

GRYNBERG STATE 1-20 WORKOVER

Phase 1 - Part 1

1. MI-RU Workover Rig
2. Pull and lay down 2 3/8 tubing
3. PU rental string of 3 1/2 tubing
4. Drill out and recover BP's @ 4756, 4780, 4783 & 5540

Phase 11 - Part 1

1. Perforate 6315-30 and 6346-54 with 6 SPF.
2. Run packer and break down each zone separately with 2300 gds 7 1/2 acid each zone
3. Set packer @ # 6250 frac down 3 1/2 tubing at 25/30 BPM 60 foam frac and 100,000 #20/40 Ottawa sand.
4. Flow swab back - Test gas rate

Phase 11 - Part 11

1. Release packer and trip out.
2. Re-perforate 6163-70 and 6198-6207 with 4 SPF.
3. Pick up packer & RBP. Trip in set RBP @ # 6185 and packer at # 6150. Break down parts with 2000 gals 7 % acid. Lower RBP to #6230, set packer at = 6185 and break down with 2000 gals acid.
4. Move packer up to #6100 and trac down 3 1/2 tubing at 25/30 BPM CO foam trac and 125000# 20/40 Ottawa sand.
5. Flow/Swab back - Test gas rate.

Phase 11 - Part 111

1. Retrieve RBP at #6230. Pull up and re-set at #5450. Dump 2 sx sand on top. Trip out.
2. Perforate 5365-70, 5382-92 and 5414-30 with 1 SPF
3. Trip on with packer and set #5350. Break down perfs with 2000 gals 7 1/2 acid.
4. Frac down 3 1/2 tubing with nitrogen foam and 200,000 #20/40 sand at 25/30 BPM.
5. Flow/Swab back - Test gas rate.
6. Recover RBP at 5450

Phase 11 - Part IV

1. Pull up and set RBP #5080. Dump 2 sx sand on top. Trip out.
2. Perforate 4870-57, 5045-52 and 5055-58 with 1 SPF
3. Trip in with packer, set at #5020 and break down perfs with 2000 gals 7 ½ acid.
Move RBP to 4880 and packer 4820 and break down perfs with 2000 gals 7 ½ % acid
4. Move RBP back to 5080, set powder at 4820 and frac down 3 ½% tubing with nitrogen foam and 150,000 #20/40 sand at 25/30 BPM.
5. Flow swab back - test gas rate.

Phase 11 - Part V

1. Move RBP from *5080 up to *4780. Dump 2 sx sand on top. Trip out.
2. Perforate 4715-24 and 4747-50 with SPF.
3. Trip in, set at *4790. Back down perfs with 2500 gals 7 ½% acid.
4. Trip out with packer.
5. Frac down casing with nitrogen foam and 300,000 #20/40 sand at 50 BPM.
6. Flow/swab back - Test gas flow.
7. Retrieve RBP and lay down 3 ½ tubing.
8. Pack up 2 3/8 tubing and 4 ¾ bit scraper. Trip in hole to PBTD and circulate hole clean with 2% KCL water. Trip out.
9. Pick up hydro set production packer w/seating nipple and standing valve in place. Hang packer at x5500: Land tubing and NUX-mas tree. Swab down tubing and annulus. Pressure up on tubing and packer. Place well on production w/ABO on CSQ & Penn on tubing.