

**Lucerne A #2A MV/PC  
Repair Procedure  
P Sec 9 T31N R10W  
San Juan County, New Mexico**

1. Comply with all NMOC, BLM, & MOI rules and regulations. Test rig anchors & MI blow pit. MOL and RU completion rig (DAYLIGHT). NU adapter flange & BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Blow well down. Only if necessary, kill well w/ water.
2. PU 1-1/4" tubing and TOH laying down the tbq (3040' - SN @ 3007').
3. Release the Baker Model "G" packer seal assembly and TOH w/ the 2-3/8" tbq (5616' - SN @ 5581').
4. TIH w/ 7" csg scrapper on tested 2-3/8" tubing to 1800'. TOH.
5. TIH w/ 7" retrievable bridge plug on 2-3/8" tbq and set @ 1800'. Load hole. TOH. Dump 1 sx sand on RBP.
6. MI & RU Wireline truck. Run a Cement Bond log from 1750' to Surf. Apply 1000 psi if necessary to clarify bond. Pressure test csg to 1000 psi.
7. Perf 2 SQ holes in 7" csg 50' above the TOC. TIH w/ 2-3/8" tbq. to 50' above SQ perfs. W/ bradenhead valve open and the pipe rams closed establish rate down 2-3/8". If circ can be established w/ bradenhead valve, circ cmt out bradenhead valve. Cmt w/ class "B" w/ 0.6% F.L. additive and 2% CaCl. Max pressure is 1000 psi. Flush cmt w/ water to leave 50' above perfs. Pull 2 stands of pipe and repressurize. Rig down cement crew and wait 4 hours. Check for flow. If there is no flow TOH. Otherwise, test every hour thereafter. If circulation was not established then run a temperature survey and squeeze 50' above TOC.
8. TIH with 6-1/4" bit on 2-3/8" tbq. Drill out cmt w/ air/mist below the squeeze holes & pressure test to 500 psi. Resqueeze if necessary. When pressure test holds, circ sand off RBP @ 1800' w/ air/mist (2% KCL). Retrieve BP. TOH. TIH w/ 3-7/8" bit on 2-3/8" tbq & C.O. to PBD 5649'. TOH.
9. Run 2-3/8" tbq w/ Model "G" production packer set @ 3176. Set 2-3/8" tbq @ 5616' w/ S.N. one joint above bottom.
10. Run 1-1/4" tbq. Set @ 3040' w/ S.N. one joint off bottom.
11. Release rig & resume production.

Approve: \_\_\_\_\_  
J. A. Howieson

VENDORS:  
Wireline: HLS 327-4751  
Cement: Halliburton 325-3575