



# Well History

Well Name: **Danley 12-28**

API 05123194730000	Surface Legal Location SWNW 28 6N 64W	Field Name Wattenberg	State CO	Well Configuration Type Vertical	
Ground Elevation (ft) 4,698.00	Original KB Elevation (ft) 4,707.00	KB-Ground Distance (ft) 9.00	Spud Date 3/13/1998 00:00	Rig Release Date On Production Date 4/21/1998	Abandon Date

**Job**  
**Drilling - original, 3/13/1998 13:30**

Job Category Drilling	Primary Job Type Drilling - original	Start Date 3/13/1998	End Date 3/31/1998	Objective Drill and Complete new Codell producer
--------------------------	---	-------------------------	-----------------------	---

**Daily Operations**

Start Date	Summary	End Date

**Fracture Treatment, 11/23/2004 13:30**

Job Category Completion/Workover	Primary Job Type Fracture Treatment	Start Date 11/23/2004	End Date 12/16/2004	Objective Refrac the Codell and Recomplete the Niobrara
-------------------------------------	--	--------------------------	------------------------	--

**Daily Operations**

Start Date	Summary	End Date

**Fracture Treatment, 8/5/2008 08:00**

Job Category Completion/Workover	Primary Job Type Fracture Treatment	Start Date 8/5/2008	End Date 9/2/2008	Objective Niobrara Refrac
-------------------------------------	--	------------------------	----------------------	------------------------------

**Daily Operations**

Start Date	Summary	End Date
8/19/2008	190#s both tbq/production csg open flowing to sales, 0#s surface csg, MIRU Ensign rig #304, blew well down, control well w/30 bbls 2% KCL, ND WH, NU BOPs, POOH laying down production tbq, (POOH w/219 jts 1.900" 2.76# IJ 10rd, sn/nc, NOTE: did not hydrotest or tally production tbq coming out, tbq visually looks to be in good shape, will test going back in), chg over to 2 3/8" handling tools, PU STS Oil Tools 2 7/8" blade bit/3 1/2" csg scraper dressed for 9.3# csg, TIH picking up tallying 2 3/8" 4.7# N-80 CSHD workstring, 209 jts in at 6423.48' KB and tools, isolate well, SDFN.	8/19/2008
8/20/2008	80#s tbq/60#s production csg/0#s surface csg, blew well down, continue TIH picking up tallying 2 3/8" workstring, tagged fill at 6913.47' KB and tools w/225 jts, RU to clean out, broke circulation and cleaned out to 6956.29' KB and tools w/226 jts tagging hard (46' of rat hole), rolled hole clean, POOH to derrick w/workstring, LD tools, PU STS Oil Tools 3 1/2" WLTC RBP, TIH w/workstring, set RBP at 6615.20' KB and tools w/214 jts, LD 1 jt, circulated gas out, ND BOPs, NU to test csg to 5000 psi, RU H-S Testing, pressure tested csg to 5100 psi, held 15 minutes, test good, released tester, NU BOPs, TIH and release RBP, lower RBP and set at 6800.40' KB and tools w/220 jts, (70' below bttm Niobrara perf and 100' above top Codell perf), LD 20 jts, spotted 1 sk sand across RBP, continued POOH laying down workstring, 75 jts left in hole, isolate well, SDFN.	8/20/2008
8/21/2008	0#s at WH, finish POOH laying down 2 3/8" workstring and retrieving head, RU Nue X Wireline, RIH w/2 1/8" scallop gun, correlated cased hole and open hole logs getting on depth. re-perforated Niobrara "B" bench 6720-6730', 3 spf (30 new holes), 60 deg phasing, 6.5 gram Gunslinger charges, .27" entry holes w/27.51" penetration, all shots fired, (wireline tag at 6784'), release e-line, ND BOPs, install PDC owned 4 1/2" 5K frac valve, isolate well, RDMO.	8/21/2008
8/25/2008	Niobrara Hybrid Recomplete: Halliburton performed a Niobrara stimulation. Took 38.1 bbls to load hole. (Break 4187 @ 5.8 BPM). Pumped 1000 gals of 15% HCl, 1668 bbls Slickwater pad, 144 bbls of SilverStim 22# X-Linked pad, 168 bbls of 1.0 ppg 30/50 slurry with 22# SilverStim, 781 bbls of 2.0 ppg 30/50 slurry with 22# SilverStim, 825 bbls of 3.0 ppg 30/50 slurry with 22# SilverStim, 312 bbls of 4.0 ppg 30/50 slurry with 22# SilverStim, 103 bbls of 4.0 ppg 12/20 SB Excel slurry with 22# SilverStim. Flushed well to top perf (58.5 bbls) Shutdown (ISDP 3186 psi) 30/50 white sand (239020 lbs) 12/20 SB Excel proppant (12000 lbs). Fluid contained the flowing chemicals: 1.0 gpt Clayfix II, 6.5 gpt LGC-6, 0.5 gpt CL-37, 0.3 gpt CL-23, 0.5 - 1.0 gpt BA-40, 1.5 gpt GasPerm 1000, 3.0 gpt Vicon NF, 0.25 -0.5 gpt CAT-3, 0.1, 0.25, 0.5 gpt CAT-4, 1.0 - 2.0 gpt FR-56. MTP =4939 psi, ATP = 4822 psi, AIR = 29.6 bpm. Pressure response was flat to positive for most of job. Pumped treatment through 3 1/2" casing with RBP set @ 6615'. RD Halliburton, turned well on to flowback on a 14/64" choke. Treatment went good.	8/25/2008
8/28/2008	Light blow production csg open to FBT/0#s surface csg, MIRU Ensign rig #304, pulled choke and blew well down, attempt to pump down csg, csg loaded up w/1 bbl 2% KCL, ND flowback and frac valve, install 3K mandrel style tbq head, NU BOPs, PU STS Oil Tools retrieving head, TIH picking up 2 3/8" CSHD workstring, 174 jts in, isolate well, SDFN. Note: well kicked off flowing several times on the day.	8/28/2008
8/29/2008	0#s at WH, continue TIH picking up 2 3/8" CSHD workstring, tagged sand fill at 6716.45' KB and tools w/218 jts, RU to clean out, circulated down latching onto RBP at 6800.40' KB and tools w/220 jts, rolled hole clean, released RBP, POOH laying down workstring and tools, RU Hole Seekers, PU 1.900" notched seatnipple (I.D. 1.500"), TIH picking up tallying and testing 1.900" production tbq to 6000 psi, layed down 17 bad jts testing in, RD tester, PU replacement tbq (new), tagged sand fill at 6867.92' KB w/220 jts, 24' above top Codell perf at 6900', well was cleaned out to 6956' KB prior to Niobrara re-frac, RU to clean out, broke circulation and cleaned out to 6998.13' KB w/225 jts, rolled hole clean, LD 5 jts, ND BOPs, land tbq at 6886.92' KB w/220 jts 2.76# IJ 10rd tbq, NU WH, isolate well, SDFN.	8/29/2008
9/2/2008	260#s both tbq/csg, 0#s surface csg, blew well down, circulated gas out, dropped PCS full port standing valve and chased to seatnipple w/1.516 broach, isolate well, RDMO.	9/2/2008

**Wireline, 12/3/2008 00:00**

Job Category Other	Primary Job Type Wireline	Start Date 12/3/2008	End Date 12/5/2008	Objective run
-----------------------	------------------------------	-------------------------	-----------------------	------------------

**Daily Operations**

Start Date	Summary	End Date
12/3/2008	MRI, RU, SDFN...  Daily Cost \$2425.00 NOTE COST GOES TO THE DANLEY 28 GD	12/3/2008