PLUG AND ABANDONMENT PROCEDURE

June 3, 2014

Kroeger-Ferguson #2 KF - 3
Red Mesa Field
458' FNL & 257' FWL, Section 27, T33N, R12W, La Plata County, CO
API 05-067-06069 / Long _____/ Lat: _____

Note: All cement volumes use 10% excess per 1000 foot of depth or 100% excess outside pipe and 50' excess inside pipe, whichever is greater. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.8 ppg with a 1.18 cf/sx yield.

1. This project will use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

2. Install and test location rig anchors. Comply with all COGCC, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.

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4. Rods: Yes___ , No____, Unknown_____.
   Tubing: Yes _X__ , No ___, Unknown ____ , Size __2-3/8"_ , Length __?? Unknown depth__.
   Packer: Yes____ , No__X__, Unknown_____, Type _____.
   If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.

   Round trip 4.5" gauge ring or casing scraper to 2745' or as deep as possible.

5. **Plug #1 (Dakota perforations and top, 2745' – 2645'):** TIH and wireline set 4.5" cement retainer at 2745'. Pressure test tubing to 1000#. Load casing with water and circulate well clean. If tubing has not been tested; pressure test tubing to 1000#. *Attempt to pressure test casing. If casing does not test then spot or tag subsequent plugs as appropriate.* Mix 12 sxs Class B and spot above CR to isolate the Dakota interval.

6. **Plug #2 (Interval plug, 1945' – 1845'):** Perforate 3 squeeze holes at 1945'. Establish injection rate into squeeze holes if casing tested. RIH and wireline set 4.5" cement retainer at 1895'. Mix and pump 28 sxs Class B cement, squeeze 16 sxs outside 4.5" casing and leave 16 sxs inside casing. TOH.

7. If the well has no pressure at the surface, then complete a Hot Work Permit, testing the atmosphere for hydrocarbons. If LEL are zero, then ND the BOP and the wellhead. Screw a 4.5" pick up sub into or

weld a slip-on collar on the 4.5" casing at surface. Pull up on the 4.5" casing and calculate a free point depth. Perforate squeeze holes at 1350' and establish circulation to surface. Jet cut the 4.5" casing at the appropriate depth. Pull and LD the 4.5" casing.

8. **Plug #3 (4.5" Casing stub and inside 7" casing shoe, 1400' – 1300'):** Mix 32 sxs Class B cement, and spot a balanced plug in the open hole interval to cover the 4.5" casing stub and 7" casing shoe. WOC. TIH and tag cement. TOH with tubing.

9. **Plug #4 (8-5/8" casing shoe and 7" x 9-7/8" annulus to surface, 1300' – 0'):** Perforate 3 squeeze holes at 1295' (or as close to where cement tagged on Plug #3, ie: if cement tagged at 1290' then perforate at 1288'). Establish circulation out 7" x 9-7/8" annulus. RIH with open ended tubing to 1295' Mix and pump 290 sxs Class B cement and squeeze to surface, circulate good cement out annulus. SI bradenhead valve then spot 311 sxs inside casing to cover from 1300' to 1245' (finish topping off casing shoe and 50' above perforation. Modify as appropriate based on Plug #3). PUH and WOC. Tag cement at least 50' above perforation. If necessary top off plug. PUH.

10. **Plug #5 (Mancos top, 645' – 545'):** Spot balanced plug, 29 sxs inside casing to cover from cover the Mancos top. PUH.

11. **Plug #6 (Surface, 100' – 0'):** Spot 20 sxs inside casing and circulate good cement out casing valve. SI well and WOC.

12. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. Cut off anchors and clean up location. Restore location per BLM stipulations.