
WILLIAMS PRODUCTION RMT INC EBUSINE

**SG 431-32
RULISON
Garfield County , Colorado**

**Squeeze Perfs
17-Feb-2009**

Job Site Documents

The Road to Excellence Starts with Safety

| | | | |
|---|--------------------|---|------------------------|
| Sold To #: 300721 | Ship To #: 2705350 | Quote #: | Sales Order #: 6511910 |
| Customer: WILLIAMS PRODUCTION RMT INC EBUSINE | | Customer Rep: Ralph Snow | |
| Well Name: SG | Well #: 431-32 | API/UWI #: 05-045-17200 | |
| Field: RULISON | City (SAP): RIFLE | County/Parish: Garfield | State: Colorado |
| Lat: N 39.397 deg. OR N 39 deg. 23 min. 50.64 secs. | | Long: W 108.131 deg. OR W -109 deg. 52 min. 9.109 secs. | |
| Contractor: WORKOVER | | Rig/Platform Name/Num: WORKOVER | |
| Job Purpose: Squeeze Perfs | | | |
| Well Type: Development Well | | Job Type: Squeeze Perfs | |
| Sales Person: HARROLD, DALE | | Srvc Supervisor: HOEFER, BRYAN | MBU ID Emp #: 415775 |

Job Personnel

| HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # |
|----------------------|---------|--------|---------------------|---------|--------|----------------------|---------|--------|
| BANKS, BRENT A | 5 | 371353 | DUBON, TODD N | 5 | 443351 | HOEFER, BRYAN D | 5 | 415775 |
| MADRIGAL, MARK Henry | 5 | 444368 | MOORE, ALEX Vincent | 5 | 158427 | MOREY, STEVEN Wesley | 5 | 453277 |

Equipment

| HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| | | | | | | | |

Job Hours

| Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|--------------|-------------------|-----------------|---|-------------------|-----------------|------|-------------------|-----------------|
| 2/17/09 | 5 | 3 | | | | | | |
| TOTAL | 5 | 3 | <i>Total is the sum of each column separately</i> | | | | | |

Job

Job Times

| Formation Name | Formation Depth (MD) Top | Bottom | Called Out | Date | Time | Time Zone |
|-----------------------------|--------------------------|-------------------|---------------|-----------------|-------|-----------|
| Form Type | BHST | | On Location | 17 - Feb - 2009 | 07:00 | MST |
| Job depth MD | 6490. ft | Job Depth TVD | Job Started | 17 - Feb - 2009 | 10:07 | MST |
| Water Depth | | Wk Ht Above Floor | Job Completed | 17 - Feb - 2009 | 12:28 | MST |
| Perforation Depth (MD) From | | To | Departed Loc | 17 - Feb - 2009 | 14:15 | 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 |
|--------------------------------------|-----|---------|-------|----------|
| PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI | 1 | JOB | | |
| ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI | 1 | JOB | | |

Tools and Accessories

| Type | Size | Qty | Make | Depth | Type | Size | Qty | Make | Depth | Type | Size | Qty | Make |
|--------------|------|-----|------|-------|-------------|------|-----|------|-------|----------------|------|-----|------|
| Guide Shoe | | | | | Packer | | | | 3588 | Top Plug | | | |
| Float Shoe | | | | | Bridge Plug | | | | | Bottom Plug | | | |
| Float Collar | | | | | Retainer | | | | | SSR plug set | | | |
| Insert Float | | | | | | | | | | Plug Container | | | |
| 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 | Injection Test | | 10 | bbl | . | .0 | .0 | .0 | |
| 2 | Tail Cement | SQUEEZECEM (TM) SYSTEM (452971) | 350 | sacks | 15.8 | 1.15 | 4.96 | | 4.96 |
| | 4.958 Gal | FRESH WATER | | | | | | | |
| 3 | Displacement Fluid | | 15 | bbl | 8.33 | .0 | .0 | .0 | |
| Calculated Values | | Pressures | | Volumes | | | | | |
| Displacement | 15 | Shut In: Instant | | Lost Returns | | Cement Slurry | | Pad | |
| Top Of Cement | | 5 Min | | Cement Returns | | Actual Displacement | | Treatment | |
| Frac Gradient | | 15 Min | | Spacers | | Load and Breakdown | | Total Job | |
| Rates | | | | | | | | | |
| Circulating | 3 | Mixing | | 3 | Displacement | 1 | Avg. Job | | 2 |
| Cement Left In Pipe | Amount | 0 ft | Reason | | | | | | |
| 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 | | | | | |

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| Field: RULISON | City (SAP): RIFLE | County/Parish: Garfield | State: Colorado |
| Legal Description: | | | |
| Lat: N 39.397 deg. OR N 39 deg. 23 min. 50.64 secs. | | Long: W 108.131 deg. OR W -109 deg. 52 min. 9.109 secs. | |
| Contractor: WORKOVER | | Rig/Platform Name/Num: WORKOVER | |
| Job Purpose: Squeeze Perfs | | | Ticket Amount: |
| Well Type: Development Well | | Job Type: Squeeze Perfs | |
| Sales Person: HARROLD, DALE | | Srvc Supervisor: HOEFER, BRYAN | MBU ID Emp #: 415775 |

| Activity Description | Date/Time | Cht # | Rate bbl/min | Volume bbl | | Pressure psig | | Comments |
|--|---------------------|-------|--------------|------------|-------|---------------|--------|---|
| | | | | Stage | Total | Tubing | Casing | |
| Call Out | 02/17/2009 04:00 | | | | | | | |
| Pre-Convoy Safety Meeting | 02/17/2009 06:00 | | | | | | | WITH ALL HES EE'S |
| Arrive at Location from Service Center | 02/17/2009 07:00 | | | | | | | |
| Assessment Of Location Safety Meeting | 02/17/2009 07:01 | | | | | | | WITH ALL HES EE'S |
| Pre-Rig Up Safety Meeting | 02/17/2009 08:55 | | | | | | | WITH ALL HES EE'S |
| Rig-Up Equipment | 02/17/2009 09:00 | | | | | | | ELITE #6, 1-660 BULK TRUCK, IRON TO FLOOR, IRON TO PIT, TWO WATER LINES |
| Rig-Up Completed | 02/17/2009 09:30 | | | | | | | |
| Start Job | 02/17/2009 10:07 | | | | | | | 4.5" 11.6# CASING, PERFS AT 3782, PACKER AT 3588 ON 2 3/8" 4.6# J-55 TUBING |
| Test Lines | 02/17/2009 10:13 | | 0.5 | 0.1 | | 5150. 0 | | TESTED LINES AND PUMP TO 5150 |
| Safety Meeting - Pre Job | 02/17/2009 10:15 | | | | | | | WITH RIG CREW AND ALL HES EE'S |
| Injection Test | 02/17/2009 10:40 | | 3 | 10 | | 1750. 0 | | FRESH WATER |
| ISIP | 02/17/2009 10:42 | | 0 | 0 | | 800.0 | | |
| Pump Cement | 02/17/2009 10:47 | | 3 | 59.4 | | 2150. 0 | | Pumped 10 bbls @15.8#, 25bbls @17#, 10bbls @17.5#, 14.4 bbls @17 |
| Start Squeeze | 02/17/2009 11:07 | | 1 | 12 | | 980.0 | | FRESH WATER |
| Shut-In Pressure @ 5 Minutes | 02/17/2009 11:32 | | | 12 | | 1032. 0 | | |

Sold To #: 300721

Ship To #: 2705350

Quote #:

Sales Order #:

6511910

SUMMIT Version: 7.20.130

Tuesday, February 17, 2009 01:44:00

| Activity Description | Date/Time | Cht # | Rate bbl/min | Volume bbl | | Pressure psig | | Comments |
|------------------------------|---------------------|-------|--------------|------------|-------|---------------|--------|----------|
| | | | | Stage | Total | Tubing | Casing | |
| Start Squeeze | 02/17/2009 11:37 | | 0.3 | 12.25 | | 1085. 0 | | |
| Shut-In Pressure @ 5 Minutes | 02/17/2009 11:37 | | | | | 1085. 0 | | |
| Start Squeeze | 02/17/2009 11:42 | | 0.3 | 12.5 | | 1147. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:43 | | | | | 1147. 0 | | |
| Start Squeeze | 02/17/2009 11:45 | | 0.3 | 12.75 | | 1211. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:46 | | | | | 1211. 0 | | |
| Start Squeeze | 02/17/2009 11:48 | | 0.3 | 13 | | 1244. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:49 | | | | | 1244. 0 | | |
| Start Squeeze | 02/17/2009 11:51 | | 0.3 | 13.25 | | 1297. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:52 | | | | | 1297. 0 | | |
| Start Squeeze | 02/17/2009 11:54 | | 0.3 | 13.5 | | 1370. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:55 | | | | | 1370. 0 | | |
| Start Squeeze | 02/17/2009 11:57 | | 0.3 | 13.75 | | 1450. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 11:58 | | | | | 1450. 0 | | |
| Start Squeeze | 02/17/2009 12:00 | | 0.3 | 14 | | 1557. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 12:01 | | | | | 1557. 0 | | |
| Start Squeeze | 02/17/2009 12:03 | | 0.3 | 14.25 | | 1690. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 12:04 | | | | | 1690. 0 | | |
| Start Squeeze | 02/17/2009 12:06 | | 0.3 | 14.5 | | 1815. 0 | | |
| Shut-In Pressure @ 2 Minutes | 02/17/2009 12:07 | | | | | 1815. 0 | | |
| Start Squeeze | 02/17/2009 12:09 | | 0.3 | 14.6 | | 1800. 0 | | |
| Shut-In Pressure @ 1 Minute | 02/17/2009 12:10 | | | | | 1720. 0 | | |
| Start Squeeze | 02/17/2009 12:10 | | 0.3 | 14.7 | | 1800. 0 | | |

Sold To #: 300721

Ship To #: 2705350

Quote #:

Sales Order #:

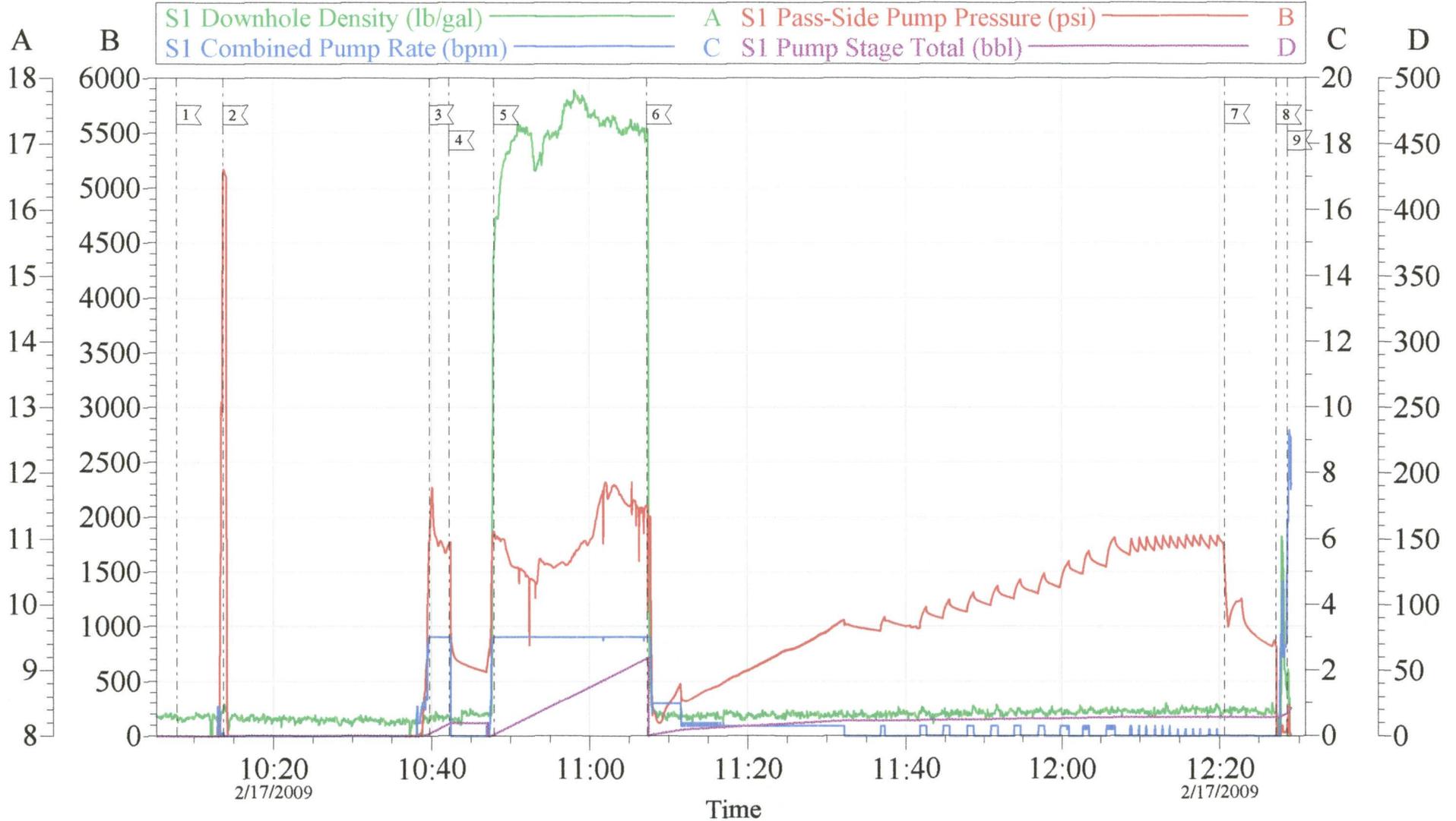
6511910

SUMMIT Version: 7.20.130

Tuesday, February 17, 2009 01:44:00

| Activity Description | Date/Time | Cht # | Rate bbl/min | Volume bbl | | Pressure psig | | Comments |
|--|---------------------|-------|--------------|------------|-------|---------------|--------|---|
| | | | | Stage | Total | Tubing | Casing | |
| Shut-In Pressure @ 1 Minute | 02/17/2009 12:11 | | | | | 1743. 0 | | |
| Start Squeeze | 02/17/2009 12:11 | | 0.3 | 14.8 | | 1800. 0 | | |
| Shut-In Pressure @ 1 Minute | 02/17/2009 12:12 | | | | | 1757. 0 | | |
| Start Squeeze | 02/17/2009 12:12 | | 0.3 | 14.9 | | 1800. 0 | | |
| Shut-In Pressure @ 1 Minute | 02/17/2009 12:13 | | | | | 1769. 0 | | |
| Start Squeeze | 02/17/2009 12:13 | | 0.3 | 15 | | 1800. 0 | | |
| Shut-In Pressure @ 1 Minute | 02/17/2009 12:14 | | | | | 1792. 0 | | |
| Start Squeeze | 02/17/2009 12:14 | | 0.3 | 15.1 | | 1800. 0 | | |
| Shut In Well | 02/17/2009 12:15 | | | | | 1798. 0 | | |
| Bleeding Tubing Or Casing | 02/17/2009 12:20 | | | | | 1000. 0 | | BLEED DOWN CASING TO STING OUT OF TOOL |
| Reverse Circ Well | 02/17/2009 12:27 | | 3 | 20 | | | | Rig Reversed Out |
| Shutdown | 02/17/2009 12:33 | | | | | | | |
| End Job | 02/17/2009 12:34 | | | | | | | |
| Safety Meeting - Pre Rig-Down | 02/17/2009 13:00 | | | | | | | WITH ALL HES EE'S |
| Rig-Down Equipment | 02/17/2009 13:05 | | | | | | | |
| Rig-Down Completed | 02/17/2009 14:00 | | | | | | | |
| Safety Meeting - Departing Location | 02/17/2009 14:05 | | | | | | | WITH ALL HES EE'S |
| Depart Location for Service Center or Other Site | 02/17/2009 14:15 | | | | | | | THANK YOU FOR USING GRAND JUNCTION HALLIBURTON CEMENT DEPARTMENT, BRYAN HOEFER AND CREW |

Williams Squeeze



| Local Event Log | | | |
|------------------------------------|----------|---|----------|
| 1 Start Job | 10:07:52 | 2 Test lines | 10:13:44 |
| 4 ISIP | 10:42:17 | 5 Pump Cement | 10:47:57 |
| 7 Shut Down/Bleed pressure to 1000 | 12:20:40 | 8 Bleed Off | 12:27:07 |
| | | 3 Injection Test | 10:39:44 |
| | | 6 Start Displacement/Start Squeeze Cement | 11:07:19 |
| | | 9 End Job | 12:28:30 |

| | | |
|-----------------------------|----------------------------------|------------------------------------|
| Customer: Williams | Job Date: 17-Feb-2009 | Sales Order #: 6511910 |
| Well Description: SG-431-32 | Job Type: Squeeze | ADC Used: Yes |
| Company Rep: Ralph Snow | Cement Supervisor: Bryan Hoefler | Elite # / Operator: #6 Brent Banks |