



Well History

Well Name: Vetting 24-14

API 05123130680000	Surface Legal Location SESW 14 5N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,619.00	Original KB Elevation (ft) 4,629.00	KB-Ground Distance (ft) 10.00	Spud Date 5/28/1986 00:00	Rig Release Date On Production Date

Daily Operations

Start Date	Summary	End Date																																								
5/30/2001	5-30-2001 MIRU 5-31-2001 ND well head NU BOP, RIH tag fill @ 7031' POOH w/222 jts 6925.43' 23/8" J-55 8-rnd flagging down. TIH with 23/8" CS-HYDRILL tubing work string, hydro-testing to 8000#.	5/31/2001																																								
5/31/2001	RU BJ for FRAC <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Time</td> <td style="width: 15%;">STP</td> <td style="width: 15%;">CSG Press</td> <td style="width: 15%;">BBLs</td> <td style="width: 15%;">Total BBS</td> </tr> <tr> <td>Pump in 9:07</td> <td>3843</td> <td>480</td> <td>24</td> <td>24</td> </tr> <tr> <td>PAD 9:19</td> <td>5408</td> <td>495</td> <td>833</td> <td>857</td> </tr> <tr> <td>1#SAND</td> <td>5511</td> <td>499</td> <td>249</td> <td>1106</td> </tr> <tr> <td>2#SAND</td> <td>5373</td> <td>508</td> <td>544</td> <td>1650</td> </tr> <tr> <td>3#SAND</td> <td>5481</td> <td>609</td> <td>1119</td> <td>2769</td> </tr> <tr> <td>4#SAND</td> <td>5662</td> <td>619</td> <td>242</td> <td>3011</td> </tr> <tr> <td>FLUSH 1:40</td> <td>5605</td> <td>617</td> <td>27.5</td> <td>3015</td> </tr> </table> Flow back-start 3150# 30-min 1850# 1 hr 1480# 32BBS 1.5 hrs. 1340# 22BBS 2 hrs 1100# 24BBS 3 hrs 600# 45BBS	Time	STP	CSG Press	BBLs	Total BBS	Pump in 9:07	3843	480	24	24	PAD 9:19	5408	495	833	857	1#SAND	5511	499	249	1106	2#SAND	5373	508	544	1650	3#SAND	5481	609	1119	2769	4#SAND	5662	619	242	3011	FLUSH 1:40	5605	617	27.5	3015	6/1/2001
Time	STP	CSG Press	BBLs	Total BBS																																						
Pump in 9:07	3843	480	24	24																																						
PAD 9:19	5408	495	833	857																																						
1#SAND	5511	499	249	1106																																						
2#SAND	5373	508	544	1650																																						
3#SAND	5481	609	1119	2769																																						
4#SAND	5662	619	242	3011																																						
FLUSH 1:40	5605	617	27.5	3015																																						
6/3/2001	NU BOP Release packer and lay down frac string. Pick up production string tag fill @ 6980' Clean out fill to @ 7040' ND BOP Land 222jts 2/38" tubing w/SN w/NC @ 6935' KB SWAB	6/4/2001																																								
6/4/2001	RDMO	6/5/2001																																								
9/9/2004	140# both tbg/csg, MIRU Action rig #4, location muddy, had to winch in equipment, left well flowing to sales, SDFN	9/10/2004																																								
9/12/2004	140# tbg/csg, blow well down, kill well w/production water, 25 bbls csg - 25 bbls tbg, ND WH, NU BOPs, PU tag jts, tagged w/62' in, LD tag jts, RU H-S Testing hydrotester, POOH tallying standing back testing to 6000#, (laid down 4 jts w/holes & split 2 jts), RD tester, POOH w/222 jts - seatnipple/notched collar - landed @ 6939' KB, tag depth of 6991' KB, PU 4 1/2" csg scraper & 3 7/8" blade bit, TIH w/production tbg, RU to clean out, circulated clean to PBSD (7040'), rolled hole clean, POOH laying down production tbg & tools, SI well. SDFN	9/13/2004																																								
9/13/2004	Vacume csg, RU Excell Services Wireline, RIH w/C.I.B.P. & set @ 6920', spot 2 sks cmt across plug, ND BOPs, NU frac valve, load csg w/2% KCL (60 bbls), pressure test csg & plug to 5000#, held pressure 30 minutes, test good, RIH and perforate Niobrara "C" 6856-6866", "B" 6784-6802", "A" 6656-6666", all 4 spf - 120 pbs - 23 gram shot - .38 dia - 21.92 penetration, RD e-line, SI well, RDMO	9/14/2004																																								
9/17/2004	Opened flowback on a 20/64" choke. 3400# pressure.	9/18/2004																																								
9/18/2004	In approx 20 1/2 hrs produced 937 bbls. 3179 BLTR. 20/64" choke. 250# pressure.	9/19/2004																																								
9/19/2004	6 am 200# on a 20/64" choke. Produced 250 bbls. TLR - 1187, TLLTR - 2929. Well flowed back 1110 bbls H2O and 77 bbls oil. Final report. SI well to build to put down line.	9/20/2004																																								
10/17/2004	MIRU Action rig #4, leave well flowing up csg to sales, SDFN	10/18/2004																																								
10/18/2004	140# csg, blow well down, kill well w/50 bbls 2% KCL, ND WH, NU BOPs, PU 3 7/8" cone bit, TIH picking up tallying production tbg, tagged @ 6827' KB w/218 jts, POOH w/3 stands above Niobrara perms, SI well, SDFN	10/19/2004																																								
10/19/2004	100# tbg/110# csg, blow well down, TIH to tag point (6827' w/218 jts), RU to drill out CIBP, circulate sand off CIPB & drill up plug, push plug to PBSD (7040') w/226 jts, rolled hole clean, POOH w/tbg & tools, LD bit, PU seat nipple/notched collar, TIH w/production tbg, ND BOPs, land tbg, NU WH, made broach run to seat nipple, made 2 swab runs, IFL 2400', recovered 10 bbls, SI well, vacume/vacume, RDMO <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Tbg detail:</td> <td style="width: 35%;">10' KB</td> <td style="width: 35%;">10'</td> </tr> <tr> <td>212 jts 2 3/8" 4.7# J-55 8rd</td> <td>6640.50'</td> <td>6650.50'</td> </tr> <tr> <td>Seat nipple/Notched collar</td> <td>1.50'</td> <td>6652.00'</td> </tr> </table> EOT @ 6652' KB	Tbg detail:	10' KB	10'	212 jts 2 3/8" 4.7# J-55 8rd	6640.50'	6650.50'	Seat nipple/Notched collar	1.50'	6652.00'	10/20/2004																															
Tbg detail:	10' KB	10'																																								
212 jts 2 3/8" 4.7# J-55 8rd	6640.50'	6650.50'																																								
Seat nipple/Notched collar	1.50'	6652.00'																																								
10/20/2004	Move in Key Energy swab rig, swab rig backed into well head spotting in, bending tbg, csg & surface pipe, reports to follow on fixing well head @ Keys expense.	10/21/2004																																								
10/1/2006	MI, RUPU, pump & rig tank. WTP=200#, WCP=200#, bled down & killed well w/ 50 bbls KCL. ND the WH, NU x-over flange & the BOPs. RIH w/ 13-jts=410' of tbg, tag PBSD @ 7046' MD & lay down tag jts. TOH w/ 212-jts of tbg tallying. Secured the well & SDON.	10/2/2006																																								
10/2/2006	SIWP=100#, bled down the press & RU H-S Testing. Made up prod equip, TIH w/ tbg hydro testing to 7000# (found 1 hole @ 2800') RD H-S. RU the swab bottle & broached the tbg to the SN. Landed the tbg as follows= 2 3/8" API SN w/ notched collar & 218-jts 2 3/8" j-55 tbg to surface. ND the BOPs, x-over flange & NU the WH. Start swabbing, swabbed fluid level from 5300' down to 5500' & recovered 22 bbls. Secured the well & SDON.	10/3/2006																																								
10/3/2006	SITP=350#, SITP=350#. Bled off the tbg & started swabbing. Swabbed fluid level from 5500' down to 6000', the csg press fell to 50# & recovered 15 bbls of fluid. RDPU, pump, rig tank & MO equip. FINAL REPORT	10/4/2006																																								
7/8/2008	MIRU WOR tank & rig pump, Blow down tbg & kill w/ 15 bbls 2% KCL, ND WH, unland tbg, PU & tag fill w/ 132', LD tag jts. SWIFN.	7/9/2008																																								
7/9/2008	STP/SCP-0#: RU Pipe Renewal, TOOH scan o logging 218 jts 2 3/8" tbg, found 165-red 51-100%, 32 green-31-50% 21 blue-16-30% wall loss. RD scanners. (tagged fill @ 6970' 9' perms covered) PU 21 blue band tbg & RBP & new tbg, RIH, set BP @ 6598' w/ 209 jts. LD one jt. circulate 30 bbls drilling mud to tank. POOH w/ 10 stds, pour sand & pump 6 bbls to spot, TOH w/ 12 stds & SWIFN.	7/10/2008																																								



Well History

Well Name: Vetting 24-14

API 05123130680000	Surface Legal Location SESW 14 5N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,619.00	Original KB Elevation (ft) 4,629.00	KB Ground Distance (ft) 10.00	Spud Date 5/28/1986 00:00	Rig Release Date On Production Date

Daily Operations		
Start Date	Summary	End Date
7/10/2008	SP-0/0#: FTOH w/ retrieving head,PU 4 1/2" Arrow Set Pkr,RIH, deepest set @ 3480', Highest set @ 2208', find holes between 3313'-3344'. Set plr @ 3008' w/ 95 jts, establish rate @ 3-4 BPM & 600 PSI. SWIFWE.	7/11/2008
7/13/2008	SCP-60#: stand by for orders, SWI	7/14/2008
7/14/2008	Release Pkr,RIH w/ 6 jts,set pkr @ 3190' w/ 101 jts, load & pressure test casing to 1000 psi,good test. RU Halliburton Services,Pump 10 bbls fresh water spacer, pump 35 sxs 10.6# w/ 3% Calcium & 15 sxs 14.2# w/ 3% Calcium,flush w/ 13 bbls fresh water. Wait for 30 mins,pump 1/2 bbl,pressure 0 psi,wait 45 mins pump 1/4 bbl pressure is 320 psi, wait 45 mins pump 1/4 bbl pressure is 2050 psi, hold for 5 mins, bleed off pressure,RD Halliburton,Release pkr,POOH w/ tbg, close Blind Rams,pressure up casing to 500 PSI. SWIFN.	7/15/2008
7/15/2008	SCP-400#: Blow down casing, PU 3 7/8" blade bit,TIH w/ 90 jts 2 3/8" tbg,NU JU head. SDON.	7/16/2008
7/16/2008	TIH w/ 14 jts, tag cement @ 3256' KB,LD one jt,RU power swivel & break circulation,drill from 3256' to 3445' KB PU 3 more jts to 3540' KB circulate hole clean.RD swivel,Pressure test to 740 psi, bled off 50 psi in 15 mins, held on third try. Release pressure ND JU head,LD 8 jts,TOH w/ 104 jts + bit. SWIFN.	7/17/2008
7/17/2008	RU JW Wireline,RIH & shoot 4- .36" dia squeeze holes @ 440',RD wireline,ND x-over flange & BOPs, NU 4 1/2" frac valve,RU Halliburton Service,pump 20 bbls fresh water,establish rate @ 4 BPM & 210 psi,SD batch cement,pump 20 sxs 10.6# lead cement & 55 sxs 14.2#,drop wiper plug & displace w/ 6.4 bbls F.W.SI WH & casing.RD Halliburton	7/18/2008
7/20/2008	ND frac valve,NU x-over flange & BOPs.PU 4- 3 1/4" DC w/ bit + 9 jts 2 3/8" tbg,tag cement @ 400',LD one jt,NU JU head,NU power swivel,break circulation, drill from 400'-473', PU three more jts,circulate hole clean,RD swivel,pressure test casing to 750 psi,bleeds down to 740 psi in 15 mins.release pressure, ND JU,LD tbg,collars & bit. SWIFN.	7/21/2008
7/21/2008	RU JW Wireline, run CBL,hold 700 psi on casing, find TOC @ 310' (state requires cement from 430'-170')RIH & perforate 4 - .36" squeeze holes @ 285'. RD wireline,Shut blind rams,pump 3 to 4 BPM @ 500 psi. SWIFN.	7/22/2008
7/22/2008	ND x-over flange & BOPs,NU frac valve,RU Halliburton Services,load casing w/ one bbl,pump to establish rate of 2 BPM @ 90 psi. batch mix 60 sxs 50/50 Poz.@ 14.2# PPG pump @ 2 bpm & 95 psi.Displace w/ 5 bbls fresh water, to spot cement 5' above perms.SI casing & surface casing valves.RD Halliburton,SWIFN.	7/23/2008
7/23/2008	SCP-0#: ND frac valve,NU x-over flange & BOPs. PU 4- 3 1/4" DC w/ blade bit, tag cement @ 292' (7' below perms) load & pressure casing to 500 psi, lose 120 psi in 10 mins,try several times,release pressure, RU power swivel start to drill,falls through, circulate clean,PU 3 more jts to 412' KB ,did'nt tag,RD swivel,TIH to total of 50 jts to 1706',tag nothing,TOH w/ bit DC & tbg, RU JW Wireline,run CBL from 510' to surface, Found TOC @ 240',(state requires 170') RIH & perforate 4- .36" squeeze holes @ 230'. RD wireline, ND x-over flange & BOPs, NU frac valve establish rate of 3-4 BPM SWIFN.	7/24/2008
7/24/2008	RU Halliburton Services,Establish rate of 4 BPM & 56 psi, batch & pump 100 sks of 14.2# cement, displace w/ 4 bbls fresh water.Have cement to surface. Max press-200 psi SI surface casing & WH.RD Halliburton,SDFWE	7/25/2008
7/25/2008	ND frac valve,NU x-over flange & BOPs.PU bit & 4 DC + 3 2 3/8" tbg, tag cement @ 220'.NU JU & power swivel,break circulation,drill out 35' & fall through,run 11 jts to 346.81'circulate cementout,RD swivel & JU. Pressure test to 700 PSI,good test.LD 2 jts tbg & DC, RU JW Wireline, run CBL, have good bond from 440' to surface.RD wireline, TIH w/ bit & scraper,tag cement @ 220' RU swivel & ream 60', faql through.Tag again @ 3310', RU swivel,ream 60', keep running tbg, tag sand @ 6578',clean down to RBP,circulate clean,ND JU head & swivel,TOH w/ 120 jts. SWIFN.	7/26/2008
7/28/2008	SCP-0#: FTOH w/ tbg,break out cement in work tank, stand by for state. SWIFN	7/29/2008
7/29/2008	TIH w/ retrieving head & 209 jts tbg,NU JU, break circulation, clean top of plug,release RBP,ND JU,TOH w/ plug,RU H&S Testers, RIH w/ NC & SN ,hydrotesting 219 jts 2 3/8" tbg to 7000 psi, found one collar leak, RD tester tag fill @ 6973' w/ 221 jts, circulate clean to PBD @ 7046',LD 5 jts.ND x- over flange & BOPs, land tbg @ 6921.62' KB w/ 219 jts,NU swab bottle & run broach to SN.SWIFN.	7/30/2008
7/30/2008	RDMO WOR pupmp & tank,SCP-0#,STP-0# SFL-500': RU to swab well to production tank, start to swab 100% water,tbg & csg on vac after each run.ETP-vac,ECP-vac, FFL-3800' Made 17 runs, recovered 80 bbls	7/31/2008
7/31/2008	STP-0#,SCP-10#,SFL-4500':RU to swab well to production tank, start to swab,100% water,FL dropping after each run, no fluid entry by mid day, ETP-vac,ECP-0#, FFL-6000' Made 20 swab runs,Recovered 45 bbls	8/1/2008
8/1/2008	STP-0#,SCP-20#,SFL-5500':Ru to swab to production tank, start to swab, 100% water, by 10 am tbg on vac, well dry, SI one hour 0/30, last 2 runs dry.ETP-0#,ECP-30#,FFL-6100' Made 11 swab runs, recovered 10 bbls	8/2/2008
8/3/2008	STP-20#,SCP-280#,SFL-5500': RU & blow tbg to production tank. Start to swab, 100% water, runs 5,6, & 7 were dry.SI for one hr, fluid flow @ 300', run 9 & 10 were dry.csg broke & blew gas to 70 psi. Drop plg & SWI. ETP-blow,ECP-70#, FFL-6000' Made 12 swab runs & recovered 22 bbls.	8/4/2008
8/4/2008	STP-310#,SCP-360#,SFL-plg up, RU & blow tbg to production tank, fluid in 15 mins, plg up in 20. drop plg & SWI ETP-250# ECP-250# FFL-plg up	8/5/2008
9/27/2013	ITP-700 psi ICP-300 psi, ISCP-unable to record. Hold JSA meeting with all personel on location, MI&RU pump and tank. Pressure test hard lines to 1500 psi-good test, prepare to circualte oil and gas out of hole. Break reverse circulation controlling returns through ajustable choke. Circulated 1 1/2 hole volume @ 2 bpm @ 700 psi, total volume pumped was 192 bbls. Shut pump down and check for flow, tubing had small flow with gas cut fluid, continue reverse circulation, same results, possible tubing leak, decided to shut well in and let the gas migrate to surface over night. Remove large concrete chunk from Hwy 34 away from well head, back fill around well head, MI&RU Bayou Rig #008, SDFN.	9/27/2013



Well History

Well Name: Vetting 24-14

API 05123130680000	Surface Legal Location SESW 14 5N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,619.00	Original KB Elevation (ft) 4,629.00	KB-Ground Distance (ft) 10.00	Spud Date 5/28/1986 00:00	Rig Release Date On Production Date

Daily Operations

Start Date	Summary	End Date
9/28/2013	<p>SCP 100 psi, STP 100 psi, opened well to rig tank, blew down casing to 0 psi, blew tubing down to 0 psi, RU circulating equipment, broke circulation pumping down casing up tubing circulated well for 2 hours, rolling out all oil and gas, MIRU Iron Horse Welding (Crittter), held safety meeting, completed JSA, heated up tubing with torch just above tubing head, stood tubing up vertically, cut tubing off above tubing head, MIRU STS, PU 2 3/8" tubing sub and tubing spear dressed for 2 3/8" J-55 tubing, removed nut from tubing head, removed plated and rubber, torched tubing off just above tubing slips, speared into tubing, PU unlanded tubing at 45K, removed tubing slips, TOO H w/ one jts, LD jt onto ground LD spear and sub, install tubing slips into WH, NU BOP's, released welder, pressure tested and function tested BOP's, PU TOO H w/ 218 jts of 2 3/8" 4.7# J-55 production tubing to derrick, PU STS 3 7/8" bit and casing scraper, MIRU Pick Testers, TIH from derrick w/ tubing and tools, testing tubing in to 6000 psi, found no bad jts, all jts tested good, RD tester, EOT @ 6807.21' (151.21' below Nio "A" bench), RU circulating equipment, broke circulation, rolled hole clean, rolling out all oil and gas, TOO H standing back to derrick w/ 126 jts, LD 90 onto trailer provided by ATP, LD tools, Si and isolated well, dained lines, prepared for next day operaions. SDFN</p>	9/28/2013
9/29/2013	<p>STP 0 psi, SCP 0 psi, SSCP 0 psi, opened well to rig tank, MIRU Nabors Wireline, PU RMOR CIBP dressed for 4 1/2" 11.6# casing, TIH w/ wireline set cast iron plug, correlated with logs, set cast iron plug @ 6,600', TOO H LD setting tool, TIH w/ dump bailer and two sacks of cement, spotted cement on top of plug abandoning Codell/ Niobara formations, MIRU Scientific Drilling to run gyro, PU gyro tools, TIH w/ tools, gyro'd from 6550' to surface, TOO H w/ tools, RD Scientific Drilling, PU Nabors CBL tool, ran GR/CCL/CBL/VDL log from 6600' to surface, original cmt top @ 6348" , squeeze job cement from 3,364" to 2,840", squeeze job cement form 430' to surface, LD logging tool, RU rig pump, loaded hole, pressure casing to 500 psi, held for 15/m, good test, PU RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, shot squeezes holes @ 4000' 4spf (.36" holes), TOO H LD perf gun, PU wireline set retainer and 3 1/8" slickgun, TIH w/ tools, correlated cased/open logs getting on correct depth, set retainer @ 3405', PU spotting again at 3390', shot squeeze holes @ 3390' 4 spf (.36"), all shots fired, TOO H w/ wireline, LD tools, RD e-line, PU cement retainer stringer provided by STS, TIH from derrick w/ 104 jts plus tools, LD 22 jts onto trailer provided by ATP, leaving EOT @ 3291.21' (113.79' above retainer) SI and isolated well, drained lines, prepared for next day operations. SDFN</p>	9/29/2013
9/30/2013	<p>STP 0 psi, SCP 0 psi, SSCP 0 psi, TIH w/ tubing, stung into retainer, did not need to sub up, stung in setting tubing 3' above rig floor. RU rig pump, pumped attempting to establishing circulation, establishing circulation for only two mins, then lost circulation, pumped 90bbls of Biocide/Claytreat water down tubing through retainer, into casing and out of bottom holes @ 4000', unable to circulate, continued pumping down tubing for another 40 bbls, pumping total hole volume @ 2.1 bmp rate @ 1400 psi, worked pump up to 2.5bpm rate @ 1800 psi, no circulation, shut pump down, pump held 1000 psi pressure, Sussex/Parkman formation appearing to drink fluid, but formation never broke down hold constant at 1000 psi, opened tubing to rig tank, tubing started flowing back, PU stung out of retainer, flow stopped, pumped down 4 1/2" casing up tubing establishing circulation after 2bbls pumped, shut tubing, pumped into casing pumping into top holes at 3390', pumped 15 bbls @ 2bpm rate @ 800 psi, upper holes are open, stung back into retainer, attempted to circulate again down tubing, unable to circulate, attempted process over and over down tubing, down casing, no success, believed to be mud bridge in annulus between lower and upper squeeze holes, pumped a total of 210 bbls into well bore, opened tubing to tank flowed back 60 bbls back balancing well</p> <p>MI&RU Baker Hughes Cement Services to 2 3/8" 4.7# J-55 8rd EUE, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Pumped 10 bbl fresh water spacer</p> <p>Mixed and pumped 10 bbl pill of calcium water, 1 bbl fresh water spacer, 10 bbl pill of Sodium Metasilicate and 16 bbls of fresh water overing displacing tubing by 3 bbls, pumping fluid lose materials into well bore attempting to seal off Sussex/Parkman formations. Shut 5 mins, pumped 10 bbls of fresh water at 2 bpm rate @ 1150 psi attempting to establish circulation, no circulation, formation still taking fluid, shut down 10 mins (continued)</p>	9/30/2013
9/30/2013	<p>(continued), pumped another 10 bbls, sill no circulation, formation still taking fluid, shut 30mins, pumped another 10 bbls, no circulation, shut down 1 hour, pump 30 bbls (hole volume again), still no circulation. RD Baker Hughes, Si and isolated well, drained lines, install TIW valve, reported to State speaking with Diana Burn our efforts to establish circulation, State desided to change P&A orders from sucide squeeze to pumping 500' cement plug otop of retainer inside 4 1/2" casing sealing up squeeze holes and from 500' to surface inside 4 1/2" casing, prepared for next days operations, SDFN</p>	9/30/2013



Well History

Well Name: Vetting 24-14

API 05123130680000	Surface Legal Location SESW 14 5N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,619.00	Original KB Elevation (ft) 4,629.00	KB Ground Distance (ft) 10.00	Spud Date 5/28/1986 00:00	Rig Release Date
On Production Date				

Daily Operations

Start Date	Summary	End Date
10/1/2013	<p>STP 0 psi, SCP 0 psi, SSCP 0 psi, PU stung out of retainer, RU circulating equipment, broke circulation, rolled hole clean.</p> <p>MI&RU Baker Hughes Cement Services to 2 3/8" 4.7# J-55 8rd EUE, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 10 bbl fresh water to establish circulation</p> <p>1st stage:EOT set @ 3400' w/108 jts and tools, mix, batch, and pump 25 sks, Premium Lite 12.5 ppg 1.89 yield (8 bbls) Displace 10.0 bbls balancing plug, Broke Baker off of WH, TOO H w/ 92 jts tubing LD onto trailer provided by ATP, stood back 16 jts, LD stinger, TIH w/ 16 jts tubing,</p> <p>RU Baker Hughes Cement Services to 4 1/2" production casing, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 10 bbl mud flush to establish circulation rolling hole clean</p> <p>2nd stage EOT @ 506.99'w/16 jts, mix, batch, and pump 29 sks, Type III 14.0 ppg 1.53 yield (8 bbls), 8 bbls cement returns to tank, Displace .5 bbls fresh water, Broke Baker off of WH, TOO H LD 14 jts, leaving 2 jts in hole, chained tubing to BOP's, RU baker to tubing, topped off w/ 5 bbls cement, total cement returns to tank 13 bbls, Broke Baker off of tubing, RD Baker Hughes MOL, SI and isolated well, drained lines, prepared for next day operations, SDFN</p>	10/1/2013
10/3/2013	<p>0 psi @ WH, PU 300' tape measure and plumb bob TIH tagging cement at 3.5", MIRU roustabouts, dug around well head, MIRU welder, attempted to cut off 8 5/8" surface casing 6' below ground level, unable to, surcase casing had pressure, bled off pressure, gas monitors shows heavy signs of gas present, rigged up hard line, spotted in 500 bbl frac tank provided by ATP, installed adjustable choke, opened surface casing through 18 choke venting gas to frac tank over weekend. SDFWE</p>	10/3/2013
10/7/2013	<p>Shut surface casing and production casing, broke off hard lines and manifold, opened surface casing, once again surface was building and holding pressure, installed pressure guage on surface, monitored pressure in five minutes increments for one hour, pressure climbed to and stabilized at 155 psi. MIRU B&J Hot Oilers, rigged up onto surface casing, attempted to pump into surface casing, pumped .25 bbl, surface pressured up to 500 psi, monitored pressure, pressure dropped to 300 psi after 20 mins, held 300 psi for 30 mins, bled off pressure, RD Hot Oiler, Notified State, left well shut in, waiting on state orders. SDFN</p>	10/7/2013
10/9/2013	<p>Opened surface casing to vent through hard lines through 20/64 choke to frac tank, MIRU Great White pressure control to hot tap surface casing to release trapped pressure, MIRU welder to install weldolet, decided not to hot tap, surface casing full of cement to at least 7' below ground level. SCP 0 psi, SSCP 155 psi, MIRU Bayou 008, blew well down to rig tank, ND WH, NU BOP, PU 3 7/8" cone bit, bit sub, 3 1/2" 26 lbs/f drill collar all provided by STS, TIH w/ drill collar and tools tagging cement at 3.5', PU power swivel, RU circulating equipment, started circulating and rotating drilling out cement job inside of 4 1/2" casing, drilled rest of day drilling down to 210' w/ 6 drill collars and 1 jts 2 3/8" 4.7# tubing, rolled hole clean, SI and isolated well, drained line, prepared for next day operations. SDFN.</p>	10/9/2013
10/10/2013	<p>SCP 0 psi, STP 0 psi, ISCP 0 psi (open venting to frac tank), PU power swive and circulaing equipment, continued drilling out cement falling through @ 503.21' w/ 6 drill collars, 10 jts 2 3/8" tubing and tools, PU 2 more jts of tubing, no tag, rolled hole clean, LD power swivel and circulating equipment, TOO H standing back w/ tubing, LD drill collars and tools, PU NC/SN TIH w/ tubing to 1403.25' w/ 45 jts tubing, rolled hole clean, TOO H LD 5 jts, stood back 40 jts to derrick, MIRU NAbors wireline, PU STS CIBP dressed for 4 1/2" 11.6# casing, TIH w/ wireline set cast iron plug, correlated with logs, set cast iron plug @ 1,200', TOO H LD setting tool, RDMOL Wireline, TIH w/ tubing from derrick, tagged CIBP @ 1200.31' w/ 38 jts, RU circulating equipment, rolled hole clean, TOO H standing back w/ 14 jts, LD onto trailer provided by ATP w/ 26 jts, SI and isolated well, drained lines, prepared fro next day operations. SDFN.</p>	10/10/2013
10/11/2013	<p>SCP 0 psi, ISCP 0 psi (open venting to frac tank), load 4 1/2" w/ water from rig tabnk, pressure test casing to 500 psi, held for 15 mins, good test, released pressure, MIRU Nabors Wireline, PU RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, shot squeezes holes @ 1000' 4spf (.36" holes), TOO H LD perf gun, PU wireline set retainer and 3 1/8" slickgun, TIH w/ tools, correlated cased/open logs getting on correct depth, set retainer @ 510', PU spotting again at 495', shot squeeze holes @ 495' 4 spf (.36"), all shots fired, had immediate pressure in 4 1/2" after upper squeeze holes were shot, pressure chased wirelin tools out of hole, TOO H w/ wireline to surface, opened well to rig tank blew down pressure in 4 1/2', estimate pressure @ 500 +/-, LD tools, RD e-line, well continued flowing to rig tank, surging gas and fluid, continued flowing to tank bring back light drilling mud, ran hard line to frac tank flowed well through 30/64" choke to frac tank over week end, shut and locked BOP's, drained lines, prepared for next day operations. SDFWE</p>	10/11/2013



Well History

Well Name: Vetting 24-14

API 05123130680000	Surface Legal Location SESW 14 5N 65W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,619.00	Original KB Elevation (ft) 4,629.00	KB-Ground Distance (ft) 10.00	Spud Date 5/28/1986 00:00	Rig Release Date On Production Date

Daily Operations		
Start Date	Summary	End Date
10/14/2013	<p>ICP 0 psi, opened flowing to frac tank, well surging light gas and little to no fluid, Select Services delivered out 100 bbl 10# drilling mud from drilling rig, RU circulating equipment, pumped 10# mud down 4 1/2" casing, pumped 10 bbls away casing pressured up to 500 psi, opened casing back to rig tank, well flowed back 3 bbls of mud, well stopped flowing, PU TIH w/ STS retainer stinger and 16 jts 2 3/8" 4.7# J-55 tubing, installed TIW valve, stung into retainer, setting tubing 5' above rig floor. opened TIW, tubing had pressure, bled pressure off to rig tank, RU rig pump, pumped establishing circulation with 10# drilling mud, circulated w/ mud for 3.5 hours, bringing bottoms up four balancing well bore, no gas present after initial 30 mins of circulating,</p> <p>MI&RU Halliburton Cement Services to 2 3/8" 4.7# J-55 8rd EUE, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 10 bbl of mud flesh establishing circulation</p> <p>1st stage:EOT set @ 510' w/16 jts and tools, mix, batch, and pump 205 sks, Varicem 12.0 ppg 2.18 yield (77 bbls), 10 bbls cement returns to tank, Displace 1 bbls fresh water, Broke Halliburton off of WH, PU stinging out of retainer, pressure to 50 psi, opened tubing back to Halliburton pump truck, pressure bled off to 0 psi TOO H w/ tubing LD onto ground, LD stinger, TIH w/ 2 jts of tubing, chained tubing down to BOP's, RU Halliburton, mix and batched 4 bbls of Varicem 12.0 ppg, 2.18 yield topping off well, bringing back 3 bbls of cement returns, Displace .5 bbls fresh water, Broke Halliburton off of WH, RD Halliburton MOL, SI and isolated well, drained lines, prepared for next day operations, SDFN</p>	10/14/2013
10/15/2013	<p>0 psi @ WH, Ran plumb bob and 300' tape tagging cement top at 17', installed gauge onto surface casing order by COGCC, surface built to 120 psi afer 1.5 hours, hooked up hard line to frac tank, opened surface casing to frac tank to vent and to montior for one week orders from COGCC, racked pump and tank, RDMOL.</p>	10/15/2013
11/14/2013	<p>SCP 0 psi, SSCP 155 psi, MIRU Bayou 008, blew well down to rig tank, ND WH, NU BOP, PU 3 7/8' cone bit, bit sub, 3 1/2" 26 lbs/f drill collar all provided by STS, TIH w/ drill collar and tools tagging cement at 3.5', PU power swivel, RU circulating equipment, started circulating and rotating drilling out cement job inside of 4 1/2" casing, drilled rest of day drilling down to 311' w/ 6 drill collars and 4 jts 2 3/8" 4.7# tubing, rolled hole clean, SI and isolated well, drained line, prepared for next day operations. SDFN.</p>	11/14/2013
11/15/2013	<p>SCP 0 psi, ISCP 0 psi (open venting to frac tank), load 4 1/2" w/ water from rig tank, MIRU Nabors Wireline, install high pressure lubricator bolting flange to BOP's, PU RIH w/ CBL tool, correlated cased/open hole logs getting on correct depth, ran CBL from 310' to surface, TOO H LD CBL tool, PU RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, shot squeezes holes @ 300' 2spf (.36" holes), PU placing perf guns into lubricator, shut blind rams, RU rig pump, starting pumping down casing establishing injection rate of .6bbls/min @ 700 psi, shut down pump, released pressure, opened blinds, TIH spotting perf guns @ 256', shot squeezes holes @ 256' 2spf (.36" holes), PU spotted guns @ 230', shot squeezes holes @ 230' 2spf (.36" holes), PU placing perf guns into lubricator, shut blind rams, released pressure from lubricator, RD wireline moved off of location, opened casing to work tank, 0 psi had some flow to tank for 2 mins, PU TIH w/ 10 jts 2 3/8" 4.7# J-55 tubing tagging cement at 310', LD jt # 10, PU 10 tubing sub, placing EOT @ 300', set collar of sub below pipe rams shut rams, chained tubing to BOP's, MI&RU Baker Cement Services to 2 3/8" 4.7# J-55 8rd EUE, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 5 bbl of fresh water establishing circulation</p> <p>1st stage:EOT set @ 300' w/9 jts, 1-10 and tools, mix, batch, and pump 300 sks, G&E 15.8 ppg 1.15 yield (61 bbls), pump 40 bbls of cement injecting into squeeze holes, opened casing valves, filling casing w/ cement bringing back 6 bbls to tank, disp .5 bbls, broke off Baker, TOO H LD w/ tubing, ND BOP's, hooked Baker onto 4.5" casing pumped an additional 15 bbls bull heading down casing into squeeze holes, disp .5 bbls, broke off Baker, Si and isolated well. Monitored surface casing entire job, 0 psi. SDFWE</p>	11/15/2013
11/19/2013	<p>0 psi @ WH, Ran plumb bob and 300' tape tagging cement top at 3', MIRU roustabouts, dug around well head, MIRU welder, MIRU 2 Magna 130bbl transports, 1 Devoe 150bbl transport, 1 ATP 130bbl transport and 1 80bbl ATP bobtail plus trash pump from Ensign and 2 500 bbl frac tanks from ATP, pump a total of 1700 bbls of water from bell hole to be able to cut and cap, cut off 8 5/8" surface casing and 4 1/2" production casing 6' below ground level, welded cap onto surface casing, RD welder, backfilled burying capped casing. RD roustabouts. FINAL REPORT</p>	11/19/2013

CEMENT JOB REPORT



CUSTOMER PETROLEUM DEVELOPMENT		DATE 15-NOV-13	F.R. # 10011027405	SERV. SUPV. JOHN R WUDARCZYK	
LEASE & WELL NAME VETTING #24-14 - API 05123130680000		LOCATION 14-5N-65W		COUNTY-PARISH-BLOCK Weld Colorado	
DISTRICT Brighton		DRILLING CONTRACTOR RIG # W/O		TYPE OF JOB Plug & Abandon	
SIZE & TYPE OF PLUGS	LIST-CSG-HARDWARE	MECHANICAL BARRIERS	MD	TVD	HANGER TYPES MD TVD
	No Shoe				
	NA-P&A				

MATERIALS FURNISHED BY BJ	LAB REPORT NO.	PHYSICAL SLURRY PROPERTIES						
		SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT ³	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER
Fresh Water		0	8.34	0	0	00:00	0.5	
Calcium Chloride H2O		0	8.3	0	0	00:00	0	
Plug 1		300	15.8	1.15	5	04:00	61.4	35.69
Fresh water spacer		0	8.3	0	0	00:00	5	
Sodium Chloride Water		0	8.3	0	0	00:00	0	
Fresh Water Spacer		0	8.3	0	0	00:00	0	
Available Mix Water	130 Bbl.	Available Displ. Fluid	80 Bbl.	TOTAL			66.9	35.69

HOLE			TGB-CSG-D.P.							COLLAR DEPTHS		
SIZE	% EXCESS	DEPTH	ID	OD	WGT.	TYPE	MD	TVD	GRADE	SHOE	FLOAT	STAGE
7.875	0	262	4	4.5	11.6	CSG	302	302	N-80	0	0	0

LAST CASING				PKR-CMT RET-BR PL-LINER				PERF. DEPTH		TOP CONN		WELL FLUID	
ID	OD	WGT	TYPE	MD	TVD	BRAND & TYPE	DEPTH	TOP	BTM	SIZE	THREAD	TYPE	WGT.
8.1	8.63	24	CSG	415	415	NO PACKER	0	230	302	2.375	BRND	WATER BASED	8.4

DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TGB PSI		MAX CSG PSI		MIX WATER
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED	Operator	RATED	Operator	
0.5	BBLs	Fresh Water	8.34	0	0	1000	8960	1000	6224	1000	TRANSPORT

Circulation Prior to Job

Circulated Well: Rig BJ Circulation Time: .5 Circulation Rate: 1 BPM

Mud Density In: 8.4 LBS/GAL Mud Density Out: 8.4 LBS/GAL PV & YP Mud In: 0 PV & YP Mud Out: 0

Gas Present: NO YES Units: Solids Present at End of Circulation: NO YES

Displacement And Mud Removal

Displaced By: Rig BJ Amount Bled Back After Job: 0 BBLs

Returns During Job: NONE PARTIAL FULL Method Used to Verify Returns: VISUAL

Cement Returns at Surface: YES NO Were Returns Planned at Surface: NO YES

Pipe Movement: ROTATION RECIPROICATION NONE UNABLE DUE TO STUCK PIPE

Centralizers: NO YES Quantity: Type: BOW RIGID

Job Pumped Through: CHOKE MANIFOLD SQUEEZE MANIFOLD MANIFOLD NO MANIFOLD

Plugs

Number of Attempts by BJ: 1 Competition: 0 Wiper Balls Used: NO YES Quantity:

Plug Catcher Used: NO YES Parabow Used: NO YES

Was There a Bottom: NO YES Top of Plug: 0 FT Bottom of Plug: 302 FT

Squeezes (Update Original Treatment Report for Primary Job)

BLOCK SQUEEZE SHOE SQUEEZE TOP OF LINER SQUEEZE PLANNED UNPLANNED

Liner Packer: NO YES Bond Log: NO YES PSI Applied: 657 Fluid Weight: 15.8 LBS/GAL

Casing Test (Update Original Treatment Report for Primary Job)

Casing Test Pressure: 0 PSI With 0 LBS/GAL Mud Time Held: 00 Hours 00 Minutes

EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NONE

CEMENT JOB REPORT



Shoe Test (Update Original Treatment Report for Primary Job)

Depth Drilled out of Shoe: 0 FT	Target EMW: 0 LBS/GAL	Actual EMW: 0 LBS/GAL
Number of Times Tests Conducted: 0	Mud Weight When Test was Conducted: 0 LBS/GAL	

Problems Before Job (I.E. Running Casing, Circulating Well, ETC)
 PRIOR TO JOB DISCUSSED WITH CO MAN JOB PROCEDURES, DID NOT PUMP FLOW GUARD SPACER OR ADD CACL TO CEMENT BLEND, MIXED AT 15.8 PPG PER CUSTOMER REQUEST.

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)
 NONE

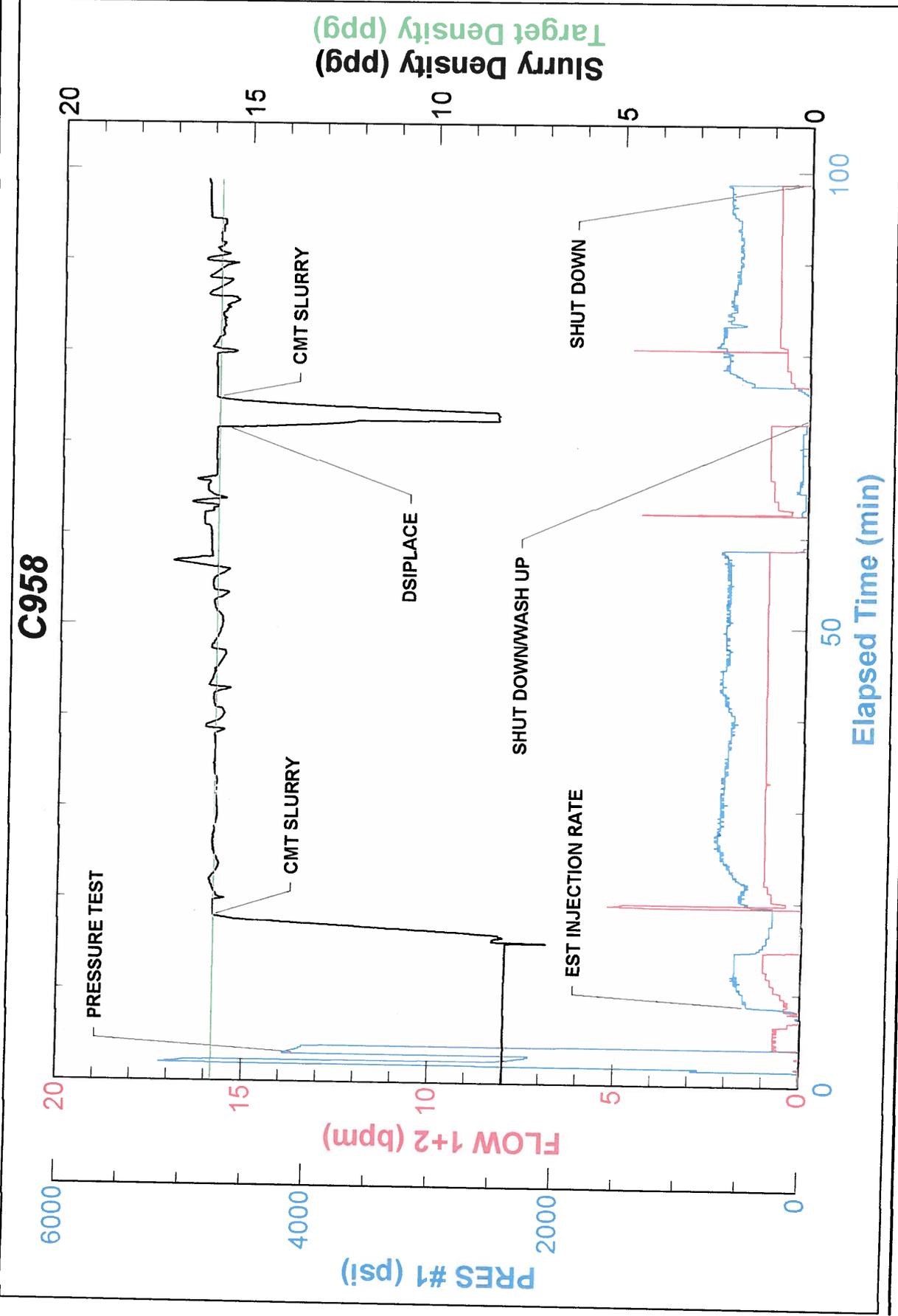
Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)
 NONE

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	4100 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/> BJ <input type="checkbox"/>	
08:45	0	0	0	0	0	ARRIVE ON LOCATION (33 MILES)	
09:30	0	0	0	0	0	PRE RIG UP SAFETY MEETING	
10:12	0	0	0	0	0	PRE JOB MEETING	
10:22	4100	0	0	0	H2O	PRESSURE TEST PUMPS AND LINES	
10:30	532	0	1	5	H2O	ESTABLISH INJECTION RATE	
10:40	703	0	1	48.5	CMT	BATCH UP AND PUMP 236 SKS CLASS G @ 15.8#	
11:33	40	0	1	.5	H2O	DISPLACE	
11:34	0	0	0	0	H2O	SHUT DOWN / WASH UP	
12:19	657	0	.8	16	CMT	BATCH UP AND PUMP 78 SKS CLASS G @ 15.8#	
12:42	0	0	0	0	H2O	SHUT DOWN / WASH UP	
13:00	0	0	0	0	0	POST JOB RIG DOWN SAFETY MEETING	

BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	Service Supervisor Signature:
Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 0		Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 5		70	115	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	<i>John R. Windsor</i>



Baker Hughes JobMaster Program Version 3.60
Job Number: 10011027405
Customer: PDC
Well Name: VETTING #24-14





NABORS

FIELD TICKET No. 15 - 21949

PLEASE REMIT TO:
NABORS COMPLETION & PRODUCTION SERVICES CO.
P.O. BOX 975682
DALLAS, TX 75397-5682
435-725-5344

DELIVERED FROM _____

DATE 11-15-13

INVOICE NO.	P.O. NO.	AFE NO.
CUSTOMER NO.	LEASE <u>Vetting 21-14</u>	WELL NO.
CUSTOMER <u>P.D.C.</u>	FIELD <u>Wittulby</u> STATE <u>CO</u>	COUNTY <u>Weld</u>
ADDRESS	LOCATION <u>Hwy 31 & Old Hwy 34</u>	
CITY	CASING SIZE & WT. <u>4 1/2"</u>	TBG. SIZE
STATE	ZIP	TYPE OF JOB <u>Perf</u>

ORDERED BY <u>Sailer</u>	TITLE	SERVICE SUPV.
---------------------------------	--------------	----------------------

PART NO.	DESCRIPTION	REV. CODE	QTY.	UNIT PRICE	DISC.	AMOUNT
45-70-212-0200	CBL Pipe Change			\$1.30/ft		NC
45-70-214-0200	CBL CPS Change			\$1.30/ft		NC
45-70-255-0100	Perf. cfl					\$400 ⁰⁰
45-70-255-1110	Lubricator					\$900 ⁰⁰
45-70-299-0050	Squeeze Gun 4shots 300'-302'					\$1000 ⁰⁰
45-70-299-0050	Squeeze Gun 4shots 254'-256'					\$1000 ⁰⁰
45-70-299-0050	Squeeze Gun 4shots 230'-232'					\$1000 ⁰⁰
45-75-815-1111	Select Fire		3	\$150 ⁰⁰		\$450 ⁰⁰
45-70-200-9998	Fuel Charge					\$140 ⁰⁰
	<u>Thru the Chock</u>					\$4890 ⁰⁰
						<u>Sub 15.34% - \$750⁰⁰</u>

CALLLED OUT	ON LOCATION	COMPLETED	TOTAL SERVICE & MATERIALS
Time _____	Time _____	Time _____	TAX % _____ ST. TAXABLE AMT. _____
Date _____	Date _____	Date _____	TOTAL CHARGES <u>\$4140⁰⁰</u>

WITH MY INITIALS, I CONFIRM THAT THE TIME SHOWN IN THE "HOURS" COLUMN, ACCURATELY REFLECTS MY COMPENSABLE TIME.

Employee Name (Print)	Hours	Initials	Employee ID No.
<u>Judy Eric S</u>			
<u>Shau K.</u>			

I was not injured, involved in or witness to an accident during the performance of this work. If an injury or accident occurred a signature is not to be provided. The injury or accident is to be reported to the supervisor so that a report can be prepared.

I hereby attest that my employer Nabors Completion & Production Services Co. did permit me to eat while working.

***ACCIDENT REPORT MUST BE ATTACHED WHEN NOT SIGNED**

CUSTOMER AGREES to pay Nabors Completion & Production Services Co. (the "Company") on a net 30 day basis from date of invoice. If Customer disputes any item invoiced, Customer shall, within 20 days after receipt of invoice, notify the Company of the item(s) disputed, specifying the reason(s) therefor; payment of the disputed item(s) may be withheld until settlement of dispute, but payment of undisputed portion of invoice shall be made without delay. All payments shall be made at the address shown on the reverse side of this document. In the absence of a separate written contract, CUSTOMER REPRESENTATIVE REPRESENTS AND WARRANTS THAT HE/SHE IS AUTHORIZED TO ENTER INTO THIS AGREEMENT ON BEHALF OF CUSTOMER AND ACCEPTS ALL TERMS AND CONDITIONS AS PRINTED ON THE REVERSE SIDE OF THIS DOCUMENT (WHICH INCLUDES INDEMNITY LANGUAGE THAT ALLOCATES RISKS RELATED TO THE ABOVE DESCRIBED SERVICES). Pricing and extensions, if shown above, are subject to verification and correction at time of invoicing.

X [Signature]
NABORS COMPLETION & PRODUCTION SERVICES CO.

X [Signature]
CUSTOMER REPRESENTATIVE

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2377515	Quote #:	Sales Order #: 900814219
Customer: PDC ENERGY EBUS		Customer Rep: SAILORS, CHAD	
Well Name: Vetting	Well #: 24-14	API/UWI #: 05-123-13068	
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: Weld	State: Colorado
Contractor: WORKOVER		Rig/Platform Name/Num: Workover	
Job Purpose: Squeeze Perfs			
Well Type: Development Well		Job Type: Squeeze Perfs	
Sales Person: PLIENESS, RYAN		Srvc Supervisor: OTERI, VAUGHN	MBU ID Emp #: 443828

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
DORFMAN, BRIAN	0.0	524637	JEWELL, WILLIAM Uris	0.0	503358	KADIR, ZAM	0.0	123456
MULLER, MICHEL B	4.5	529830	OTERI, VAUGHN Steeves	4.5	443828	PRUDHOMME, JOSH	0.0	548040
WHIPPLE, WESLEY Morgan	4.5	518611						

Equipment

HES Unit #	Distance-1 way						
10829457	35 mile	10866497C	35 mile	10866497C	35 mile	11488570C	35 mile
11562570C	35 mile	11605597	35 mile	11812069C	35 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
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
				On Location	11 - Oct - 2013	07:00	MST
Form Type			BHST	On Location	11 - Oct - 2013	10:30	MST
Job depth MD	1000. ft		Job Depth TVD	Job Started	11 - Oct - 2013	12:03	MST
Water Depth			Wk Ht Above Floor	Job Completed	11 - Oct - 2013	13:54	MST
Perforation Depth (MD)	From 4,600.00 ft	To 5,200.00 ft		Departed Loc	11 - Oct - 2013	15:00	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
10" Open Hole				10.				226.	7040.		
12.25" Open Hole				12.25				.	226.		
4 1/2"	Unknown		4.5	4.	11.6			.	7040.		
8 5/8" Surface Casing	Unknown		8.625	8.097	24.			.	226.		
Retainer	Unknown		3.5	2.992	9.3			480.	481.		
Tubing	Unknown		2.375	1.995	4.7	8 RD	J-55	.	480.	.	480.
Perforation Interval								470.	1000.	470.	1000.

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				510	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 ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	VariCem 12.#	VARICEM (TM) CEMENT (452009)	205.0	sacks	12.	2.18	12.33		12.33
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns	0	Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns	10	Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
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

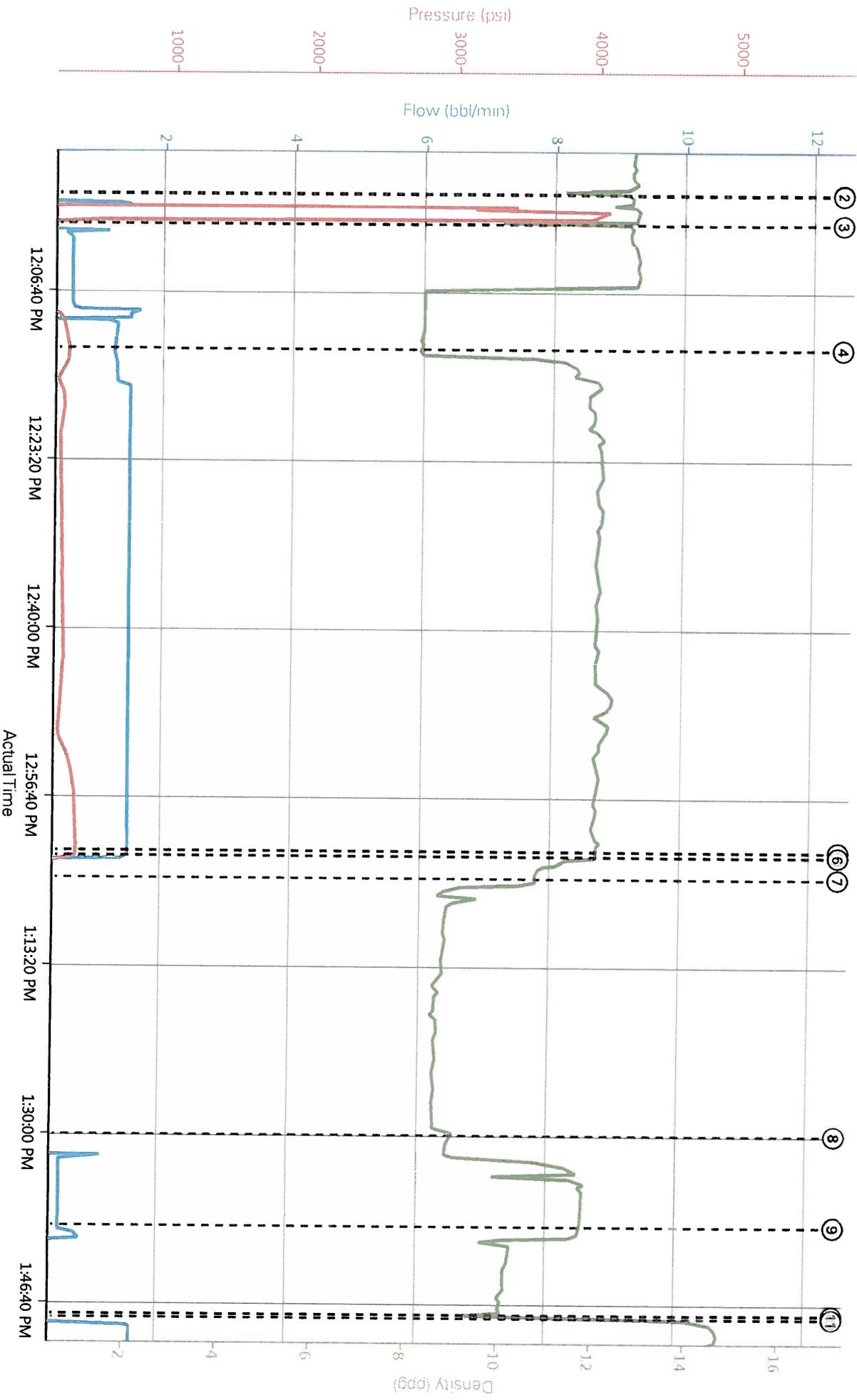
Sold To #: 304535	Ship To #: 2377515	Quote #:	Sales Order #: 900814219
Customer: PDC ENERGY EBUS		Customer Rep: SAILORS, CHAD	
Well Name: Vetting	Well #: 24-14	API/UWI #: 05-123-13068	
Field: WATTENBERG	City (SAP): GREELEY	County/Parish: Weld	State: Colorado
Legal Description:			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: WORKOVER		Rig/Platform Name/Num: Workover	
Job Purpose: Squeeze Perfs			Ticket Amount:
Well Type: Development Well		Job Type: Squeeze Perfs	
Sales Person: PLIENESS, RYAN		Srvc Supervisor: OTERI, VAUGHN	MBU ID Emp #: 443828

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Arrive at Location from Service Center	10/14/2013 10:15							ARRIVE ON LOCATION EARLY TALK WITH CHAD ABOUT JOB PROCESS AND HAZARD DUE TO AREA
Safety Meeting	10/14/2013 11:30							HELD SAFTY MEETING WITH EVERYONE ON LOCATION TO DISCUSS PROCESS AND HAZARDS
Start Job	10/14/2013 12:03							
Test Lines	10/14/2013 12:03						3980.0	PRESSURE TESTED PUMPS AND LINES FOUND NO LEAKS AND PRESSURE HELD GOOD
Pump Spacer 1	10/14/2013 12:06		0.5	10			75.0	MIXED MUD FLUSH WITH FRESH WATER
Pump Cement	10/14/2013 12:18		1.5	73			263.0	MIXED 12.0PPG VARICEM WITH FRESH WATER
Pump Displacement	10/14/2013 13:08		1.5	1			320.0	PUMPED 1.0BBL OF FRESH WATER TO CLEAN LINES
Shutdown	10/14/2013 13:08							SHUT DOWN SO THAT RIG CREW CAN PULL 19 JOINTS OF TUBING
Pump Cement	10/14/2013 13:36		0.5	4			20.0	PUMPED REMAINING CEMENT IN TUB TO TOP OUT HOLE
Pump Displacement	10/14/2013 13:40		0.5	0.5			20.0	PUMPED .5 BBL TO CLEAN LINES
Shutdown	10/14/2013 13:54							

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
End Job	10/14/2013 13:54							

PDC VETTING 24-14



Comb Pump Rate (bbl/min) DH Density (ppg) PS Pump Press (psi)

- ① Start Job 0:12:76:3
- ② Test Lines 0:12:7:3
- ③ Pump Spacer 1 0:12:75:12
- ④ Pump Cement 1:2:8:23:262
- ⑤ Pump Displacement 1:5:12:07:325
- ⑥ Shutdown 0:11:37:228
- ⑦ Other 0:10:77:6
- ⑧ Pump Cement 0:9:04:3
- ⑨ Pump Displacement 0:5:11:78:7
- ⑩ Shutdown 0:13:53:16
- ⑪ End Job 0:14:45:17



SUPERIOR WELL SERVICES

SALES AND SERVICE FIELD TICKET

TICKET NO. 45- **009440**

SERVICE DATE **10/11/13**

TICKET PAGE _____ of _____

0903 Master Field Ticket

CHARGE TO PDC	LEASE NAME OR PROJECT Welling 24-14		
ADDRESS	COUNTY Weld	STATE CO	
	FIELD WaHenberg	WELL PERMIT NUMBER	
OWNER	SERVICE ENGINEER Greg Nolas		

PURCHASE ORDER / REFERENCE	JOB TYPE 2 CBL, 597 Guns, Plus	CALLED OUT TIME 6:30	ON LOCATION TIME 6:30	COMPLETED TIME 10:30
		DATE 10/11	DATE 10/11	DATE 10/11

SIGNATURE of CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT NAME HERE) **X** *[Signature]* **ZCNS3**

I have read, understood and agreed to the terms and conditions printed on the reverse side hereof which include, but are not limited to, LIMITED WARRANTY, INDEMNITY, RELEASE and PAYMENT and represent that I have full power and authority to execute this agreement.

LOC	PRICE REFERENCE	AMOUNT	DESCRIPTION	UNIT COST	TOTAL COST
45	70 210 1000	1	CBL Service Charge	1500	1500 ⁰⁰
45	75 865 1005	1	SQZ Gun Min	1600	1600 ⁰⁰
45	70 299 3000	1	Set 3 rd Party Retainer	2400	2400
45	70 255 0100	1	Pack-off	400	400 ⁰⁰
45	70 200 9998		Fuel Surcharge	3.5%	192.50
45	75 865 1005	1	SQZ Gun Min	1600	1600 ⁰⁰
			4 holes @ 1000'		
			4 holes @ 495		
			Retainer @ 510		

Thank you

Stroppel, Sachet

CUSTOMER OR AGENT SIGNATURE X <i>[Signature]</i> ZCNS-3	<p>Unless satisfactory credit terms have been established prior to services payment in advance may be required. All invoices rendered for services performed by Superior Well Services shall be paid as indicated on the invoice within thirty (30) days from date of receipt. If not paid within thirty (30) days the unpaid amount is subject to interest at one and one half percent (1 1/2%) per month (eighteen percent per annum). All discounts indicated on the invoice are based upon payment within the invoice payment term and are subject to being cancelled by Superior Well Services if not paid within terms. If it should be necessary to employ an attorney to collect the amount due, you will be held liable for attorneys' fees and collection costs. Superior Well Services, price book is incorporated herein by reference, which also contains all invoice payment terms.</p>	<p>Subtotal 7692.50</p> <p>Discount - 2000⁰⁰</p> <p>Bal Due → \$5692.25</p>
--------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------

WALTER CORPORATION

Walter Corporation, LLC 33250 CR 53 Gill, CO 80624

Office: 970.301.2028

Fax: 970.284.6682

Field Ticket # 10233
Date 10/1/2013

10233

Bill To Customer:	P D C	PO#	Lease Name:	Vetting	Well #	24-14
Address:	3801 Carson Ave	County:	Weld	St:	CO	Invoice \
City:	Evans	Job Type:	OCSG #:			
State:	CO	Zip:	Casing Sz & Wt:			
Ordered By:	80620	Legal Description:	Service Man			

NO.	RENTALS/SALES	QTY	PRICE	DSC	TOTAL
1	Sale of 4-1/2 D & H CIBP	1	1,100.00		\$1,100.00
2					0.00
3					0.00
4					0.00
5					0.00
6					0.00
7					0.00
8					0.00
9					0.00
10					0.00
11					0.00
12					0.00
13					0.00
14					0.00
Subtotal Taxable Charges					\$1,100.00

SERVICE MANS TIME					
					\$0.00
					0.00
					0.00
					0.00
Subtotal Non-Taxable Charges					\$0.00

MILEAGE					
					\$0.00
					0.00
					0.00
					0.00
Subtotal Non-Taxable Charges					\$0.00

Terms: Net 30 Days

Total Service & Material: \$1,100.00

Tax: \$31.90

TOTAL CHARGES: \$1,131.90

Authorized Agent: _____ Date: _____



Field Ticket # 10174

10174

Date 10/1/2013

Sater Tools and Services LLC, 19708 CR 50.5, LaSalle CO 80645 Office 970-301-2028 Fax 970-284-7808

NO.	RENTALS/SALES	QTY	PRICE	DISC	TOTAL
1	Rental of 4-1/2 casing scraper	1	605.00	15%	\$514.25
2	Rental of 2-3/8 reg box x 2-3/8 8rd box	1	125.00	15%	106.25
3	Rental of 3-7/8 blade bit	1	125.00	15%	106.25
4					0.00
5	Rental of 1348 releasing spear	1	320.00	15%	272.00
6	Rental of 1.992 1348 spear grappel	1	823.00	50%	411.50
7	Rental of 2-3/8 reg pin x 2-3/8 8rd box	1	125.00	15%	106.25
8	Rental of 2-3/8 lift sub	1	138.00	15%	117.30
9	Sale of 4-1/2cement retainer	1	1,633.00		1,633.00
10	Rental of wireline adoptor kit and stinger	1	550.00	15%	467.50
11	Rental of 2-3/8 TIW valve	1	275.00	15%	233.75
12					0.00
13					0.00
14					0.00
Subtotal Taxable Charges					\$3,968.05
SERVICE MANS TIME					
	Service mans time	1	\$850.00	15%	\$722.50
	Service mans time	1	850.00	15%	722.50
	Service mans time	1	850.00	15%	722.50
	Inspection charges	6	30.00		180.00
Subtotal Non-Taxable Charges					\$2,347.50
MILEAGE					
	Mileage	20	\$2.95		\$59.00
	Mileage	20	2.95		59.00
	Mileage	20	2.95		59.00
					0.00
Subtotal Non-Taxable Charges					\$177.00
Terms: Net 30 Days					Total Service & Material: \$6,492.55
					Tax: \$115.07
					TOTAL CHARGES: \$6,607.62

Authorized Agent: _____ Date: _____

CEMENT JOB REPORT



CUSTOMER PETROLEUM DEVELOPMENT		DATE 30-SEP-13	F.R. # 10011016891	SERV. SUPV. COLE W MARRIOTT											
LEASE & WELL NAME VETTING #24-14 - API 05123130680000		LOCATION 14-5N-65W		COUNTY-PARISH-BLOCK Weld Colorado											
DISTRICT Brighton		DRILLING CONTRACTOR RIG # WO		TYPE OF JOB Plug & Abandon											
SIZE & TYPE OF PLUGS		LIST-CSG-HARDWARE		MECHANICAL BARRIERS		MD	TVD	HANGER TYPES		MD	TVD				
		Mech Set Retainer 4 1/2 inch 9.5-15		Retainers		3405	3405								
PHYSICAL SLURRY PROPERTIES															
MATERIALS FURNISHED BY BJ		LAB REPORT NO.		SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT ³	WATER GPS	PUMP TIME HR:MIN	Bbl SLURRY	Bbl MIX WATER					
Fresh Water		0		0	8.34	0	0		13.11						
PLC		0		180	12.5	1.88	10.38		60.41	44.49					
Fresh Water		0		0	8.34	0	0		10						
Fresh Water		0		0	8.34	0	0		10						
Type III		0		75	14	1.51	7.73		20.21	13.80					
Fresh Water		0		0	8.34	0	0		1.70						
Available Mix Water		300 Bbl.		Available Displ. Fluid		100 Bbl.		TOTAL		115.42	58.30				
HOLE			TBG-CSG-D.P.						COLLAR DEPTHS						
SIZE	% EXCESS	DEPTH	ID	OD	WGT.	TYPE	MD	TVD	GRADE	SHOE	FLOAT	STAGE			
10	0	4000	8.097	8.625	24	CSG	226	226	J-55						
LAST CASING			PKR-CMT RET-BR PL-LINER			PERF. DEPTH			TOP CONN		WELL FLUID				
ID	OD	WGT.	TYPE	MD	TVD	BRAND & TYPE		DEPTH	TOP	BTM	SIZE	THREAD	TYPE	WGT.	
4	4.5	11.6	CSG	4000	4000	Cement Retainer		3405	0	0	2.375	8RD	WATER BASED	8.34	
DISPL. VOLUME		DISPL. FLUID		CAL. PSI		CAL. MAX PSI		OP. MAX		MAX TBG PSI		MAX CSG PSI		MIX WATER	
VOLUME	UOM	TYPE		WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED	Operator	RATED	Operator				
13.2	BBLS	Fresh Water		8.34	0	0	0	6160	2500	6224	2500	Transport			
		Fresh Water		8.34											
Circulation Prior to Job															
Circulated Well: Rig <input checked="" type="checkbox"/> BJ <input type="checkbox"/>				Circulation Time: 0				Circulation Rate: 1 BPM							
Mud Density In: 8.34 LBS/G				Mud Density Out: 8.34 LBS/GAL				PV & YP Mud In: 0				PV & YP Mud Out: 0			
Gas Present: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>				Units:				Solids Present at End of Circulation: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>							
Displacement And Mud Removal															
Displaced By: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>				Amount Bled Back After Job: 0 BBLS											
Returns During Job: <input type="checkbox"/> NONE <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/> FULL				Method Used to Verify Returns: Visual											
Cement Returns at Surface: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				Were Returns Planned at Surface: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES											
Pipe Movement: <input type="checkbox"/> ROTATION <input type="checkbox"/> RECIPROCATION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE															
Centralizers: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Quantity:				Type: <input type="checkbox"/> BOW <input type="checkbox"/> RIGID							
Job Pumped Through: <input type="checkbox"/> CHOKE MANIFOLD <input type="checkbox"/> SQUEEZE MANIFOLD <input type="checkbox"/> MANIFOLD <input type="checkbox"/> NO MANIFOLD															
Plugs															
Number of Attempts by BJ: 1				Competition: 0				Wiper Balls Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Quantity:							
Plug Catcher Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Parabow Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES											
Was There a Bottom: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Top of Plug: 0 FT				Bottom of Plug: 0 FT							
Squeezes (Update Original Treatment Report for Primary Job)															
BLOCK SQUEEZE <input type="checkbox"/>				SHOE SQUEEZE <input type="checkbox"/>				TOP OF LINER SQUEEZE <input type="checkbox"/>				PLANNED <input type="checkbox"/> UNPLANNED <input type="checkbox"/>			
Liner Packer: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Bond Log: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				PSI Applied: 0				Fluid Weight: 0 LBS/GAL			
Casing Test (Update Original Treatment Report for Primary Job)															
Casing Test Pressure: 0 PSI				With 0 LBS/GAL Mud				Time Held: 00 Hours 00 Minutes							
EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: None															

CEMENT JOB REPORT



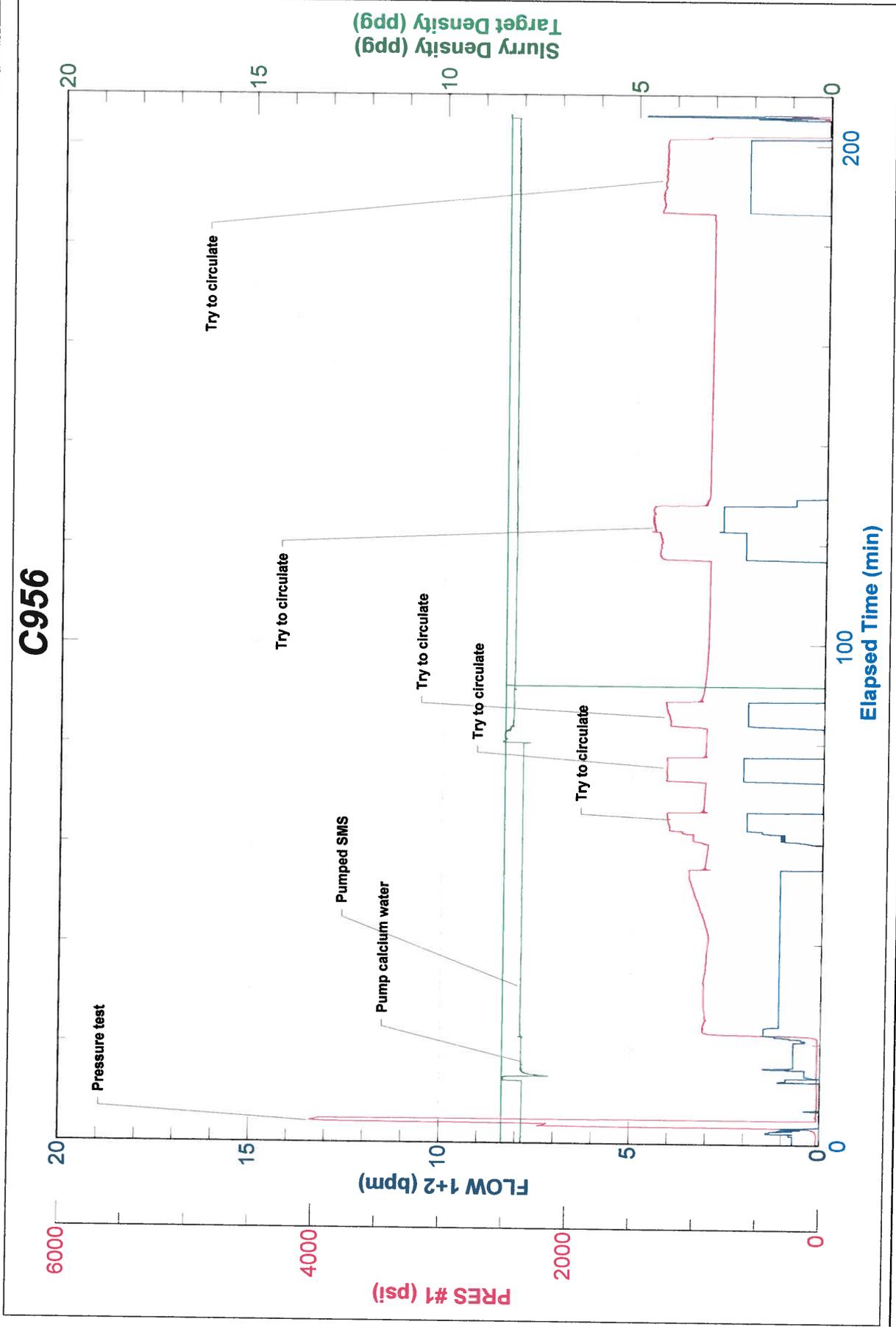
Shoe Test (Update Original Treatment Report for Primary Job)

Depth Drilled out of Shoe: 0 FT	Target EMW: 0 LBS/GAL	Actual EMW: 0 LBS/GAL
Number of Times Tests Conducted: 0	Mud Weight When Test was Conducted: 0 LBS/GAL	
Problems Before Job (I.E. Running Casing, Circulating Well, ETC) None		
Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC) None		
Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC) None		

PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	4020 PSI
						CIRCULATING WELL - RIG <input checked="" type="checkbox"/>	BJ <input type="checkbox"/>
08:50	0	0	0	0	N/A	Arrive on location 42 miles	
12:00	0	0	0	0	N/A	Spot trucks rig cant get circulation	
12:10	0	0	0	0	N/A	Pre rig up safety meeting	
12:10	0	0	0	0	N/A	Pre job safety meeting	
12:51	4020	0	0	0	H2O	Pressure test	
13:10	930	0	1.1	10	H2O	10 BBLS of calcium water pumped	
13:20	923	0	1.1	1	H2O	1 BBL water pumped	
13:21	924	0	1.1	10	H2O	10 BBLS of SMS water pumped	
13:30	1050	0	1.1	16	H2O	Fresh water behind to spot flow guard preflush	
13:44	906	0	0	0	N/A	Shut down for 5 minutes	
13:49	1226	0	2	10	H2O	Pumped water trying to get circulation	
13:56	0	0	0	0	N/A	Shut down for 5 minutes	
14:01	1234	0	2	10	H2O	Pumped water trying to get circulation	
14:07	0	0	0	0	N/A	Shut down for 5 minutes	
14:12	1240	0	2	10	H2O	Pumped water trying to get circulation	
14:17	0	0	0	0	N/A	Shut down for 30 minutes	
14:47	1290	0	2	10	H2O	Pumped water trying to get circulation	
14:53	1360	0	2.7	10	H2O	Pumped water trying to get circulation	
14:57	0	0	0	0	N/A	SHut down for 1 hour	
15:50	1300	0	2	30	H2O	Pumped water trying to get circulation	
BUMPED PLUG	PSI TO BUMP PLUG	TEST FLOAT EQUIP.	BBL.CMT RETURNS/ REVERSED	TOTAL BBL. PUMPED	PSI LEFT ON CSG	SPOT TOP OUT CEMENT	Service Supervisor Signature:
Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 0		Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 0		117	0	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	



Baker Hughes JobMaster Program Version 3.60
Job Number: 10011016891
Customer: PDC
Well Name: Vetting 24-14





Sater Tools and Services LLC, 19708 CR 50.5, LaSalle CO 80645 Office 970-301-2028 Fax 970-284-7808

Field Ticket # 10269
Date 10/9/2013

Bill To Customer:	P D C	PO#	Lease Name:	Vetting	Well #:
Address:	3801 Carson Ave		County:	CO	24-14
City:	Evans	Field:	Job Type:		Invoice Ref. #:
State:	CO	Legal Description:	Casing Sz & Wt:	4-1/2 11.6#	OCSG #:
Ordered By:	Chad Sailor		Service Man:	MERCED TERRAZAS	

NO.	RENTALS/SALES	QTY	PRICE	DSC	TOTAL
1	Rental of 3-1/8 drill collars	6	360.00	15%	\$1,836.00
2	Rental of 2-7/8 PAC box x 2-3/8 reg box	1	125.00	15%	106.25
3	Rental of 2-7/8 PAC pin x 2-3/8 8rd box	1	125.00	15%	106.25
4	Rental of safety clamp	1	303.00	15%	257.55
5	Rental of drill collars lift sub	3	138.00	15%	351.90
6	Sale of 4-1/2 cement retainer	1	1,650.00		1,650.00
7					0.00
8					0.00
9					0.00
10					0.00
11					0.00
12					0.00
13	Sale of 3-7/8 cone bit	1	1,450.00	15%	1,232.50
14					0.00

Subtotal Taxable Charges \$5,540.45

SERVICE MANS TIME					
	Service mans time	1	\$850.00	15%	\$722.50
	Service mans time	1	850.00	15%	722.50
	Service mans time	1	850.00	15%	722.50
	Inspection charges	16	30.00		480.00

Subtotal Non-Taxable Charges \$2,647.50

MILEAGE					
	Mileage	20	\$2.95		\$59.00
	Mileage	20	2.95		59.00
					0.00
					0.00

Subtotal Non-Taxable Charges \$118.00

Terms: Net 30 Days Total Service & Material: \$8,305.95
 Tax: \$160.67
 TOTAL CHARGES: \$8,466.62

Authorized Agent:

Date: 10/9/2013