

HALLIBURTON

iCem[®] Service

BP AMERICA PROD CO-SORAC/NAG EBIZ

For: CARRY CARR

Date: Thursday, December 17, 2015

FORD H1

FORD H1

BP FORD H1 SURFACE

Job Date: Thursday, December 17, 2015

Sincerely,

JACOB AYERS

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The Road to Excellence Starts with Safety

| | | | |
|--|---------------------|-------------------------------------|----------------------------|
| Sold To #: 358135 | Ship To #: 3699377 | Quote #: 0022138457 | Sales Order #: 0902993665 |
| Customer: BP AMERICA PROD CO-SORAC/NAG EBIZ | | Customer Rep: CARY CARR | |
| Well Name: FORD H | | Well #: 1 | API/UWI #: 05-067-09956-00 |
| Field: IGNACIO-BLANCO | City (SAP): IGNACIO | County/Parish: LA PLATA | State: COLORADO |
| Legal Description: SE NW-10-33N-8W-1678FNL-1704FWL | | | |
| Contractor: UNKNOWN | | Rig/Platform Name/Num: WORKOVER RIG | |
| Job BOM: 7521 | | | |
| Well Type: COAL DE-GAS | | | |
| Sales Person: HALAMERICA\HB41307 | | Srvc Supervisor: Jacob Ayers | |

Job

| | |
|------------------------|-------|
| Formation Name | |
| Formation Depth (MD) | Top |
| Form Type | BHST |
| Job depth MD | 406ft |
| Water Depth | |
| Perforation Depth (MD) | From |

Well Data

| Description | New / Used | Size in | ID in | Weight lbm/ft | Thread | Grade | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|-------------------|------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| Casing | | 8.625 | 8.097 | 24 | STC | J-55 | 0 | 402 | | |
| Open Hole Section | | | 12.25 | | | | 0 | 402 | | |

Tools and Accessories

| Type | Size in | Qty | Make | Depth ft | Type | Size in | Qty | Make |
|--------------|---------|-----|------|----------|----------------|---------|-----|------|
| Guide Shoe | 8.625 | | | 406 | Top Plug | 8.625 | | HES |
| Float Shoe | 8.625 | | | | Bottom Plug | 8.625 | | HES |
| Float Collar | 8.625 | | | | SSR plug set | 8.625 | | HES |
| Insert Float | 8.625 | | | | Plug Container | 8.625 | | HES |
| Stage Tool | 8.625 | | | | Centralizers | 8.625 | | HES |

Fluid Data

Stage/Plug #: 1

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal |
|---------|--------------------|--------------------|-----|---------|------------------------|----------------|---------------|--------------|---------------------|
| 1 | Fresh Water Spacer | Fresh Water Spacer | 10 | bbl | 8.33 | | | | |

| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft3/sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal |
|------------|-------------|--------------------------|-----|---------|------------------------|----------------|---------------|--------------|---------------------|
| 2 | Lead Cement | VARICEM (TM) CEMENT | 70 | sack | 12.3 | 2.42 | | 4 | 13.58 |
| 13.58 Gal | | FRESH WATER | | | | | | | |
| 0.1250 lbm | | POLY-E-FLAKE (101216940) | | | | | | | |

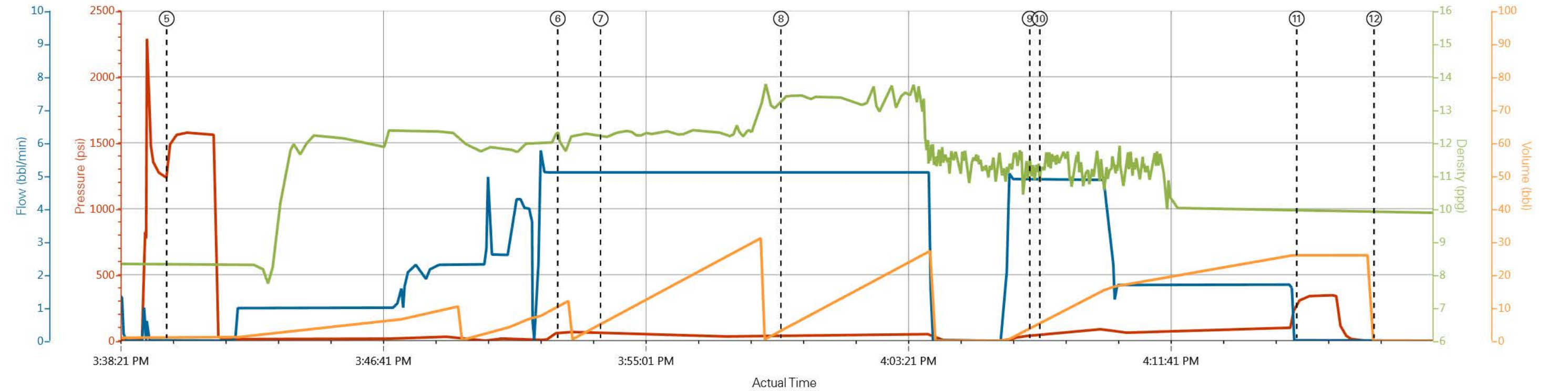
| 0.10 % | | FE-2 (100001615) | | | | | | | | |
|---------------------|--------------|----------------------------|------------------|---------|---------------------------|--------------------------------|------------------|------------------------------|---------------------------|--|
| 5 lbm | | KOL-SEAL, BULK (100064233) | | | | | | | | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 3 | Tail Cement | VARICEM (TM) CEMENT | 100 | sack | 13.5 | 1.86 | | 4 | 9.37 | |
| 0.10 % | | FE-2 (100001615) | | | | | | | | |
| 0.1250 lbm | | POLY-E-FLAKE (101216940) | | | | | | | | |
| 9.37 Gal | | FRESH WATER | | | | | | | | |
| 5 lbm | | KOL-SEAL, BULK (100064233) | | | | | | | | |
| | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty UoM | Mixing Density lbm/gal | Yield ft ³ /sack | Mix Fluid Gal | Rate bbl/min | Total Mix Fluid Gal | |
| 4 | Displacement | Displacement | 24.6 | bbl | 8.33 | | | | | |
| | | | | | | | | | | |
| Cement Left In Pipe | | Amount | 18 ft | | Reason | | | Shoe Joint | | |
| Plug Bumped? | | Yes | Bump Pressure: | | | 102 psi MPa | | Floats Held? Yes | | |
| Cement Returns: | | 19.0bbl m3 | Returns Density: | | | 12.3 lb/gal kg/m3 | | Returns Temperature:## °F °C | | |
| Comment | | | | | | | | | | |

2.0 Real-Time Job Summary

2.1 Job Event Log

| Type | Seq. No. | Activity | Graph Label | Date | Time | Source | PS Pump Press (psi) | DH Density (ppg) | PS Pump Rate (bbl/min) | PS Pmp Stg Tot (bbl) | Recirc Density (ppg) | Comments |
|-------|----------|---------------------------|---------------------------|------------|----------|--------|------------------------|---------------------|---------------------------|-------------------------|-------------------------|---|
| Event | 1 | Call Out | Call Out | 12/17/2015 | 15:20:27 | USER | 0.00 | 0.49 | 0.00 | 0.0 | 8.47 | @ 1045 AM |
| Event | 2 | Pre-Convoy Safety Meeting | Pre-Convoy Safety Meeting | 12/17/2015 | 15:30:34 | USER | 0.00 | -1.31 | 0.00 | 0.0 | 8.33 | |
| Event | 3 | Pre-Rig Up Safety Meeting | Pre-Rig Up Safety Meeting | 12/17/2015 | 15:31:50 | USER | -1.00 | -1.40 | 0.00 | 0.0 | 8.33 | WITH CREW |
| Event | 4 | Pre-Job Safety Meeting | Pre-Job Safety Meeting | 12/17/2015 | 15:32:51 | USER | -1.00 | -1.50 | 0.00 | 0.0 | 8.33 | WITH ALL AFFECTED PERSONEL ON LOCATION |
| Event | 5 | Pressure Test | Pressure Test | 12/17/2015 | 15:39:53 | USER | 1470.00 | -1.97 | 0.00 | 1.0 | 8.33 | TEST TO 1500 |
| Event | 6 | Pump Spacer | Pump Spacer | 12/17/2015 | 15:52:17 | USER | 63.00 | -2.05 | 5.10 | 10.8 | 12.00 | 10 BBL WATER SPACER |
| Event | 7 | Pump Lead Cement | Pump Lead Cement | 12/17/2015 | 15:53:39 | USER | 61.00 | -2.05 | 5.10 | 5.5 | 12.18 | 70 SKS @ 12.3 # WRQ 13.58 = 30.1 BBL CMT 22.6 BBL |
| Event | 8 | Pump Tail Cement | Pump Tail Cement | 12/17/2015 | 15:59:23 | USER | 41.00 | -2.05 | 5.10 | 3.5 | 13.33 | 100 SKS @ 13.5# WRQ 9.37 = 33.12 BBL CMT 22.3 BBL WRQ |
| Event | 9 | Pump Displacement | Pump Displacement | 12/17/2015 | 16:07:16 | USER | 40.00 | -1.86 | 4.90 | 4.1 | 11.09 | CALCULATED 24.6 BBL PUMPED 25 BBL |
| Event | 10 | Cement Returns to Surface | Cement Returns to Surface | 12/17/2015 | 16:07:35 | USER | 47.00 | -1.87 | 4.90 | 5.7 | 11.24 | 19 BBL GOOD CMT BACK TO SURFACE |
| Event | 11 | Bump Plug | Bump Plug | 12/17/2015 | 16:15:45 | USER | 304.00 | -1.58 | 0.00 | 25.9 | 9.92 | BUMP PLUG @ 102 PSI TOOK IT TO 348 PSI |
| Event | 12 | Check Floats | Check Floats | 12/17/2015 | 16:18:12 | USER | -3.00 | -1.33 | 0.00 | 0.0 | 9.91 | FLOATS HELD .25 BBL BACK |

BP FORD H1 SURFACE



PS Pump Press (psi) DH Density (ppg) PS Pump Rate (bbl/min) PS Pmp Stg Tot (bbl) Recirc Density (ppg)

- | | | | |
|--|---|--|--|
| ① Call Out 0;0.49;0;0;8.47 | ④ Pre-Job Safety Meeting -1;-1.5;0;0;8.33 | ⑦ Pump Lead Cement 61;-2.05;5.1;5.5;12.18 | ⑩ Cement Returns to Surface 47;-1.87;4.9;5.7;11.24 |
| ② Pre-Convoy Safety Meeting 0;-1.31;0;0;8.33 | ⑤ Pressure Test 1470;-1.97;0;1;8.33 | ⑧ Pump Tail Cement 41;-2.05;5.1;3.5;13.33 | ⑪ Bump Plug 304;-1.58;0;25.9;9.92 |
| ③ Pre-Rig Up Safety Meeting -1;-1.4;0;0;8.33 | ⑥ Pump Spacer 63;-2.05;5.1;10.8;12 | ⑨ Pump Displacement 40;-1.86;4.9;4.1;11.09 | ⑫ Check Floats -3;-1.33;0;0;9.91 |

▼ **HALLIBURTON** | iCem® Service

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