

# CEMENT JOB REPORT



|                                                                                                                                                                                         |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------|----------------------|-------------------------|-------------------|----------------------------------|------------------------------------|-------------|
| <b>CUSTOMER</b> ANADARKO PETROLEUM COR                                                                                                                                                  |                 |                          | <b>DATE</b> 06-AUG-14                          |                                                                                                      | <b>F.R. #</b> 10011088518  |                                             |                       | <b>SERV. SUPV.</b> Anthony J Staples                                                                      |                      |                         |                   |                                  |                                    |             |
| <b>LEASE &amp; WELL NAME</b><br>HALE #21-13 - API 05123269590000                                                                                                                        |                 |                          | <b>LOCATION</b><br>13-3N-67W                   |                                                                                                      |                            | <b>COUNTY-PARISH-BLOCK</b><br>Weld Colorado |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| <b>DISTRICT</b><br>Brighton                                                                                                                                                             |                 |                          | <b>DRILLING CONTRACTOR RIG #</b><br>Ensign 316 |                                                                                                      |                            | <b>TYPE OF JOB</b><br>Squeeze-Perforation   |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| <b>SIZE &amp; TYPE OF PLUGS</b>                                                                                                                                                         |                 | <b>LIST-CSG-HARDWARE</b> |                                                |                                                                                                      | <b>MECHANICAL BARRIERS</b> |                                             | <b>MD</b>             | <b>TVD</b>                                                                                                | <b>HANGER TYPES</b>  |                         | <b>MD</b>         | <b>TVD</b>                       |                                    |             |
|                                                                                                                                                                                         |                 | No Shoe                  |                                                |                                                                                                      | Retainers                  |                                             | 7040                  | 7040                                                                                                      |                      |                         |                   |                                  |                                    |             |
| <b>MATERIALS FURNISHED BY BJ</b>                                                                                                                                                        |                 |                          | <b>LAB REPORT NO.</b>                          |                                                                                                      |                            | <b>PHYSICAL SLURRY PROPERTIES</b>           |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
|                                                                                                                                                                                         |                 |                          |                                                |                                                                                                      |                            | <b>SACKS OF CEMENT</b>                      | <b>SLURRY WGT PPG</b> | <b>SLURRY YLD FT<sup>3</sup></b>                                                                          | <b>WATER GPS</b>     | <b>PUMP TIME HR:MIN</b> | <b>Bbl SLURRY</b> | <b>Bbl MIX WATER</b>             |                                    |             |
| Fresh Water                                                                                                                                                                             |                 |                          |                                                |                                                                                                      |                            | 0                                           | 8.34                  | 0                                                                                                         | 0                    | 00:00                   | 20                |                                  |                                    |             |
| Cement Slurry                                                                                                                                                                           |                 |                          | C08-012-14                                     |                                                                                                      |                            | 165                                         | 14.8                  | 1.33                                                                                                      | 6.31                 | 02:42                   | 39.02             | 24.80                            |                                    |             |
| Fresh Water                                                                                                                                                                             |                 |                          |                                                |                                                                                                      |                            | 0                                           | 8.34                  | 0                                                                                                         | 0                    | 00:00                   | 3                 |                                  |                                    |             |
| <b>Available Mix Water</b> 60 Bbl.                                                                                                                                                      |                 |                          | <b>Available Displ. Fluid</b> 60 Bbl.          |                                                                                                      |                            | <b>TOTAL</b>                                |                       |                                                                                                           | 62.02                |                         | 24.80             |                                  |                                    |             |
| <b>HOLE</b>                                                                                                                                                                             |                 |                          | <b>TBG-CSG-D.P.</b>                            |                                                                                                      |                            |                                             |                       |                                                                                                           | <b>COLLAR DEPTHS</b> |                         |                   |                                  |                                    |             |
| <b>SIZE</b>                                                                                                                                                                             | <b>% EXCESS</b> | <b>DEPTH</b>             | <b>ID</b>                                      | <b>OD</b>                                                                                            | <b>WGT.</b>                | <b>TYPE</b>                                 | <b>MD</b>             | <b>TVD</b>                                                                                                | <b>GRADE</b>         | <b>SHOE</b>             | <b>FLOAT</b>      | <b>STAGE</b>                     |                                    |             |
| 8.063                                                                                                                                                                                   | 0               | 7562                     | 4.052                                          | 4.5                                                                                                  | 10.5                       | CSG                                         | 1500                  | 1500                                                                                                      |                      | 0                       | 0                 | 0                                |                                    |             |
|                                                                                                                                                                                         |                 |                          | 1.278                                          | 1.66                                                                                                 | 3.02                       | TBG                                         | 1500                  | 1500                                                                                                      |                      |                         |                   |                                  |                                    |             |
| <b>LAST CASING</b>                                                                                                                                                                      |                 |                          | <b>PKR-CMT RET-BR PL-LINER</b>                 |                                                                                                      |                            | <b>PERF. DEPTH</b>                          |                       |                                                                                                           | <b>TOP CONN</b>      |                         | <b>WELL FLUID</b> |                                  |                                    |             |
| <b>ID</b>                                                                                                                                                                               | <b>OD</b>       | <b>WGT</b>               | <b>TYPE</b>                                    | <b>MD</b>                                                                                            | <b>TVD</b>                 | <b>BRAND &amp; TYPE</b>                     |                       | <b>DEPTH</b>                                                                                              | <b>TOP</b>           | <b>BTM</b>              | <b>SIZE</b>       | <b>THREAD</b>                    | <b>TYPE</b>                        | <b>WGT.</b> |
| 8.1                                                                                                                                                                                     | 8.63            | 24                       | CSG                                            | 809                                                                                                  | 809                        | No Packer                                   |                       | 0                                                                                                         | 0                    | 0                       | 2.375             | 8RD                              | WATER BASED                        | 8.5         |
| <b>DISPL. VOLUME</b>                                                                                                                                                                    |                 | <b>DISPL. FLUID</b>      |                                                | <b>CAL. PSI</b>                                                                                      | <b>CAL. MAX PSI</b>        | <b>OP. MAX</b>                              | <b>MAX TBG PSI</b>    |                                                                                                           | <b>MAX CSG PSI</b>   |                         | <b>MIX WATER</b>  |                                  |                                    |             |
| <b>VOLUME</b>                                                                                                                                                                           | <b>UOM</b>      | <b>TYPE</b>              |                                                | <b>WGT.</b>                                                                                          | <b>BUMP PLUG</b>           | <b>TO REV.</b>                              | <b>SQ. PSI</b>        | <b>RATED</b>                                                                                              | <b>Operator</b>      | <b>RATED</b>            | <b>Operator</b>   |                                  |                                    |             |
| 3                                                                                                                                                                                       | BBLS            | Fresh Water              |                                                | 8.34                                                                                                 | 0                          | 0                                           | 0                     | 9440                                                                                                      | 1000                 | 0                       | 0                 | transport                        |                                    |             |
| <b>Circulation Prior to Job</b>                                                                                                                                                         |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>                                                                                                    |                 |                          |                                                | Circulation Time: 1                                                                                  |                            |                                             |                       | Circulation Rate: 2 BPM                                                                                   |                      |                         |                   |                                  |                                    |             |
| Mud Density In: 8.5 LBS/GAL                                                                                                                                                             |                 |                          |                                                | Mud Density Out: 8.5 LBS/GAL                                                                         |                            |                                             |                       | PV & YP Mud In: 0                                                                                         |                      | PV & YP Mud Out: 0      |                   |                                  |                                    |             |
| Gas Present: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>                                                                                                        |                 |                          |                                                | Units:                                                                                               |                            |                                             |                       | Solids Present at End of Circulation: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> |                      |                         |                   |                                  |                                    |             |
| <b>Displacement And Mud Removal</b>                                                                                                                                                     |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Displaced By: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>                                                                                                       |                 |                          |                                                | Amount Bled Back After Job: .25 BBLS                                                                 |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Returns During Job: <input type="checkbox"/> NONE <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/> FULL                                                             |                 |                          |                                                | Method Used to Verify Returns: Visual                                                                |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Cement Returns at Surface: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO                                                                                          |                 |                          |                                                | Were Returns Planned at Surface: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Pipe Movement: <input type="checkbox"/> ROTATION <input type="checkbox"/> RECIPROCATION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE      |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Centralizers: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                                                                                                       |                 |                          |                                                | Quantity:                                                                                            |                            |                                             |                       | Type: <input type="checkbox"/> BOW <input type="checkbox"/> RIGID                                         |                      |                         |                   |                                  |                                    |             |
| Job Pumped Through: <input type="checkbox"/> CHOKE MANIFOLD <input type="checkbox"/> SQUEEZE MANIFOLD <input type="checkbox"/> MANIFOLD <input checked="" type="checkbox"/> NO MANIFOLD |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| <b>Plugs</b>                                                                                                                                                                            |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Number of Attempts by BJ: 0                                                                                                                                                             |                 |                          |                                                | Competition: 0                                                                                       |                            |                                             |                       | Wiper Balls Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                     |                      |                         |                   |                                  | Quantity:                          |             |
| Plug Catcher Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                                                                                                  |                 |                          |                                                | Parabow Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                    |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Was There a Bottom: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                                                                                                 |                 |                          |                                                | Top of Plug: 0 FT                                                                                    |                            |                                             |                       | Bottom of Plug: 0 FT                                                                                      |                      |                         |                   |                                  |                                    |             |
| <b>Squeezes (Update Original Treatment Report for Primary Job)</b>                                                                                                                      |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| BLOCK SQUEEZE <input type="checkbox"/>                                                                                                                                                  |                 |                          |                                                | SHOE SQUEEZE <input type="checkbox"/>                                                                |                            |                                             |                       | TOP OF LINER SQUEEZE <input type="checkbox"/>                                                             |                      |                         |                   | PLANNED <input type="checkbox"/> | UNPLANNED <input type="checkbox"/> |             |
| Liner Packer: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                                                                                                       |                 |                          |                                                | Bond Log: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES                        |                            |                                             |                       | PSI Applied: 0                                                                                            |                      | Fluid Weight: 0 LBS/GAL |                   |                                  |                                    |             |
| <b>Casing Test (Update Original Treatment Report for Primary Job)</b>                                                                                                                   |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Casing Test Pressure: 0 PSI                                                                                                                                                             |                 |                          |                                                | With 0 LBS/GAL Mud                                                                                   |                            |                                             |                       | Time Held: 00 Hours 00 Minutes                                                                            |                      |                         |                   |                                  |                                    |             |
| <b>Shoe Test (Update Original Treatment Report for Primary Job)</b>                                                                                                                     |                 |                          |                                                |                                                                                                      |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |
| Depth Drilled out of Shoe: 0 FT                                                                                                                                                         |                 |                          |                                                | Target EMW: 0 LBS/GAL                                                                                |                            |                                             |                       | Actual EMW: 0 LBS/GAL                                                                                     |                      |                         |                   |                                  |                                    |             |
| Number of Times Tests Conducted: 0                                                                                                                                                      |                 |                          |                                                | Mud Weight When Test was Conducted: 0 LBS/GAL                                                        |                            |                                             |                       |                                                                                                           |                      |                         |                   |                                  |                                    |             |

# CEMENT JOB REPORT



Problems Before Job (I.E. Running Casing, Circulating Well, ETC)

None

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)

None

Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)

None

**EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: none**

| PRESSURE/RATE DETAIL |                |         |             |                      |               | EXPLANATION                                                                                              |  |
|----------------------|----------------|---------|-------------|----------------------|---------------|----------------------------------------------------------------------------------------------------------|--|
| TIME<br>HR:MIN.      | PRESSURE - PSI |         | RATE<br>BPM | Bbl. FLUID<br>PUMPED | FLUID<br>TYPE | SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/> |  |
|                      | PIPE           | ANNULUS |             |                      |               | TEST LINES 2205 PSI                                                                                      |  |
|                      |                |         |             |                      |               | CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>                   |  |
| 07:00                | 0              | 0       | 0           | 0                    | N/A           | Leave Yard                                                                                               |  |
| 08:00                | 0              | 0       | 0           | 0                    | N/A           | Arrive On Location (17 Miles)                                                                            |  |
| 08:06                | 0              | 0       | 0           | 0                    | N/A           | Spot Trucks                                                                                              |  |
| 08:10                | 0              | 0       | 0           | 0                    | N/A           | Pre-Rig Safety Meetings                                                                                  |  |
| 08:43                | 0              | 0       | 0           | 0                    | N/A           | Pre-Job Safety Meetings                                                                                  |  |
| 08:49                | 264            | 0       | 1.2         | 1.5                  | H2O           | Load Lines                                                                                               |  |
| 08:51                | 2205           | 0       | 0           | 0                    | H2O           | Pressure Test                                                                                            |  |
| 08:53                | 547            | 0       | 2           | 20                   | H2O           | Fresh Water Spacer                                                                                       |  |
| 09:07                | 904            | 0       | 2           | 39                   | CMT           | Batch, Weigh, and Pump 14.8# Type III + .01% Static Free + .1% R-3 + .25 lb/sk Cello Flake               |  |
| 09:31                | 816            | 0       | 2           | 3                    | H2O           | Displacement                                                                                             |  |
| 09:33                | 222            | 0       | 0           | 0                    | H2O           | Shut Down                                                                                                |  |
| 09:34                | 0              | 0       | 0           | 0                    | H2O           | Bleed Psi off through Cement Pump                                                                        |  |
| 09:38                | 0              | 0       | 0           | 0                    | N/A           | Wash Up Cement Pump                                                                                      |  |
| 09:50                | 0              | 0       | 0           | 0                    | N/A           | Pre-Rig Down Safety Meeting                                                                              |  |

|                                         |                         |                                         |                                  |                          |                        |                                         |                                      |
|-----------------------------------------|-------------------------|-----------------------------------------|----------------------------------|--------------------------|------------------------|-----------------------------------------|--------------------------------------|
| <b>BUMPED PLUG</b>                      | <b>PSI TO BUMP PLUG</b> | <b>TEST FLOAT EQUIP.</b>                | <b>BBL.CMT RETURNS/ REVERSED</b> | <b>TOTAL BBL. PUMPED</b> | <b>PSI LEFT ON CSG</b> | <b>SPOT TOP OUT CEMENT</b>              | <b>Service Supervisor Signature:</b> |
| Y <input checked="" type="checkbox"/> N | 0                       | Y <input checked="" type="checkbox"/> N | 0                                | 62                       | 0                      | Y <input checked="" type="checkbox"/> N |                                      |