

The Road to Excellence Starts with Safety

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|---|------------|--------------------|-----------------|----------------------------------|----------------------------|---------------------------|-----------|--------------|------------|---------------|
| Sold To #: 345242 | | Ship To #: 3924733 | | Quote #: | | Sales Order #: 0906774579 | | | | |
| Customer: NOBLE ENERGY INC-EBUS | | | | Customer Rep: Charles Culver | | | | | | |
| Well Name: BECKER | | | Well #: D17-715 | | API/UWI #: 05-123-48855-00 | | | | | |
| Field: WATTENBERG | | City (SAP): KERSEY | | County/Parish: WELD | | State: COLORADO | | | | |
| Legal Description: NE SE-5-3N-64W-1815FSL-1292FEL | | | | | | | | | | |
| Contractor: H & P DRLG | | | | Rig/Platform Name/Num: H & P 517 | | | | | | |
| Job BOM: 7523 | | | | | | | | | | |
| Well Type: HORIZONTAL OIL | | | | | | | | | | |
| Sales Person: HALAMERICA\HX41066 | | | | Srv Supervisor: Thomas Haas | | | | | | |
| Job | | | | | | | | | | |
| | | | | | | | | | | |
| Formation Name | | | | | | | | | | |
| Formation Depth (MD) | | Top | | Bottom | | | | | | |
| Form Type | | | | BHST | | 230 degF | | | | |
| Job depth MD | | 15091ft | | Job Depth TVD | | 6852 | | | | |
| Water Depth | | | | Wk Ht Above Floor | | 6' | | | | |
| Perforation Depth (MD) | | From | | To | | | | | | |
| | | | | | | | | | | |
| Well Data | | | | | | | | | | |
| Description | New / Used | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
| Casing | 0 | 9.625 | 8.921 | 36 | | | 0 | 1927 | 0 | 1927 |
| Casing | 0 | 5.5 | 4.892 | 17 | | | 0 | 15091 | 0 | 6852 |
| Open Hole Section | | | 8.5 | | | | 1927 | 15100 | 1927 | 6852 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Tools and Accessories | | | | | | | | | | |
| Type | Size in | Qty | Make | Depth ft | | Type | Size in | Qty | Make | |
| Float Shoe | 5.5 | 1 | HES | 15091 | | Top Plug | 5.5 | 1 | HES | |
| Float Collar | 5.5 | 1 | HES | 15043 | | Bottom Plug | 5.5 | 2 | HES | |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Fluid Data | | | | | | | | | | |
|--|-------------------|----------------------------------|---------------------|---------|---------------------------|----------------------|------------------|------------------------|------------------------|-------|
| Stage/Plug #: 1 | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 1 | Tuned Prime | TUNED PRIME CEMENT SPACER SYS | 80 | bbl | 11.5 | 3.87 | 24.46 | 8 | 2839 | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 2 | ElastiCem | ELASTICEM (TM) SYSTEM | 140 | sack | 13.2 | 1.6 | 7.63 | 8 | 1068 | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 3 | ElastiCem w/ SCBL | ELASTICEM (TM) SYSTEM | 763 | sack | 13.2 | 1.67 | 8.03 | 8 | 6127 | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 4 | NeoCem NT1 | NeoCem TM | 867 | sack | 13.2 | 2.04 | 9.79 | 8 | 8488 | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 5 | Displacement | Displacement | 349 | bbl | 8.33 | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Cement Left In Pipe | | Amount | 48 ft | | Reason | | | Shoe Joint | | |
| Mix Water: | | pH 7 | Mix Water Chloride: | | | <300 ppm | | Mix Water Temperature: | | 68 °F |
| Cement Temperature: | | N/A | Plug Displaced by: | | | 8.4lb/gal TreatedH2O | | Disp. Temperature: | | 71 °F |
| Plug Bumped? | | Yes | Bump Pressure: | | | 2500 psi | | Floats Held? | | Yes |
| Cement Returns: | | N/A | Returns Density: | | | N/A | | Returns Temperature: | | N/A |
| Comment Plug bumped at calculated displacement, final circulating pressure of 2188 psi, held 5 min casing test at 2800 psi, released pressure back to the truck, floats held, 4.5 bbl back. 30 bbl spacer interface returned to surface. | | | | | | | | | | |

2.0 Real-Time Job Summary

2.1 Job Event Log

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | DS Pump Press (psi) | DH Density (ppg) | Comb Pump Rate (bbl/min) | Pump Stg Tot (bbl) | Comments |
|-------|----------|---------------------------|---------------------------|------------|----------|--------|------------------------|---------------------|-----------------------------|-----------------------|--|
| Event | 1 | Call Out | Call Out | 10/23/2020 | 21:30:00 | USER | | | | | CREW CALLED OUT AT 21:30 10/23/2020, REQUESTED ON LOCATION 03:30 10/24/2020. CREW PICKED UP CEMENT, CHEMICALS (50 GAL D-AIR, 10 GAL MMCR), 100 LBS SUGAR, FROM FORT LUPTON, CO. BULK 660: 11071487 /10867521, PUMP ELITE: 12644845/11645460. |
| Event | 2 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 10/23/2020 | 23:15:00 | USER | | | | | DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW |
| Event | 3 | Crew Leave Yard | Crew Leave Yard | 10/23/2020 | 23:30:00 | USER | | | | | STARTED JOURNEY MANAGEMENT. |
| Event | 4 | Arrive At Loc | Arrive At Loc | 10/24/2020 | 00:30:00 | USER | | | | | END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING: 9.625" 36# @ 1927', CASING: 5.5" 17# @ 15091', 48' SHOE JOINT, 8.5" OPEN HOLE, TVD @ 6852', 9.8 PPG WELL FLUID, PACKER FLUID DISPLACEMENT. |

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|-------|----|---------------------------|---------------------------|------------|----------|------|--------|-------|------|-------|---|
| Event | 5 | Pre-Rig Up Safety Meeting | Pre-Rig Up Safety Meeting | 10/24/2020 | 05:00:00 | USER | | | | | HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER. |
| Event | 6 | Rig-Up Equipment | Rig-Up Equipment | 10/24/2020 | 05:10:00 | USER | | | | | CREW STAGED EQUIPMENT AND RIGGED UP BULK, IRON, AND WATER HOSES TO PERFORM JOB. |
| Event | 7 | Pre-Job Safety Meeting | Pre-Job Safety Meeting | 10/24/2020 | 09:00:00 | USER | -21.70 | 0.09 | 0.00 | 0.00 | MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS. |
| Event | 8 | Start Job | Start Job | 10/24/2020 | 09:29:07 | COM8 | -11.70 | 8.50 | 0.00 | 0.00 | START JOB DATA RECORDING. |
| Event | 9 | Test Lines | Test Lines | 10/24/2020 | 09:31:22 | COM8 | 94.30 | 8.57 | 0.00 | 2.20 | KICKOUTS SET @ 500 PSI, KICKED OUT @ 580 PSI, 5TH GEAR STALL OUT @ 1650 PSI. PRESSURE TESTED IRON TO 4800. |
| Event | 10 | Test Lines | Test Lines | 10/24/2020 | 09:34:33 | COM8 | 30.30 | 8.55 | 1.00 | 2.70 | TESTED I BOP TO 1700 PSI. |
| Event | 11 | Drop Bottom Plug | Drop Bottom Plug | 10/24/2020 | 09:38:00 | COM8 | 271.30 | 8.60 | 3.90 | 5.20 | PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN. |
| Event | 12 | Pump Spacer 1 | Pump Spacer 1 | 10/24/2020 | 09:39:28 | COM8 | 53.30 | 8.54 | 0.00 | 7.80 | PUMP 80 BBLS OF TUNED SPACER @ 11.5 LB/GAL, ADDED 30 GAL D-AIR, DENSITY VERIFIED BY PRESSURIZED MUD SCALES. |
| Event | 13 | Shutdown | Shutdown | 10/24/2020 | 09:56:16 | COM8 | 57.30 | 11.63 | 0.00 | 86.60 | SHUTDOWN TO DROP 2ND BOTTOM PLUG. |

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|-------|----|------------------|------------------|------------|----------|------|--------|-------|------|--------|---|
| Event | 14 | Drop Bottom Plug | Drop Bottom Plug | 10/24/2020 | 09:56:29 | COM8 | 19.30 | 11.50 | 0.00 | 86.60 | PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN. |
| Event | 15 | Pump Cap Cement | Pump Cap Cement | 10/24/2020 | 09:59:08 | COM8 | 6.30 | 11.46 | 1.00 | 0.00 | PUMP 140 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.60 YIELD, 7.63 GAL/SK, 39.9 BBLS, CALCULATED TOC @ 1013', DENSITY VERIFIED BY PRESSURIZED MUD SCALES. ADDED 10 GAL OF D-AIR. |
| Event | 16 | Pump Lead Cement | Pump Lead Cement | 10/24/2020 | 10:03:51 | COM8 | 745.30 | 13.21 | 9.00 | 40.60 | PUMP 763 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.67 YIELD, 8.03 GAL/SK, 227 BBLS, CALCULATED TOL @ 1846', DENSITY VERIFIED BY PRESSURIZED MUD SCALES. |
| Event | 17 | Pump Tail Cement | Pump Tail Cement | 10/24/2020 | 10:31:40 | COM8 | 650.30 | 13.16 | 9.10 | 251.90 | PUMP 867 SKS OF NEOCEM @ 13.2 LB/GAL, 2.04 YIELD, 9.79 GAL/SK, 316 BBLS, CALCULATED TOT @ 7397', DENSITY VERIFIED BY PRESSURIZED MUD SCALES. |
| Event | 18 | Shutdown | Shutdown | 10/24/2020 | 11:08:01 | COM8 | 136.30 | 12.95 | 0.00 | 328.70 | SHUTDOWN TO CLEAN PUMPS/LINES AND DROP TOP PLUG. |
| Event | 19 | Drop Top Plug | Drop Top Plug | 10/24/2020 | 11:14:51 | COM8 | -32.70 | 8.58 | 0.00 | 15.70 | PLUG WAS LOADED DIRECTLY INTO LANDING JOINT, VERIFIED BY COMPANY MAN. |

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|-------|----|-----------------------------|-----------------------------|------------|----------|------|---------|------|------|--------|--|
| Event | 20 | Pump Displacement | Pump Displacement | 10/24/2020 | 11:14:54 | COM8 | -32.70 | 8.58 | 0.00 | 15.70 | BEGIN CALCULATED DISPLACEMENT 349 BBL FRESH WATER. 10 GAL MMCR IN FIRST 20 BBL, LAST 40 BBL WITH FRESH WATER. ADDED 10 GAL OF D-AIR. |
| Event | 21 | Bump Plug | Bump Plug | 10/24/2020 | 11:55:19 | COM8 | 2625.30 | 8.39 | 0.00 | 352.80 | PLUG BUMPED AT CALCULATED DISPLACEMENT, FINAL CIRCULATING PRESSURE OF 2188 PSI. 30 BBL INTERFACE RETURNED TO SURFACE. |
| Event | 22 | Other | Casing Test | 10/24/2020 | 11:55:28 | USER | 2638.30 | 8.39 | 0.00 | 352.80 | 5 MIN CASING TEST AT 2800 PSI. |
| Event | 23 | Check Floats | Check Floats | 10/24/2020 | 12:00:45 | USER | 2714.30 | 8.38 | 0.00 | 352.80 | RELEASED PRESSURE BACK TO THE TRUCK, FLOATS HELD, 4.5 BBL TO THE TRUCK. |
| Event | 24 | End Job | End Job | 10/24/2020 | 12:03:06 | COM8 | -87.70 | 8.32 | 0.00 | 352.80 | END JOB DATA RECORDING. |
| Event | 25 | Pre-Rig Down Safety Meeting | Pre-Rig Down Safety Meeting | 10/24/2020 | 12:05:00 | USER | -84.70 | 8.32 | 0.00 | 0.00 | DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES. |
| Event | 26 | Rig-Down Completed | Rig-Down Completed | 10/24/2020 | 13:00:00 | USER | | | | | ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL. |
| Event | 27 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 10/24/2020 | 13:20:00 | USER | | | | | DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW. |
| Event | 28 | Crew Leave Location | Crew Leave Location | 10/24/2020 | 13:30:00 | USER | | | | | THANK YOU FOR USING HALLIBURTON - THOMAS HAAS AND CREW. |

3.0 Attachments

3.1 Job Chart

