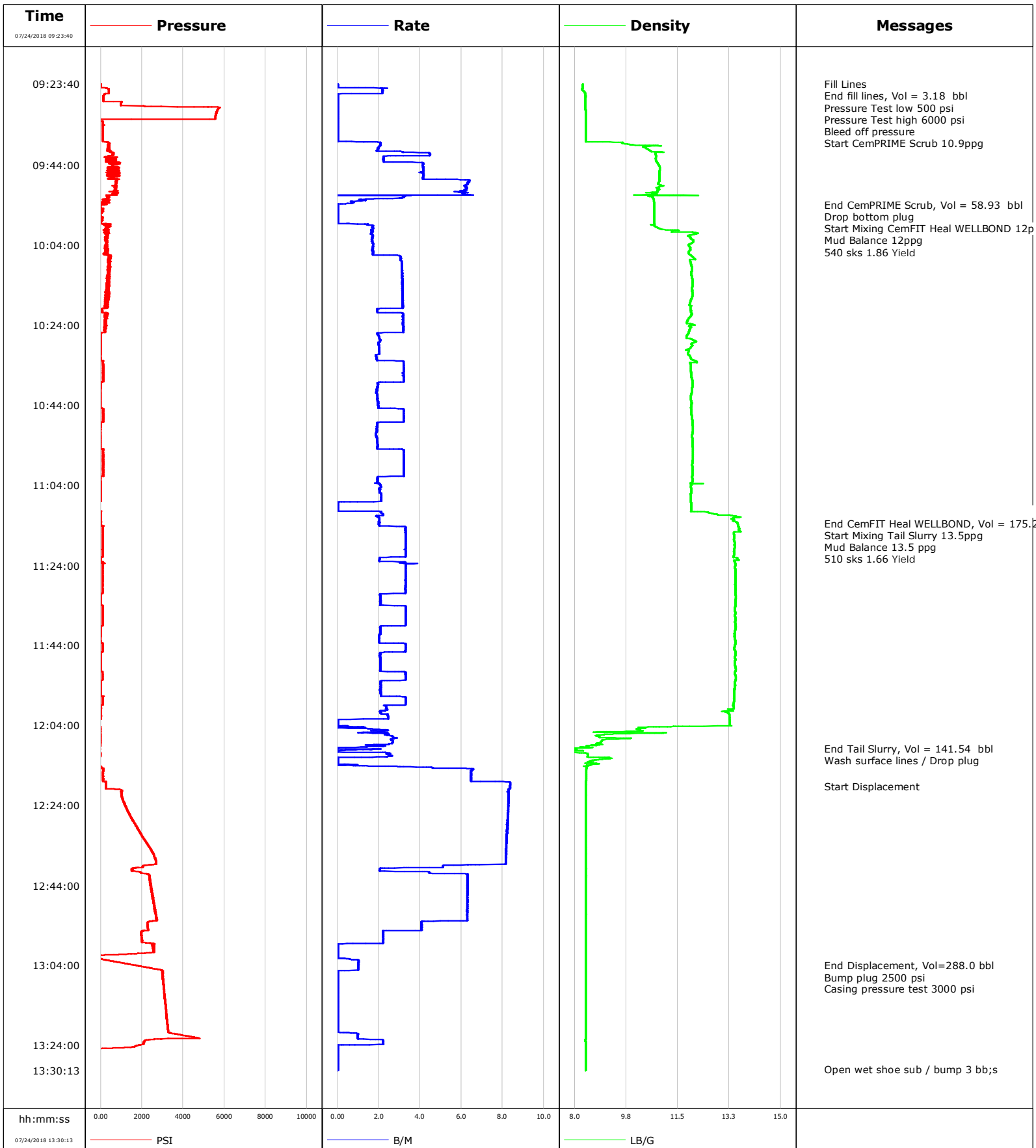


| | | | |
|-----------------|----------------|-----------------|-----------------|
| Well | Gracie 24-15HZ | Client | Anadarko |
| Field | Wattenberg | SIR No. | DN38-00042 |
| Engineer | Adam Aasen | Job Type | Cem Prod Casing |
| Country | United States | Job Date | 07-24-2018 |



| | | | | Customer | | | Job Number | | | |
|--|-------------------------|--|-------------------|-------------------|------------------------|--|-----------------|----------------------|----------------|--------|
| | | | | Anadarko | | | DN38-00042 | | | |
| Well | | Location (legal) | | | Schlumberger Location | | | Job Start | | |
| Gracie 24-15HZ | | | | | | | | Jul/24/2018 | | |
| Field | | Formation Name/Type | | | Deviation | Bit Size | Well MD | | Well TVD | |
| Wattenberg | | | | | deg | 7.9 in | 12544.0 ft | | 7337.0 ft | |
| County | | State/Province | | | BHP | BHST | BHCT | Pore Press. Gradient | | |
| Weld | | Colorado | | | psi | 245 degF | 230 degF | lb/gal | | |
| Well Master | | API/UWI | | | | | | | | |
| 0631763344 | | | | | | | | | | |
| Rig Name | Drilled For | | Service Via | | Casing/Liner | | | | | |
| P461 | | | Land | | Depth, ft | Size, in | Weight, lb/ft | Grade | Thread | |
| | | | | | 1887.0 | 9.6 | 36.0 | J55 | N/A | |
| Offshore Zone | Well Class | | Well Type | | 12534.0 | 5.5 | 17.0 | P110 | 8RD | |
| | N/A | | Development | | | | | | | |
| Drilling Fluid Type | | Max. Density | Plastic Viscosity | | Tubing/Drill Pipe | | | | | |
| | | 9.50 lb/gal | 65.000 cP | | T/D | Depth, ft | Size, in | Weight, lb/ft | Grade | Thread |
| | | | | | | | | | | |
| Service Line | Job Type | | | | Perforations/Open Hole | | | | | |
| Cementing | Cem Prod Casing | | | | Top, ft | Bottom, ft | shot/ft | No. of Shots | Total Interval | |
| | | | | | ft | ft | | | ft | |
| Max. Allowed Tub. Press | Max. Allowed Ann. Press | | WH Connection | | ft | ft | | | Diameter | |
| psi | psi | | 5" XH DP pin | | ft | ft | | | in | |
| Service Instructions | | | | | Treat Down | Displacement | Packer Type | Packer Depth | | |
| Pump 58.9 bbl CemPrime Scrub @ 10.9ppg | | | | | Casing | 290.6 bbl | | ft | | |
| Pump CemPRIME Heal WELLBOND @ 12ppg, 175.2 bbl, yield: 1.86 ft ³ /sack, 540 sacks, MW:6.36 gal/sack | | | | | Tubing Vol. | Casing Vol. | Annular Vol. | Openhole Vol. | | |
| Pump tail slurry @ 13.5ppg, 141.54 bbl, yield: 1.66 ft ³ /sack, 510 sacks, MW: 7.92 gal/sack | | | | | bbl | 290.8 bbl | 419.7 bbl | 0.6 bbl | | |
| Disp: 288.0 bbl Final circ pressure: 1994 psi Bump: 2575 psi CSG Pressure Test: 3000 psi | | | | | | | | | | |
| Open Wet shoe sub @ 4800 psi / bump 3 bbls | | | | | | | | | | |
| TOT: 7695.8 ft TOL:1954.7 ft | | | | | | | | | | |
| Casing/Tubing Secured | | 1 Hole Vol. Circulated prior to Cement | | | Casing Tools | | | Squeeze Job | | |
| <input type="checkbox"/> | | <input type="checkbox"/> | | | | | | | | |
| Lift Pressure | | Shoe Type | | | Shoe Depth | | Squeeze Type | | | |
| psi | | Float | | | 12534.0 ft | | | | | |
| Pipe Rotated | | Pipe Reciprocated | | | Stage Tool Type | | Tool Depth | | | |
| <input type="checkbox"/> | | <input type="checkbox"/> | | | | | ft | | | |
| No. Centralizers | | Top Plugs | Bottom Plugs | Stage Tool Depth | | | Tail Pipe Size | | | |
| | | 1 | 1 | ft | | | in | | | |
| Cement Head Type | | | | Collar Type | | | Tail Pipe Depth | | | |
| Double | | | | Float | | | ft | | | |
| Job Scheduled For | | Arrived on Location | | Leave Location | Collar Depth | | Sqz. Total Vol. | | | |
| Jul/24/2018 05:00 | | Jul/23/2018 21:00 | | Jul/24/2018 15:30 | 12525.3 ft | | bbl | | | |
| Date | Time 24-hr clock | Treating Pressure PSI | Flow Rate B/M | Density LB/G | Volume BBL | Message | | | | |
| 07/24/2018 | 09:23:40 | 1 | 0.0 | 8.28 | 0.0 | Remark | | | | |
| 07/24/2018 | 09:25:07 | 391 | 2.2 | 8.25 | 0.0 | End fill lines, Vol = 3.18 bbl | | | | |
| 07/24/2018 | 09:26:12 | 191 | 0.0 | 8.36 | 0.0 | Pressure Test low 500 psi | | | | |
| 07/24/2018 | 09:27:15 | 129 | 0.0 | 8.37 | 0.0 | Pressure Test high 6000 psi | | | | |
| 07/24/2018 | 09:27:16 | 129 | 0.0 | 8.37 | 0.0 | Bleed off pressure | | | | |
| 07/24/2018 | 09:27:45 | 130 | 0.0 | 8.37 | 0.0 | Start CemPRIME Scrub 10.9ppg | | | | |
| 07/24/2018 | 09:53:55 | 3 | 0.0 | 10.70 | 0.0 | End CemPRIME Scrub, Vol = 58.93 bbl | | | | |
| 07/24/2018 | 09:53:58 | 5 | 0.0 | 10.70 | 0.0 | Drop bottom plug | | | | |
| 07/24/2018 | 09:54:00 | -1 | 0.0 | 10.70 | 0.0 | Start Mixing CemFIT Heal WELLBOND 12ppg | | | | |
| 07/24/2018 | 09:56:58 | 117 | 0.0 | 10.70 | 0.0 | Mud Balance 12ppg | | | | |
| 07/24/2018 | 11:10:31 | 9 | 2.1 | 12.06 | 0.0 | End CemFIT Heal WELLBOND, Vol = 175.20 bbl | | | | |
| 07/24/2018 | 11:10:37 | 9 | 2.1 | 12.53 | 0.0 | Start Mixing Tail Slurry 13.5ppg | | | | |
| 07/24/2018 | 11:15:39 | 94 | 3.3 | 13.41 | 0.0 | Mud Balance 13.5 ppg | | | | |
| 07/24/2018 | 12:03:55 | -76 | 0.0 | 13.26 | 0.0 | End Tail Slurry, Vol = 141.54 bbl | | | | |
| 07/24/2018 | 12:04:00 | -76 | 0.0 | 13.30 | 0.0 | Wash surface lines / Drop plug | | | | |
| 07/24/2018 | 12:13:18 | -76 | 0.0 | 8.59 | 0.0 | Start Displacement | | | | |
| 07/24/2018 | 12:58:00 | 1994 | 2.2 | 8.38 | 0.0 | End Displacement, Vol=288.0 bbl | | | | |
| 07/24/2018 | 12:59:00 | 2575 | 0.0 | 8.38 | 0.0 | Bump plug 2500 psi | | | | |
| 07/24/2018 | 13:00:00 | 2589 | 0.0 | 8.38 | 0.0 | Casing pressure test 3000 psi | | | | |

| | | | | |
|-------------------------------|----------------------------|---------------------------------|-----------------------------|---------------------------------|
| Well Gracie 24-15HZ | Field Wattenberg | Job Start Jul/24/2018 | Customer Anadarko | Job Number DN38-00042 |
|-------------------------------|----------------------------|---------------------------------|-----------------------------|---------------------------------|

Post Job Summary

| Average Pump Rates, bbl/min | | | | | Volume of Fluid Injected, bbl | | | |
|---|--|----------------------------------|--|---|--|---|--------------------------|--|
| Slurry 6.0 | N2 | Mud | Maximum Rate 8.0 | Total Slurry 316.7 | Mud 0.0 | Spacer 58.9 | N2 | |
| Treating Pressure Summary, psi | | | | | Breakdown Fluid | | | |
| Maximum 4800 | Final 0 | Average 0 | Bump Plug to 2500 | Breakdown | Type | Volume bbl | Density lb/gal | |
| Avg. N2 Percent % | Designed Slurry Volume 0.0 bbl | Displacement 288.0 bbl | Mix Water Temp degF | Cement Circulated to Surface? <input type="checkbox"/> | Volume bbl | | | |
| | | | | Washed Thru Perfs <input type="checkbox"/> | To ft | | | |
| Customer or Authorized Representative Joe | | | Schlumberger Supervisor Adam Aasen | | Circulation Lost <input type="checkbox"/> | Job Completed <input type="checkbox"/> | | |
| | | | | | - | - | | |



Service Quality Evaluation

| | |
|----------------------|-----------------|
| Client: | Anadarko |
| Field: | Wattenberg |
| Rig: | P461 |
| Well: | Gracie 24-15HZ |
| Service Line: | Cementing |
| Job Type: | Cem Prod Casing |

| | |
|--------------------------------|-------------|
| Service Order #: | |
| Date: | Jul/24/2018 |
| Operating Time (hh:mm): | 00:00 |
| Client Rep: | Joe |
| Schlumberger Engineer: | Adam Aasen |
| Schlumberger FSM: | Cam Eplett |

Main Objective: Production Casing

To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.

| | | Score | Yes / No | | Result |
|-----------|--|-------|---|-----------------------------|--------|
| 1 | HSE | | | | |
| 1a | Free of lost time injury and compliance with SLB and loc. spec. HSE practice | 5 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 5 |
| 1b | Free of environmental spill or non-compliant discharge | 5 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 5 |
| 1c | Wellsite left clean | 4 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 4 |
| Sub-total | | | | | 100% |

| | | | | | |
|-----------|--|---|---|-----------------------------|------|
| 2 | Design / Preparation | | | | |
| 2a | Program incl. job simulation (CemCADE) & pump schedule / tool hydraulic calcs | 3 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 3 |
| 2b | Equipment maintenance schedule completed / Green tagged | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 2c | All materials and equipment required for job/contingency checked & on location | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 2d | Safety / pre-job meeting conducted with all involved present | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| Sub-total | | | | | 100% |

| | | | | | |
|-----------|--|---|---|-----------------------------|------|
| 3 | Execution | | | | |
| 3a | Lost time < 30 mins | 3 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 3 |
| 3b | Equipment pressure tested successfully | 3 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 3 |
| 3c | All key parameters monitored and recorded accurately (Pressure, Rate, Density) | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3d | Plugs / darts released and tested successfully | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3e | Density variation met expectations | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3f | Personnel performed as per expectations | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3g | Equipment performed as per expectations | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3h | Job pumped as per design | 3 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 3 |
| 3i | Did job start on time | 2 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 2 |
| 3j | Free of Operational failures (screen out, Cementing Example, etc.) | 3 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 3 |
| Sub-total | | | | | 100% |

| | | | | | |
|-----------|---|----|---|-----------------------------|------|
| 4 | Evaluation | | | | |
| 4a | Main job objective achieved with no consequential non-productive time | 10 | yes <input checked="" type="checkbox"/> | no <input type="checkbox"/> | 10 |
| Sub-total | | | | | 100% |

Total 100%

Comments: (Please include a brief explanation for a "NO" response and summarize any innovations attempted on this well.)

| | |
|--------------------------|--------------------------------|
| Client: | Schlumberger: |
| | |
| Client Signature: | Schlumberger Signature: |