

HALLIBURTON

iCem[®] Service

HIGHPOINT RESOURCES CORP-EBUS

Date: Monday, March 18, 2019

Highpoint Wetco 4-63-5-5649C Production Liner

Job Date: Monday, March 04, 2019

Sincerely,
Tyler Hill

Legal Notice

Disclaimer:

All information in this report is provided subject to the terms and conditions which govern the services provided by Halliburton. Halliburton personnel use their best efforts in gathering information and their best judgment in interpreting it, but any interpretation, research, analysis or recommendation furnished by Halliburton are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and empirical relationships and assumptions are not infallible, and with respect to which professionals in the industry may differ. iCem 3D Displacement results are used to understand how fluids intermix during a cement job. Simulation and 3D displacement results are not intended as and should not be used as a replacement for bond logs in determining top of cement. Current 3D model calculations are known to model more volume than the input volume for standard cases due to known calculation improvements required. For rotational cases, the modeled volume will be impacted by the same calculations impacting the standard cases, as well as additional constraints imposed to make the calculation time required operationally feasible. Therefore, until further notice, 3D displacement results should not be used for replacement of a bond log, or used as an identifier of top of cement. HALLIBURTON IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, OR JOB RECOMMENDATION and any interpretation or recommendation is not for use of or reliance upon by any third party. The customer has full responsibility for any of its decisions which are based on the information provided in this report.

Table of Contents

1.0 Cementing Job Summary 4

 1.1 Executive Summary4

2.0 Real-Time Job Summary 7

 2.1 Job Event Log7

3.0 Attachments..... 12

 3.1 Highpoint Wetco 4-63-5-5649C Production Liner.png12

1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Wetco 4-63-5-5649C** cement **Production** liner job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

Halliburton Ft. Lupton

The Road to Excellence Starts with Safety

| | | | | | | | | | | | |
|---|-------------------|---------------------------|-----------------------------|---------------------------------------|---------------|-----------------------------------|-------------------------------|-----------------------|----------------------|----------------------|----------------------------|
| Sold To #: 343492 | | Ship To #: 3917349 | | Quote #: | | Sales Order #: 0905526766 | | | | | |
| Customer: HIGHPOINT RESOURCES CORP-EBUS | | | | | | Customer Rep: Chris Moore | | | | | |
| Well Name: WETCO | | | Well #: 4-63-5-5649C | | | API/UWI #: 05-123-48499-00 | | | | | |
| Field: WATTENBERG | | City (SAP): KERSEY | | County/Parish: WELD | | State: COLORADO | | | | | |
| Legal Description: NW SW-4-4N-63W-2215FSL-727FWL | | | | | | | | | | | |
| Contractor: CADE DRLG | | | | Rig/Platform Name/Num: CADE 23 | | | | | | | |
| Job BOM: 7525 7525 | | | | | | | | | | | |
| Well Type: HORIZONTAL OIL | | | | | | | | | | | |
| Sales Person: HALAMERICA/H139013 | | | | Srv Supervisor: Prince Perez | | | | | | | |
| Job | | | | | | | | | | | |
| | | | | | | | | | | | |
| Formation Depth (MD) | | Top | 0' | | Bottom | 16,470' | | | | | |
| Job depth MD | | 16,460' | | Job Depth TVD | 6,585' | | | | | | |
| | | | | Wk Ht Above Floor | 5' | | | | | | |
| | | | | | | | | | | | |
| 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 | |
| Drill Pipe | | 4.5 | 3.34 | 14 | | | 0 | 6755 | 0 | 6585 | |
| Casing | | 7 | 6.366 | 23 | | | 0 | 7005 | 0 | 6585 | |
| Casing | | 4.5 | 4 | 11.6 | | | 6755 | 16460 | 0 | 0 | |
| Open Hole Section | | | 6.125 | | | | 7005 | 16470 | 0 | 0 | |
| | | | | | | | | | | | |
| Tools and Accessories | | | | | | | | | | | |
| Type | Size in | Qty | Make | Depth ft | | Type | Size in | Qty | Make | | |
| Guide Shoe | 4.5 | | | 16,460 | | Top Plug | 4.5 | 1 | PP | | |
| Float Shoe | 4.5 | | | | | Bottom Plug | 4.5 | | | | |
| Float Collar | 4.5 | | | 16404.5' | | SSR plug set | 4.5 | | | | |
| Insert Float | 4.5 | | | | | Plug Container | 4.5 | | | | |
| Stage Tool | 4.5 | | | | | Centralizers | 4.5 | 50 | | | |
| | | | | | | | | | | | |
| 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 | Spacer | Tuned Spacer III | | | 20 | bbl | 12 | 3.21 | 20.1 | 4 | 703 |
| | | | | | | | | | | | |
| 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 | Cement | NeoCem TM | 174.4 | bbl | 13.2 | 2.04 | 9.74 | 8 | 4,675 |
| 0.09 % | | SCR-100 (100003749) | | | | | | | |
| | | | | | | | | | |
| 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 | Displacement | Fresh Water | 234.7 | bbl | 8.4 | | | | |
| | | | | | | | | | |
| Cement Left In Pipe | | Amount | 0 ft | | Reason | | | Wet Shoe | |
| Mix Water: | | pH 7 | Mix Water Chloride: | | <300 ppm | | Mix Water Temperature: | | 60 °F |
| Cement Temperature: | | ## °F | Plug Displaced by: | | 8.34 lb/gal | | Disp. Temperature: | | 60 °F |
| Plug Bumped? | | Yes | Bump Pressure: | | 645 psi | | Floats Held? | | Yes |
| Cement Returns: | | 0 bbl | Returns Density: | | 12 lb/gal | | Returns Temperature: | | 75 °F |
| Comment | | | | | | | | | |
| Pumped 20 bbls of Tuned Spacer III with 10 gallons of D-Air. | | | | | | | | | |
| Pumped 174.4 bbls of Neocem. | | | | | | | | | |
| Pumped 234.7 bbls of fresh water Displacement with 5 gallons of MMCR, 10 gallons of Anhib, 5 gallons of Oxygen, and 3 lbs of BE-3. | | | | | | | | | |
| Pumped a 2 bbl wet shoe. | | | | | | | | | |
| 1.5 bbls back on the floats. | | | | | | | | | |
| Pumped 160 bbls to circulated out. | | | | | | | | | |
| 20 bbls of spacer back to surface. | | | | | | | | | |

2.0 Real-Time Job Summary

2.1 Job Event Log

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | DH Density (ppg) | Comb Pump Rate (bbl/min) | PS Pump Press (psi) | Comments |
|-------|----------|---|---|----------|----------|--------|---------------------|-----------------------------|------------------------|--|
| Event | 1 | Call Out | Call Out | 3/3/2019 | 13:45:00 | USER | | | | CREW CALLED OUT AT 13:45, REQUESTED ON LOCATION 21:30. CREW PICKED UP CEMENT, CHEMICALS, FROM FT. LUPTON, CO. BULK 660 11023106, 10867096, 10248062, PUMP 0070. |
| Event | 2 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 3/3/2019 | 20:50:00 | USER | | | | DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW. |
| Event | 3 | Crew Leave Shop | Crew Leave Shop | 3/3/2019 | 21:00:00 | USER | | | | STARTED JOURNEY MANAGEMENT. |
| Event | 4 | Arrive at Location from Service Center | Arrive at Location from Service Center | 3/3/2019 | 22:00:00 | USER | | | | END JOURNEY MANAGEMENT. MET WITH COMPANY MAN AND TOOL HAND TO DISCUSS JOB DETAILS. TD-16,470', TP-16,460', LINER CASING- SET @ 16,460', LINER TOP @ 6,755.4', 11.6 LB/FT 4.5" P-110, 4.5" 37.37# HWDP-6,755.4', 4.5" 18.1# DP-5185.95', PC- 7,005' 7" 23 LB/FT, WF- 8.8 LB/GAL. LANDED ON BOTTOM @ 21:30 |
| Event | 5 | Safety Meeting - Assessment of Location | Safety Meeting - Assessment of Location | 3/3/2019 | 22:10:00 | USER | | | | HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND |

| WEATHER. | | | | | | | | | | |
|----------|----|------------------------|------------------------|----------|----------|------|-------|------|---------|--|
| Event | 6 | Rig-Up Equipment | Rig-Up Equipment | 3/3/2019 | 22:20:00 | USER | | | | RIG UP BULK AND MIXING EQUIPMENT. |
| Event | 7 | Rig-Up Completed | Rig-Up Completed | 3/4/2019 | 03:00:00 | USER | 0.00 | 0.00 | -31.00 | |
| Event | 8 | Pre-Job Safety Meeting | Pre-Job Safety Meeting | 3/4/2019 | 03:10:00 | USER | 0.00 | 0.00 | -29.00 | MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS AFTER WAITING FOR RIG TO WARM UP MIXING WATER TO 60 DEGREES F. |
| Event | 9 | Pre-Job Safety Meeting | Pre-Job Safety Meeting | 3/4/2019 | 07:30:00 | USER | 7.24 | 3.30 | 2.00 | HAD A SECOND MEETING AFTER WE GOT THE PUMP THAWED FROM IT BEING FROZEN AT CERTAIN VALVES AND AIR LINES. DISCUSSED WITH THE COMPANY MAN THAT WE WERE CONFIDENT TO PUMP THE JOB WITH PUMP ON LOCATION AFTER WE WERE ABLE TO MOVE WATER ON IT FREELY. |
| Event | 10 | Start Job | Start Job | 3/4/2019 | 08:08:36 | COM4 | 6.93 | 0.00 | 6.00 | BEGIN RECORDING JOB DATA. |
| Event | 11 | Test Lines | Test Lines | 3/4/2019 | 08:21:18 | COM4 | 10.53 | 0.00 | 6610.00 | PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 600 PSI, 5TH GEAR STALL OUT @ 1,800 PSI. KICKOUTS SET @ 6,500 PSI, KICKED OUT @ 6,500 PSI. |
| Event | 12 | Pump Spacer 1 | Pump Spacer 1 | 3/4/2019 | 08:21:53 | COM4 | 11.46 | 0.00 | -23.00 | PUMP 20 BBLS OF TUNED SPACER @ 12 LB/GAL, 3.21 FT3/SK, 20.1 GAL/SK. HOS |

| | | | | | | | | | | |
|-------|----|-------------------|-------------------|----------|----------|------|-------|------|--------|--|
| | | | | | | | | | | DPIN CALCULATED @ 1,015.23'. TOS DPIN CALCULATED @ 5,199.9'DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 4 BBLS/MIN @ 350 PSI. |
| Event | 13 | Pump Lead Cement | Pump Lead Cement | 3/4/2019 | 08:28:53 | COM4 | 12.80 | 2.80 | 58.00 | PUMP 480 SKS OF NEOCEM @ 13.2 LB/GAL, 2.04 FT3/SK, 9.74 GAL/SK, 174.4 BBLS, DENSITY VERIFIED BY PRESSURIZED MUD SCALES. TOC CALCULATED @ 6,215.1'. PUMP RATE 6 BBLS/MIN @ 395 PSI. |
| Event | 14 | Shutdown | Shutdown | 3/4/2019 | 08:59:45 | COM4 | 12.35 | 2.30 | -3.00 | SHUTDOWN TO FREE A STUCK VALVE ON THE 660 TO DELIVER PRODUCT. |
| Event | 15 | Shutdown | Shutdown | 3/4/2019 | 09:10:36 | COM4 | 0.95 | 0.00 | -49.00 | SHUTDOWN TO DROP DART/CLEAN LINES. |
| Event | 16 | Drop Top Plug | Drop Top Plug | 3/4/2019 | 09:17:55 | COM4 | -0.34 | 0.00 | -65.00 | DART LOADED BY TOOL HAND. |
| Event | 17 | Pump Displacement | Pump Displacement | 3/4/2019 | 09:18:00 | COM4 | -0.34 | 0.00 | -66.00 | BEGIN DISPLACEMENT WITH 234.7 BBLS OF FRESH WATER. MMCR IN THE FIRST 10 BBLS OF DISPLACEMENT. 10 GALLONS OF ANHIB, 5 GALLONS OF OXYGON, AND 3 LBS OF BE-3 BIOCIDES ALSO ADDED TO DISPLACEMENT. SLOW RATE TO 3.0 BBLS/MIN @ 70 BBLS TO LAND DART. PICKED UP PLUG @ 75 BBLS AWAY PRESSURE WAS 1,640 PSI. SLOW RATE TO 3 BBLS/MIN @ 210 BBLS TO BUMP PLUG. DART LANDED AT 234 |

| | | | | | | | | | | |
|-------|----|---|---|----------|----------|------|------|------|---------|--|
| | | | | | | | | | | BBLS INTO DISPLACEMENT, SHEARD AT 3,806 PSI. |
| Event | 18 | Bump Plug | Bump Plug | 3/4/2019 | 10:08:52 | COM4 | 8.19 | 0.00 | 1145.00 | PLUG BUMPED AT CALCULATED DISPLACEMENT. PRESSURED 500 PSI OVER FINAL CIRCULATING PRESSURE. |
| Event | 19 | Check Floats | Check Floats | 3/4/2019 | 10:10:40 | COM4 | 8.17 | 0.00 | 1223.00 | 1.5 BBLS BACK ON THE FLOATS. |
| Event | 20 | Pressure Up Well | Pressure Up Well | 3/4/2019 | 10:13:46 | COM4 | 8.30 | 1.90 | 3806.00 | SHEARED @ 3,806 PSI FOLLOWED BY A 2 BBL WET SHOE. |
| Event | 21 | Test Lines | Test Lines | 3/4/2019 | 10:33:13 | COM4 | 8.15 | 0.00 | -1.00 | TESTED TO 500 PSI ON THE BACKSIDE. HELD FOR 20 MINUTES. |
| Event | 22 | Circulate Well | Circulate Well | 3/4/2019 | 10:51:35 | USER | 8.13 | 0.00 | 513.00 | CIRCULATED WELL WITH FRESH WATER AND 5 GALLONS OF MMCR TO CLEAN CEMENT AND SPACER FROM TOP OF HANGER. CIRCULATED 20 BBLS OF TUNED SPACER III & CALCULATED 10 BBLS OF CEMENT OFF THE TOP OF LINER. |
| Event | 23 | End Job | End Job | 3/4/2019 | 11:14:29 | COM4 | 8.19 | 0.00 | 7.00 | STOP RECORDING JOB DATA. |
| Event | 24 | Post-Job Safety Meeting (Pre Rig-Down) | Post-Job Safety Meeting (Pre Rig-Down) | 3/4/2019 | 11:20:00 | USER | 8.22 | 0.00 | -9.00 | DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES. |
| Event | 25 | Rig-Down Equipment | Rig-Down Equipment | 3/4/2019 | 11:30:00 | USER | 8.22 | 1.70 | -15.00 | RIG DOWN BULK AND MIXING EQUIPMENT. |
| Event | 26 | Rig-Down Completed | Rig-Down Completed | 3/4/2019 | 12:40:00 | USER | | | | |

| | | | | | | | |
|-------|----|---------------------------|---------------------------|----------|----------|------|--|
| Event | 27 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 3/4/2019 | 16:20:00 | USER | DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW. |
| Event | 28 | Crew Leave Location | Crew Leave Location | 3/4/2019 | 16:30:00 | USER | THANK YOU FOR USING HALLIBURTON – PRINCE A PEREZ AND CREW. |

3.0 Attachments

3.1 Highpoint Wetco 4-63-5-5649C Production Liner.png

