



## Well History

Well Name: **Guttersen 43-6**

API 05123261640000		Surface Legal Location NESE 6 3N 63W		Field Name Wattenberg		State CO		Well Configuration Type Vertical					
Ground Elevation (ft) 4,840.00		Original KB Elevation (ft) 4,850.00		KB-Ground Distance (ft) 10.00		Spud Date 8/27/2007 00:00		Rig Release Date 9/26/2007 00:00		On Production Date 11/7/2007		Abandon Date	

### Daily Operations

Start Date	Summary	End Date
9/19/2007	MIRU Nuex Wireline. Ran GRVDL/CBL log finding PBTD @ 7024" and Cement Top @ 850' on lead and 5100 on tail.. Acceptable cement bond on tail slurry, poor bond on filler slurry. Perforated the Codell formation from 6856-6864' (2 spf, 11 gram charges, 0.34" entry holes, and 13.59" penetration), 16 holes total. Perforated the Niobrara formation from 6652-6660 ( 1 spf, 3 1/8 slick gun, 21 gram Hero Charges, .39" entry hole, 30.92" penetration) 8 shots. Prepare well for Codell / Niobrara Limited entry stimulation.  Daily Cost \$4235.00 Cost to Date \$254,753.00	
9/26/2007	MIRU BJ Services. Codell / Niobrara (previous job on 9-21-07 was cut short due to equipment problems, 120K sand was pumped). Performed a Limited Entry Codell/Niobrara stimulation using 2977 bbls of Vistar 20# fluid system, 338320 lbs of 20/40 white sand and 16140 lbs of Super LC 20/40 resin coated proppant. Niobrara perfs @ 6652-6660' (8 Shots) & Codell perfs @ 6856-6864' (16 Shots). Hole loaded w/15 bbls. Breakdown at 3843 psi @ 4.9 bpm, Dropped 24 bio-ball sealers. Seen slight ball action on Niobrara perfs and no other pressure responses, shut down, allowed balls to drop for approximately 15 minutes and proceeded remainder of treatment. Pumped 1904 bbls of Slickwater pad. Pumped 1 - 4 ppg stages of 20/40 white sand, 4 ppg Super LC proppant, flush well to top Niobrara perforation (105.47 bbls), shut down, record ISDP = 3690 psi, RD BJ Services, turn well on to flowback. MTP = 4948 psi, ATP = 4775 psi, AIR = 47.6 bpm. Operationally treatment was good. Pressure response was flat to negative during entire treatment, Well turned on for flowback on a 14/64" choke. Frac via 4 1/2" casing.  Daily Cost \$147,200.00 Cost to Date \$401,953.00	

### Tubing Repair, 1/29/2008 00:00

Job Category Completion/Workover	Primary Job Type Tubing Repair	Start Date 1/29/2008	End Date 1/30/2008	Objective Install tubing in Codell well
-------------------------------------	-----------------------------------	-------------------------	-----------------------	--

### Daily Operations

Start Date	Summary	End Date
1/29/2008	SCP 50#, MIR, RU rig, pump & tank, blow well down & control W/60 bbls of 2% KCL, ND 4 1/2 frac valve, NU WH & BOP, PU nc/sn & new 2 3/8 4.7# J-55 EUE tubing talling, tag @6871.26' W/223 jts, lay down 2 jts, SWI, SDFN.  Daily Cost \$31950 Cost To Date \$433903	
1/30/2008	SCP 120# STP 200#, RU to circulate, clean out to 7046.66' W/228 jts + 15', roll hole clean, lay down tag jts, ND BOP, NU WH, land well @6846' W/222 jts of 2 3/8 4.7# J-55 EUE tubing, drop 2 3/8 seated full bore standing valve & chase to bottom W/2 3/8 broach, tubing broached good, SWI, clean up loc., RD rig, pump & tank, move rig off, FINAL REPORT..  Daily Cost \$5350 Cost To Date \$439253	

### Refrac/Recomplete, 6/19/2012 00:00

Job Category Completion/Workover	Primary Job Type Refrac/Recomplete	Start Date 6/19/2012	End Date	Objective Refrac Codell and Niobrara
-------------------------------------	---------------------------------------	-------------------------	----------	---

### Daily Operations

Start Date	Summary	End Date
6/19/2012	ITP-450, ICP-500, ISCP-0. MIRU Basic 1548. RU return line to production equipment and blow well down to RT. Control well w/50 bbls of 2% claytreat/biocide water. ND production equipment and NU BOP. PU 5 tag jts. no fill tagged w/227 jts.. LD 5 tag jts.. POOH and tally 222 jts. of 2 3/8" 4.7# J-55 8 rd. prod. tbg. to the derrick. ND BOP and swap 3K well head w/5K well head. NU BOP and shut in and secure well for the night.	6/19/2012
6/20/2012	No tubing in the hole, ICP-50. Blow down to RT and pumped 15 bbls of 2% claytreat/biocide water. MIRU Pick Testers. PU 3 7/8" blade bit and casing scraper dressed for 4 1/2" casing. TIH and hydrotest to 6,000 psi. 222 jts. of 2 3/8" 4.7# J-55 EUE 8 rd. prod. tbg.. EOT @ 6,858.45'. All jts. tested good. RD Pick testers. LD 8 jts. and POOH to the derrick 214 jts.. LD bit and scraper. PU 4 1/2" WLTC RBP. TIH w/214 jts. setting RBP @ 6,604.84' w/214 jts., tools and KB. LD 1 jt.. RU circ. equip.. Broke circulation and rolled hole clean of oil and gas. RD circ. equip. and Install 5K tubing mandril. RU Pick testers and tested casing to 5,000 psi. for 15 min. Casing held pressure. RD Pick Testers. Removed mandril and PU 1 jt.. Latched onto and released RBP. POOH to the ground 214 jts.. Leaving 222 jts. on the ground. Swap out 5K well head and install original 3K well head. Shut in well and secure for the night.	6/20/2012
6/21/2012	SCP 0 psi, SSCP 0 psi, open well, MIRU Superior Well Service, RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, re-perforated Codell 6,855'-6,863', 3 spf (24 new holes), 120 degree phasing, 19 gram charges, .41" entry holes w/21.28" penetration, all shots fired, RD e-line. RU Pick Testers, PU RMOR's 4 1/2" AS1X 10K Arrow set PKR, TIH picking up tallying WS308 2 7/8" workstring testing to 8000 psi, RD tester, set PKR in BOP's at 6,767.24' KB (87.76' above the Codell) and tools w/197 jts 2 7/8" N-80 plus 10 jts 2 3/8" N-80 , install HES 3 1/2" 10K frac valve, load backside and test csg/PKR to 500 psi, test good, load and pump down tbg at 2000 psi, had no communication on backside, isolate well, RDMO.	6/21/2012



## Well History

Well Name: Guttersen 43-6

API 05123261640000		Surface Legal Location NESE 6 3N 63W		Field Name Wattenberg		State CO		Well Configuration Type Vertical					
Ground Elevation (ft) 4,840.00		Original KB Elevation (ft) 4,850.00		KB-Ground Distance (ft) 10.00		Spud Date 8/27/2007 00:00		Rig Release Date 9/26/2007 00:00		On Production Date 11/7/2007		Abandon Date	

### Daily Operations

Start Date	Summary	End Date
6/28/2012	Codell ReFrac: MIRU HES. Well took 27 bbls to load. (Break 3749 psi @ 2.4 BPM), Pumped 29 bbl cla-web load and break, Pumped 120 bbls of FE-1A pad, 595 bbls of 26# pHaser pad, 191 bbls of 1.0 ppg 20/40 slurry with 26# pHaser, 524 bbls of 2.0 ppg 20/40 slurry with 26# pHaser, 929 bbls of 3.0 ppg 20/40 slurry with 26# pHaser, 281 bbls of 4.0 ppg 20/40 slurry with 26# pHaser, 75 bbls of 4.0 ppg SB Excel slurry with 26# pHaser. Flushed well to top of the Codell perf (39.9 bbls) Shutdown (ISIP 3675 psi) (FG 1.00) Fluid contained the following chemicals: .30 gpt be-7, .6 gpt CL-23, .5 gpt BA-20, 1.5 gpt GasPerm 1100, .5 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 (216.960 lbs Ottawa 20/40) (8000 lbs 20/40 SB Excel). RD HES. MTP = 6346 psi, ATP = 5324 psi, AIR = 18.7 bpm. Pressure response was slightly positive for entire treatment.	6/28/2012
7/2/2012	Prep for Niobrara Re-Frac:MIRU BWS rig # 008, ITP/0 psi ICP/ 0 psi, Release ROMR Arrowset IX packer, roll hole, TOO H laying down 197 jts of 2 7/8, WS 308 and 10 jts of 2 3/8 tail pipe on trailer, load hole. MIRU Superior Wireline, RIH w/ 3 1/8 slick gun and RMOR 10K CIPF. Set CIPF @ 6,780' (110' below "B" bench) and perf Nio "A" 6,597' - 6,599' (2 spf) and Re-Perf Nio "B" 6,648' - 6,656' (3 spf), (28 new holes) 120 degree phasing, 19 gram charges, .41" entry holes w/ 21.28" penetration, all shots fired, RDMO E-line. Load hole ND BOP and NU 4 1/2" frac valve.  NOTE: Well is ready for Niobrara refrac.	7/2/2012
7/5/2012	MIRU HES. Niobrara Refrac, Well loaded with 9 bbl. (Break 4994psi @ 5.2 BPM) Pumped 24 bbl 15% HCL, 119 bbls of Active pad, Pumped 777 bbls of Slickwater pad, 738 bbls of 24# pHaser pad, 168 bbls of 1.0 ppg 20/40 slurry with 24# pHaser, saw slight pressure increase when 1# hit formation, 192 bbls of 2.0 ppg 20/40 slurry with 24# pHaser, when 2# hit formation pressure spiked to 5500 psi @ 44.2 bpm, drop rate to 17 bpm, pressure @ 5200, climbed almost immediately back to 5500, cut screws, unable to pump, well pressure remained between 5400 and 5500. Hooked up to flow back, attempted to flow back bottoms up, recovered only 74 bbls, attempted to flush, pumped away only 62 bbls, screened out.Shutdown (ISDP 5518 psi) (FG 1.27). Total propan into formation 19,645 lbs, left 3588 lbs in well bore. 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, (23,233 lbs 20/40 Preferred Rock) (0 20/40 SB Excel. RD HES. MTP = 5653 psi, ATP = 5171 psi, AIR = 29.4 bpm.	7/5/2012
7/9/2012	ICP-50 psi/0, MIRU BWS rig #008, pull choke and flow well to FBT for 1 hour. Kill well with 5 bbls, ND Frac valve and flow line. NU WH and BOP, PU 2 3/8 4.7# J-55 EUE 8rd production tbg and RMOR's 3 3/4" x 3 1/8"x 7 1/2' burn shoe. Tag @ 6,745' w/ 219 jts, 110' above Codell. PU Power swivel and break circulation, Roll hole clean and drill up plug @ 6776' W/ 220 jts, Rolled hole clean, push plug down. Tag @ 6922' w/ 225 jts, 59' below Codell, couldn't break circulation. Pulled 15 stands to derrick leaving 210 jts in hole @ 6468', (128' above Niobrara "A"). Close BOP and lock, SDFN.	7/9/2012
7/10/2012	ITP- 20 psi, ICP- 20 psi, blow well down to FBT, control well w/10 bbls clay treat w/biocide. TOO H to derrick with remaining 210 jts, lay down tools. PU 5 3 7/8 cone bit, TIH and clean out to bottom @ 7,015' W/ 228 jts, roll hole, ( 152' below codell ). TOO H to derrick, LD tools. PU 2 3/8" NC/SN, TIH from derrick w/ 221 jts, land tubing w/ 221 jts-6,807.42', 3 subs, 2 - 8' subs and 1 - 6' and NC/SN-1.60', tubing is landed @ 6,839.02' KB (15.98' above Codell). ND BOP NU WH, broached to seatnipple w/1.901" broach, ND BOP and flange, Install WH. Did not drop new PCS full port standing valve, isolate well, RDMOL  Tbg detail: 221 jts 2 3/8" 4.7# J-55 EUE 8rd 8.0' adj KB 8.0' 6,807.42' 6,815.42' 3 - subs, 2 - 8' sub 1 - 6' 2 3/8" 4.7# J-55 EUE 8rd 22' 6,837.42' Seatnipple/notched collar 1.60' EOT 6,839.02' KB. 15.98' above Codell.	7/10/2012

### WBI - Abandon Well Other Operator, <dtmstart>

Job Category Abandon	Primary Job Type WBI - Abandon Well Other Operator	Start Date	End Date	Objective
-------------------------	---	------------	----------	-----------

### Daily Operations

Start Date	Summary	End Date