



**Motis 2  
REDTAIL  
Plug & Abandon  
API No. 051231944500  
AFE #**

**WELL DATA**

**Surface Location:** 2380' FNL & 600' FEL of Sec 1, T9N, R58W, Weld County, CO

**Elevations:** Ground Level: 4660 ft Kelly Bushing: 4670 ft (10' KB)

**Depths:** Total Depth: 6298 ft KBMD

**Surface Casing:** Set @ 371 ftKB

| <u>OD</u> | <u>Grade</u> | <u>Weight</u> | <u>ID</u> | <u>Drift</u> | <u>Cap</u>    | <u>Collapse</u> | <u>Burst</u> | <u>Tensile</u> |
|-----------|--------------|---------------|-----------|--------------|---------------|-----------------|--------------|----------------|
| 8-5/8"    | J-55         | 24            | 8.097 in  | 7.972 in     | 0.0636 bbl/ft | 1370 psi        | 2950 psi     | 244,000 lbs.   |

**Production Casing:** Set @ 6280 ftKB

| <u>OD</u> | <u>Grade</u> | <u>Weight</u> | <u>ID</u> | <u>Drift</u> | <u>Cap</u>    | <u>Collapse</u> | <u>Burst</u> | <u>Tensile</u> |
|-----------|--------------|---------------|-----------|--------------|---------------|-----------------|--------------|----------------|
| 5-1/2"    | J-55         | 15.5          | 4.950 in  | 4.825 in     | 0.0155 bbl/ft | 4040 psi        | 4810 psi     | 248000 lbs.    |

**OBJECTIVE**

The following is a procedure to plug and abandon the Motis 2 well located in Weld County, Colorado

**Re-Plug and Abandon Procedure**

1. Provide the COGCC with 48-hour notice of MIRU via electronic Form 42.
2. MIRU workover rig. Mob-in pump, swivel, two (2) 500 bbl working tanks, one (1) 500 bbl flat tank, and all other necessary equipment. ND wellhead, 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. NU circulating head.
3. PU cmt retainer for 5-1/2" 15.5 lb/ft csg, TIH on 2-3/8" workstring and set cmt retainer at 6,167 ftKB. Pull into test position, pressure test tbg to 1,000 psi., sting back in and establish rate into perfs & record pressure (pass information onto engineering and cmt company).
4. MIRU cmt company, pressure test surface lines to 2,000 psi. Squeeze perfs w/ 50 sks Class G, 15.8 lb., 1.5% CaCl, cmt. Sting-out & leave 5 sks on top of cement retainer. POOH w/ 2 joints of workstring standing back, reverse clean.
5. TOOH to 5,400 ftKB, mix and pump 30 sks, API Class G, 1.15 cu-ft/sk, 15.8 ppg cement, balancing plug at 5,400 ftKB. TOOH with 2-3/8" workstring standing back. Let cement cure overnight.
6. TIH with 2-3/8" workstring open ended. Tag TOC with EOT, record depth. TOOH standing back.
7. MIRU Wireline. PU 1-ft perforating gun loaded w/ 4 spf, 90 degree phasing (0.50" EHD). RIH w/ gun and perforate @ 1,600 ftKB. POOH spent gun, LD gun, ensure all shots fired.
8. PU cmt retainer for 5-1/2" 15.5 lb/ft csg, TIH on 2-3/8" workstring and set cmt retainer at 1,525 ftKB. Pull into test position, pressure test tbg to 1,000 psi., sting back in and establish rate into perfs & record pressure (pass information onto engineering and cmt company).
9. MIRU cmt company, pressure test surface lines to 2,000 psi. Squeeze perfs w/ 50 sks Class G, 15.8 ppg, 1.5% CaCl, cmt. Sting-out & leave 5 sks on top of cement retainer. POOH w/ 2 joints of workstring standing back, reverse clean.

10. MIRU Wireline. PU 1-ft perforating gun loaded w/ 4 spf, 90 degree phasing (0.50" EHD). RIH w/ gun and perforate @ 450 ftKB. POOH spent gun, LD gun, ensure all shots fired.
11. TIH w/ 2-3/8" tbg to 450 ftKB. MIRU cement company. Pressure test surface lines to 2,000psi. squeeze perfs with a total of 45 sks, Class G, 15.8 ppg, 1.5% CaCL cmt (25 sks squeeze in annulus and leave TOC in 5-1/2" @ 300 ftKB). TOOH w/ workstring standing back, reverse clean, leave SI overnight.
12. TIH w/ workstring open ended, tag TOC and record depth. TOOH standing back. MIRU wireline. PU 1-ft perforating gun loaded w/ 4spf, 90 degree phasing (0.50" EHD) and pack off, NU pack off to BOP. RIH w/ gun and perforate @ 75 ftKB. POOH w/ spent gun, ND pack off, LD gun and ensure all shots fired. RDMO wireline.
13. MIRU cement company. Pressure test surface lines to 2,000psi. RU pump lines to tbg head outlet, access csg head valve (A-section), open valve and plumb to flowback tank, close blind rams. Pump fresh water down 5-1/2" csg and establish circulation out A section outlet to flowback tank. Mix and pump 25 sks, Class G, 15.8 ppg, 1.5% caCL cmt, circulating cement down 5-1/2" csg and out A section. Leave TOC in 5-1/2" csg at surface. RDMO cement company.
14. Cut off WH 5' below GL and fill hole.
15. Weld on cap with plugging information plate. Backfill cellar
16. RDMO rig and equipment.
17. Reclaim disturbed surface.

**SAFETY & ENVIRONMENTAL**

**\*\*EMERGENCY CONTACTS BELOW\*\***

Whiting Operating stresses safety and environmental stewardship in all operations. Safety tailgate meetings are encouraged prior to commencing with any major wellsite task. Spills of notable size should be reported and recorded. The proper personal protective equipment (PPE) should be worn at all times while on location. Should there be any questions regarding Whiting's safety/environmental policies, the Wellsite Supervisor will provide instruction.

**EMERGENCY CONTACT INFORMATION**

| <b>Contacts</b>                            | <b>Phone Number &amp; Description</b>               |
|--|---|
| <b>EMERGENCY</b>                           | <b>911 or (800) 472-2121</b>                        |
| <b>Sheriff's Department (Sterling, CO)</b> | <b>(970) 522-3512 (Logan County)</b>                |
| <b>New Raymer Fire Dept</b>                | <b>(970) 437-5713</b>                               |
| <b>After Hours Emergency (WOG)</b>         |   |
| <b>Engineer: James Kopp</b>                | <b>Cell: (303) 681-1997, Office: (303) 357-1410</b> |
| <b>Rig Supervisor: Bryan Olmstead</b>      | <b>Cell: (970) 290-8333</b>                         |
| <b>Operations Supervisor: Mike Staab</b>   | <b>Cell: (307) 299-0095, Office: (970) 493-2900</b> |