



Well History

Well Name: Seele 31-31

API 05123201060000		Surface Legal Location NWNE 31 4N 67W		Field Name Wattenberg		State CO		Well Configuration Type Vertical					
Ground Elevation (ft) 4,998.00		Original KB Elevation (ft) 5,008.00		KB-Ground Distance (ft) 10.00		Spud Date 10/27/2000 00:00		Rig Release Date 11/9/2000 00:00		On Production Date 12/21/2000		Abandon Date	

Job						
Drilling - original, 10/27/2000 07:00						

Job Category Drilling	Primary Job Type Drilling - original	Start Date 10/27/2000	End Date 11/10/2000	Objective Explore for Codell Production
--------------------------	---	--------------------------	------------------------	--

Daily Operations		
Start Date	Summary	End Date

Workover, 3/26/2001 07:00				
Job Category Completion/Workover	Primary Job Type Workover	Start Date 3/26/2001	End Date 3/28/2001	Objective

Daily Operations		
Start Date	Summary	End Date
3/26/2001	WO road conditions to move in Completion Rig and run 2 3/8" tubing for Siphon string.	3/26/2001
3/27/2001	MIRU Completion Rig to run 2 3/8" tubing. Kill well & TIH with 2 3/8" tubing. Ran 7338 to tag sand. Circ. & clean out hole to 7471 KB. Pull tubing up hole & SI well. SDFN.	3/27/2001
3/28/2001	Landed 2 3/8" tubing @ 7338 KB. (234 Jts.) NU wellhead & broach tubing string to bottom. RDMO Completion Rig & MIRU Swab Rig. SDFN.	3/28/2001

Recompletion, 12/13/2011 00:00				
Job Category Completion/Workover	Primary Job Type Recompletion	Start Date 12/13/2011	End Date 12/29/2011	Objective Bring annular cement to surface, re-frac Codell, re-complete Niobrara

Daily Operations		
Start Date	Summary	End Date
12/13/2011	ITP-100 psi., ICP-150, ISCP-0. Blow down to RT, control w/60 bbls of 2 % claytreat and biocide water. ND production equip. and NU BOP. Unlanded 2 3/8" tubing and tubing was stuck. Pipe moved 55" and would not move anymore. Pipe had enough movement to remove tubing hanger. PU 1 tag jt. and attempted to work pipe with no success. RU circ. equip., reversed circ and pressured up. Attempted to conventional circ. and also pressured up. After several attempts of trying to free the tubing the decision was made to free point and cut 2 3/8" tubing. Scheduled Superior Well Service for next day to free point and cut tubing. Drain lines and SIFN.	12/13/2011
12/14/2011	ITP-300, ICP-50, ISCP-0. Blow down to RT. RU Superior Well service. RIH w/free point tool, calibrated and verified that free point was working at 4900'. Tagged up @ 7024'. Pulled off tag and found free point @ 6990'. POOH LD free point tool and PU 2 3/8" chemical cutter. RIH corilated depth and cut @ 6990'. POOH and LD cutter. Verified pipe was free by pulling tubing and pipe was free. RD Superior Well Service. Pulled 1-6' sub and 1 full jt.. RU circ. equip.. Break circ. and reverse circ. hole clean. RD circ. equip.. POOH 221 full jts., 20' of jt. #222, and 1-6' sub of 2 3/8" 4.7# J-55 8rd prod. tbg. to the ground. Leaving approximately 348' (11 full jts, and 10' of jt #12) in the hole. Drain lines and SIFN.	12/14/2011
12/15/2011	No pressures @ WH. RU RMOR Spear head. Speared into 4 1/2" csg. and re-landed csg. w/new csg. slips. RD Spear, and PU 10 jts. (367.15') of washover pipe. TIH w/2 7/8" N80 6.5# tbg., tagging up @ 7,004.22' w/5' in on jt. #205. RU power swivel. Washed down to 7,328.44', w/24.75' in on jt. #213, tools-367.15', and 5' KB. Role hole clean. TOOH to derrick 213 jts. and LD wash pipe. Drain lines SIFN.	12/15/2011
12/16/2011	No pressures @ WH. PU overshot dressed with 2 3/8" grappel, bumper sub, jars and cross over (20.15'). TIH tagging @ 7,005' w/214 jts. of 2 7/8" 6.4# N-80 Tools and KB. Latched onto fish and jarred for 3 hrs. w/70,000# max. POOH to the derrick w/214 jts. LD tools and PU 12 jts. of washover pipe-402.71', TIH 197 jts. leaving EOT @ 6,843.55'. Drain lines SIFW.	12/16/2011
12/19/2011	No pressures @ WH. TIH w/15 jts. tagging up @ 7,325' w/12 jts. of washover pipe, and 20' in on jt. #212 of 2 7/8" N-80. RU power swivel. Break circulation and washed down to 7,507' w/12 jts. wash over pipe, and 218 jts. of 2 7/8" N-80. Circ. hole clean. POOH 218 jts. to the derrick and LD 12 jts. of wash over pipe. PU RMOR's overshot derssed w/2 3/8" grappel, bumper sub, jars, and cross over (Total length of tools 20.15'). TIH tagging fish @ 7,127.90' w/218 jts. of 2 7/8" N-80 and tools and KB.. Latched onto fish and had to set jars off at 60,000# to free fish. POOH to derick w/218 jts. and LD jars, bumper sub, overshot, and 11 full jts and a 10' section of 2 3/8" 4.7# J-55 8rd prod. tbg. Drain lines SIFN.	12/19/2011
12/20/2011	No pressures @ WH, PU RMOR's 3 7/8" blade bit and casing scraper dressed for 4 1/2" 10.5#casing. TIH from derrick w/225 jts.. EOT @ 7,368.79' w/tools and KB.. No fill tagged. TOOH to derrick w/225 jts. LD bit and scraper and PU RMOR RBP. TIH from derrick w/223 jts. setting plug @ 7289.02' w/223 jts., tools and KB. LD 1 jt. and RU circ. equip.. Break circ. and role hole clean. Tested plug to 2000 psi. Plug tested good. RD circ. equip. POOH to derrick 222 jts. of 2 7/8" 6.4# N-80 tubing. LD retrieving head. ND BOP and RU Pick Testers. Tested casing to 5000 psi. for 15 min.. Casing tested good. RD Pick Testers. Unlanded casing, had 20" of stretch at 90,000# of pull. NU annular flange. Drain lines and SIFN.	12/20/2011
12/21/2011	No pressures @ well head. TIH w/1 1/4" CS Hydrill tbg.. Tagging top of original cement @ 6,352.44' w/200jts.. RU circulation equip.. Break circulation and condition hole through the night.	12/21/2011
12/22/2011	RD circ. equip.. MIRU HES, held safety meeting, tested pump and lines to 3500 psi, pumped 10 bbls water ahead establishing circulation and rate, pumped 12 bbls Mud Flush, pumped 10 bbl water spacer, mixed and pumped 169 sks (62 bbls) Filcem slurry at 11.8 ppg, (est cmt top at 5,400' based off of 9" hole), Disp. 1.5 bbl, Break HES off WH, POOH laying down 31 jts leaving EOT at 5335.14' w/169 jts, RU HES back to WH, mixed and pumped 264 sks (97 bbls) Filcem slurry at 11.8 ppg, circulated 9 bbls cmt to cmt tank. RD HES, POOH 114 jts. EOT @ 1430' w/47 jts. RU HES back to well head, mixed and pumped 103 sks (40 bbls) Varicem slurry at 12 ppg, circulated 40 bbls cmt to cmt tank RDMO HES, POOH laying down remaining 47 jts, ND annular flanges, re-land csg in WH at 65K, pack off csg head, install original tbg head, NU BOP, isolate well. Drain lines and SI and scure for the holliday weekend. Note COGCC was advised prior to operation	12/22/2011



Well History

Well Name: Seele 31-31

API 05123201060000		Surface Legal Location NWNE 31 4N 67W		Field Name Wattenberg		State CO		Well Configuration Type Vertical					
Ground Elevation (ft) 4,998.00		Original KB Elevation (ft) 5,008.00		KB-Ground Distance (ft) 10.00		Spud Date 10/27/2000 00:00		Rig Release Date 11/9/2000 00:00		On Production Date 12/21/2000		Abandon Date	

Daily Operations

Start Date	Summary	End Date
12/27/2011	<p>0 psi at WH, open well, RU Superior Wireline, ran GR/CCL/CBL/VDL log from 6500' to surface, had acceptable bonding on 11.8 ppg Fillcem cmt from original cmt top to 1380' and acceptable bonding on 12.0 ppg Varicem cmt from 1380' to surface, RD e-line, PU RMOR's retrieving head, TIH w/workstring tbg, tagged sand across RBP at 7,284.02' KB and tools w/223 jts, RU to circulate sand off RBP, broke circulation, circulated down latching onto RBP at 7,289.02' KB and tools w/same jt, rolled hole clean, released RBP, POOH laying down production tbg. Leaving 234 jts, not tallied on the ground. RU e-line, RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, re-perforated Codell 7,353'-7,361', 3 spf (24 new holes), 120 degree phasing, 19 gram charges, .41" entry holes w/21.28" penetration, all shots fired, RD e-line. ND BOP and well head, NU frac valve. Well is ready for Frac. SIFN. RDMO Basic Rig #1548.</p> <p>Note: Tubing is not hydrotested.</p>	12/27/2011
12/29/2011	<p>Codell ReFrac: MIRU HES. Well took 40 bbls to load. (Break 2627 psi @ 4.9 BPM) Pumped 119 bbls of FE-1A pad, 596 bbls of 26# pHaser pad, 189 bbls of 1.0 ppg 20/40 slurry with 26# pHaser, 524 bbls of 2.0 ppg 20/40 slurry with 26# pHaser, 928 bbls of 3.0 ppg 20/40 slurry with 26# pHaser, 280 bbls of 4.0 ppg 20/40 slurry with 26# pHaser, 78 bbls of 4.0 ppg 20/40 SBXL slurry with 26# pHaser, Flush to top Codell perf (117.3) bbl. Shutdown (ISDP 3745 psi) (FG .94) Fluid contained the following chemicals: .6 gpt CL-23, .5 gpt BA-20, 1.5 gpt GasPerm 1100, .25 gpt Cla-web, 3.0 - 5.0 gpt Vicon NF, 0.25 - .75 gpt CAT 3, 6.0 gpt LG-6 1.0 gpt Losurf-100, FE-1A @ 20 gpt (218000 lbs Preferred Rock 20/40) (8000 lbs SBXL 20/40). RD HES. MTP = 3809 psi, ATP = 3289 psi, AIR = 18.5 bpm. Pressure response was slightly positive for entire treatment.</p>	12/29/2011
12/29/2011	<p>Niobrara Hybrid: RIH with PSI wireline using High pressure control unit and grease head. Set RMOR Cast Iron Flowthrou 10k frac plug @ 7240' with a Baker #10. Duel fire 3 1/8" slick gun and EXT charges (22.7 gram, .42 entry hole, 35.1" penetration, 120 degree phasing). Niobrara "B" Bench @ 7137'-7145' (3 SPF) Niobrara "A" Bench @ 7059' - 7061' (2 SPF) (28 New holes). POOH and RDMO PSI Wireline.</p> <p>MIRU HES. Well was loaded @ open. (Break 3255 psi @ 9.8 BPM) Pumped 119 bbl active pad, Pumped 1448 bbls of Slickwater pad, 145 bbls of 20# pHaser pad, 167 bbls of 1.0 ppg 20/40 slurry with 20# pHaser, 786 bbls of 2.0 ppg 20/40 slurry with 20# pHaser, 697 bbls of 3.0 ppg 20/40 slurry with 20# pHaser, 368 bbls of 4.0 ppg 20/40 slurry with 20# pHaser, 88 bbls of 4.0 ppg SB Excel 20/40 slurry with 20# pHaser. Flushed well to top of "B" bench (113.8 bbls) Shutdown (ISDP - 3532 psi) (FG .93). 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 (238660 lbs 20/40 Preferred Rock) (12000 20/40 SB Excel. RD HES. MTP = 5058 psi, ATP = 4647 psi, AIR = 57.8 bpm. Went to 4 ppg early due to being short on water, left 7000 lbs of preferred rock on sand bin. Pressure response was negative for entire treatment.</p>	12/29/2011
3/6/2012	<p>ICP- 300 psi, ISCP-0 psi, MI&RU Basic Rig #1557. ND production equipmemnt, RU pump line to frac valve and control well w/40 bbls Claytreat/Biocide water. ND frac valve, install original 3K mandrel style tbg head, NU BOP, PU 2 3/8" standard seat nipple and RMOR's 3 3/4" x 3 1/8" x 7.50' burn shoe, TIH tallying and picking up 2 3/8" 4.7# J-55 EUE 8rd tbg., tagging fill @ 7,152' w/228 jts. RU circulation equipment, break circulation and clean out tagging plug @ 7,240' w/231 jts. PU power swivel and drilled out plug and push it down tagging sand fill below Codell @ 7,457.1' KB w/238 jts, wash and push plug down to 7,471' w/238 jts.. Circulate hole clean, RD power swivel, LD 5 jts. to the ground and POOH to derrick w/10 jts. leaving EOT @ 6,991.47' w/223 jts.. Drain lines and shut in for the night.</p>	3/6/2012
3/7/2012	<p>ITP-350 psi, ICP-0 psi, blow well down to FBT, controll well w/20 bbls clay treat w/biocide, TOOH to derrick w/ 223 jts, lay down tools, PU 2 3/8" NC/SN. TIH out of derrick w/ 233 jts, land tubing w/ 233 jts-7,313.7', 1-8', NC/SN-1.60', and 7' adj. KB.. Tubing is landed @ 7,338.3' (14.7' above Codell). ND BOP NU WH, and broached to seatnipple w/1.901" broach, isolate well, RDMOL</p>	3/7/2012

Abandon Well LOE, <dtmstart>

Job Category Abandon	Primary Job Type Abandon Well LOE	Start Date	End Date	Objective
-------------------------	--------------------------------------	------------	----------	-----------

Daily Operations

Start Date	Summary	End Date