



**Walker 1
REDTAIL
Plug and Abandon
API No. 051231978600
AFE #**

WELL DATA

Surface Location: 661' FNL & 1852' FEL of Sec 31, T10N, R58W, Weld County, CO
Elevations: Ground Level: 4797 ft Kelly Bushing: 4808 ft 11.0 ft (KB)
Depths: Total Depth: 6661 ft KBMD

Casing Information:

Casing	Depth	OD	Grade	Weight	ID	Drift	Cap	Collapse	Burst	Tensile
Surface	306 ft	8-5/8"	J-55	24.0 #	8.097 in	7.972 in	0.0773 bbl/ft	1,370 psi	2,950 psi	244,000 lbs.
Production	6,750 ft	4-1/2"	N-80	11.6 #	4.000 in	3.875 in	0.0155 bbl/ft	6,350 psi	7,780 psi	223,000 lbs.

OBJECTIVE

The following is a procedure to plug and abandon the Walker 1 well. The work will include cutting and pulling existing production casing and setting cement balance plugs isolating the Niobrara and all uphole water bearing zones. All surface equipment will be removed and the location will be reclaimed.

Plug and Abandon Procedure

1. Notify COGCC at least 48-hours prior to the start of operations using a Form 42. Verify with James Kopp that this is completed prior to moving the rig in.
2. Take GPS coordinates of well location. Send information to:
 James Kopp James.Kopp@whiting.com (303) 357-1410
3. MIRU WO rig. Mob-in pump, tank, tubing float, and all other necessary equipment. NU 7-1/16" 5K BOP w/ 2-3/8" pipe rams on top and blind rams on bottom, pressure test high and low, function test BOP. Have delivered clean 500-bbl upright tank and fill with fresh water. Heat as necessary. Fresh water to be used for cementing operation, circulating, and cement displacement.
4. TOOH with 2-3/8" tbg hydrotesting on the way out. Send good tbg to yard. PU 2-3/8" workstring, bit and scraper for 4-1/2", 11.6 lb/ft csg. RIH to 6,500 ftKB. TOOH standing back, LD tools.
5. MIRU gyro equipment (use Scientific Drilling). PU tools and RIH while logging down to 6,500 ftKB. POOH while logging, LD tools. RD Wireline. TOOH w/ 2-3/8" workstring standing back, LD tools.
6. Pump 1 csg volume (approximately 100 bbls) fresh water into perforations. Report and record injection rate and pressure and review with engineering.
7. PU cement retainer for 4-1/2", 11.6 lb/ft casing. RIH and set CR @ 6,467 ftKB. Pull into test position, pressure test tbg to 1,000 psi., sting back in and establish injection rate into perforations, target 2 bpm injection rate (monitor 4-1/2" csg for pressure). Record rate and pressure. Pass onto engineering and cement company.
8. MIRU wireline company. ND BOP, NU pack-off or lubricator. PU CBL logging tools and RIH w/ logging tools to 6,500 ftKB and log under 1,500 psi. RD Wireline. Send processed log to engineer **ASAP** and verify depths prior to moving forward.
9. NU BOPs and MIRU cement crew. Pressure test surface lines to 2,000 psi. Mix and pump 80 sks, Class G, 1.15 cu-ft/sk, 15.8 ppg cement, squeezing through existing perforations from 6,542 ftKB - 6,548 ftKB. Sting out of retainer, spot 5 sks cement on top of CR. TOOH w/ 4 stands, reverse clean with fresh water. TOOH w/ remaining tbg. Let cement cure overnight.

10. TIH with 2-3/8" workstring. Tag TOC with EOT, record depth. TOOH standing back. ND BOP, NU WH. MIRU wireline company. PU plasma cutter tool & NU lubricator. RIH w/ plasma cutter to 5,700' and cut 4-1/2" production casing. POOH with plasma cutter tool. ND lubricator & LD tools. RDMO wireline company.
11. NU BOP changing rams out for 4-1/2" csg. PU and POOH with 4-1/2" csg. Casing is be scrapped if no other use determined.
12. NU 7-1/16" 5K BOP w/ 2-3/8" pipe rams on top and blind rams on bottom, pressure test high and low, function test BOP.
13. MIRU cement crew. Pressure test surface lines to 2,000psi. Mix and pump 180 sks, API Class G, 1.15 cu-ft/sk, 15.8 ppg cement, balancing plug at 5,740 ftKB. TOOH with 2-3/8" workstring standing back. Let cement cure overnight.
14. TIH with 2-3/8" workstring. Tag TOC with EOT, record depth.
15. MIRU cement crew. Pressure test surface lines to 2,000psi. Mix and pump 90 sks, API Class G, 1.15 cu-ft/sk, 15.8 ppg cement, balancing plug at 1,800 ftKB. TOOH with 2-3/8" workstring standing back to 900 ftKB.
16. MIRU cement crew. Pressure test surface lines to 2,000psi. Mix and pump 270 sks, API Class G, 1.15 cu-ft/sk, 15.8 ppg cement, balancing plug from 900 ftKB to surface. TOOH with 2-3/8" workstring, LD on float.
17. Cut off WH to 5' below GL and fill hole.
18. Weld on cap with plugging information plate. Backfill cellar.
19. Reclaim distrubed surface.