

WORKOVER PROCEDURE	Verdad Resources
Crystal State #41-18 SHL: Lat 40°13'53.32 Long 104°21'35.82", NENE Sec. 8-3N-62	
Weld County, CO API: 05-123-09568 Date: 05/31/17 AFE: 2017CO01	
WELL DATA	Re-Enter P&A
GL Elev: 4,666' Spud Date: 9/14/1971	TD: 6,933 'KB PBTD: 6,955' Btm 4-1/2" shoe @6,933'
CASING	
Surface: 8-5/8", 24#, J-55, @449'. Cemented w/ 250 sxs, Cement to Surface Hole Size: 12 1/4"	
Production: 4-1/2", 11.6#, Cemented w/225 sxs, Cut and pulled casing @5,900' Hole Size: 7 7/8"	
Directions to Location:	
Formation Tops:	
Base of Fox Hills 410'; Top of the Niobrara 6140'	
PROCEDURE	
Prior to Frac	
<ol style="list-style-type: none"> 1. Contact landowner and state representative 48 hours prior to commencing work 2. Build temporary pad and access road for completion rig and cement unit 3. Cut off dry hole marker 4. Verify casing size and weld on wellhead flange and riser 5. MIRU WO rig, BOPS, working tank w/drilling mud, Frac Tank (w/fresh water), shakers tank, Gas Buster 6. Make up BHA as follows; 3 1/2" work string, 2 4" drill collars, POBS, 6" roller-cone bit. 7. RIH and drill out cement to 450'. Circulate bottoms up at 450'. 8. Wash down to 5,900' without rotating. If depth is not achieved call engineer to contact COGCC. 9. TOOH Laydown BHA. 10. TIH with open ended tubing. Rig up cement crew. 11. Pump 60 sks balanced plug from 5,900' to 5,700' 12. POOH to 5000' circulate for 4 hours 13. TBIH and tag cement plug. Notify engineer of depth tagged 14. TOOH to 460', pump 140sks balanced plug to surface 15. TOOH and pump 5 sks to top out cement 16. RDMO WO rig, BOPS, working tank, Frac Tank 17. Cut off wellhead and riser 4' below ground level 20. Weld on dry hole marker 21. Clean location and reclaim 	