

**ANADARKO PETROLEUM CORP - EBUS  
DO NOT MAIL - PO BOX 4995  
THE WOODLANDS, Texas**

Badding 15N-35HZ

**Majors 29**

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

Date Prepared: 11/30/2013  
Version: 1

Service Supervisor: BULINSKI, MATTHEW

Submitted by: TRIER, DEREK

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

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| Job Tubulars      |                           |            |          |              | MD        |              | Shoe Joint Length<br>ft |
|-------------------|---------------------------|------------|----------|--------------|-----------|--------------|-------------------------|
| Type              | Description               | Size<br>in | ID<br>in | Wt<br>lbm/ft | Top<br>ft | Bottom<br>ft |                         |
| Casing            | 9 5/8" Surface Casing     | 9.63       | 8.921    | 36.00        | 0.00      | 1,195.00     | 45.00                   |
| Open Hole Section | 13 1/2" Open Hole Section |            | 13.500   |              | 0.00      | 1,198.00     | 0.00                    |

# HALLIBURTON

## ***Pumping Schedule***

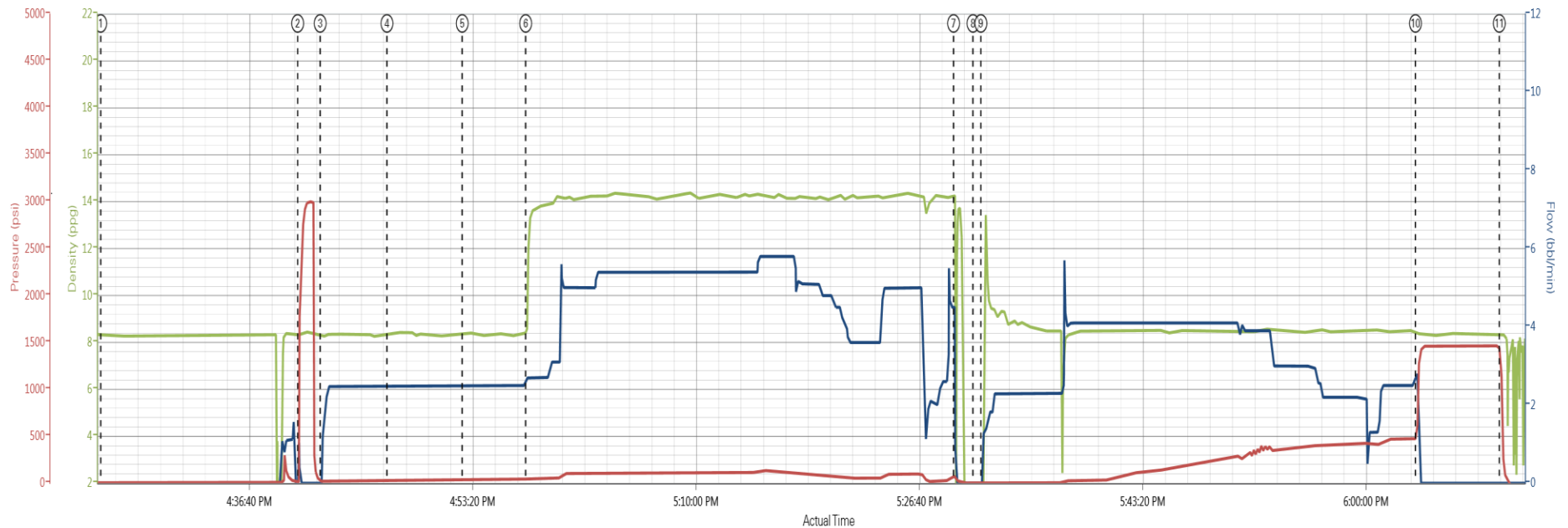
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| Stage /Plug # | Fluid # | Fluid Type    | Fluid Name         | Surface Density lbm/gal | Avg Rate bbl/min | Surface Volume | Downhole Volume |
|---------------|---------|---------------|--------------------|-------------------------|------------------|----------------|-----------------|
| 1             | 1       | Spacer        | Fresh Water Spacer | 8.33                    | 3.00             | 10.0 bbl       | 10.0 bbl        |
| 1             | 2       | Spacer        | Mud Flush          | 8.40                    | 3.00             | 12.0 bbl       | 12.0 bbl        |
| 1             | 1       | Spacer        | Fresh Water Spacer | 8.33                    | 3.00             | 10.0 bbl       | 10.0 bbl        |
| 1             | 3       | Cement Slurry | SwiftCem B2        | 14.20                   | 5.00             | 497.0 sacks    | 497.0 sacks     |

# HALLIBURTON

## Data Acquisition

Anadarko Badding 15N-35HZ Surface 11-29-13



DH Density (ppg) 7.33 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) -38

① Start Job 8:33;0,5    ④ Pump Spacer 2 8:31;2,5;35    ⑦ Shutdown 11:04;0,59    ⑩ Bump Plug 8:37;2,8;619  
 ② Test Lines 8:32;0,1781    ⑤ Pump Spacer 1 8:35;2,5;40    ⑧ Drop Top Plug 0,12;0,2    ⑪ End Job 8:34;0,1168  
 ③ Pump Spacer 1 8:27;0,16    ⑥ Pump Cement 10:3;2,7;47    ⑨ Pump Displacement 0,21;0,1

▼ HALLIBURTON | iCem® Service

Created: 2013-11-29 15:41:47, Version: 2.0.606

Edit

Customer: ANADARKO PETROLEUM CORP -  
EBUS

Job Date: 11/29/2013 3:44:18 PM

Well: 15N-35HZ

Representative: Matt Bulinski

Sales Order #: 900930033

# HALLIBURTON

## Service Supervisor Reports

### Job Log

| Date/Time        | Chart # | Activity Code                          | Pump Rate | Cum Vol | Pump | Pressure (psig) | Comments                                                                                              |
|------------------|---------|----------------------------------------|-----------|---------|------|-----------------|-------------------------------------------------------------------------------------------------------|
| 11/29/2013 12:00 |         | Call Out                               |           |         |      |                 |                                                                                                       |
| 11/29/2013 14:00 |         | Depart Yard Safety Meeting             |           |         |      |                 |                                                                                                       |
| 11/29/2013 15:00 |         | Arrive at Location from Service Center |           |         |      |                 | Arrived 1hr early and rig is on schedule running Csg almost at bottom                                 |
| 11/29/2013 15:10 |         | Assessment Of Location Safety Meeting  |           |         |      |                 | Hazard Hunt on location before spotting in trucks                                                     |
| 11/29/2013 15:20 |         | Safety Meeting - Pre Rig-Up            |           |         |      |                 | JSA on rigging up bulk trucks and iron to rig                                                         |
| 11/29/2013 15:30 |         | Rig-Up Equipment                       |           |         |      |                 |                                                                                                       |
| 11/29/2013 15:50 |         | Rig-Up Completed                       |           |         |      |                 |                                                                                                       |
| 11/29/2013 16:15 |         | Safety Meeting - Pre Job               |           |         |      |                 | JSA with Company Man, Rig hands, 3rd party, and HES hands on pump schedule                            |
| 11/29/2013 16:25 |         | Start Job                              |           |         |      |                 |                                                                                                       |
| 11/29/2013 16:40 |         | Test Lines                             |           |         |      |                 | 3000psi Pressure Test Lines to Rig Floor                                                              |
| 11/29/2013 16:42 |         | Pump Spacer 1                          | 3         | 10      |      | 35.0            | 10bbls H2O spacer                                                                                     |
| 11/29/2013 16:47 |         | Pump Spacer 2                          | 3         | 12      |      | 36.0            | 12bbls Mud Flush spacer                                                                               |
| 11/29/2013 16:52 |         | Pump Spacer 1                          | 3         | 10      |      | 35.0            | 10bbls H2O spacer                                                                                     |
| 11/29/2013 16:57 |         | Pump Cement                            | 5         | 136     |      | 111.0           |                                                                                                       |
| 11/29/2013 17:29 |         | Shutdown                               |           |         |      |                 |                                                                                                       |
| 11/29/2013 17:30 |         | Drop Top Plug                          |           |         |      |                 | Pre-Loaded                                                                                            |
| 11/29/2013 17:31 |         | Pump Displacement                      | 4         | 99      |      | 100.0           | H2O displacement, Good returns throughout..18bbls cmt back to Surface                                 |
| 11/29/2013 18:03 |         | Bump Plug                              | 2.5       |         |      | 480.0           | Slowed down last 20bbls to 2.5bbl/min to bump. Plug landed at 480psi and brought to 1464psi for 5mins |
| 11/29/2013 18:09 |         | Check Floats                           |           |         |      |                 | Floats Held                                                                                           |
| 11/29/2013 18:10 |         | End Job                                |           |         |      |                 |                                                                                                       |
| 11/29/2013 18:12 |         | Safety Meeting - Pre Rig-Down          |           |         |      |                 | JSA on rigging down bulk trucks and iron from rig                                                     |
| 11/29/2013 18:15 |         | Rig-Down Equipment                     |           |         |      |                 |                                                                                                       |
| 11/29/2013 18:55 |         | Rig-Down Completed                     |           |         |      |                 |                                                                                                       |
| 11/29/2013 19:00 |         | Safety Meeting - Departing Location    |           |         |      |                 | JSA on location walk around, pre-tripping trucks, and driving back to Brighton Yard                   |

## The Road to Excellence Starts with Safety

|                                          |                         |                                    |                          |
|------------------------------------------|-------------------------|------------------------------------|--------------------------|
| Sold To #: 300466                        | Ship To #: 3204352      | Quote #:                           | Sales Order #: 900930033 |
| Customer: ANADARKO PETROLEUM CORP - EBUS |                         | Customer Rep: Balkenbush, Bob      |                          |
| Well Name: Badding                       |                         | Well #: 15N-35HZ                   | API/UWI #: 05-123-38410  |
| Field: WATTENBERG                        | City (SAP): FORT LUPTON | County/Parish: Weld                | State: Colorado          |
| Contractor: Majors                       |                         | Rig/Platform Name/Num: Majors 29   |                          |
| Job Purpose: Cement Surface Casing       |                         |                                    |                          |
| Well Type: Development Well              |                         | Job Type: Cement Surface Casing    |                          |
| Sales Person: GREGORY, JON               |                         | Srvc Supervisor: BULINSKI, MATTHEW | MBU ID Emp #: 483865     |

## Job Personnel

| HES Emp Name        | Exp Hrs | Emp #  | HES Emp Name       | Exp Hrs | Emp #  | HES Emp Name     | Exp Hrs | Emp #  |
|---------------------|---------|--------|--------------------|---------|--------|------------------|---------|--------|
| BULINSKI, MATTHEW J | 0.0     | 483865 | CARPENTER, JACOB P | 0.0     | 499500 | MILLS, KENDALL R | 0.0     | 557380 |
| Robinson, Troy      | 0.0     | 123456 | VIATOR, JASON R.   | 0.0     | 550394 |                  |         |        |

## Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| 10982754C  | 10 mile        | 11064046C  | 10 mile        | 11527037   | 10 mile        | 11542778   | 10 mile        |
| 11605598   | 10 mile        |            |                |            |                |            |                |

## Job

## Job Times

| Formation Name         |                   |               |          | Date          | Time            | Time Zone |
|------------------------|-------------------|---------------|----------|---------------|-----------------|-----------|
| Formation Depth (MD)   | Top               | Bottom        |          | Called Out    | 29 - Nov - 2013 | 12:00 MST |
| Form Type              | BHST              |               |          | On Location   | 29 - Nov - 2013 | 15:00 MST |
| Job depth MD           | 1198. ft          | Job Depth TVD | 1198. ft | Job Started   | 29 - Nov - 2013 | 16:25 MST |
| Water Depth            | Wk Ht Above Floor |               |          | Job Completed | 29 - Nov - 2013 | 18:10 MST |
| Perforation Depth (MD) | From              | To            |          | Departed Loc  | 29 - Nov - 2013 | 19:00 MST |

## Well Data

| Description               | New / Used | Max pressure psig | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|---------------------------|------------|-------------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| 13 1/2" Open Hole Section |            |                   |         | 13.5  |               |        |       | .         | 1198.        |            |               |
| 9 5/8" Surface Casing     | Unknown    |                   | 9.625   | 8.921 | 36.           |        | J-55  | .         | 1195.        |            |               |

Sales/Rental/3<sup>rd</sup> Party (HES)

| Description                              | Qty | Qty uom | Depth | Supplier |
|------------------------------------------|-----|---------|-------|----------|
| CMT CASING EQUIPMENT BOM                 | 1   | JOB     |       |          |
| MILEAGE FOR CEMENTING CREW,ZI            | 20  | MI      |       |          |
| ZI FUEL SURCHG-CARS/PICKUPS<1 1/2TON     | 20  | MI      |       |          |
| KIT,HALL WELD-A                          | 1   | EA      |       |          |
| CNTRLZR, 9 5/8"x13 3/4',#500-0963-1375   | 8   | EA      |       |          |
| Description                              | Qty | Qty uom | Depth | Supplier |
| BASKET - CEMENT - 9-5/8 CSG X 12-1/4     | 1   | EA      |       |          |
| PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA | 1   | EA      |       |          |
| COLLAR-STOP-9 5/8"-FRICTION-HINGED       | 2   | EA      |       |          |

## Fluid Data

| Stage/Plug #: 1                          |                    |                                       |        |                                   |                        |                           |                  |              |                        |
|------------------------------------------|--------------------|---------------------------------------|--------|-----------------------------------|------------------------|---------------------------|------------------|--------------|------------------------|
| Fluid #                                  | Stage Type         | Fluid Name                            | Qty    | Qty uom                           | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
| 1                                        | Fresh Water Spacer |                                       | 10.00  | bbl                               | 8.33                   |                           |                  | 3.0          |                        |
| 2                                        | Mud Flush          |                                       | 12.00  | bbl                               | 8.4                    |                           |                  | 3.0          |                        |
| 3.5 lbm/bbl                              |                    | MUD FLUSH III, 40 LB SACK (101633304) |        |                                   |                        |                           |                  |              |                        |
| 42 gal/bbl                               |                    | MUD FLUSH III - SBM (528788)          |        |                                   |                        |                           |                  |              |                        |
| 1                                        | Fresh Water Spacer |                                       | 10.00  | bbl                               | 8.33                   |                           |                  | 3.0          |                        |
| 3                                        | SwiftCem B2        | SWIFTCM (TM) SYSTEM (452990)          | 497.0  | sacks                             | 14.2                   | 1.54                      | 7.66             | 5.0          | 7.66                   |
| 7.66 Gal                                 |                    | FRESH WATER                           |        |                                   |                        |                           |                  |              |                        |
| Calculated Values                        |                    | Pressures                             |        | Volumes                           |                        |                           |                  |              |                        |
| Displacement                             | 99                 | Shut In: Instant                      |        | Lost Returns                      | 0                      | Cement Slurry             |                  | Pad          |                        |
| Top Of Cement                            |                    | 5 Min                                 |        | Cement Returns                    | 18                     | Actual Displacement       | 99               | Treatment    |                        |
| Frac Gradient                            |                    | 15 Min                                |        | Spacers                           | 32                     | Load and Breakdown        |                  | Total Job    |                        |
| Rates                                    |                    |                                       |        |                                   |                        |                           |                  |              |                        |
| Circulating                              |                    | Mixing                                |        | Displacement                      |                        | Avg. Job                  |                  |              |                        |
| Cement Left In Pipe                      | Amount             | 45 ft                                 | Reason | Shoe Joint                        |                        |                           |                  |              |                        |
| Frac Ring # 1 @                          | ID                 | Frac ring # 2 @                       | ID     | Frac Ring # 3 @                   | ID                     | Frac Ring # 4 @           | ID               |              |                        |
| The Information Stated Herein Is Correct |                    |                                       |        | Customer Representative Signature |                        |                           |                  |              |                        |

