

## **Mineral Resources – Annular Remediation Proposal**

### **A. Valley Pack X5 #3-5-31, API# 05-123-26714 – TOC @ 386' per CBL.**

1. Pump 5 bbls fresh water down 4-1/2" x 8-5/8" annulus to establish rate & pressure.
2. Release pressure.
3. POH w/ Tubing String, trip casing scraper through existing production perforations. Set RBP at 6720'.
4. Load 4-1/2" Casing w/ fluid & pressure up to 1000 psi.
5. Mix & pump 5 sacks Class "G" cement into Annular Valve, Displace cement w/ ½ bbl H2O.
6. Relieve 4-1/2" & Surface pressures. SI well for 24 hrs. Check for Casing & Surface Pressures.
7. Retrieve RBP, RIH w/ Tubing String.
8. Return well to production.

#### **If no rate established during step #1:**

9. Perform steps #3 and #4, and release pressure.
10. ND tubing head, install 4-1/2" casing sub, pick up and hold 4-1/2" casing with rig, split the 8-5/8" casing head (dress and strip on new 8-5/8" slip collar if necessary).
11. Decentralize 4-1/2" casing, run 1" tubing (line pipe w/ long, Merchant collars) down 4-1/2" x 8-5/8" annulus as deep as possible.
12. Calculate volume, then mix and pump Class "G" cement from achieved depth to surface. POOH tubing.
13. Recentralize 4-1/2" and install new casing head, weld slip collar in place. NU tubing head.
14. Run new CBL if necessary.
15. Return well to production.