

PLUG AND ABANDONMENT PROCEDURE

September 4, 2013

Compton #2

Red Mesa Gas Field

2436' FNL, 1509' FEL, Section 21, T33N, R12W, LaPlata County, Colorado

API #05-067-06242 / Long: -108.151606 W Lat:37.090177 N

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.
3. Rods: Yes X , No _____, Unknown_____.
Tubing: Yes X , No _____, Unknown_____, Size 2-3/8" , Length 1203'.
Packer: Yes _____, No X , Unknown_____, Type _____.
4. **Plug #1 (Dakota perforations and top, 3429' - 3267')**: RIH with open ended tubing. **Note: casing collapse at 1182' per company man. If unable to get through 1182' contact company and COOGC for further direction.** Circulate well clean. Establish rate into perforations. Mix 25 sxs cement (excess due to casing issues) and spot a plug to cover DK perforations and top. PUH and WOC. TIH and tag cement. If necessary top off cement as required. TOH.
5. Jet cut casing at 1180' and LD 4.5" casing. If casing does not come free then consult company man and COOGC for further direction. If casing came free then proceed to Plug #2.
6. **Plug #2 (4.5" casing stub, 1230' – 1130')**: Mix and pump 37 sxs (20 sxs outside casing stub in 4.5" x 6.25" hole and leave 17 sxs inside casing) to cover casing cut and 4.5" stub. Note excess cement is due to casing issues. PUH and WOC. TIH and tag cement. If necessary top off cement as required. TOH.
7. **Plug #3 (7" casing shoe, 1170' – 1070')**: Round trip 7" casing ring or casing scraper to 1120'. Perforate squeeze holes at 1170'. Establish injection rate. RIH and set 7" cement retainer at 1120'. Sting into CR and establish injection rate. Mix 96 sxs Class B cement, squeeze 67 sxs outside casing and leave 29 sxs inside to cover 7" casing. TOH

8. **Plug #4 (Cliffhouse top, 620' – 520')**: Perforate squeeze holes at 620'. Establish injection rate. RIH and set 7" cement retainer at 570'. Sting into CR and establish injection rate. Mix 96 sxs Class B cement, squeeze 67 sxs outside casing and leave 29 sxs inside casing to cover the Cliffhouse top. TOH.
9. **Plug #5 (Mesaverde top, 290- 0')**: Perforate squeeze holes at 290'. Establish injection rate. Mix approximately 200 sxs Class B cement, circulate good cement out casing and annulus. SI well and WOC.
10. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.