OGOC
OIL & GAS OPERATIONS AND CONSULTING, INC.

Example Well #1-H Completion Procedure
Horizontal Multi-Stage Compl.

AFE: XXXXXX

Well Data:

16" ½" wall conductor @ 90'
9 ⅝" 36# K-55 STC @ 2850'
7" 26# N-80 LTC @ 7900'
4 ½" 11.6# N-80 GBCD @ 13,200' anchor pkr @ 7781'

Objectives:

   I. Install frac sleeve isolating 5k tbg head, NU 10k frac tree, and test
  II. Break-dn "toe" stg, est injection rate, and perform short DFIT
III. MIRU Halliburton frac equip, perform 11 stage Glenn Rose frac
IV. Flow back frac and test

Procedure:

1. "Dress-off" location and set at least 20 frac tanks (10 for transfer and 10 for frac) and 2 open top flow back tanks.
2. Instsall 10k frac sleeve and NU 10k frac tree. Test to 10k.
3. MIRU Hp pump. Apply 1500 psi in annulus and monitor during break-dn. Break-dn formation through liner toe and establish injection rate of 8 – 10 bbl/min. Inject 50 bbls into formation and shut-dn. Record leak-off data for minimum of 30 min. SWI and RDMO pump equip.
4. MIRU Halliburton frac equip including ball injector stack. Test to 10k. Perform 11 stage frac as directed. *** Frac design will be adjusted as necessary during job as performance and responses dictate (pump rate, acid vol, sand concentrations, etc).**
   - Each frac stage to include:
     1) 65 bpm avg inj rate
     2) 1500 gal 15% acid in pre-pad
     3) 30# XL gel slurry
     4) 5018 bbls total clean bbls
     5) 220M# Proppant ramped from ½ ppg to 4 ppg using 30/50 and 20/40 Premium brown sand.

5. RDMO Halliburton.
6. Immediately after Halliburton is off well MIRU 2" coil unit. NU 10K plug valve ck manifold. PU 3 5/8" junk mill and 2 7/8" motor assembly. Test to 10k.
7. RIH circ at 1 ½ - 2 bpm through ck manifold to open top tank. Drill out Halliburton Stim-Sleeves and 4 ½" float collar at 13,169'. Drill out as directed using multiple short trips back to vertical section, pumping sweeps as necessary to keep hole clean. POH and RDMO Coiled tbg unit and equip.
8. Cont flowing well through ck manifold to open top tank and as soon as possible RU flow test separator and begin flow test.
9. Cont flow test as directed.

RDR x/xx/xx