



Well History

Well Name: Baker #42-5

| | | | | | | |
|-----------------------------------|---|----------------------------------|-----------------------------|-------------------------------------|---------------------------------------|-------------------------|
| API/UWI 05123212960000 | Surface Legal Location SENE 5-4N-63W | | | Field Name Wattenberg | State/Prov CO | Well Configuration Type |
| Ground Elevation (ft) 4,620.00 | Original KB Elevation (ft) 4,632.00 | KB-Ground Distance (ft) 12.00 | Spud Date 2/4/2003 00:00 | Rig Release Date 2/19/2003 00:00 | On Production Date 3/13/2003 00:00 | |

Daily Operations

| Start Date | Summary | End Date |
|------------|--|------------|
| 2/8/2003 | MIRU PSI and ran Comp Density/Comp Neutron/Dual Induction log. LTD @ 7252' KB. RU casing crew. Ran Topco Auto Fill Guide Shoe, 14.6' shoe joint, 166 joints of 10.5 #/ft, M-65, 4 1/2" casing with 1 joint of 11.6 #/ft, N-80 on top of casing string. Casing set @ 7199' KB. PBDT @ 7185' KB. RU Halliburton and pumped 10 bbl mud flush, 10 bbl spacer and 58 bbl (200 sx) 50/50 poz + additives. Released wiper plug and displaced with 114 bbl treated water. Plug down OK @ 9:55 am. ECT @ 5900' KB. Released rig @ 11:00 am. | |
| 2/17/2003 | MIRU Nuex Wireline. Ran GR/VDL/CBL finding a PBDT of 7188' KB and a CT @ 5870' KB. Perforated the J Sand from 7080' to 7092' KB with 36, .34 diameter holes, 3 spf, 120 deg phasing. | |
| 2/19/2003 | MIRU BJ Services. Frac'd the J Sand with 2235 bbl Vistar 20# fluid system, 205460# of 20/40 mesh sand and 8000# 20/40 mesh Super LC resin coated sand. MTP - 1655 psig; ATP - 1016 psig; ATP - 15.5 bpm; 4 ppa sand; ISIP - 1363 psig; Flushed with 112 bbl. Open well to tank on 12/64 choke. | |
| 10/24/2012 | STP 300 psi, SCP 300 psi, on blow down through production equipment, SSCP 0 psi, MIRU Bayou 008, blew well down to rig tank, control well w/40 bbls Claytreat/Biocide water, ND WH, NU BOP, PU tag jts, TIH w/ 2 jts, tagged @ 7,093.45' w/2, LD tag jts, TOOH standing back w/ 226 jts 2 3/8" J-55 EUE 8rd tbg, 2-10' subs sn/nc, tbg was landed at 7,061.46' KB), tag depth of 7,093.45' KB., isolated well, drained lines, prepare for next days operations, SDFN. | 10/24/2012 |
| 10/25/2012 | SCP 0, SSCP 0 psi, RU Pick Testers, PU RMOR's 3 7/8" blade git - 4 1/2" csg scraper, TIH w/production tbg to derrick testing to 6000 psi, found 1jt with hole, 13 jts would not test due to scale, all other jts tested good, RD tester, (TIH w/ 226 jts 2 3/8" J-55 EUE 8rd tbg, circulated down to 7,093.45' KB (1' below J-Sand) and tools w/227 jts, rolled hole clean, POOH LD w/ 226 jts, ND BOP, remove tbg head, install PDC's 4 1/2" 5K frac valve, MIRU Nabors Wireline, TIH w/ wireline set cast iron plug, correlated with logs, set cast iron plug @ 7,010', TOOH LD setting tool, TIH w/ dump bailer and two sacks of cement, spotted cement on top of plug abandoning J-Sand formation, TOOH w/wireline, RD moved wireline off of location, MIRU Pick Testers, pressured tested csg/RBP to 5000 psi using Pick Testers, held 20 minutes, test good, released tester, isolate well, prepare for next days operations, SDFN | 10/25/2012 |
| 10/26/2012 | SCP 0, SSCP 0 psi, removed frac valve, un-pack csg head, un-land csg (90 K), NU annular flanges, TIH picking up tallying WS #311 1.660" 3.02# N-80 CSHD workstring to 3,127.75 w/ 100 jts, RU circulation equipment on jt 100, break circulation and conditioned hole for 5 hours @ 3,127.75' w/100 jts, LD 10 jts, isolated well, drained lines, prepared for next day, SDFWE. | 10/26/2012 |
| 10/29/2012 | STP 0 psi, SCP 0 psi, SSCP 0 psi, TIH picking up tallying WS #311 1.660" 3.02# N-80 CSHD workstring, broke circulations every 50 jts tripped in, rolling hole 45min. to 1 hour each circulation, tagged original cmt top at 5,865.33' KB half way in on jt 188, LD jt 188, RU circulation equipment on jt 187, break circulation and conditioned hole all night utilizing night crew, total circulation time of 18 hours @ 5,845.80' w/187 jts. | 10/29/2012 |
| 10/30/2012 | 0 psi @ WH, Circulate and condition hole @1,500 psi @1 .25 BPM throughout the night. Shut rig pump down, MI&RU Halliburton Cement Services to 1 1/4" 3.02# CSHD, hold JSA and procedure meeting. Pressure test lines to 3,500 psi Preflush: Pumped 10 bbl clay treat, 12 bbl Mud flush III and 10 bbl clay treat spacer 1st stage:EOT set @ 5,845.80' w/187 jts,mix, batch, and pump 213 sks (reciprocate pipe) Extendacem 11.5 ppg 2.32 yield (88 bbls) Displace 1.5 Bbls Est. TOC @ 4,354.64', lay down 44 jts. 2nd stage:EOT set @ 4,471.08' w/143 jts, mix, batch and pump 212 sks (reciprocate pipe) of Extendalcem 11.5 ppg 2.32 yield (87 bbls) displace 1.0 bbls, Est. TOC @ 2,880.42', lay down 47 jts. 3rd stage:EOT set @3,002.74' w/96 jts, mix, batch and pump 163 sks (reciprocate pipe) of Varicem (63 bbls), bringing cement top to surface, returned 9 bbls cement to tank, Displace 1.0 Bbls, RD and release Halliburton, TOOH laying down remaining 97 jts 1 1/4" work string. Change equipment over to 4 1/2", unland annular flanges and re-land casing in slips @ 60 K lbs, ND flanges and pack off casing head. NU tubing head and BOP, load casing with clay treat for logging, SI well and secure, SDFN. | 10/30/2012 |
| 10/31/2012 | 0 psi at WH, open well, RU Superior Wireline, ran GR/CCL/CBL/VDL log from 5900' to surface, had acceptable bonding on 11.5.0 ppg Extendacem cmt from original cmt top to 3000' and acceptable bonding on 12.0 ppg Varicem cmt form 3000' to surface, RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, re-perforated Codell 6569'-6577', 3 spf (24 new holes), 120 degree phasing, 19 gram charges, .41" entry holes w/21.28" penetration, all shots fired, RD e-line, SI and isolate well, drained lines, RDMOL | 10/31/2012 |

The Road to Excellence Starts with Safety

| | | | |
|-------------------------------|---------------------|-------------------------------|------------------------|
| Sold To #: 304535 | Ship To #: 2263681 | Quote #: | Sales Order #: 9928254 |
| Customer: PDC ENERGY EBUS | | Customer Rep: Sailors, Chad | |
| Well Name: Baker | | Well #: 42-5 | API/UWI #: |
| Field: Wattenberg | City (SAP): UNKNOWN | County/Parish: Weld | State: Colorado |
| Contractor: Basic | | Rig/Platform Name/Num: 1548 | |
| Job Purpose: Recement Service | | | |
| Well Type: Development Well | | Job Type: Recement Service | |
| Sales Person: AARON, WESLEY | | Srv Supervisor: SANFORD, DALE | MBU ID Emp #: 219527 |

Job Personnel

| HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # | HES Emp Name | Exp Hrs | Emp # |
|-------------------|---------|--------|------------------|---------|--------|----------------------|---------|--------|
| CHISLUM, DENNIS | 7.0 | 512130 | DIRKS, RICHARD E | 7.0 | 485940 | HINKLE, BRADLEY Dean | 7.0 | 512123 |
| RICHEY, JESSICA L | 7.0 | 525703 | SANFORD, DALE A | 7.0 | 219527 | | | |

Equipment

| HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | HES Unit # | Distance-1 way | 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 |
|----------|-------------------|-----------------|--|-------------------|-----------------|------|-------------------|-----------------|
| 10-30-12 | 7 | 3 | | | | | | |
| TOTAL | | | Total is the sum of each column separately | | | | | |

Job

Job Times

| Formation Name | Formation Depth (MD) | Top | Bottom | Called Out | Date | Time | Time Zone |
|------------------------|----------------------|-----|-------------------|---------------|-----------------|-------|-----------|
| Form Type | | | BHST | On Location | 30 - Oct - 2012 | 06:00 | MST |
| Job depth MD | 5900. ft | | Job Depth TVD | Job Started | 30 - Oct - 2012 | 07:00 | MST |
| Water Depth | | | Wk Ht Above Floor | Job Completed | 30 - Oct - 2012 | 12:00 | MST |
| Perforation Depth (MD) | From | | To | Departed Loc | 30 - Oct - 2012 | 13:00 | 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 |
|-------------------|------------|-------------------|---------|-------|---------------|--------|-------|-----------|--------------|------------|---------------|
| Production Casing | Unknown | | 4.5 | 4. | 11.6 | | | . | 6250. | . | 6250. |
| Tubing | Unknown | | 1.25 | .824 | 2.4 | | | . | 5877. | . | 5850. |

Tools and Accessories

| Type | Size | Qty | Make | Depth | Type | Size | Qty | Make | Depth | Type | Size | Qty | Make |
|--------------|------|-----|------|-------|-------------|------|-----|------|-------|----------------|------|-----|------|
| Guide Shoe | | | | | Packer | | | | | 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 ft3/sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
|---------|------------|------------|-----|---------|------------------------|--------------|------------------|--------------|------------------------|
| | | | | | | | | | |

Stage/Plug #: 1

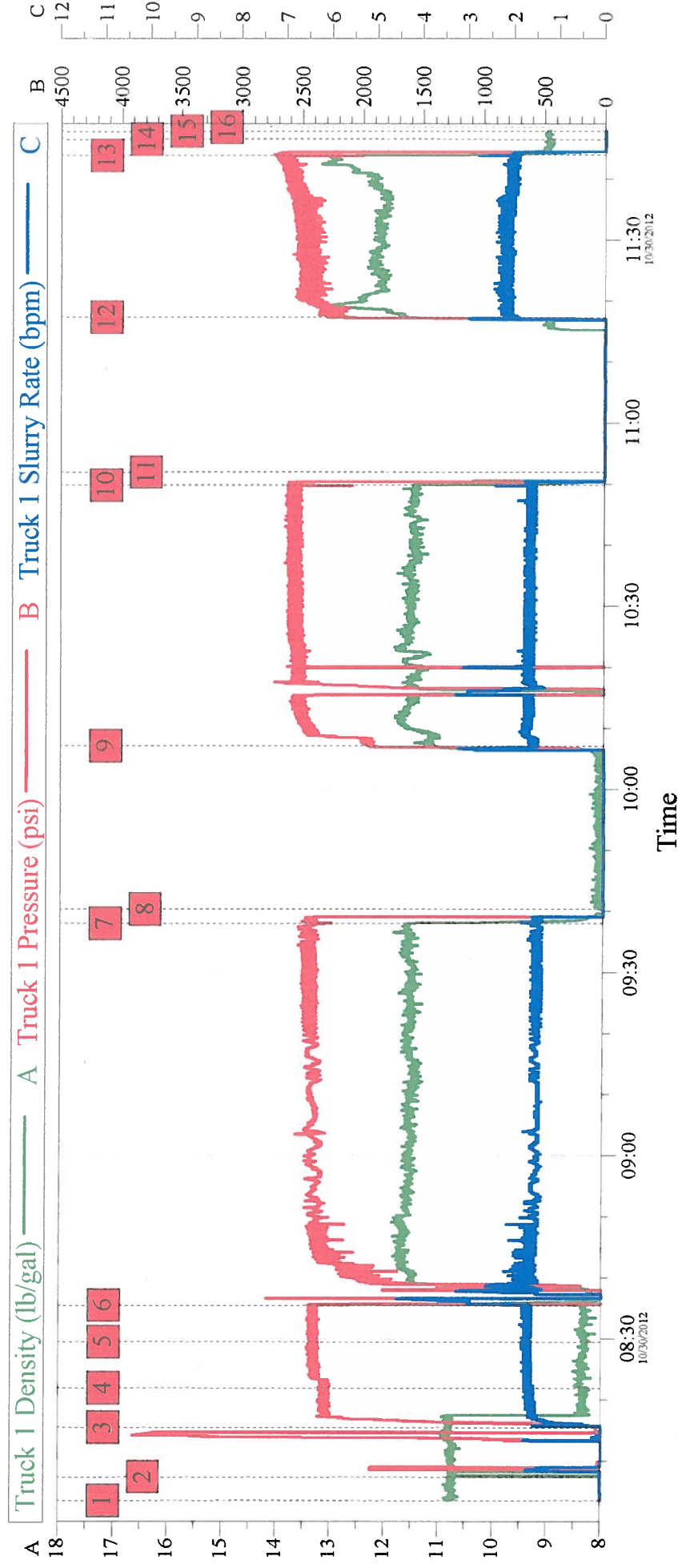
| Stage/Plug #: 1 | | | | | | | | | | |
|--|----------------------|---------------------------------|--------|-----------------------------------|------------------------|---------------------|------------------|--------------|------------------------|--|
| Fluid # | Stage Type | Fluid Name | Qty | Qty uom | Mixing Density lbm/gal | Yield ft3/sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk | |
| 1 | ClayWeb Water Spacer | | 10.00 | bbl | 8.33 | .0 | .0 | 2.0 | | |
| 2 | MUD FLUSH III | MUD FLUSH III - SBM (528788) | 12.00 | bbl | 8.4 | .0 | .0 | 2.0 | | |
| 3 | ClayWeb Water Spacer | | 10.00 | bbl | 8.33 | .0 | .0 | 2.0 | | |
| 59.525 gal/Mgal | | CLA-WEB - TOTE (101985045) | | | | | | | | |
| 4 | EXTENDACEM B1 | EXTENDACEM (TM) SYSTEM (452981) | 425.0 | sacks | 11.5 | 2.3 | 12.97 | | 12.97 | |
| 12.97 Gal | | FRESH WATER | | | | | | | | |
| 5 | Surface Varicem 12# | VARICEM (TM) CEMENT (452009) | 163.0 | sacks | 12. | 2.18 | 12.3 | | 12.3 | |
| 12.3 Gal | | FRESH WATER | | | | | | | | |
| Calculated Values | | Pressures | | Volumes | | | | | | |
| Displacement | | Shut In: Instant | | Lost Returns | | Cement Slurry | 238 | Pad | | |
| Top Of Cement | | 5 Min | | Cement Returns | 9 | Actual Displacement | 3.5 | Treatment | | |
| Frac Gradient | | 15 Min | | Spacers | | Load and Breakdown | | Total Job | | |
| Rates | | | | | | | | | | |
| Circulating | 2 | Mixing | 2 | Displacement | 2 | Avg. Job | 2 | | | |
| Cement Left In Pipe | Amount | 0 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

| | | | | | | | |
|-------------------------------|--|---------------------|-------------------------------|-----------------------------|--|------------------------|-----------------|
| Sold To #: 304535 | | Ship To #: 2263681 | | Quote #: | | Sales Order #: 9928254 | |
| Customer: PDC ENERGY EBUS | | | | Customer Rep: Sailors, Chad | | | |
| Well Name: Baker | | | Well #: 42-5 | | | API/UWI #: | |
| Field: Wattenberg | | City (SAP): UNKNOWN | | County/Parish: Weld | | | State: Colorado |
| Legal Description: | | | | | | | |
| Lat: | | | | Long: | | | |
| Contractor: Basic | | | Rig/Platform Name/Num: 1548 | | | | |
| Job Purpose: Recement Service | | | | | | Ticket Amount: | |
| Well Type: Development Well | | | Job Type: Recement Service | | | | |
| Sales Person: AARON, WESLEY | | | Srv Supervisor: SANFORD, DALE | | | MBU ID Emp #: 219527 | |

| Activity Description | Date/Time | Cht # | Rate bbl/min | Volume bbl | | Pressure psig | | Comments |
|----------------------|------------------|-------|--------------|------------|-------|---------------|--------|-----------------------------|
| | | | | Stage | Total | Tubing | Casing | |
| Test Lines | 10/30/2012 08:07 | | 0.5 | | 0.5 | 3500.0 | | |
| Pump Spacer 1 | 10/30/2012 08:15 | | 1.7 | | 10 | 2400.0 | | Claty Web Water |
| Pump Spacer 2 | 10/30/2012 08:21 | | 1.7 | | 12 | 2400.0 | | Mud Flush |
| Pump Spacer 1 | 10/30/2012 08:29 | | 1.7 | | 10 | 2400.0 | | Clay Web Water |
| Pump Lead Cement | 10/30/2012 08:35 | | 1.7 | | 87 | 2400.0 | | 212 SKS @ 11.5 # Extendacem |
| Pump Displacement | 10/30/2012 09:38 | | 1.7 | | | 2400.0 | | Water |
| Pause | 10/30/2012 09:40 | | | | | | | POOH 44 Jts |
| Pump Lead Cement | 10/30/2012 10:07 | | 2 | | 86 | 2400.0 | | 213 Sks Extendacem @ 11.5# |
| Pump Displacement | 10/30/2012 10:49 | | 2 | | 1 | | | Water |
| Pause | 10/30/2012 10:51 | | | | | | | POOH 47 jts |
| Pump Tail Cement | 10/30/2012 11:17 | | 2 | | 63 | 2400.0 | | 163 Sks Varicem @ 12# |
| Pump Displacement | 10/30/2012 11:43 | | 2 | | 1 | | | Circ. 9 Bbl cmt to pit |
| End Job | 10/30/2012 11:46 | | | | | | | |

PDC Baker 42-5 Ann Fill



Global Event Log

| Intersection | TIP | Intersection | TIP |
|------------------|-----------------|--------------------|-----------------|
| 1 Starting Job | 08:03:30 -23.27 | 2 Test Lines | 08:07:23 -0.970 |
| 4 Pump Mud Flush | 08:21:56 2262 | 3 Pump CW Water | 08:15:29 41.69 |
| 7 Pump Displace | 09:38:03 2386 | 6 Pump Lead Cement | 08:35:29 2403 |
| 10 Pump Displace | 10:49:49 2502 | 9 Pump Lead Cmt | 10:07:06 1880 |
| 13 Pump Displace | 11:43:47 2467 | 12 Pump Cement | 11:17:19 2244 |
| 16 POOH | 11:48:26 -19.39 | 15 Ending Job | 11:47:49 -19.39 |

Customer:

Job Date: 30-Oct-2012

Sales Order #: 9928254

Well Description:

UWI: