
ANTERO RESOURCES

**CSF 43D-10-07-91
WILDCAT
Garfield County , Colorado**

Cement Surface Casing **13-Sep-2010**

Post Job Report

The Road to Excellence Starts with Safety

| | | | |
|--|--------------------|--|-------------------------|
| Sold To #: 337854 | Ship To #: 2806784 | Quote #: | Sales Order #: 7634702 |
| Customer: ANTERO RESOURCES | | Customer Rep: Honeycutt, Matt | |
| Well Name: CSF | | Well #: 43D-10-07-91 | API/UWI #: 05-045-19724 |
| Field: WILDCAT | City (SAP): SILT | County/Parish: Garfield | State: Colorado |
| Lat: N 39.456 deg. OR N 39 deg. 27 min. 22.522 secs. | | Long: W 107.536 deg. OR W -108 deg. 27 min. 50.656 secs. | |
| Contractor: WORKOVER | | Rig/Platform Name/Num: Workover | |
| Job Purpose: Cement Surface Casing | | | |
| Well Type: Development Well | | Job Type: Cement Surface Casing | |
| Sales Person: METLI, MARSHALL | | Srvc Supervisor: MAGERS, MICHAEL | MBU ID Emp #: 339439 |

Job Personnel

| HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # |
|------------------------|---------|--------|---------------|---------|--------|----------------------|---------|--------|
| GAMBLE, BENJAMIN T | 3 | 446666 | LOPEZ, GERALD | 3 | 479828 | LYNGSTAD, FREDRICK D | 3 | 403742 |
| MAGERS, MICHAEL Gerard | 3 | 339439 | | | | | | |

Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| 10744648C | 120 mile | 10784080 | 120 mile | 10804579 | 120 mile | 10998508 | 120 mile |
| 11259886 | 120 mile | | | | | | |

Job Hours

| Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|------------|-------------------|-----------------|------|-------------------|-----------------|------|-------------------|-----------------|
| 09/13/2010 | 3 | 1 | | | | | | |

TOTAL Total is the sum of each column separately

Job

Job Times

| Formation Name | Top | Bottom | Called Out | Date | Time | Time Zone |
|------------------------|----------|-------------------|---------------|-----------------|-------|-----------|
| Formation Depth (MD) | | | On Location | 13 - Sep - 2010 | 06:40 | MST |
| Form Type | BHST | | Job Started | 13 - Sep - 2010 | 11:20 | MST |
| Job depth MD | 1160. ft | Job Depth TVD | Job Completed | 13 - Sep - 2010 | 13:21 | MST |
| Water Depth | | Wk Ht Above Floor | Departed Loc | 13 - Sep - 2010 | 14:27 | MST |
| Perforation Depth (MD) | From | To | | 13 - Sep - 2010 | 15:30 | 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 |
|-------------|------------|-------------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
|-------------|------------|-------------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|

Sales/Rental/3rd Party (HES)

| Description | Qty | Qty uom | Depth | Supplier |
|--|-----|---------|-------|----------|
| R/A DENSOMETER W/CHART RECORDER,/JOB,ZI | 1 | JOB | | |
| PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI | 1 | JOB | | |
| ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI | 1 | JOB | | |
| PLUG,CMTG,TOP,8 5/8,HWE,7.20 MIN/8.09 MA | 1 | EA | | |

Tools and Accessories

| Type | Size | Qty | Make | Depth | Type | Size | Qty | Make | Depth | Type | Size | Qty | Make |
|--------------|------|-----|------|-------|-------------|------|-----|------|-------|----------------|-------|------|------|
| Guide Shoe | | | | | Packer | | | | | Top Plug | 8 5/8 | 1 | HES |
| Float Shoe | | | | | Bridge Plug | | | | | Bottom Plug | | | |
| Float Collar | | | | | Retainer | | | | | SSR plug set | | | |
| Insert Float | | | | | | | | | | Plug Container | NOT | USED | |
| Stage Tool | | | | | | | | | | Centralizers | | | |

Miscellaneous Materials

| Gelling Agt | Conc | Surfactant | Conc | Acid Type | Qty | Conc | % |
|---------------|------|------------|------|-----------|------|------|---|
| Treatment Fld | Conc | Inhibitor | Conc | Sand Type | Size | Qty | |

| Fluid Data | | | | | | | | | | |
|--|----------------------|-------------------------------|--------|-----------------------------------|------------------------|---------------------------|------------------|--------------|------------------------|--|
| Stage/Plug #: 1 | | | | | | | | | | |
| Fluid # | Stage Type | Fluid Name | Qty | Qty uom | Mixing Density lbm/gal | Yield ft ³ /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk | |
| 1 | Water Spacer | | 10.00 | bbl | . | .0 | .0 | .0 | | |
| 2 | VersaCem Lead Cement | VERSACEM (TM) SYSTEM (452010) | 130.0 | sacks | 12.3 | 2.38 | 13.75 | | 13.75 | |
| | 13.75 Gal | FRESH WATER | | | | | | | | |
| 3 | Tail Cement | SWIFTCEM (TM) SYSTEM (452990) | 185.0 | sacks | 14.2 | 1.43 | 6.85 | | 6.85 | |
| | 6.85 Gal | FRESH WATER | | | | | | | | |
| 4 | Displacement | | 64.00 | bbl | . | .0 | .0 | .0 | | |
| Calculated Values | | Pressures | | Volumes | | | | | | |
| Displacement | 64.6 | Shut In: Instant | | Lost Returns | 0 | Cement Slurry | 102 | Pad | | |
| Top Of Cement | SURFACE | 5 Min | | Cement Returns | 10 | Actual Displacement | 64 | Treatment | | |
| Frac Gradient | | 15 Min | | Spacers | 10 | Load and Breakdown | | Total Job | 177 | |
| Rates | | | | | | | | | | |
| Circulating | NONE | Mixing | 5 | Displacement | 5/1.5 | Avg. Job | 5 | | | |
| Cement Left In Pipe | Amount | 45.52 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 | | | | | | |

The Road to Excellence Starts with Safety

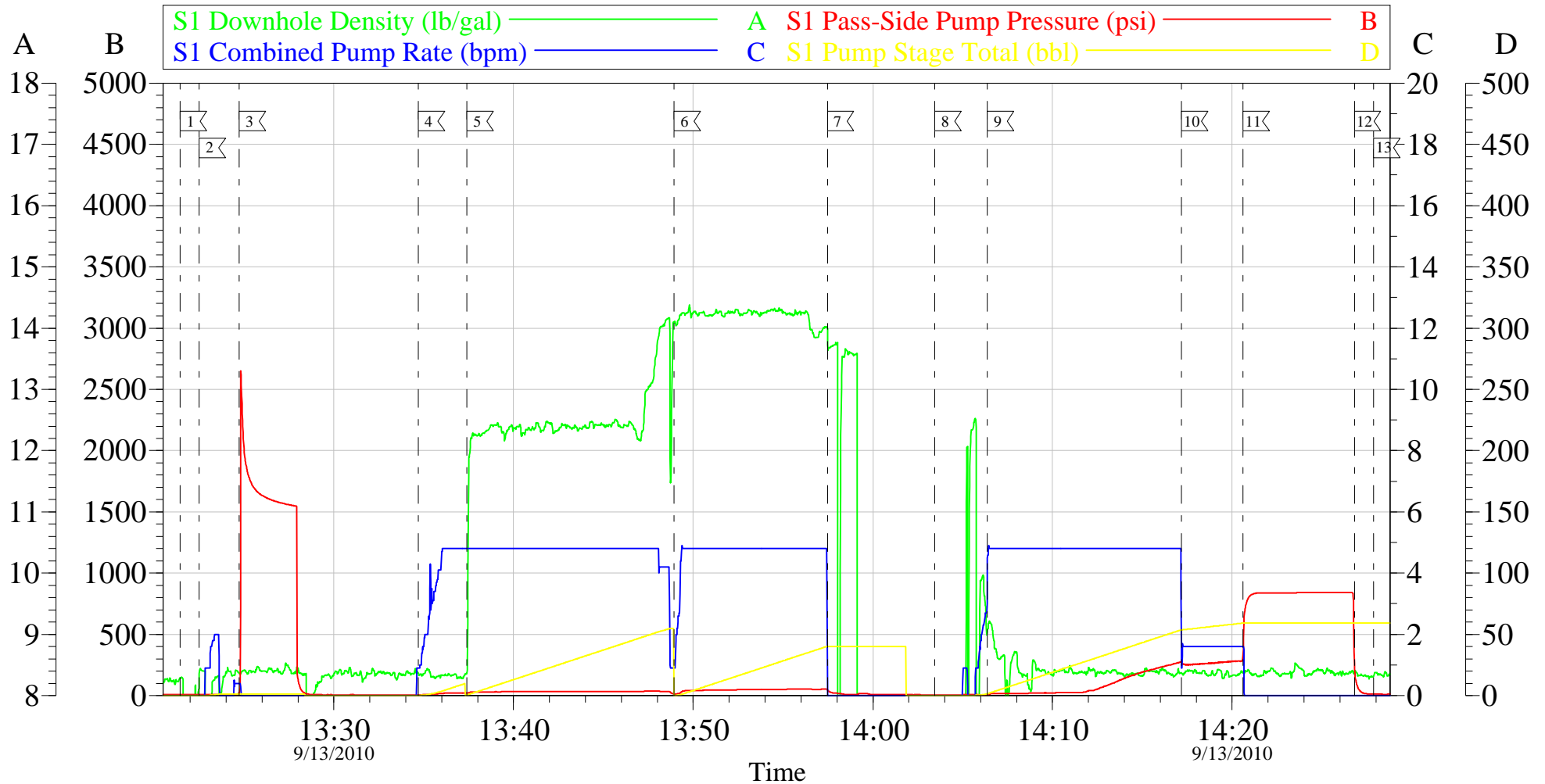
| | | | |
|---|-----------------------------|---|-------------------------------|
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| Legal Description: | | | |
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| Contractor: WORKOVER | | Rig/Platform Name/Num: Workover | |
| Job Purpose: Cement Surface Casing | | | Ticket Amount: |
| Well Type: Development Well | | Job Type: Cement Surface Casing | |
| Sales Person: METLI, MARSHALL | | Srvc Supervisor: MAGERS, MICHAEL | MBU ID Emp #: 339439 |

| Activity Description | Date/Time | Cht # | Rate bbl/min | Volume bbl | | Pressure psig | | Comments |
|---------------------------------------|------------------|-------|--------------|------------|-------|---------------|--------|--|
| | | | | Stage | Total | Tubing | Casing | |
| Crew Leave Yard | 09/13/2010 09:00 | | | | | | | HES ALL PRESENT |
| Arrive At Loc | 09/13/2010 11:20 | | | | | | | WORKOVER STILL RUNNING CASING WHEN HES ARRIVED |
| Assessment Of Location Safety Meeting | 09/13/2010 11:25 | | | | | | | LOCATION IN GOOD CONDITION |
| Pre-Rig Up Safety Meeting | 09/13/2010 12:30 | | | | | | | |
| Rig-Up Equipment | 09/13/2010 12:45 | | | | | | | JSA ON RIGGING UP |
| Safety Huddle | 09/13/2010 13:10 | | | | | | | RIG CREW AND HES ALL PRESENT |
| Start Job | 09/13/2010 13:21 | | | | | | | TD-1160 TP-1106 SJ-45.52 MW-8.33 CASING- 8 5/8 32# H-40 OH- 12 1/4" SWAGE 8 5/8" |
| Other | 09/13/2010 13:22 | | 2 | 2 | | | 10.0 | FILL LINES |
| Pressure Test | 09/13/2010 13:24 | | 0.5 | 0.5 | | | 1550.0 | PSI TEST OK |
| Pump Spacer 1 | 09/13/2010 13:34 | | 2 | 20 | | | 20.0 | FRESH WATER |
| Pump Lead Cement | 09/13/2010 13:37 | | 5 | 55.1 | | | 30.0 | 130 SKS 12.3 PPG 2.38 FT3/SK 13.75 GAL/SK |
| Pump Tail Cement | 09/13/2010 13:48 | | 5 | 47.1 | | | 50.0 | 185 SKS 14.2 PPG 1.43 FT3/SK 6.85 GAL/SK |
| Shutdown | 09/13/2010 13:57 | | | | | | | |

| Activity Description | Date/Time | Cht # | Rate bbl/ min | Volume bbl | | Pressure psig | | Comments |
|----------------------|---------------------|----------|---------------------|---------------|-------|------------------|--------|--|
| | | | | Stage | Total | Tubing | Casing | |
| Drop Plug | 09/13/2010 14:03 | | | | | | | PLUG PUT IN BY HAND/USED SWAGE/PLUG CONTAINER WAS NOT USED |
| Pump Displacement | 09/13/2010 14:06 | | 5 | 64.6 | | | 240.0 | FRESH WATER |
| Slow Rate | 09/13/2010 14:17 | | 1.5 | 60 | | | 240.0 | GOT SPACER BACK AT 44 BBLS INTO DISPLACEMENT/GOT 10 BBLS OF CEMENT TO SURFACE/GOT 1.5 BBLS BACK INTO DISPLACEMENT TANK |
| Bump Plug | 09/13/2010 14:20 | | 1.5 | 64.6 | | | 280.0 | BUMPED PLUG |
| Check Floats | 09/13/2010 14:26 | | | | | | 800.0 | FLOATS HELD |
| End Job | 09/13/2010 14:27 | | | | | | | THANKS FOR USING HES AND THE CREW OF MIKE MAGERS |

ANTERO WORKOVER

SURFACE



Customer: ANTERO WORKOVER
 Well Description: CSF 43D-10-07-91
 Company Rep: MATT HONEYCUTT

Job Date: 13-Sep-2010
 Job Type: SURFACE
 Cement Supervisor: MIKE MAGERS

Sales Order #: 7634702
 ADC Used: YES
 Elite #: 6 TRACY GAMBLE

OptiCem v6.3.4
 13-Sep-10 14:56