

**HALLIBURTON**

Cementing

**WPX ENERGY ROCKY MOUNTAIN LLC-EBUS**

BCU 542-30-198

Cyclone 29

**Post Job Summary**  
**Cement Surface Casing**

Date Prepared: 9/10/2014  
Job Date: 9/1/2014

Submitted by: Tony Eschete - Cement Engineer

**HALLIBURTON**

The Road to Excellence Starts with Safety

|                                                    |            |                        |       |                                   |                        |                           |               |              |                     |               |
|----------------------------------------------------|------------|------------------------|-------|-----------------------------------|------------------------|---------------------------|---------------|--------------|---------------------|---------------|
| Sold To #: 300721                                  |            | Ship To #: 3207154     |       | Quote #:                          |                        | Sales Order #: 0901633782 |               |              |                     |               |
| Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS       |            |                        |       | Customer Rep: Tom Bowen           |                        |                           |               |              |                     |               |
| Well Name: FEDERAL                                 |            | Well #: BCU 542-30-198 |       | API/UWI #: 05-103-11996-00        |                        |                           |               |              |                     |               |
| Field: SULPHUR CREEK                               |            | City (SAP): MEEKER     |       | County/Parish: RIO BLANCO         |                        | State: COLORADO           |               |              |                     |               |
| Legal Description: NW SE-30-1N-98W-2063FSL-2135FEL |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Contractor:                                        |            |                        |       | Rig/Platform Name/Num: Cyclone 29 |                        |                           |               |              |                     |               |
| Job BOM: 392189                                    |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Well Type: DIRECTIONAL GAS                         |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Sales Person: HALAMERICA\HX23209                   |            |                        |       | Srv Supervisor: Edward Deussen    |                        |                           |               |              |                     |               |
| Job                                                |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Formation Name                                     |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Formation Depth (MD)                               |            | Top                    |       | Bottom                            |                        |                           |               |              |                     |               |
| Form Type                                          |            |                        |       | BHST                              |                        |                           |               |              |                     |               |
| Job depth MD                                       |            | 3334ft                 |       | Job Depth TVD                     |                        |                           |               |              |                     |               |
| Water Depth                                        |            |                        |       | Wk Ht Above Floor                 |                        |                           |               |              |                     |               |
| 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 |
| Open Hole Section                                  |            |                        | 14.75 |                                   |                        |                           | 0             | 1350         | 0                   | 0             |
| Casing                                             |            | 9.625                  | 8.921 | 36                                | 8 RD                   | H-40                      | 0             | 3334         | 0                   | 0             |
| Open Hole Section                                  |            |                        | 13.5  |                                   |                        |                           | 1350          | 3344         | 0                   | 0             |
| Tools and Accessories                              |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Type                                               | Size in    | Qty                    | Make  | Depth ft                          |                        | Type                      | Size in       | Qty          | Make                |               |
| Guide Shoe                                         | 9.625      | 1                      |       | 3334                              |                        | Top Plug                  |               |              |                     |               |
| Float Shoe                                         |            |                        |       |                                   |                        | Bottom Plug               |               |              |                     |               |
| Float Collar                                       |            |                        |       |                                   |                        | SSR plug set              |               |              |                     |               |
| Insert Float                                       |            |                        |       |                                   |                        | Plug Container            | 9.625         | 1            | HES                 |               |
| Stage Tool                                         |            |                        |       |                                   |                        | Centralizers              |               |              |                     |               |
| Miscellaneous Materials                            |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Gelling Agt                                        |            | Conc                   |       | Surfactant                        |                        | Conc                      |               | Acid Type    |                     | Qty           |
| Treatment Fld                                      |            | Conc                   |       | Inhibitor                         |                        | Conc                      |               | Sand Type    |                     | Size          |
| 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                                                  | Top Out    | HALCEM (TM) SYSTEM     | 30    | sack                              | 15.6                   | 1.19                      |               | 1.0          | 5.23                |               |
| 5.23 Gal                                           |            | FRESH WATER            |       |                                   |                        |                           |               |              |                     |               |
| Fluid Data                                         |            |                        |       |                                   |                        |                           |               |              |                     |               |
| Stage/Plug #: 2                                    |            |                        |       |                                   |                        |                           |               |              |                     |               |



| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
|---------------------|------------------------|----------------------|-------|---------|---------------------------|-------------------|------------------|---------------------|---------------------------|
| 1                   | Fresh Water            | Fresh Water          | 20    | bbl     | 8.34                      |                   |                  | 4.0                 |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
| 2                   | VersaCem ( TM ) System | VERSACEM (TM) SYSTEM | 465   | sack    | 12.8                      | 1.77              |                  | 8.0                 | 9.31                      |
| 9.31 Gal            |                        | FRESH WATER          |       |         |                           |                   |                  |                     |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
| 3                   | VersaCem ( TM ) System | VARICEM (TM) CEMENT  | 210   | sack    | 12.8                      | 1.96              |                  | 8.0                 | 10.93                     |
| 10.91 Gal           |                        | FRESH WATER          |       |         |                           |                   |                  |                     |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
| 4                   | Displacement           | Displacement         | 255.7 | bbl     | 8.34                      |                   |                  | 10.0                |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
| 5                   | Fresh Water Spacer     | Fresh Water Spacer   | 20    | bbl     | 9.34                      |                   |                  | 4.0                 |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Fluid #             | Stage Type             | Fluid Name           | Qty   | Qty UoM | Mixing Density<br>lbm/gal | Yield<br>ft3/sack | Mix Fluid<br>Gal | Rate<br>bbl/mi<br>n | Total Mix<br>Fluid<br>Gal |
| 6                   | VersaCem ( TM ) System | VERSACEM (TM) SYSTEM | 775   | sack    | 12.8                      | 1.96              |                  | 8.0                 | 10.93                     |
| 10.91 Gal           |                        | FRESH WATER          |       |         |                           |                   |                  |                     |                           |
|                     |                        |                      |       |         |                           |                   |                  |                     |                           |
| Cement Left In Pipe |                        | Amount               | 26 ft |         | Reason                    |                   | Shoe Joint       |                     |                           |
| Comment             |                        |                      |       |         |                           |                   |                  |                     |                           |

# HALLIBURTON

WPX ENERGY ROCKY MOUNTAIN LLC-EBUS  
901633782  
Case 1

## 3.1 Job Event Log

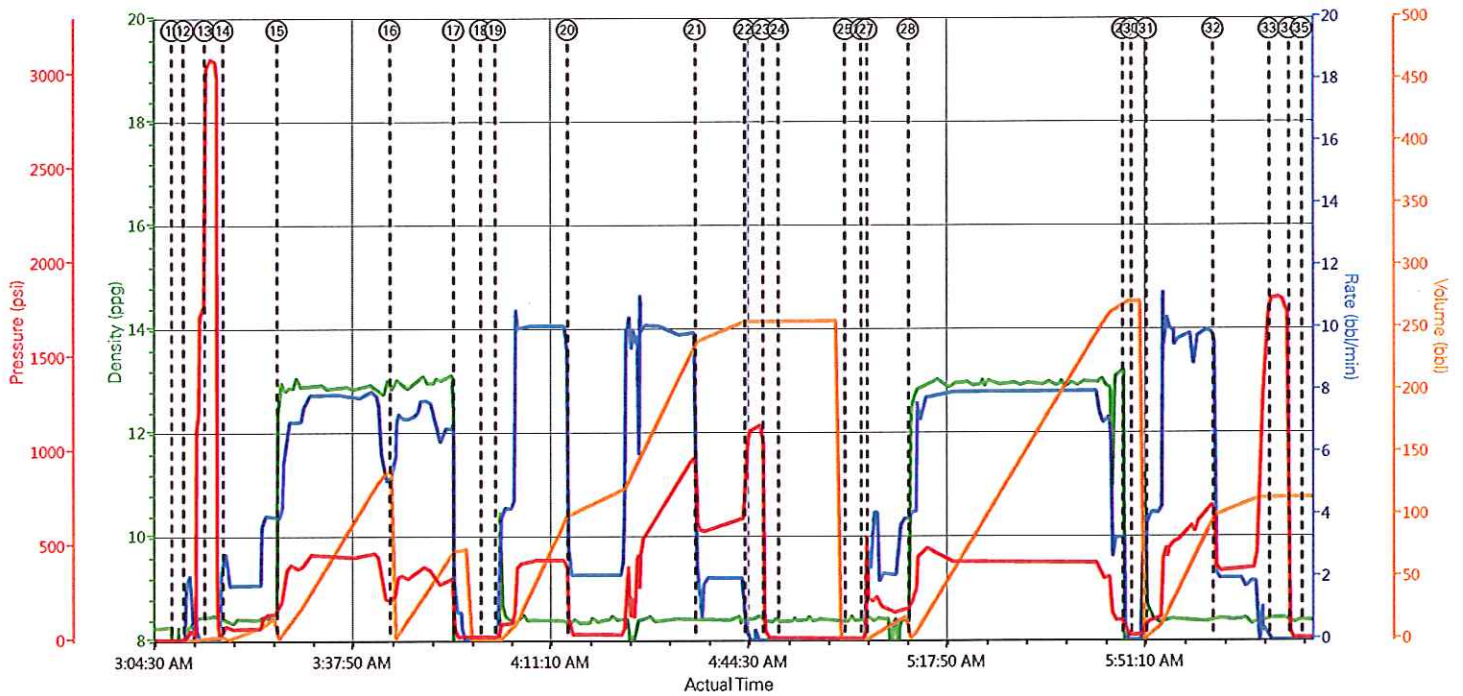
| Type  | Seq. No. | Graph Label                           | Date     | Time     | Source | Pass-Side Pump Pressure (psi) | Downhole Density (ppg) | Combined Pump Rate (bbl/min) | Pump Stage Total (bbl) | Comment                                                                                                                                |
|-------|----------|---------------------------------------|----------|----------|--------|-------------------------------|------------------------|------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Event | 1        | Call Out                              | 9/1/2014 | 08:00:00 | USER   |                               |                        |                              |                        | O/L time 1600                                                                                                                          |
| Event | 2        | Pre-Convoy Safety Meeting             | 9/1/2014 | 11:15:00 | USER   |                               |                        |                              |                        |                                                                                                                                        |
| Event | 3        | Crew Leave Yard                       | 9/1/2014 | 11:30:00 | USER   |                               |                        |                              |                        | 1 Elite, 2 660s, 1 Iron truck                                                                                                          |
| Event | 4        | Arrive At Loc                         | 9/1/2014 | 15:00:00 | USER   |                               |                        |                              |                        | Rig still pulling drill pipe                                                                                                           |
| Event | 5        | Assessment Of Location Safety Meeting | 9/1/2014 | 15:15:00 | USER   |                               |                        |                              |                        | JSA performed                                                                                                                          |
| Event | 6        | Spot Equipment                        | 9/1/2014 | 18:15:00 | USER   |                               |                        |                              |                        |                                                                                                                                        |
| Event | 7        | Pre-Rig Up Safety Meeting             | 9/1/2014 | 18:45:00 | USER   |                               |                        |                              |                        |                                                                                                                                        |
| Event | 8        | Rig-Up Equipment                      | 9/1/2014 | 19:00:00 | USER   |                               |                        |                              |                        | 1 Hard line to standpipe, Bulk hoses to silos and 660s, Water lines to day tank and upright, manifold on cement head for rig to tie in |
| Event | 9        | Rig-Up Completed                      | 9/1/2014 | 20:30:00 | USER   |                               |                        |                              |                        |                                                                                                                                        |
| Event | 10       | Pre-Job Safety Meeting                | 9/2/2014 | 02:50:00 | USER   |                               |                        |                              |                        | Mud 8.9 ppg, PV 7, YP 14                                                                                                               |
| Event | 11       | Start Job                             | 9/2/2014 | 03:08:00 | USER   |                               |                        |                              |                        | TD 3344', TP 3334', SJ 26', 14 3/4" OH to 1350', 13 1/2" OH to TD, MSC Tool @ 1433', 9 5/8" 36# csg                                    |
| Event | 12       | Prime Lines                           | 9/2/2014 | 03:10:00 | COM5   | 75                            | 8.33                   | 2.0                          | 2.0                    | Fresh Water                                                                                                                            |
| Event | 13       | Test Lines                            | 9/2/2014 | 03:13:35 | COM5   | 3091                          |                        |                              |                        | Pressure held at 3091 psi                                                                                                              |
| Event | 14       | Pump H2O Spacer                       | 9/2/2014 | 03:16:40 | COM5   | 138                           | 8.33                   | 4.0                          | 20.0                   | Fresh Water                                                                                                                            |
| Event | 15       | Pump Lead Cement                      | 9/2/2014 | 03:25:48 | COM5   | 468                           | 12.8                   | 8.0                          | 146.6                  | 465 sks, 12.8 ppg, 1.77 yield, 9.31 gal/sk                                                                                             |
| Event | 16       | Pump Tail Cement                      | 9/2/2014 | 03:44:44 | COM5   | 384                           | 12.8                   | 8.0                          | 73.3                   | 210 sks, 12.8 ppg, 1.96 yield, 10.93 gal/sk                                                                                            |
| Event | 17       | Shutdown                              | 9/2/2014 | 03:55:25 | USER   |                               |                        |                              |                        |                                                                                                                                        |
| Event | 18       | Drop Plug                             | 9/2/2014 | 03:59:57 | USER   |                               |                        |                              |                        | Rig supplied dart                                                                                                                      |
| Event | 19       | Pump Displacement                     | 9/2/2014 | 04:02:26 | COM5   | 967                           | 8.33                   | 10.0                         | 255.7                  | Fresh Water                                                                                                                            |
| Event | 20       | Slow Rate Thru Tool                   | 9/2/2014 | 04:14:37 | COM5   | 60                            | 8.33                   | 2.0                          | 20.0                   |                                                                                                                                        |
| Event | 21       | Slow Rate                             | 9/2/2014 | 04:36:11 | USER   | 585                           | 8.33                   | 2.0                          | 15.0                   | Good returns throughout job                                                                                                            |

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901633782  
Case 1

|       |    |                               |          |          |      |      |      |      |       |  |                                                       |
|-------|----|-------------------------------|----------|----------|------|------|------|------|-------|--|-------------------------------------------------------|
| Event | 22 | Bump Plug                     | 9/2/2014 | 04:44:30 | COM5 | 645  |      |      |       |  |                                                       |
| Event | 23 | Check Floats                  | 9/2/2014 | 04:47:31 | USER | 1125 |      |      |       |  | Floats held - 1 1/4 bbl flowback                      |
| Event | 24 | Drop MSC Opening Device       | 9/2/2014 | 04:50:05 | COM5 |      |      |      |       |  | Rig supplied - 10 minutes for free fall               |
| Event | 25 | 2nd Stage                     | 9/2/2014 | 05:01:18 | COM5 |      |      |      |       |  |                                                       |
| Event | 26 | Pump Spacer                   | 9/2/2014 | 05:04:02 | USER | 156  | 8.33 | 4.0  | 20.0  |  | Fresh Water                                           |
| Event | 27 | Open Multiple Stage Cementer  | 9/2/2014 | 05:05:00 | USER | 700  |      |      |       |  |                                                       |
| Event | 28 | Pump Cement                   | 9/2/2014 | 05:11:59 | COM5 | 422  | 12.8 | 8.0  | 270.5 |  | 775 sks, 12.8 ppg, 1.95 yield, 10.93 gal/sk           |
| Event | 29 | Shutdown                      | 9/2/2014 | 05:48:02 | USER |      |      |      |       |  | Wash up on top of plug                                |
| Event | 30 | Drop Closing Device           | 9/2/2014 | 05:49:29 | COM5 |      |      |      |       |  | Rig supplied plug                                     |
| Event | 31 | Pump Displacement             | 9/2/2014 | 05:52:02 | COM5 | 712  | 8.33 | 10.0 | 110.8 |  | Fresh Water - saw 51 bbls 1st stage cement to surface |
| Event | 32 | Slow Rate                     | 9/2/2014 | 06:03:12 | USER | 390  | 8.33 | 2.0  | 10.0  |  | Got 100 bbls 2nd stage cement to surface              |
| Event | 33 | Close Multiple Stage Cementer | 9/2/2014 | 06:12:38 | USER | 1807 |      |      |       |  |                                                       |
| Event | 34 | Release Casing Pressure       | 9/2/2014 | 06:15:56 | USER |      |      |      |       |  | Tool closed                                           |
| Event | 35 | End Job                       | 9/2/2014 | 06:18:05 | COM5 |      |      |      |       |  | Wait on location for topout                           |
| Event | 36 | Start Topout Job              | 9/2/2014 | 08:25:11 | COM5 |      |      |      |       |  | Cement fell approx 28 ft = 3.4 bbls cement            |
| Event | 37 | Pump Cap Cement               | 9/2/2014 | 08:32:43 | COM5 | 44   | 15.6 | 1.0  | 6.3   |  | Approx 30 sks, 15.6 ppg, 1.19 yield, 5.23 gal/sk      |
| Event | 38 | Shutdown                      | 9/2/2014 | 08:36:35 | USER |      |      |      |       |  | Water behind to clear lines                           |
| Event | 39 | End Job                       | 9/2/2014 | 08:38:00 | USER |      |      |      |       |  | Cement to surface                                     |
| Event | 40 | Pre-Rig Down Safety Meeting   | 9/2/2014 | 08:45:00 | USER |      |      |      |       |  | 9 add hours                                           |
| Event | 41 | Rig-Down Equipment            | 9/2/2014 | 09:00:00 | USER |      |      |      |       |  |                                                       |
| Event | 42 | Rig-Down Completed            | 9/2/2014 | 10:30:00 | USER |      |      |      |       |  |                                                       |
| Event | 43 | Pre-Convoy Safety Meeting     | 9/2/2014 | 10:45:00 | USER |      |      |      |       |  |                                                       |
| Event | 44 | Crew Leave Location           | 9/2/2014 | 11:00:00 | USER |      |      |      |       |  | Thank you for using Halliburton                       |

# WPX - BCU 542-30-198 - 2 STAGE 9 5/8" SURFACE



DH Density (ppg) 8.35 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 7 Pump Stg Tot (bbl) 114.9

|                                                         |                                     |                                          |                                                  |              |
|---------------------------------------------------------|-------------------------------------|------------------------------------------|--------------------------------------------------|--------------|
| ① Call Out n/a;n/a;n/a;n/a                              | ⑧ Rig-Up Equipment n/a;n/a;n/a;n/a  | ⑮ Pump Lead Cement 12.99;3.9;197;3.1     | 22 Bump Plug 8.42;0;1092;266.4                   | 29 Shutdown  |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a             | ⑨ Rig-Up Completed n/a;n/a;n/a;n/a  | ⑯ Pump Tail Cement 13.5;6;235;141.3      | 23 Check Floats 8.34;0;28;266.4                  | 30 Drop Clos |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a                       | ⑩ Pre-Job Safety Meeting 8.25;0;5;0 | ⑰ Shutdown 0.08;0.9;21;72.6              | 24 Drop MSC Opening Device 8.36;0;10;266.4       | 31 Pump Dis  |
| ④ Arrive At Loc n/a;n/a;n/a;n/a                         | ⑪ Start Job 0.18;0;5;0              | ⑱ Drop Plug -0.07;0;18;0                 | 25 2nd Stage 8.35;0;8;0                          | 32 Slow Rate |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑫ Prime Lines 8.22;1.8;24;0.5       | ⑳ Pump Displacement 0.01;1.8;22;0.2      | 26 Pump Spacer 8.43;0;8;0                        | 33 Close Mul |
| ⑥ Spot Equipment n/a;n/a;n/a;n/a                        | ⑬ Test Lines 8.42;0;3090;2.3        | 20 Slow Rate Thru Tool 8.37;2.1;41;102.1 | 27 Open Multiple Stage Cementer 8.42;2.3;191;2.3 | 34 Release C |
| ⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a             | ⑭ Pump H2O Spacer 8.41;2.8;88;4.8   | 21 Slow Rate 8.33;2;591;241.3            | 28 Pump Cement 12.64;4.1;203;3.1                 | 35 End Job 8 |

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Created: 2014-09-01 15:14:37, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 9/2/2014 12:32:22 AM

Well: BCU 542-30-198

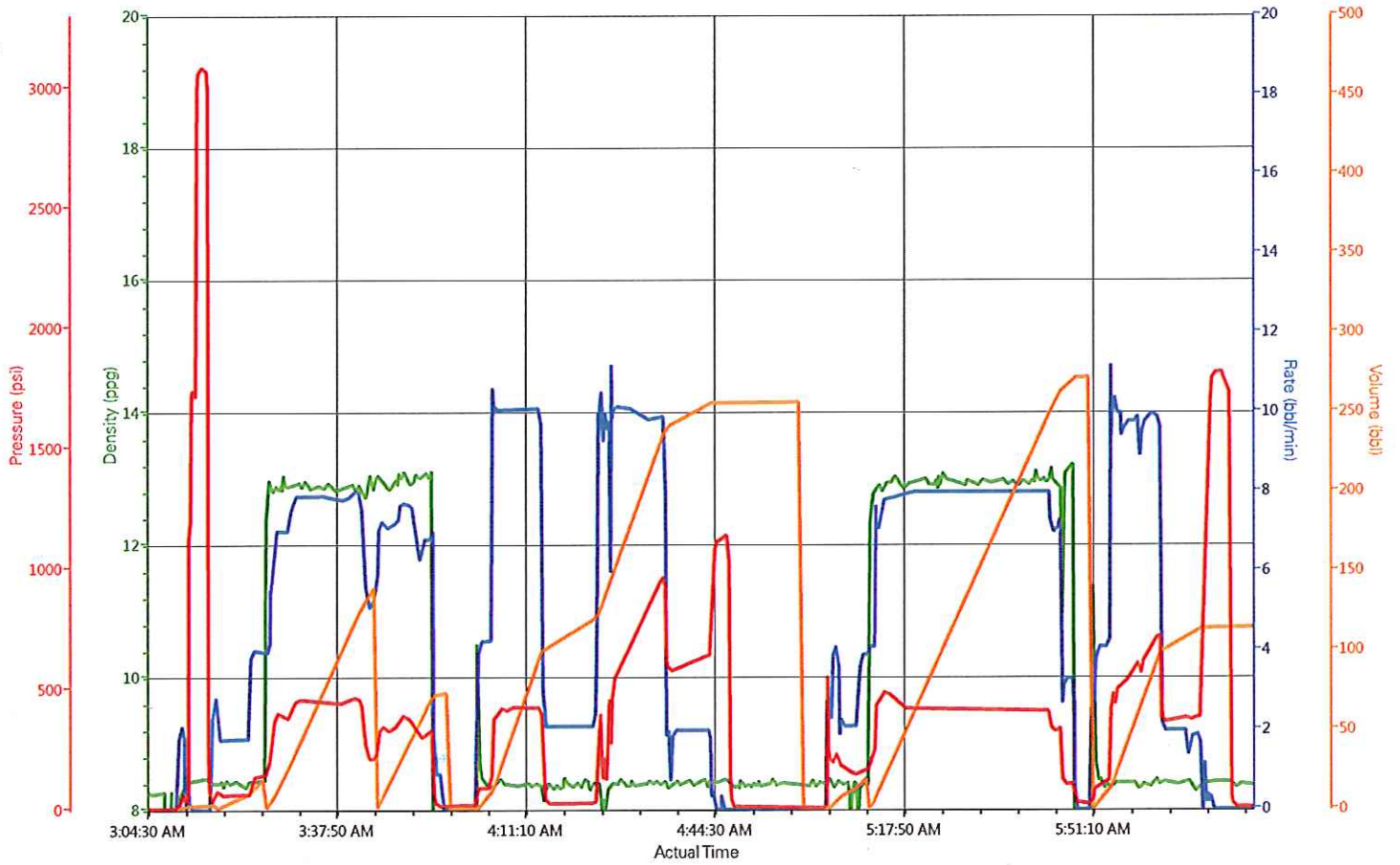
Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks



# WPX - BCU 542-30-198 - 2 STAGE 9 5/8" SURFACE



DH Density (ppg) 8.43 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 7 Pump Stg Tot (bbl) 114.9

▼ **HALLIBURTON** | iCem® Service

Created: 2014-09-01 15:14:37, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 9/2/2014 12:32:22 AM

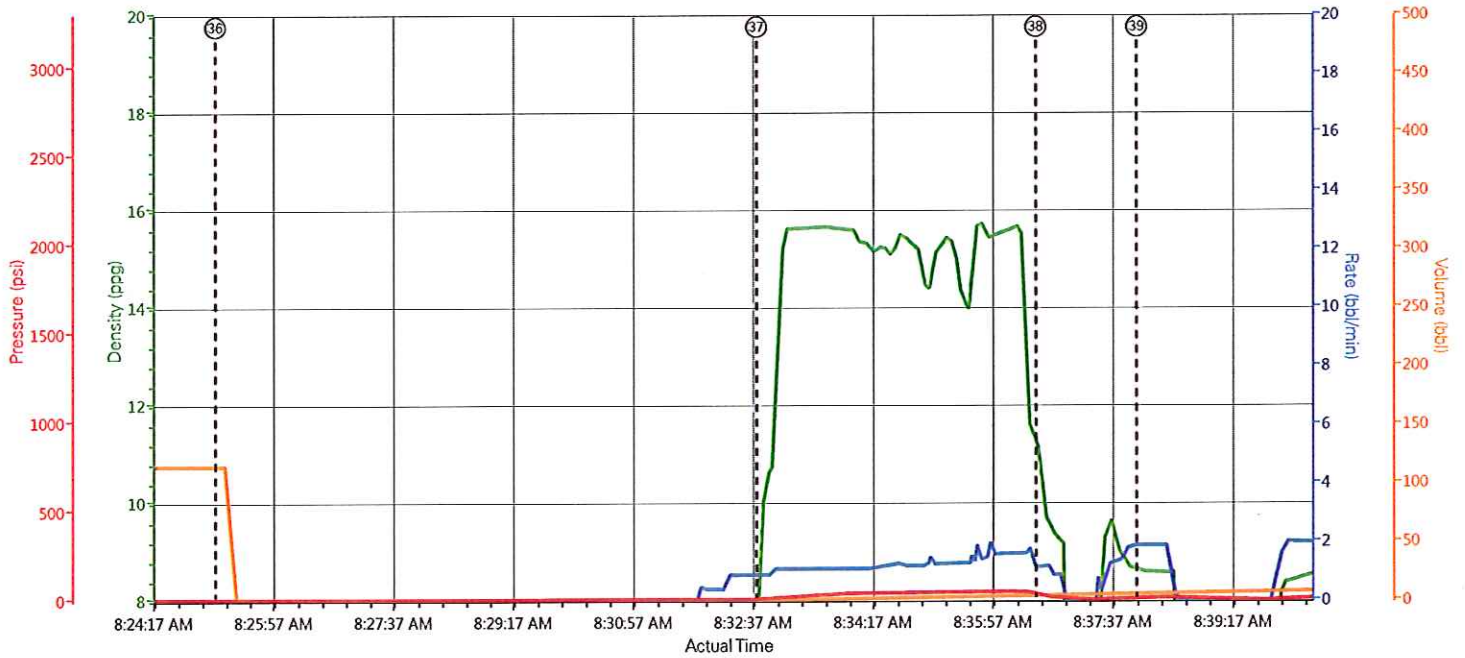
Well: BCU 542-30-198

Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks

# WPX - BCU 542-30-198 - TOPOUT



DH Density (ppg) -0.03 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 11 Pump Stg Tot (bbl) 9.6

|                                                         |                                      |                                              |                                                  |       |
|---------------------------------------------------------|--------------------------------------|----------------------------------------------|--------------------------------------------------|-------|
| ① Call Out n/a;n/a;n/a;n/a                              | ⑨ Rig-Up Completed n/a;n/a;n/a;n/a   | ⑰ Shutdown 0.08;0.9;21;72.6                  | 25 2nd Stage 8.35;0;8;0                          | 33 Ci |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a             | ⑩ Pre-Job Safety Meeting 8.25;0;5;0  | ⑱ Drop Plug -0.07;0;18;0                     | 26 Pump Spacer 8.43;0;8;0                        | 34 Ri |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a                       | ⑪ Start Job 0.18;0;5;0               | ⑳ Pump Displacement 0.01;1.8;22;0.2          | 27 Open Multiple Stage Cementer 8.42;2.3;191;2.3 | 35 Ei |
| ④ Arrive At Loc n/a;n/a;n/a;n/a                         | ⑫ Prime Lines 8.22;1.8;24;0.5        | ㉑ 20 Slow Rate Thru Tool 8.37;2.1;41;102.1   | 28 Pump Cement 12.64;4.1;203;3.1                 | 36 Si |
| ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑬ Test Lines 8.42;0;3090;2.3         | ㉒ 21 Slow Rate 8.33;2;591;241.3              | 29 Shutdown 0.21;0;43;272                        | 37 Pi |
| ⑥ Spot Equipment n/a;n/a;n/a;n/a                        | ⑭ Pump H2O Spacer 8.41;2.8;88;4.8    | ㉓ 22 Bump Plug 8.42;0;1092;256.4             | 30 Drop Closing Device 0.06;0;24;272             | 38 Si |
| ⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a             | ⑮ Pump Lead Cement 12.99;3.9;197;3.1 | ㉔ 23 Check Floats 8.34;0;28;256.4            | 31 Pump Displacement 8.44;4.1;105;4.3            | 39 Ei |
| ⑧ Rig-Up Equipment n/a;n/a;n/a;n/a                      | ⑯ Pump Tail Cement 13.5;6;235;141.3  | ㉕ 24 Drop MSC Opening Device 8.36;0;10;256.4 | 32 Slow Rate 8.43;2.2;400;100.9                  | 40 Pr |

HALLIBURTON | iCem® Service

Created: 2014-09-01 15:14:37, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-EBUS

Job Date: 9/2/2014 12:32:22 AM

Well: BCU 542-30-198

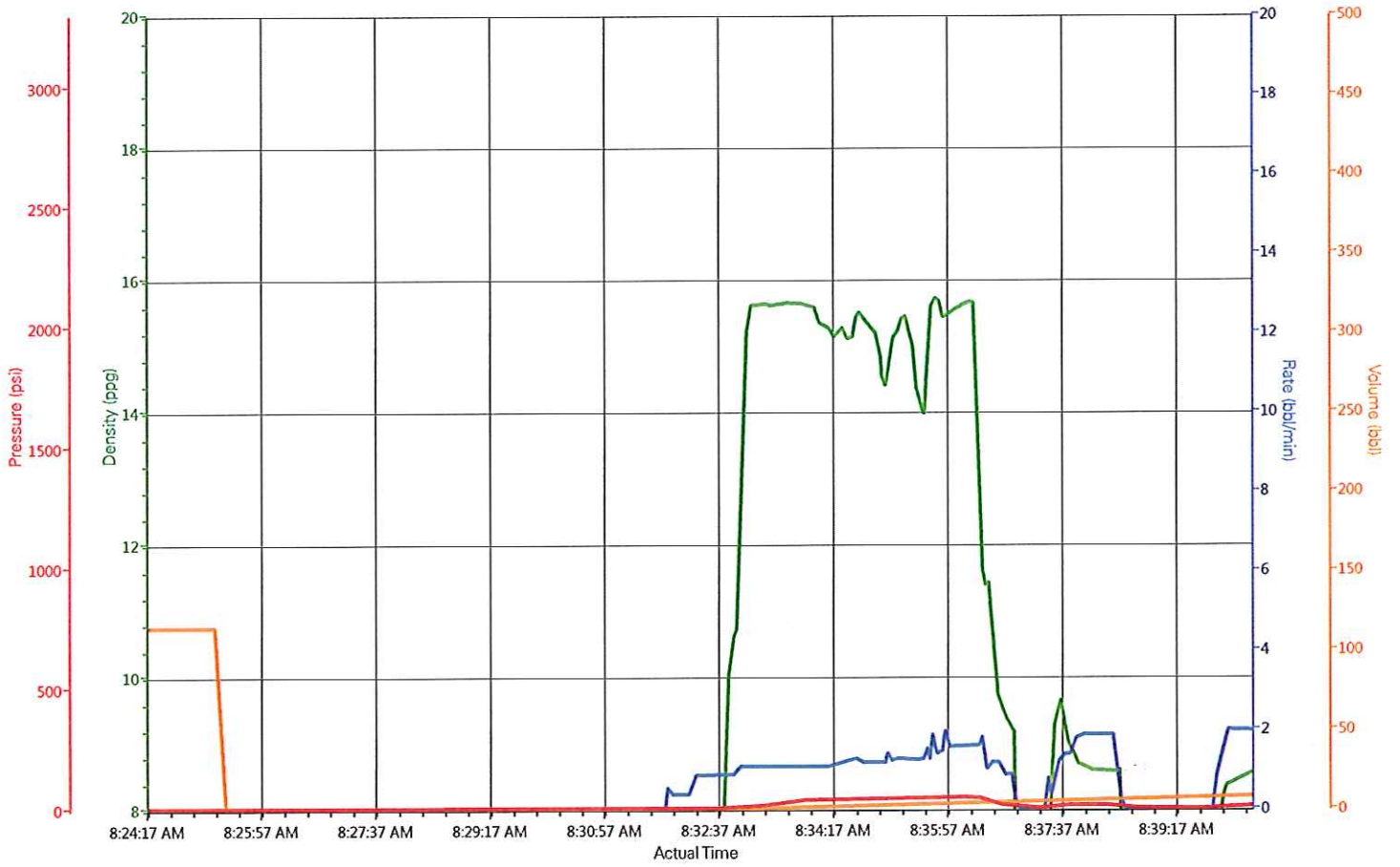
Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks



# WPX - BCU 542-30-198 - TOPOUT



HALLIBURTON | iCem® Service

Created: 2014-09-01 15:14:37, Version: 3.0.121

Edit

Customer: WPX ENERGY ROCKY MOUNTAIN LLC-  
EBUS

Job Date: 9/2/2014 12:32:22 AM

Well: BCU 542-30-198

Representative: Tom Bowen

Sales Order #: 901633782

Elite #3: Ed Deussen / Brent Banks

# HALLIBURTON

## Water Analysis Report

Company: WPX  
Submitted by: ED DEUSSEN  
Attention: J.TROUT  
Lease: BCU  
Well #: 542-30-198

Date: 9/1/2014  
Date Rec.: 9/1/2014  
S.O.#: 901633782  
Job Type: SURFACE

|                             |              |                       |
|-----------------------------|--------------|-----------------------|
| Specific Gravity            | <i>MAX</i>   | <i>1</i>              |
| pH                          | <i>8</i>     | <i>7</i>              |
| Potassium (K)               | <i>5000</i>  | <i>0 Mg / L</i>       |
| Calcium (Ca)                | <i>500</i>   | <i>120 Mg / L</i>     |
| Iron (FE2)                  | <i>300</i>   | <i>0 Mg / L</i>       |
| Chlorides (Cl)              | <i>3000</i>  | <i>0 Mg / L</i>       |
| Sulfates (SO <sub>4</sub> ) | <i>1500</i>  | <i>&lt;200 Mg / L</i> |
| Temp                        | <i>40-80</i> | <i>64 Deg</i>         |
| Total Dissolved Solids      |              | <i>260 Mg / L</i>     |

Respectfully: ED DEUSSEN

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

**NOTICE:**

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or it

|                                                        |                                |                                                               |
|--------------------------------------------------------|--------------------------------|---------------------------------------------------------------|
| <b>Sales Order #:</b><br>0901633782                    | <b>Line Item:</b><br>10        | <b>Survey Conducted Date:</b><br>9/2/2014                     |
| <b>Customer:</b><br>WPX ENERGY ROCKY MOUNTAIN LLC-EBUS |                                | <b>Job Type (BOM):</b><br>CMT MULTIPLE STAGES BOM             |
| <b>Customer Representative:</b><br>TOM BOWEN           |                                | <b>API / UWI: (leave blank if unknown)</b><br>05-103-11996-00 |
| <b>Well Name:</b><br>FEDERAL                           |                                | <b>Well Number:</b><br>0080244346                             |
| <b>Well Type:</b><br>DIRECTIONAL GAS                   | <b>Well Country:</b><br>USA    |                                                               |
| <b>H2S Present:</b><br>No                              | <b>Well State:</b><br>COLORADO | <b>Well County:</b><br>RIO BLANCO                             |

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

### CUSTOMER SATISFACTION SURVEY

| CATEGORY                | CUSTOMER SATISFACTION RESPONSE                                 |                     |
|-------------------------|----------------------------------------------------------------|---------------------|
| Survey Conducted Date   | The date the survey was conducted                              | 9/3/2014            |
| Survey Interviewer      | The survey interviewer is the person who initiated the survey. | HB57194             |
| Customer Participation  | Did the customer participate in this survey? (Y/N)             | Yes                 |
| Customer Representative | Enter the Customer representative name                         | TOM BOWEN           |
| HSE                     | Was our HSE performance satisfactory? Circle Y or N            | Yes                 |
| Equipment               | Were you satisfied with our Equipment? Circle Y or N           | Yes                 |
| Personnel               | Were you satisfied with our people? Circle Y or N              | Yes                 |
| Customer Comment        | Customer's Comment                                             | GOOD JOB! ED + CREW |

CUSTOMER SIGNATURE

|                                                        |                                |                                                               |
|--------------------------------------------------------|--------------------------------|---------------------------------------------------------------|
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| <b>Well Type:</b><br>DIRECTIONAL GAS                   | <b>Well Country:</b><br>USA    |                                                               |
| <b>H2S Present:</b><br>No                              | <b>Well State:</b><br>COLORADO | <b>Well County:</b><br>RIO BLANCO                             |

### KEY PERFORMANCE INDICATORS

#### General

|                                                                   |          |
|-------------------------------------------------------------------|----------|
| <b>Survey Conducted Date</b><br>The date the survey was conducted | 9/2/2014 |
|-------------------------------------------------------------------|----------|

#### Cementing KPI Survey

|                                                                                                                                                                     |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Type of Job</b><br>Select the type of job. (Cementing or Non-Cementing)                                                                                          | 0                       |
| <b>Select the Maximum Deviation range for this Job</b><br>What is the highest deviation for the job you just completed? This may not be the maximum well deviation. | Vertical                |
| <b>Total Operating Time (hours)</b><br>Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.                                          | 6                       |
| <b>HSE Incident, Accident, Injury</b><br>HSE Incident, Accident, Injury. This should be recordable incidents only.                                                  | No                      |
| <b>Was the Job purpose achieved?</b><br>Was the job delivered correctly as per customer agreed design?                                                              | Yes                     |
| <b>Pumping Hours</b><br>Total number of hours pumping fluid on this job. Enter in decimal format.                                                                   | 3                       |
| <b>Type of Rig Classification Job Was Performed</b><br>Type Of Rig (classification) Job Was Performed On                                                            | Drilling Rig (Portable) |
| <b>Number Of JSAs Performed</b><br>Number Of Jsas Performed                                                                                                         | 5                       |
| <b>Was this a Primary Cement Job (Yes / No)</b><br>Primary Cement Job= Casing job, Liner job, or Tie-back job.                                                      | Yes                     |
| <b>Number of Unplanned Shutdowns</b><br>Unplanned shutdown is when injection stops for any period of time.                                                          | 0                       |
| <b>Customer Non-Productive Rig Time (hrs)</b>                                                                                                                       | 0                       |



|                                                        |                                |                                                               |
|--------------------------------------------------------|--------------------------------|---------------------------------------------------------------|
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|                                                                                                                                                                                                                                  |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.                                                      |     |
| <b>Did We Run Wiper Plugs?</b><br>Did We Run Top And Bottom Casing Wiper Plugs?                                                                                                                                                  | Top |
| <b>If a top plug was run, was the plug bumped? (Yes/No/N/A)</b><br>If a top plug was run, was the plug bumped? (Yes/No/N/A)                                                                                                      | Yes |
| <b>If applicable, was Halliburton float equipment used? (Yes/No/N/A)</b><br>If applicable, was Halliburton float equipment used? (Yes/No/N/A)                                                                                    | NO  |
| <b>If applicable, did the floats hold? (Yes/No/N/A)</b><br>If applicable, did the floats hold? (Yes/No/N/A)                                                                                                                      | Yes |
| <b>Mixing Density of Job Stayed in Designed Density Range (0-100%)</b><br>Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100       | 99  |
| <b>Pump Rate (percent) of Job Stayed At Designed Pump Rate</b><br>Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100 | 99  |
| <b>If applicable, were there returns throughout the job? (Yes/No/N/A)</b><br>If applicable, were there returns throughout the job? (Yes/No/N/A)                                                                                  | YES |
| <b>Nbr of Remedial Plug Jobs Rqd - HES</b><br>Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES                                                                                                               | 0   |
| <b>Nbr of Remedial Sqz Jobs Rqd - HES</b><br>Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES                                                                                                         | 0   |