

**Concho Oil & Gas Corp.**

**Pogo State No. 1**

**Plugback to Bone Spring**

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2. TIH w/ CBL tool. Determine cement top in 5 ½" casing. If there is sufficient cmt (200') above the Bone Spring Lime interval( 10118'- 10126') proceed to step #3. If not consult engineer for squeeze hole depth and cement design. Perforate 4 squeeze holes (Use 5000# grease unit). TIH w/ packer and tbg. Set pkr above holes and establish injection rate. TIH with retainer on wireline & set 40' above holes. TIH with stinger and tbg and cement with sufficient cement to raise to 5000'. R/U Wireline. TIH w/ CBL tool. Run from PBTD to 200' above cement top
3. R/U Wireline. TIH w/ 4" predator casing gun and perforate Bone spring Lime formation from 10118'- 10126' w/ 4 SPF. 8' net for a total of 35 holes.
4. TIH w/ 10K packer assembly, seating nipple and tbg. Spot 2 bbl 15% NEFE acid at 10140'. Pull packer to 10000'(Make sure packer is below cmt top). Reverse tbg capacity plus 10 bbl. Spot acid to with 4 bbl of packer. RD BOP. Flange up wellhead. Pressure annulus to 1500#. Acidize Bone Spring Lime perms with 1200 gallons 15% NEFE acid. Swab test and evaluate for further stimulation. If zone is productive, turn well through production equipment or put on pump if necessary
5. If Bone Spring Lime is non-productive RU BOP. POOH w/ tbg and packer. RU W/L. TIH w/ 5 ½" CIBP & set @ 10100'. Load casing with 2% KCL water and test to 2000#. Dump 35' cmt on top of plug . If cement has already been raised proceed to step #7 if not proceed to step #6.
6. Consult engineer for squeeze hole depth and cement design. TIH w/ casing gun and perforate 4 squeeze holes above cement top. TIH w/ packer and tbg. Set pkr above holes and establish injection rate. TIH w/ retainer & set 40' above holes. TIH w/ stinger and tbg. Sting into retainer and cement w/ enough cement to raise cement to 5000'.
7. TIH w/ 4" predator casing gun. Perforate Bone Spring sand from 7990' – 8000' w/ 4 SPF. 10' net for a total of 41 holes.
8. TIH w/ packer and tbg. Set packer @ +/- 7850'. Acidize Bone Spring Sand w/ 1500 gallons 7 ½% NEFE acid carrying 60 ball sealers.
9. Swab well and evaluate.
10. IF zone warrants further stimulation. POOH w/ tbg and packer. RU service company and frac down 5 ½" casing as per frac recommendation. Force close at 1 BPM. Continue to flowback until dead.
11. TIH w/ packer and tbg. Set packer @ +/- 7850'. Swab test well.
12. If well will not flow POOH w/ with tbg and packer. TIH w/ mud anchor, perf'd sub, seating nipple 8 jts of tbg, TAC and remainder of tbg. Set bottom of tbg @ +/- 7900'. RD BOP and flange up well head. TIH w/ pump, 7/8" & ¾" grade "D" rods. Set pumping unit and restore well to production.

