



# Well History

Well Name: **Cockroft 43-11**

API 05123223430000	Surface Legal Location NESE 11 6N 64W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,700.00	Original KB Elevation (ft) 4,712.00	KB-Ground Distance (ft) 12.00	Spud Date 9/8/2004 00:00	Rig Release Date 9/11/2004 01:00
			On Production Date 10/4/2004	Abandon Date

## Daily Operations

Start Date	Summary	End Date
3/9/2011	0 psi at WH, open well, broke circulation w/216 jts, circulated oil and gas out, pressure tested csg/RBP to 2000 psi w/rig pump, test good, POOH w/10 jts to derrick, spotted 2 sks sand across RBP, POOH w/remaining 206 jts to derrick, LD retrieving head, ND BOP, install PDC's 4 1/2" 5K frac valve, pressure tested production csg/RBP to 5000 psi using Pick Testers, held 15 minutes, test good, release tester, remove 4 1/2" frac valve, un-pack csg head, un-land csg (75K), NU annular flanges, TIH picking up tallying WS311 1.660" 3.02# N-80 CSHD workstring, tagged at 1400' w/6' in on jt 46, hard tag and sticky, broke circulation, circulated and conditioned hole w/original well bore mud, was getting hard cmt pieces in returns, (cmt top appears to be 1400' higher than reported), LD jt 46, conditioned hole from 1394' w/45 jts for 4 hours, stop circulation, LD 5 jts leaving EOT at 1238' w/40 jts, isolate well, prepare for next days operations, SDFN.	3/9/2011
3/10/2011	0 psi at WH, open well, TIH w/5 jts 1.660" workstring to 1380' w/45 jts, (tagging 20' higher than yesterday and very sticky), LD jt 45, EOT at 1363' w/44 jts, MIRU HES, held safety meeting, tested pump and lines to 3000 psi, pumped 10 bbls water ahead establishing circulation and rate, pumped 10 bbls Mud Flush III, pumped 10 bbl water spacer, mixed and pumped 80 sks (34 bbls) Extendacem slurry at 11.3 ppg, (est cmt top at 787' based off 9" hole), Break HES off WH, POOH laying down 17 jts leaving EOT at 831' w/27 jts, RU HES back to WH, mixed and pumped 135 sks (42 bbls) Varicem slurry at 13 ppg, circulated 5 bbls cmt to cmt tank, RDMO HES, POOH laying down remaining 27 jts, ND annular flanges, re-land csg in WH at 50K, pack off csg head, install original tbg head, NU BOP, isolate well, prepare for next days operations, clean up location, SDFD. Note COGCC was advised prior to operations.	3/10/2011
3/11/2011	0 psi at WH, open well, RU Superior Wireline, ran GR/CCL/CBL/VDL log from 2997' to surface, had acceptable bonding on 11.3 ppg Extendacem cmt from original cmt top to 831' and good bonding on Varicem 13.0 ppg cmt from 831' to surface, RD e-line, PU RMOR's retrieving head, TIH w/production tbg, tagged sand across RBP at 6771' KB and tools w/217 jts, RU to circulate sand off RBP, broke circulation, circulated down latching onto RBP at 6779' KB and tools w/same jt, rolled hole clean, released RBP, POOH laying down production tbg and tools, RU e-line, RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, <b>re-perforated Codell 6878-6886', 3 spf (24 new holes)</b> , 120 degree phasing, 19 gram charges, .41" entry holes w/21.12" penetration, all shots fired, RD e-line, isolate well, RDMO.	3/11/2011
3/18/2011	2 Stage Codell ReFrac / Niobrara ReComplete: MIRU HES. Well took 60 bbls to load. (Break 3975 psi @ 4.8 BPM) Pumped 126 bbls of Active pad, 597 bbls of 26# pHaser pad, 191 bbls of 1.0 ppg 20/40 slurry with 26# pHaser, 525 bbls of 2.0 ppg 20/40 slurry with 26# pHaser, 930 bbls of 3.0 ppg 20/40 slurry with 26# pHaser, 286 bbls of 4.0 ppg 20/40 slurry with 26# pHaser, 73 bbls of 4.0 ppg SB Excel slurry with 26# pHaser. Flushed well to top of the Codell perf (109.7 bbls) with a 3 bbl spacer followed by 24 bbls of 15% HCl followed by 83 bbls claytreated water (Spotting acid @ bottom of Niobrara C Bench). Shutdown (ISDP 3512 psi) (FG .94). Fluid contained the following chemicals: .6 gpt CL-23, .5 gpt BA-20, 1.5 gpt GasPerm 1100, 1.25 gpt Clayfix III, 3.0 - 5.0 gpt Vicon NF, 0.25 - .75 gpt CAT 3, 7.0 gpt LG-6, 1.0 gpt Losurf-300 (219140 lbs 20/40 Preferred Rock) (8000 lbs 20/40 SB Excel). RD HES, MIRU PSI Wireline. MTP = 4299 psi, ATP = 3968 psi, AIR = 28.9 bpm. Pressure response was slightly positive for entire treatment. Treatment went good.	3/18/2011
3/18/2011	Niobrara Hybrid: RIH with PSI wireline using High pressure control unit and grease head. Set RMOR Cast Iron Flowthrou 10k frac plug @ 6830' with a Baker #10. Dual fire 3 1/8" slick gun and EXT charges (22.7 gram, .42 entry hole, 35.1" penetration, 120 degree phasing). <b>Niobrara "C" Bench 6784' - 6790'</b> (3 SPF), <b>Niobrara "B" Bench @ 6711' - 6719'</b> (3 SPF), <b>Niobrara "A" Bench 6599' - 6601'</b> (2 SPF) (48 New holes). POOH and RDMO PSI Wireline.  MIRU HES. Well was loaded @ open. (Break 4138 psi @ 1.5 BPM) Pumped 119 bbls FE-1A Pad, 1771 bbls of Slickwater pad, 144 bbls of 20# pHaser pad, 144 bbls of 1.0 ppg 20/40 slurry with 20# pHaser, 787 bbls of 2.0 ppg 20/40 slurry with 20# pHaser, 940 bbls of 3.0 ppg 20/40 slurry with 20# pHaser, 769 bbls of 4.0 ppg 20/40 slurry with 20# pHaser, 86 bbls of 4.0 ppg SB Excel 20/40 slurry with 20# pHaser. Flushed well to top of the Niobrara B perf (107.0 bbls) Shutdown (ISDP 3513 psi) (FG .97). Fluid contained the following chemicals: .6 gpt CL-23, 1.0 gpt BA-20, 2.0 gpt GasPerm 1100, 1.25 gpt Clayfix III, 0.5 - 3.0 gpt Vicon NF, 0.15 - .75 gpt CAT 3, 2.0 gpt FR-66, 22 ppt WG-18, 1.0 gpt Losurf-100. (338600 lbs 20/40 Preferred Rock) (12000 20/40 SB Excel). RD HES. MTP = 4705 psi, ATP = 4460 psi, AIR = 51.3 bpm. Pressure response was flat for entire treatment. Treatment went good.	3/18/2011
3/22/2011	MIRU Basic #1557. STC 350 psi, blow well down to rig tank, controlled well with 60 bbls, circulated gas out, PU power swivle, TIH picking up production tbg off of ground, tallying in, tagging sand fill at 6722' KB and tools w/ 215 jts, broke circulation washing down, tagging frac plug at 6830' KB tools w/219 jts, drilled up plug, TOOH with 20 jts. Isolate well, SI. SDFN  DC; \$4,150.00	3/22/2011
3/23/2011	Basic #1557. ICP 100 psi ITP 200 psi, blow ell to rig tank, controlled well with 25 bbls, TIH with production tubing, tagging sand fill again at 6978' KB and tools w/223 jts, continued washing down and chasing plug to 7,041' KB and tools w/225 jts (PBTD), rolled hole clean, POOH laying down 6 jts, POOH standing back remaining 219 jts, LD tools, PC SN, TIH w/tbg, land tbg in WH at 6,863.29' KB (14.71' above top Codell perf), ND BOP, NU WH, Drop standing valve chased to seatnipple w/1.901" broach, isolate well, RDMO.  Tbg detail: 219 jts 2 3/8" 4.7# J-55 EUE 8rd                      8.0' adj KB                      8.0' 1-10' 2 3/8" tubing sub                                      6833.69'                              6841.69 1-10' 2 3/8" tubing sub                                      10.00'                                      6851.69 1-10' 2 3/8" tubing sub                                      10.00'                                      6861.69 Seatnipple/notched collar                                      1.60'                                      6863.29' EOT KB	3/23/2011

## Swab, 9/5/2017 12:30

Job Category LOE	Primary Job Type Swab	Start Date 9/5/2017	End Date 11/20/2017	Objective SWAB
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