

- 1 Provide 24 hour notice of MIRU to State of Colorado
- 2 Prepare location for rig to move onto
- 3 Call Foreman and/or Field Coordinator before rig up to isolate any production equipment
- 4 MIRU WO rig, pump, & tank. Kill w/ fresh water as needed. ND wellhead. NU BOP's. Unseat landing joint and lay down
- 5 MIRU IPS wireline service (Office: 970 353-5118). RIH w/ 2-7/8" CIBP (For 2-7/8", 6.5 lbs casing) and set at 6,800' KB. Dump 2 sx cmt on top of CIBP.
NOTE: Sand plug tagged at 6,822' KB on 6/26/2012
- 6 Unseat casing from slips and work casing free
- 7 TIH with free-point tool and locate free casing. TOC is around 6,630' KB. TOO H with free-point tool.
- 8 TIH with jet cutter to cut csg 100' above free point. TOO H
- 9 RDMO wireline service.
- 10 TOO H 2-7/8" casing and LD. NOTE: 6-5/8" casing patch at 3,121' KB. If unable to pull casing contact engineering for plugging modifications.
- 11 MIRU Baker Hughes cementing services (Sheldon Kelley: (303) 659-5853). Give at least 24 hr notice to cementing service company
- 12 TIH with 3 jnts 1 1/4", 1 1/4" x 2 3/8" crossover, and 2 3/8" working string to 50' inside cut casing. Attempt to establish circulation with fresh water.
- 13 Pump cement job to cover casing stub. Pump job as follows: 20 bbl fresh water, followed by 8 bbl (40 sks) Class G 15.8 lbs cement w/ 1% CaCl (Calcium Chloride), displace to 50' above casing stub (0.00387 bbl / ln ft for 2-3/8" 4.7# tbg.)
- 14 TOO H with 16 jnts, standing back jnts. Reverse circulate with fresh water 2 times tubing capacity and have clean returns. If unable to establish circulation, continue pumping down backside at minimum 1 times capacity between 2-3/8" workstring and 7-7/8" hole (0.0548 bbl / ln ft between 2-3/8" tbg and 7-7/8" hole). Then switch connection to tbg and pump down 2 times tubing capacity.
- 15 Using rig's pump, reverse circulate with minimum 80 bbl drilling mud.
- 16 TOO H with 2-3/8" working string to have end of tubing at 4,700' KB. Pump cement plug from 4,700' KB to 4,400' KB to cover Sussex (Sussex formation is at 4,520' – 4,625' MD). Pump job as follows: after establishing circulation with fresh water, pump 10 bbl fresh water, followed by 22.5 bbl (110 sks) class G 15.8# cmt w/ 1% CaCl, displace to 4,400' KB (17 bbl fresh water)
- 17 TOO H with 20 jnts, standing back jnts. Reverse circulate with fresh water 2 times tubing capacity (about 30 bbl) and have clean returns.
- 18 SWI, WOC overnight. PU and slowly TIH 2-3/8" tbg to tag top of cement (must be minimum 50' above top of Sussex), if cement is not at or above 4,470' KB, notify engineering.
- 19 TOO H with 4 jnts 2-3/8" workstring and LD. Using rig's pump, reverse circulate with 220 bbl drilling mud.
- 20 TOO H with 2-3/8" working string to have end of tubing at 735' KB (50' below Surface casing shoe). Pump cement plug from 735' KB to Surface to cover Surface casing shoe and set top plug (Surface casing set at 685' KB). Pump job as

- follows: 10 bbl fresh water, followed by 47 bbl (230 sks) class G 15.8# cmt w/ 1% CaCl, cement should come to surface.
- 21 RDMO cementing service company. TOOH with workstring and LD.
 - 22 MIRU ready cement mixer, pour 6.7 cu ft (0.25 yards) of cement to bring plug to surface. RDMO ready cement mixer
 - 23 RDMO WO rig
 - 24 Cut surface casing 5 ft below ground level and weld on cap, have welder weld API number on cap (API# 0512316051).
 - 25 Properly abandon flowlines per Rule 1103.
 - 26 Submit Form 6 to COGCC. Provide "As Plugged" wellbore diagram identifying the specific plugging completed.