

## **APPENDIX C-1:**

### **INJECTION AND MONITORING WELL SCHEMATICS**

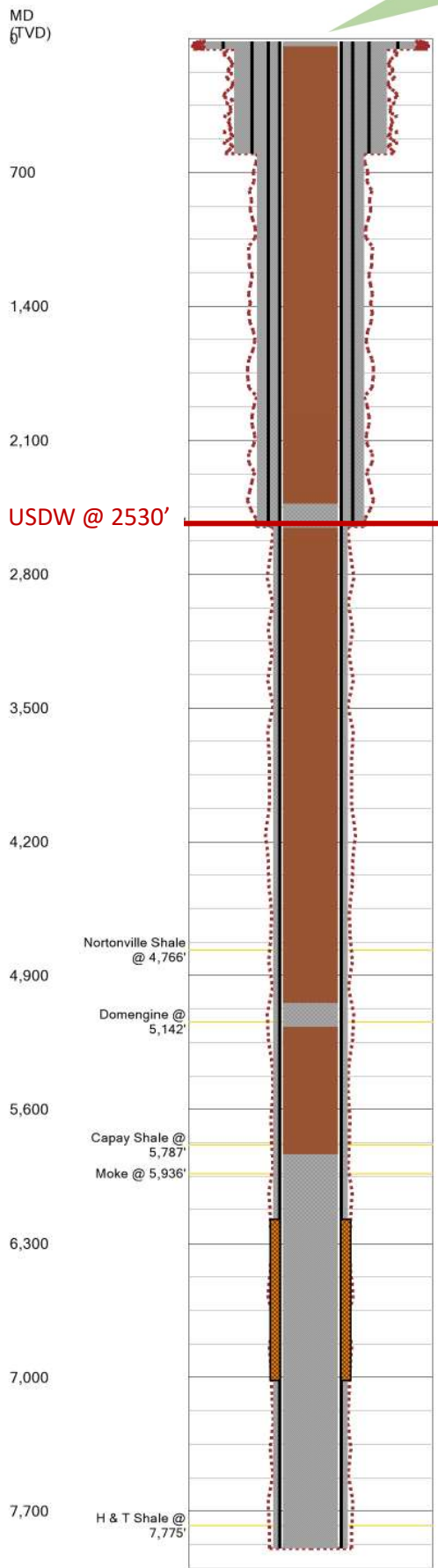
#### **“CTV III” STORAGE PROJECT**

The following schematics provide depictions of the proposed injection and monitoring wells associated with CTV III project. This includes the well construction details and the type and location of monitoring equipment within the wellbore and relative to the geologic storage complex. Perforations and gross monitoring intervals have been indicated, but actual completion and monitoring intervals will be confirmed during the pre-operations phase of the project once the wells have been drilled.

Additionally, schematics of the proposed abandonment configurations of all injection and monitoring show proposed cement plug depths to ensure confinement and non-endangerment of USDW. Cement plug descriptions have been provided in tabular format.

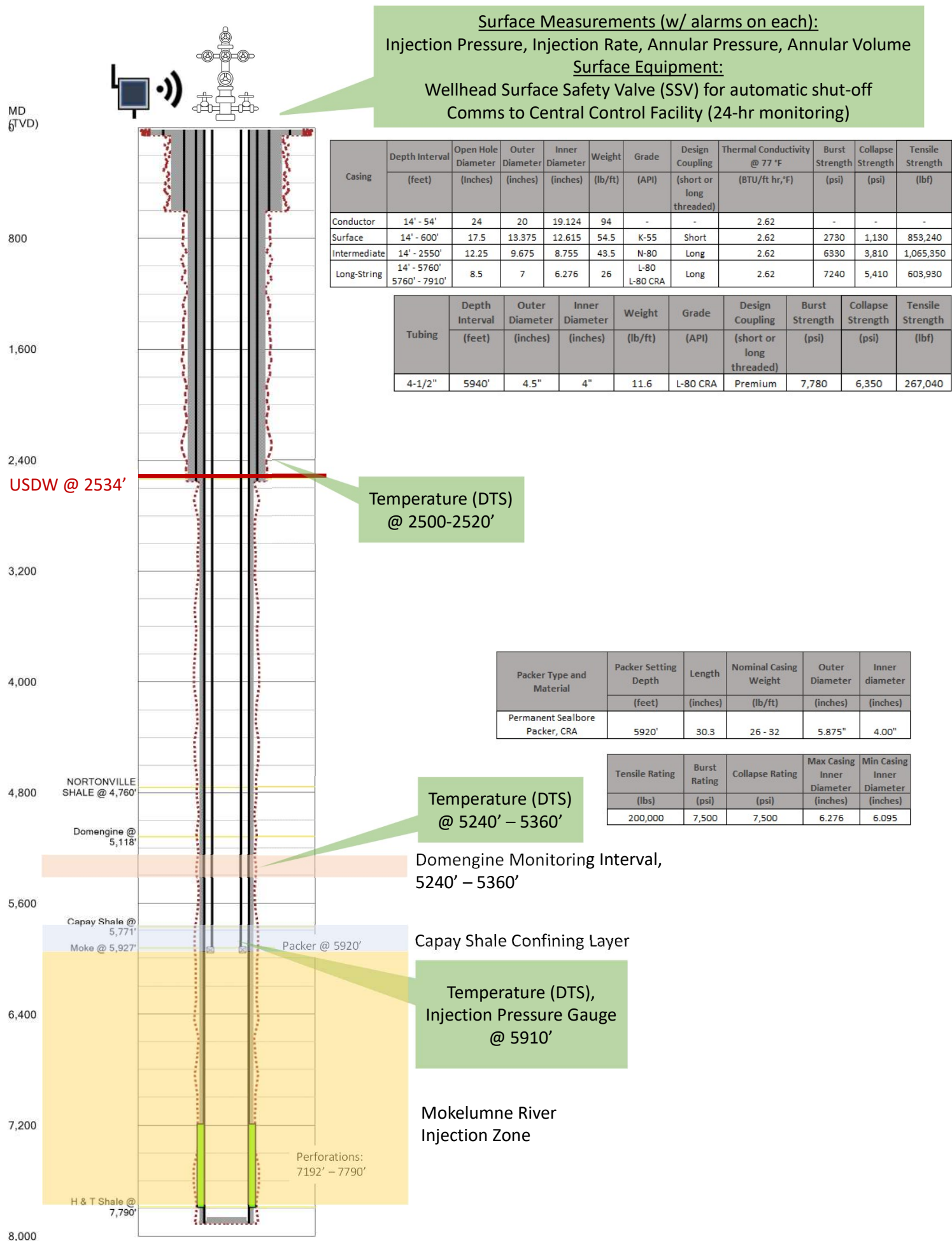


Cut casing 5' below GL. Stamp and weld cap.  
Backfill and reclaim surface location.



Well	C-1			
Plugs	Plug 1	Plug 2	Plug 3	Plug 4
Hole Size (in.)	6.276	6.276	6.276	6.276
Bottom of tubing (ft)	7800	5167	2555	39
Cement Volume (sacks)	367	24	24	5
Slurry Volume (bbl)	75.16	4.92	4.92	1.02
Slurry Weight (lb/gal)	15.8	15.8	15.8	15.8
Top of plug (ft)	5836	5042	2430	14
Bottom of Plug (ft)	7800	5167	2555	39
Type of Cement	Class G	Class G	Class G	Class G
Method of placement	Balanced Plug, Retainer, or CT Plug			

Figure 2. Injection Well C-1, Abandonment Schematic



**Figure 3. Injection Well C-2, CO<sub>2</sub> Injection Schematic**

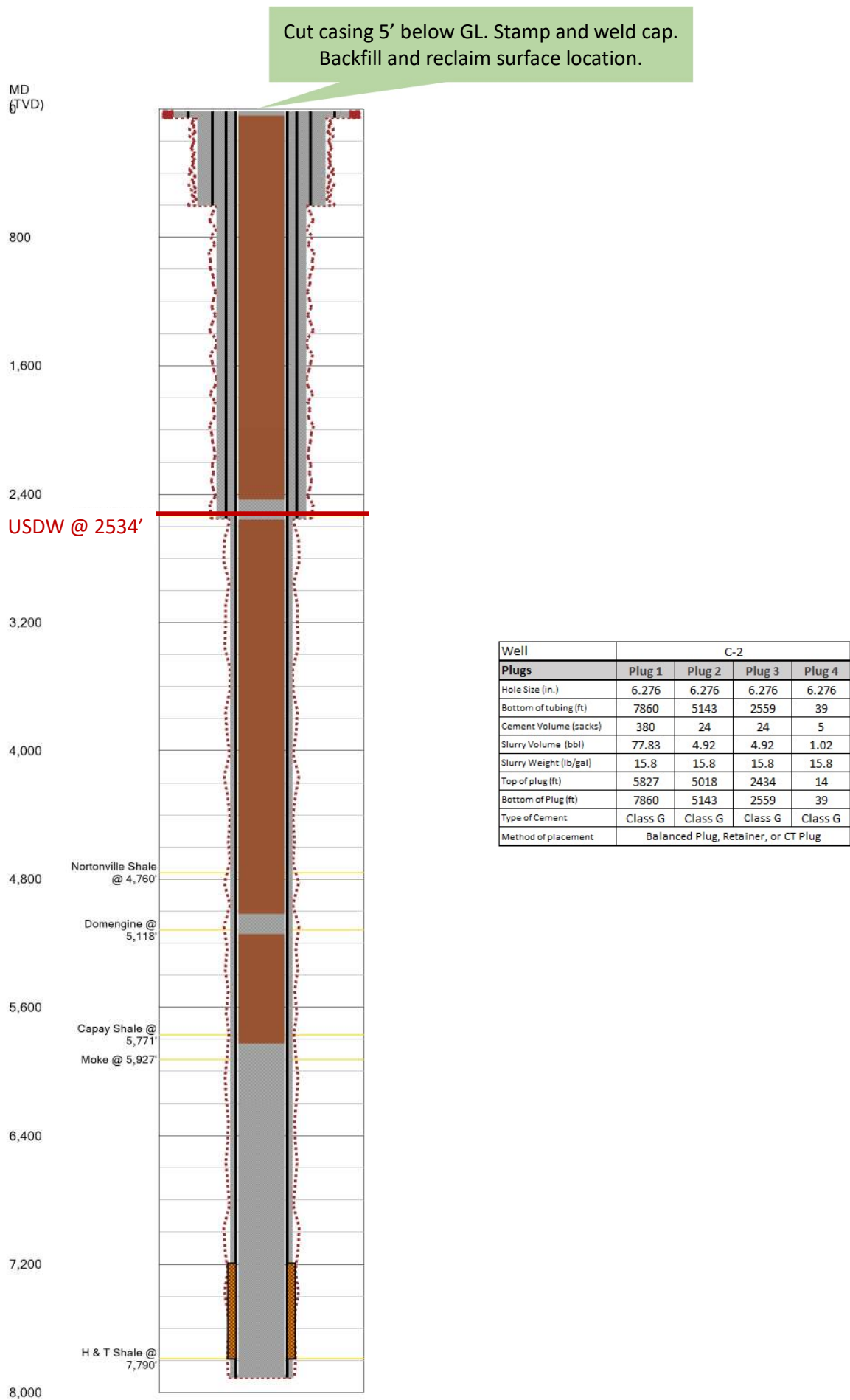
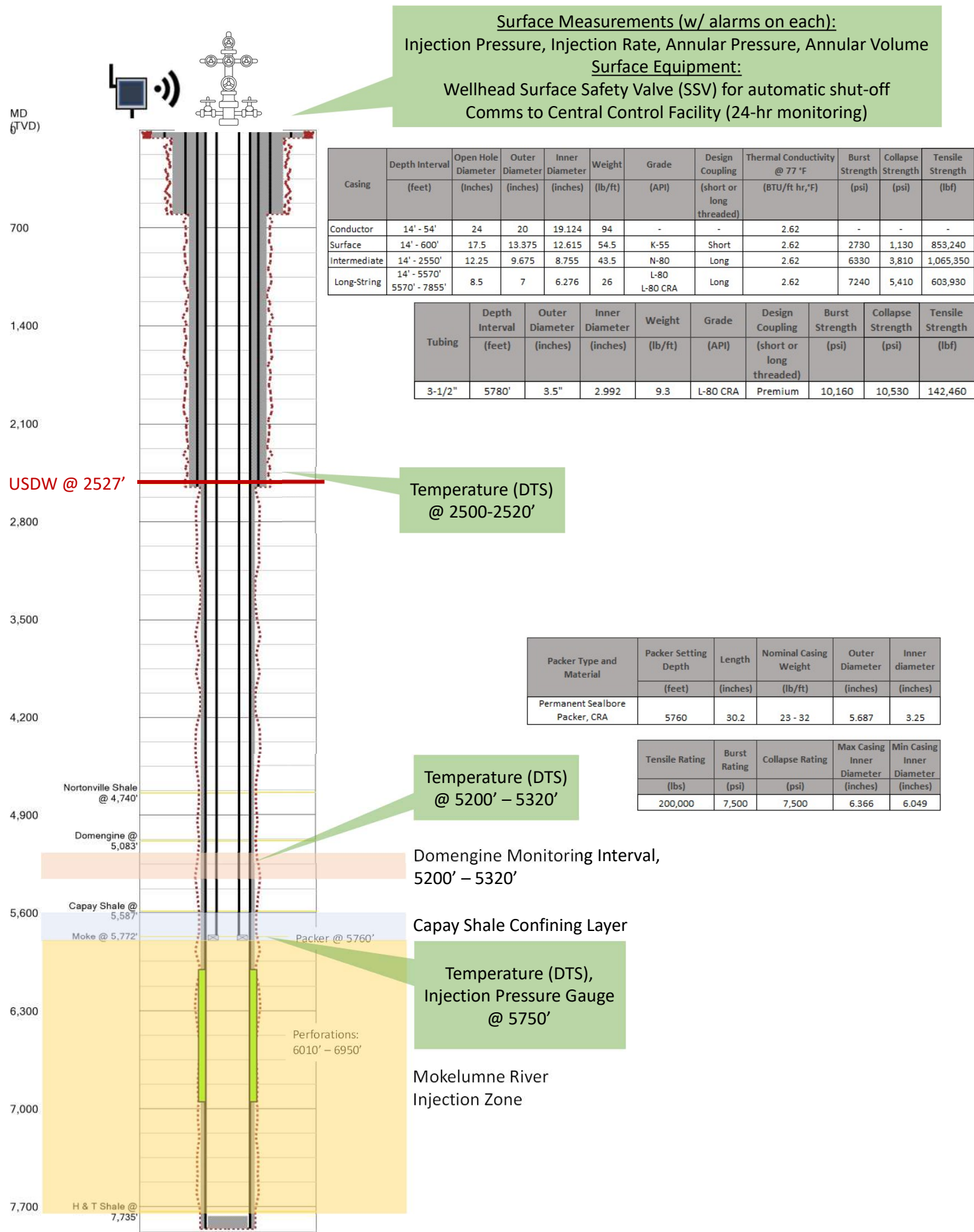
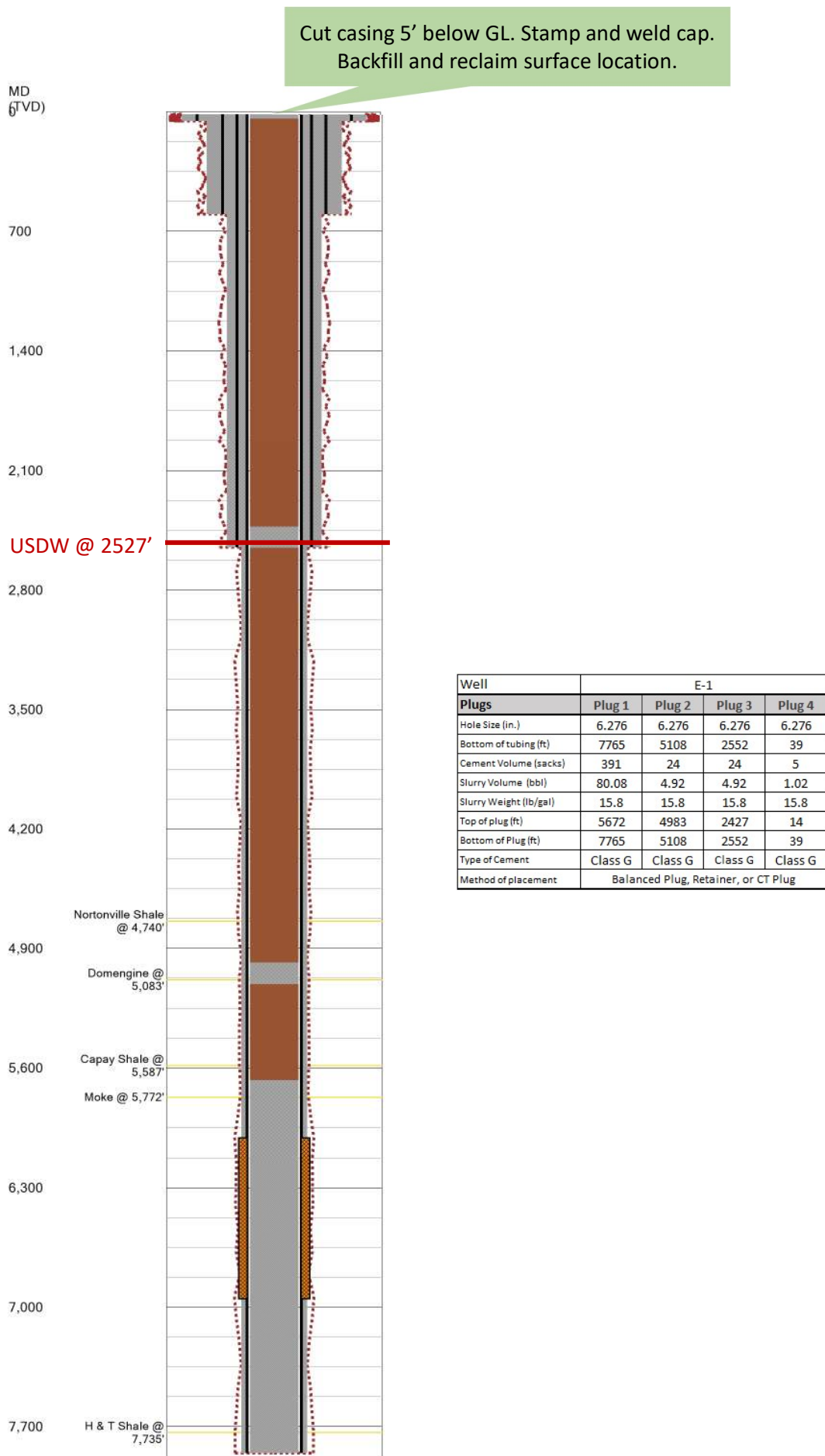


Figure 4. Injection Well C-2, Abandonment Schematic

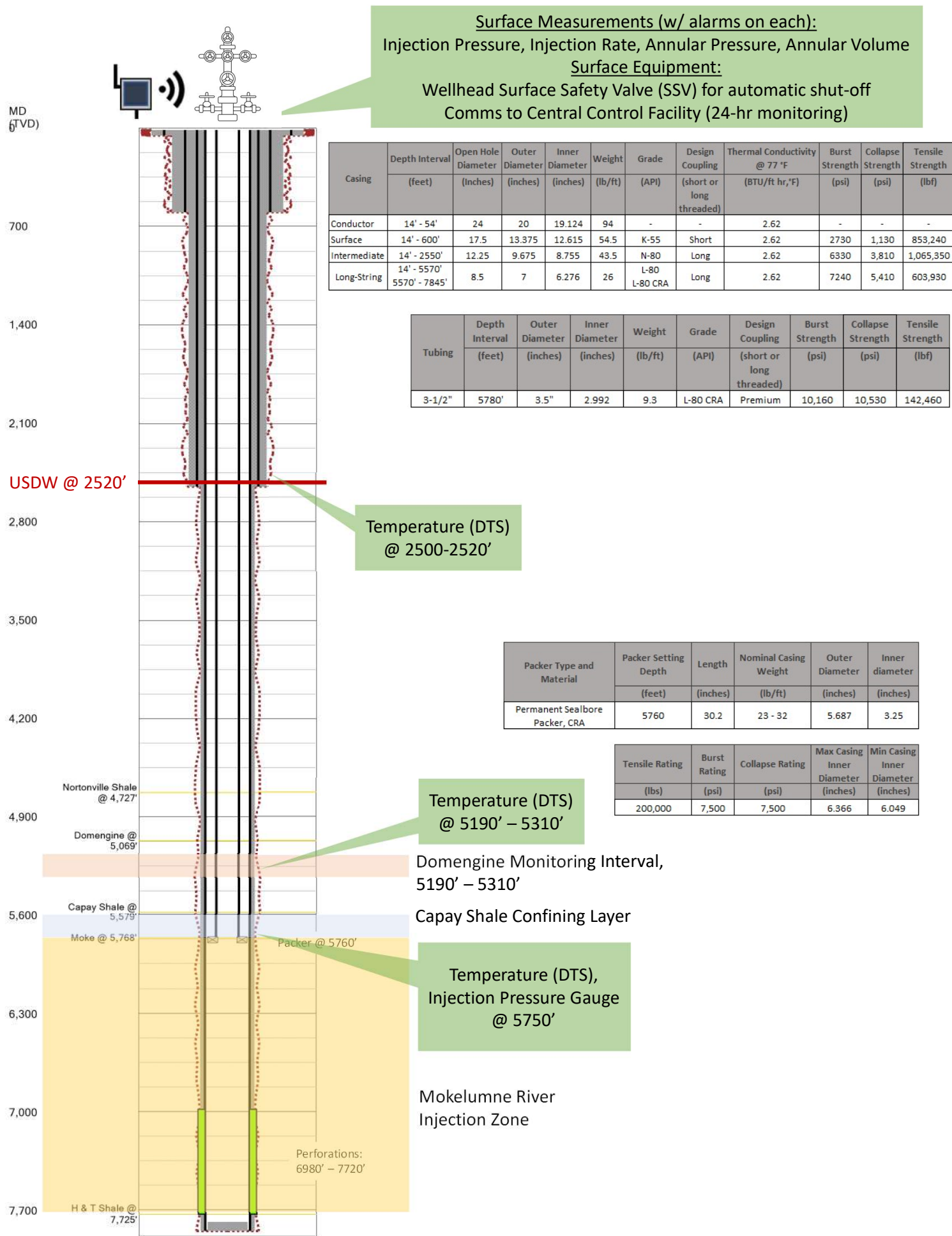




**Figure 5. Injection Well E-1, CO<sub>2</sub> Injection Schematic**

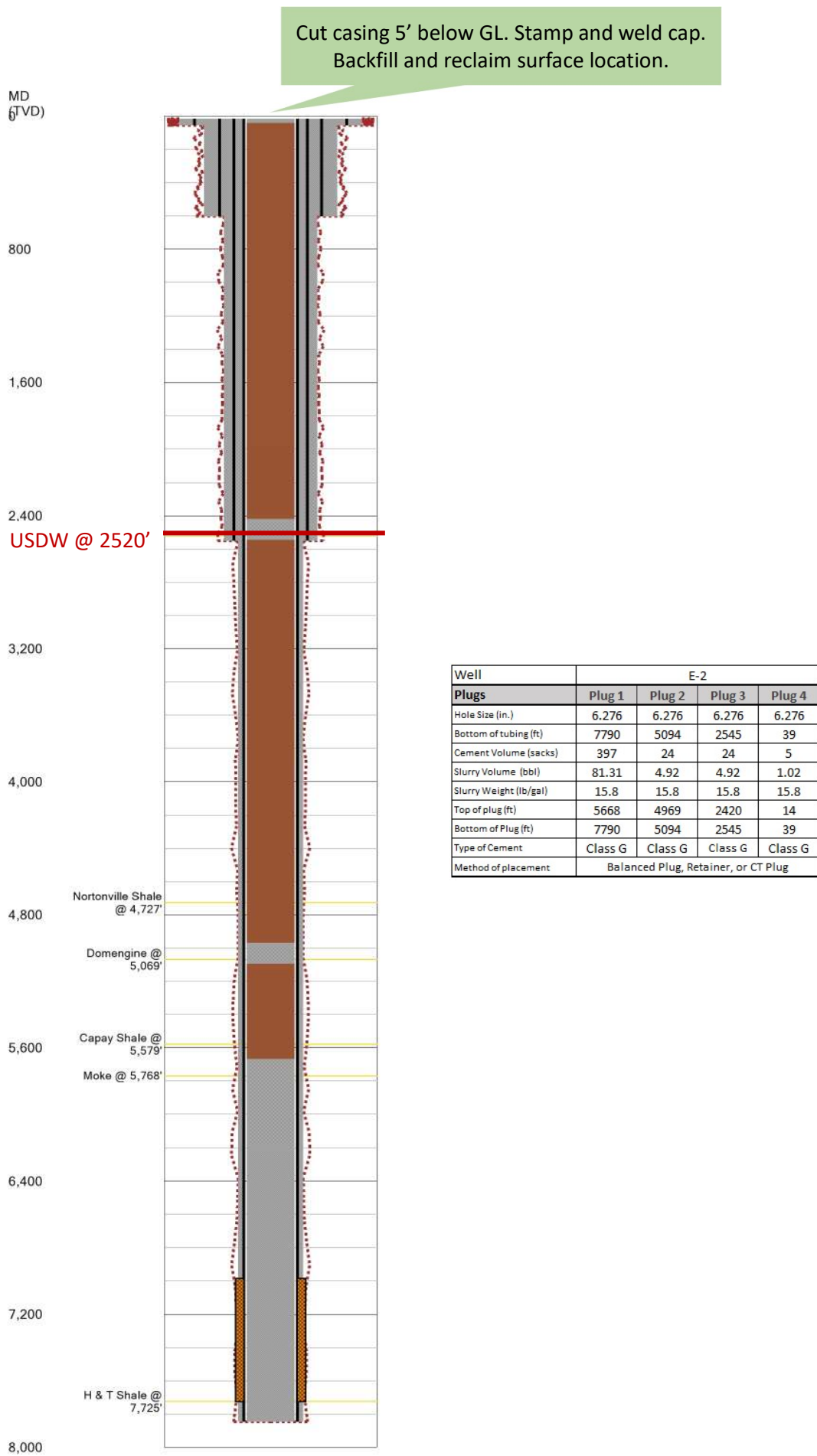


**Figure 6. Injection Well E-1, Abandonment Schematic**

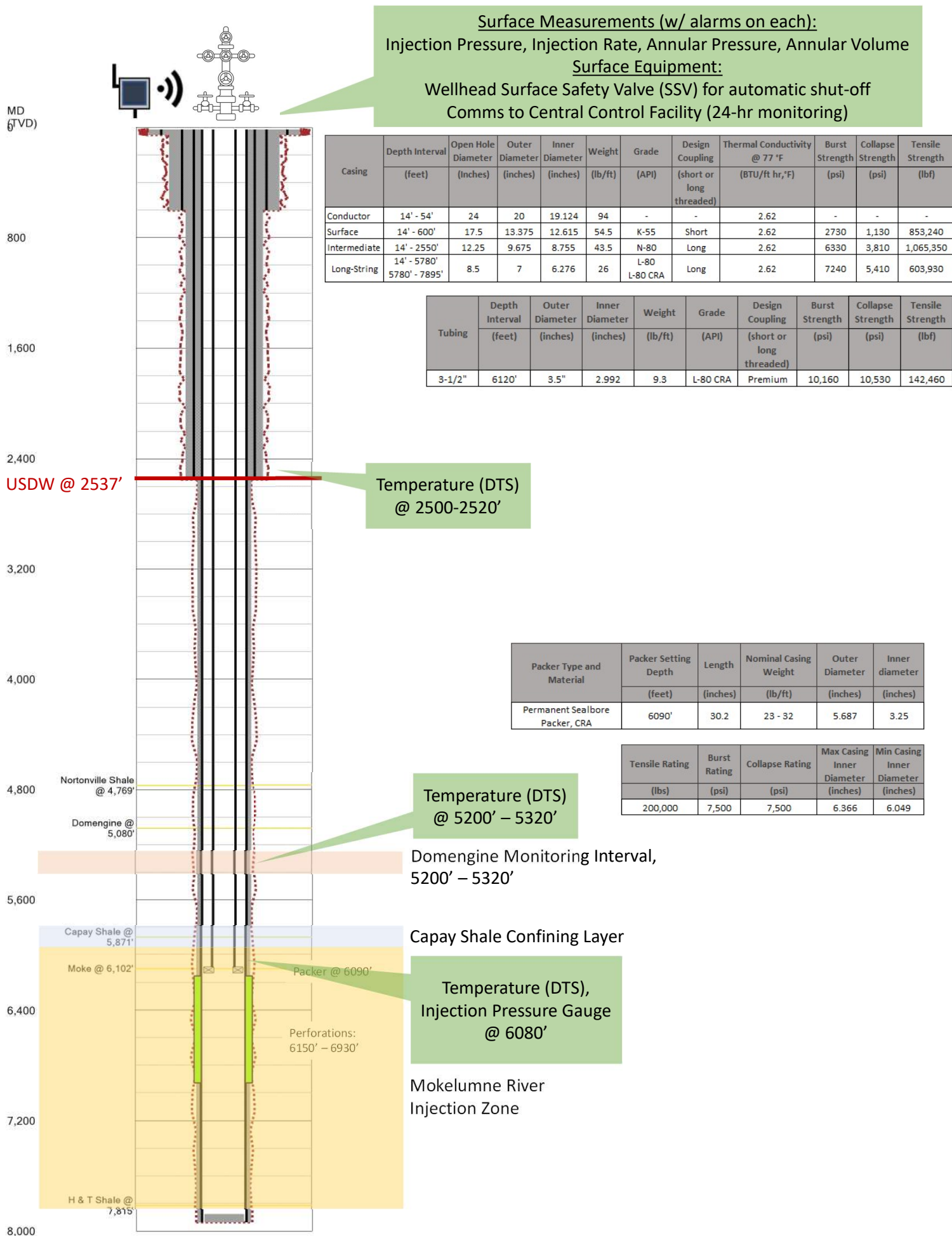


**Figure 7. Injection Well E-2, CO<sub>2</sub> Injection Schematic**

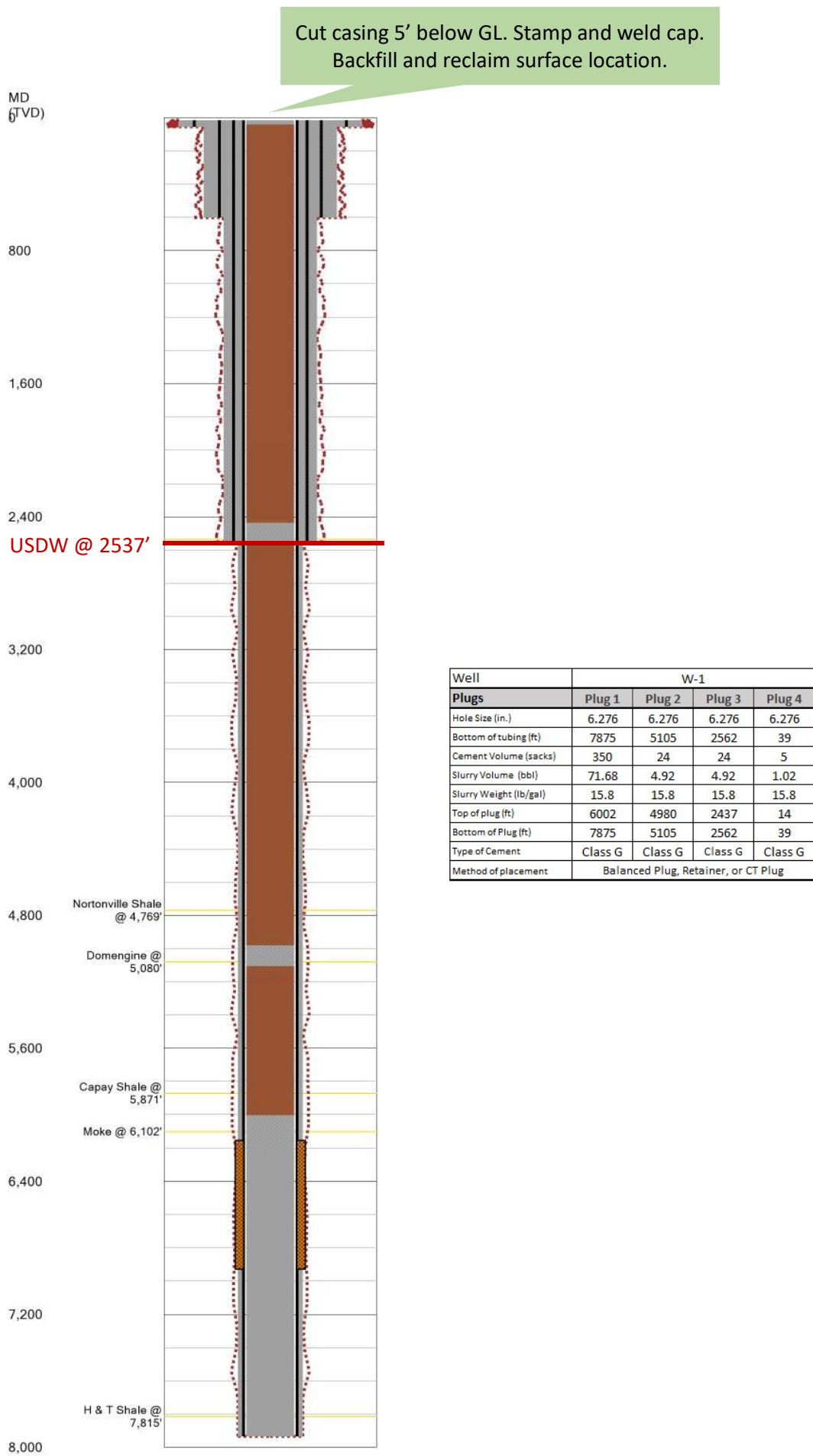




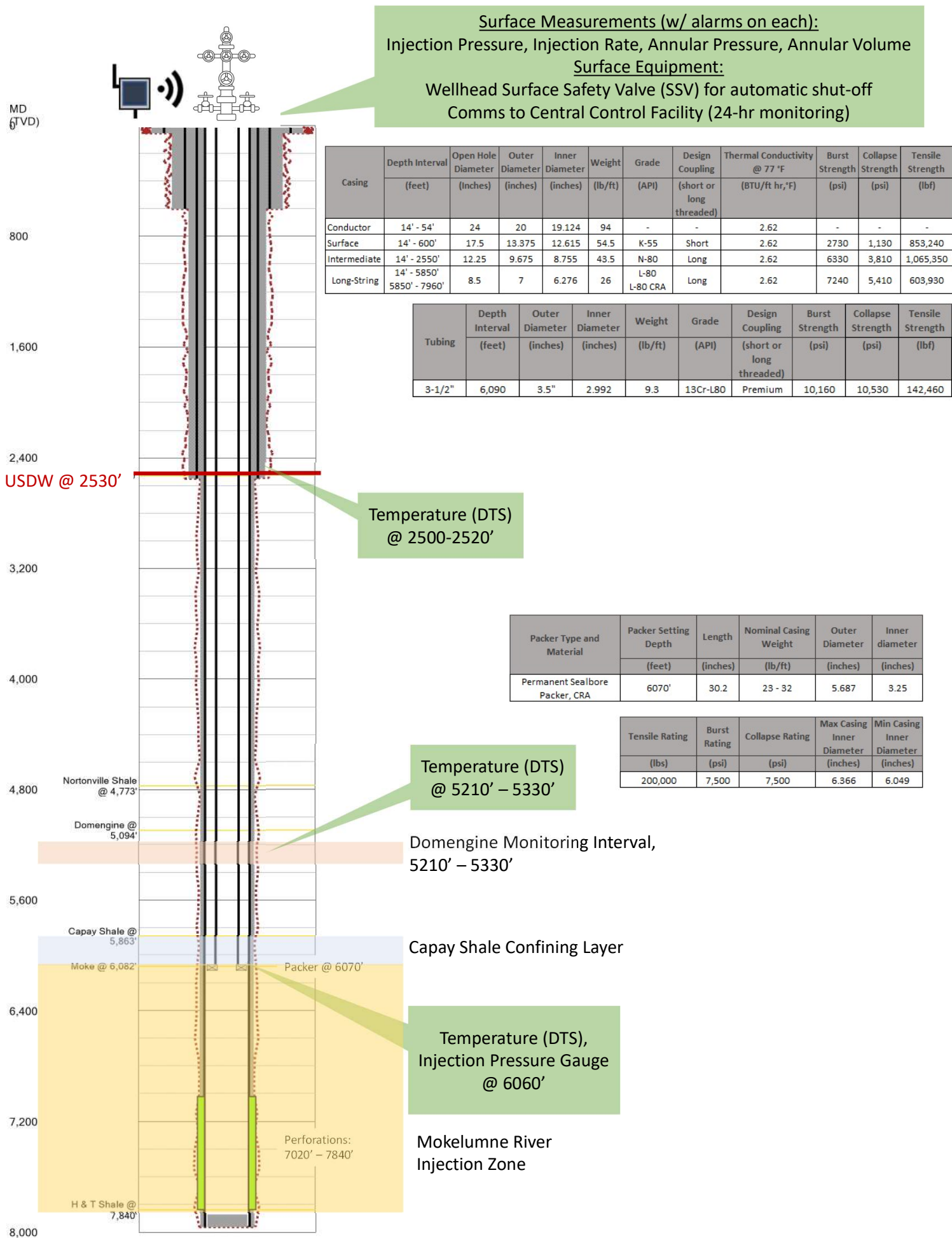
**Figure 8. Injection Well E-2, Abandonment Schematic**



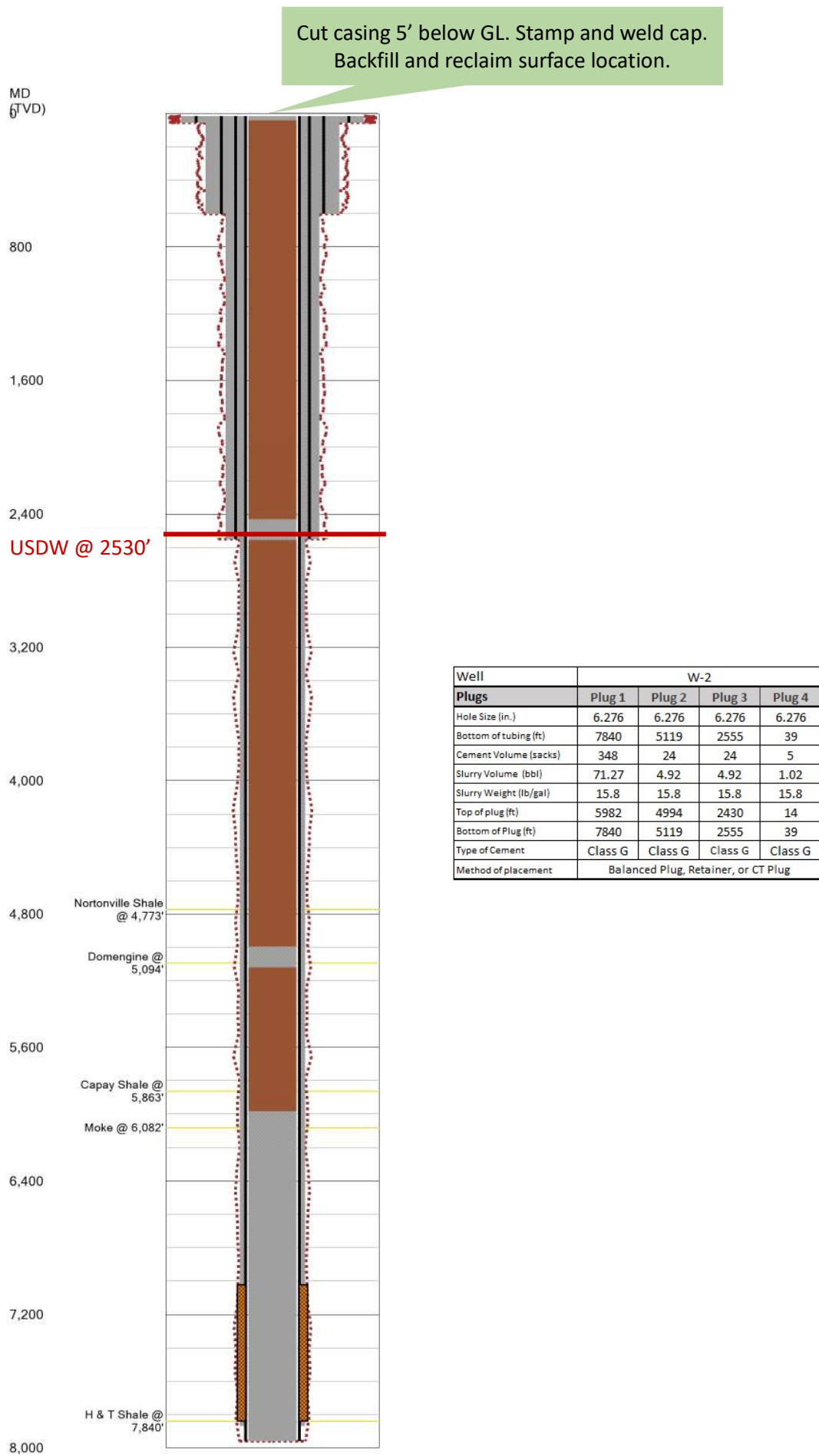
**Figure 9. Injection Well W-1, CO<sub>2</sub> Injection Schematic**



**Figure 10. Injection Well W-1, Abandonment Schematic**

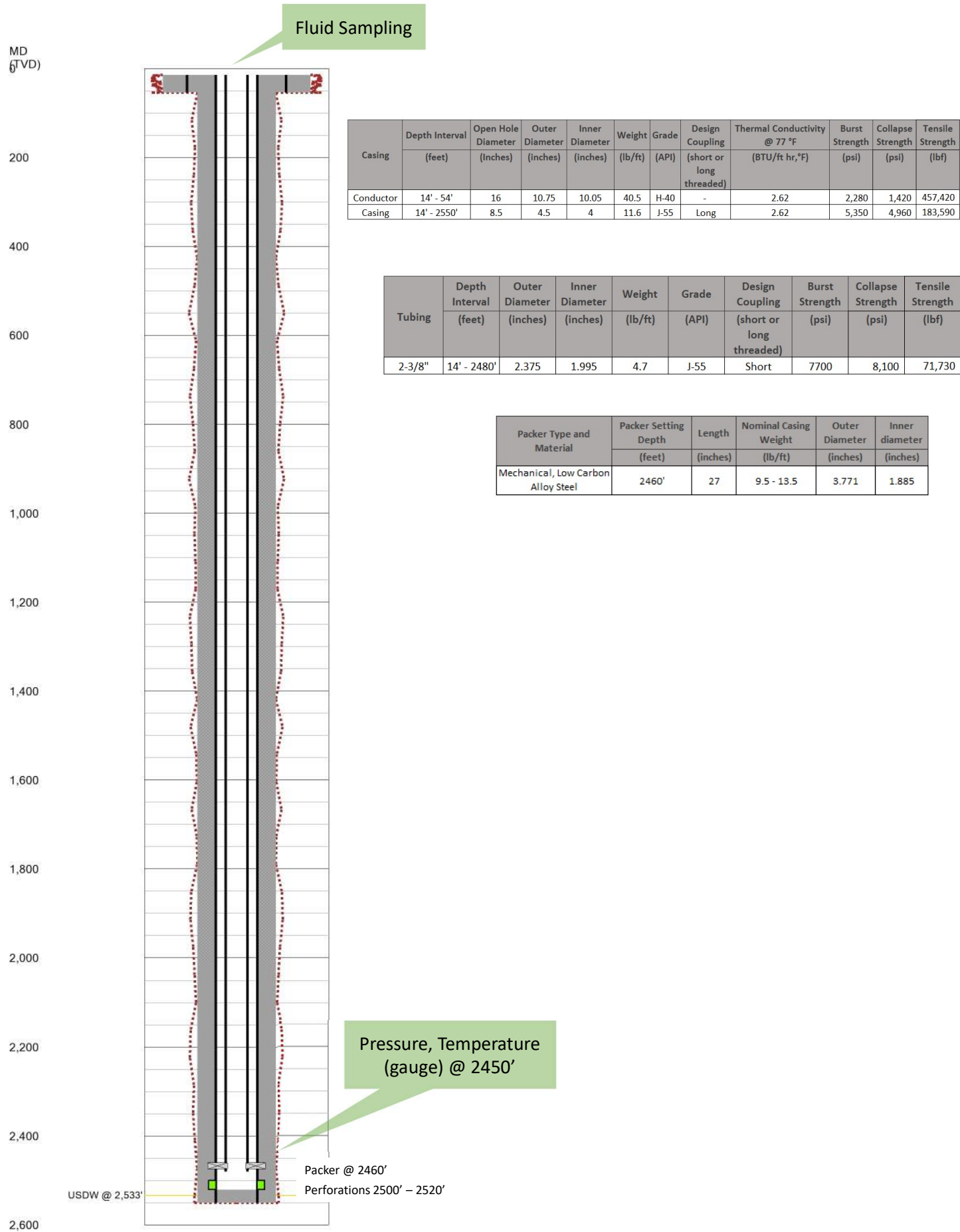


**Figure 11. Injection Well W-2, CO<sub>2</sub> Injection Schematic**

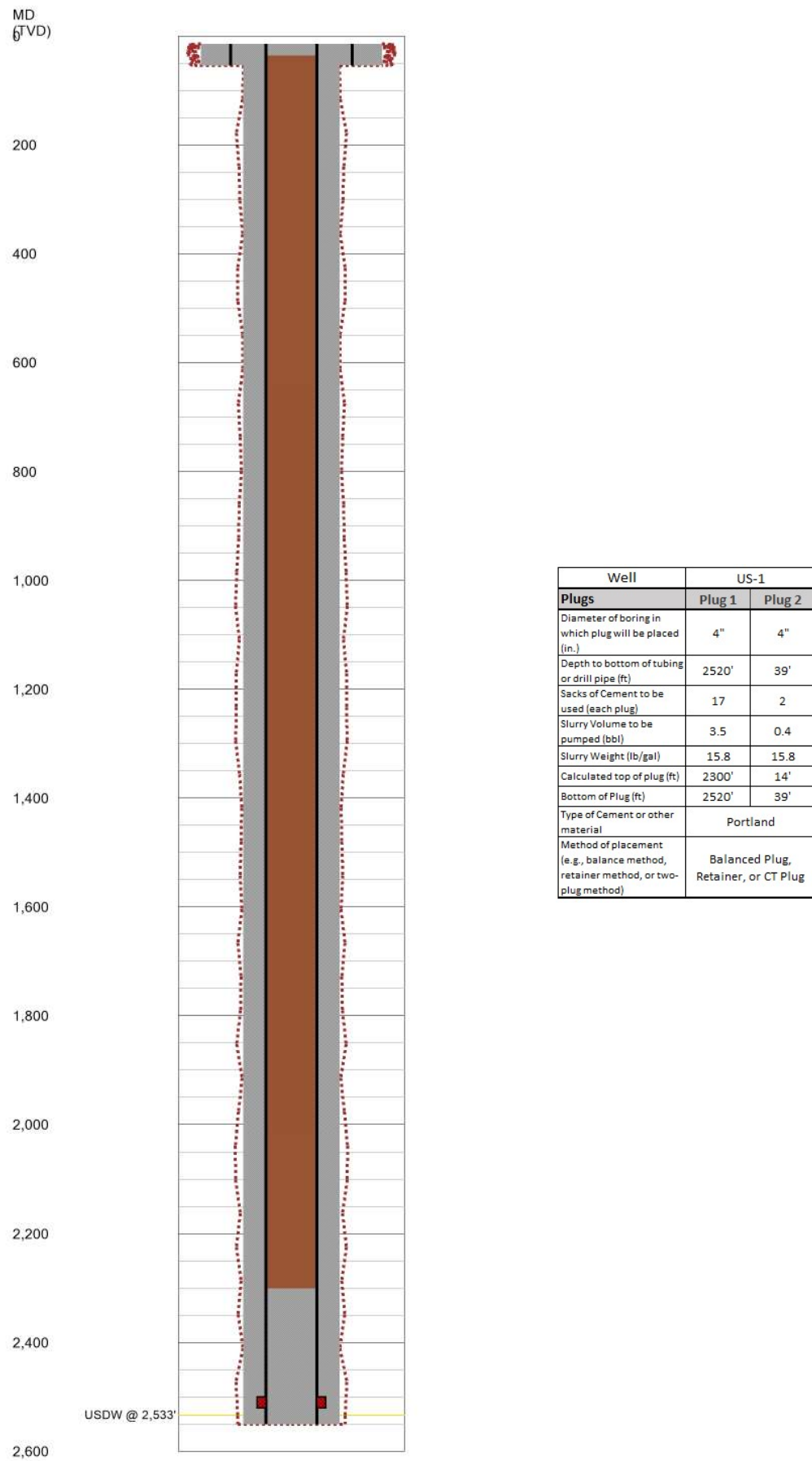


**Figure 12. Injection Well W-2, Abandonment Schematic**

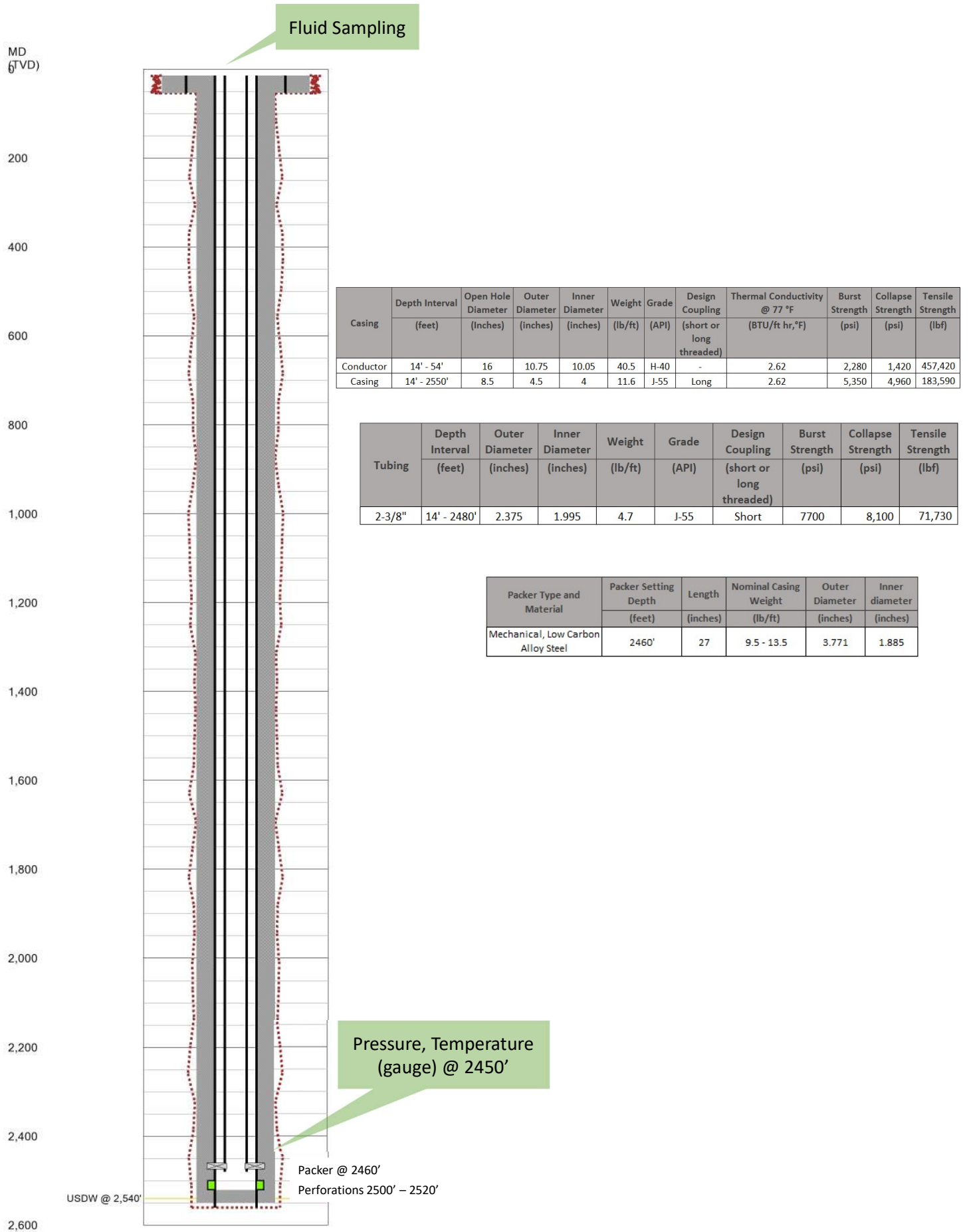




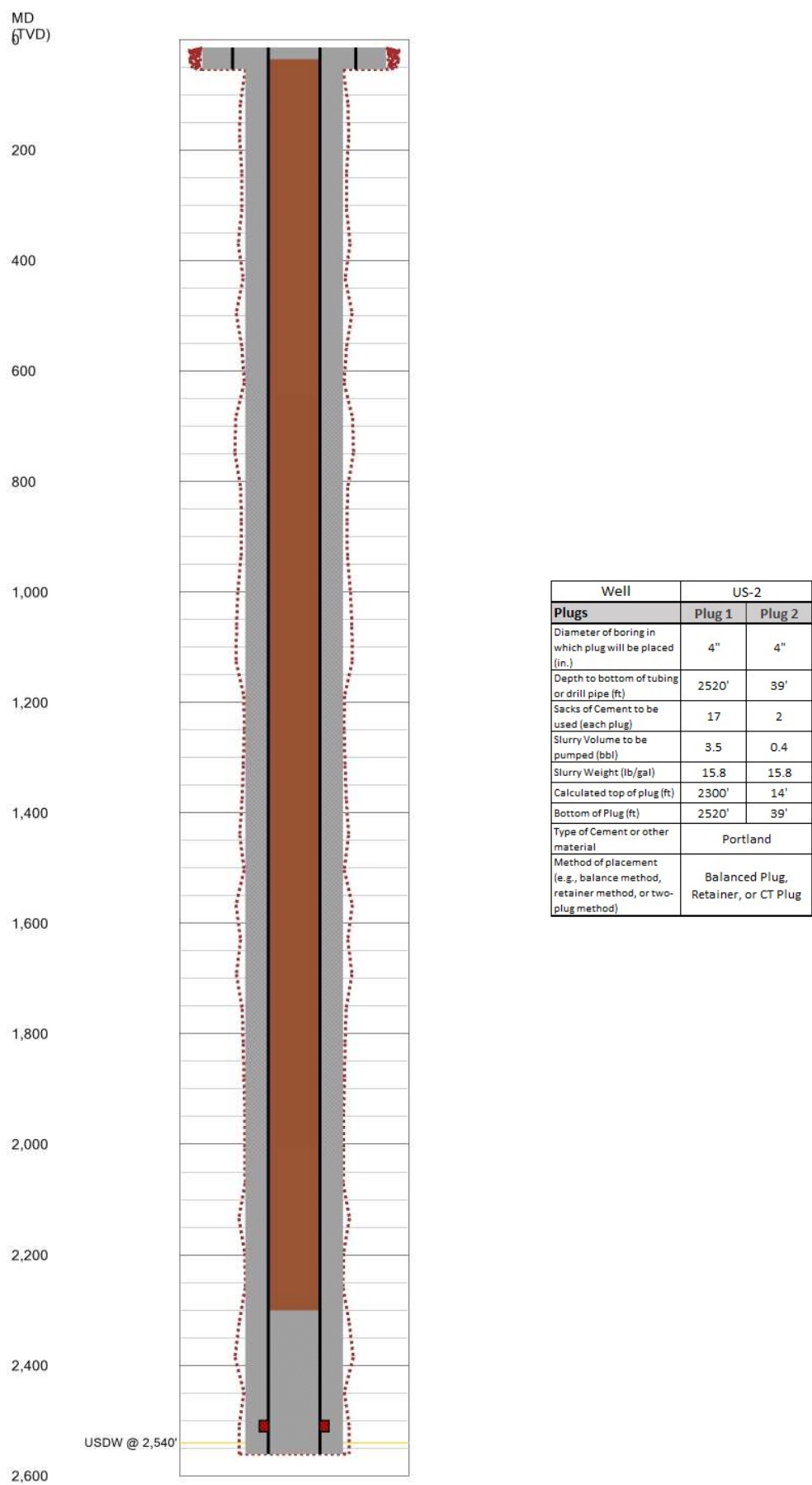
**Figure 13. USDW Monitoring Well – US-1, Proposed Monitoring Schematic**



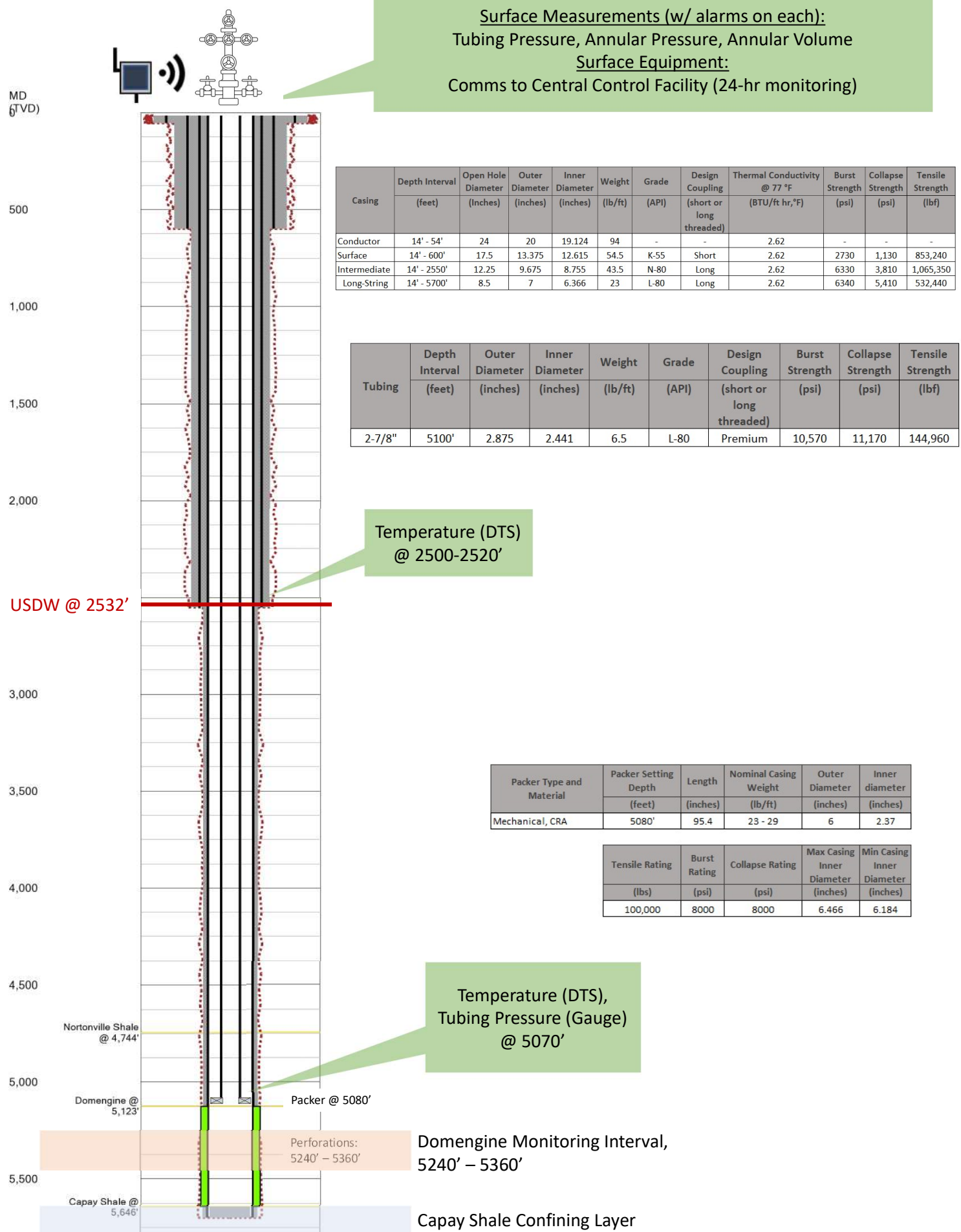
**Figure 14. USDW Monitoring Well – US-1, Proposed Abandonment Schematic**



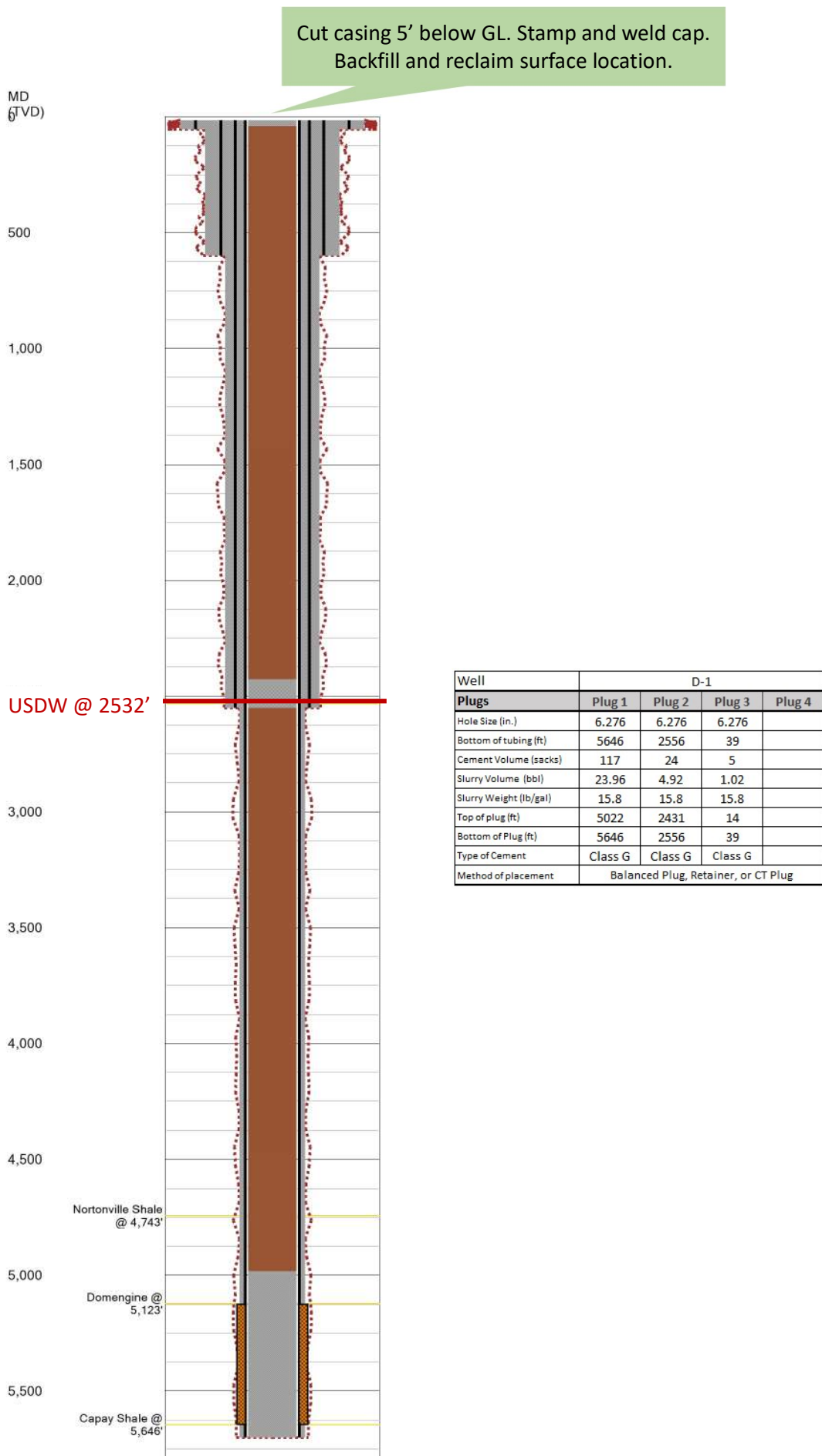
**Figure 15. USDW Monitoring Well – US-2, Proposed Monitoring Schematic**



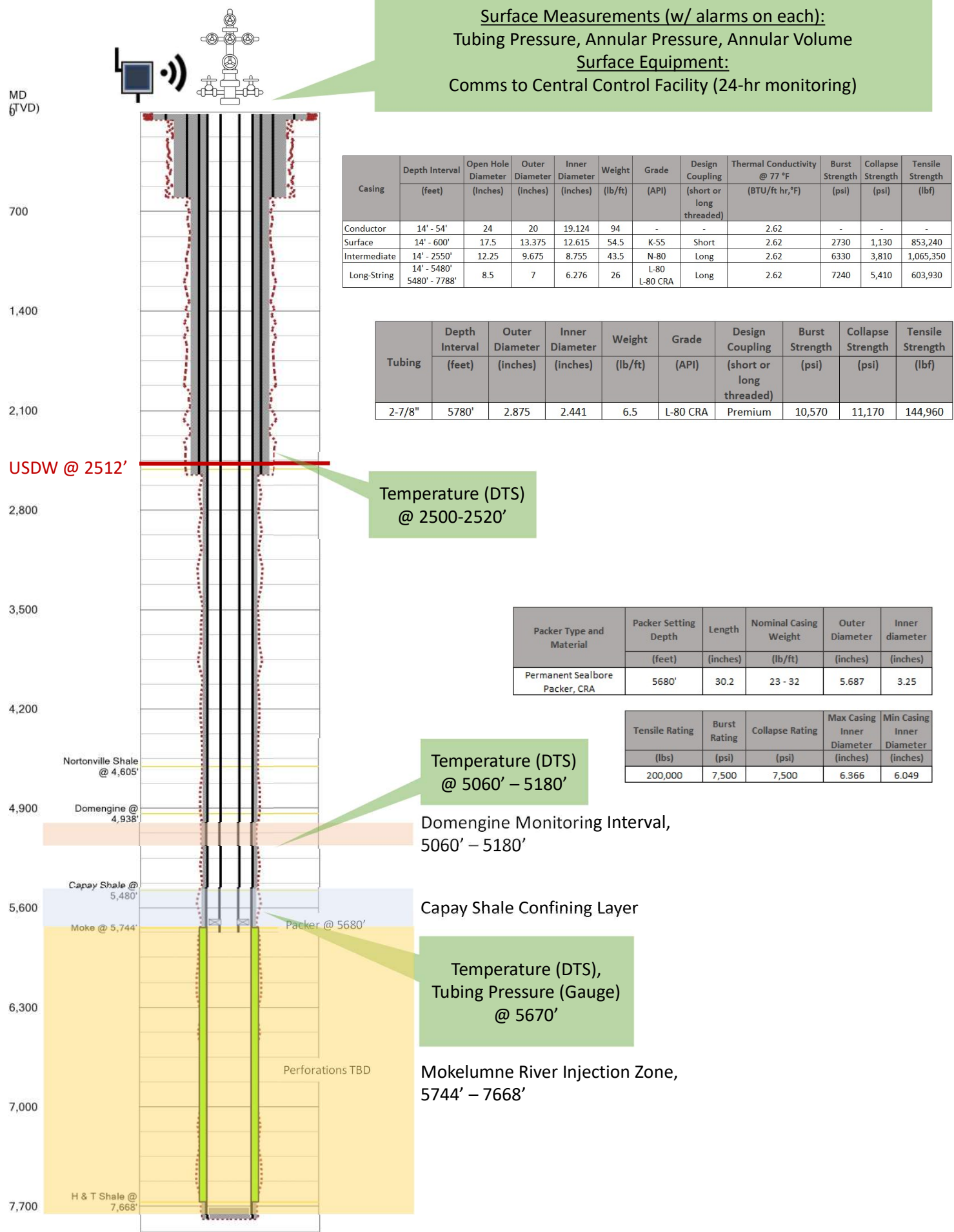
**Figure 16. USDW Monitoring Well – US-2, Proposed Abandonment Schematic**



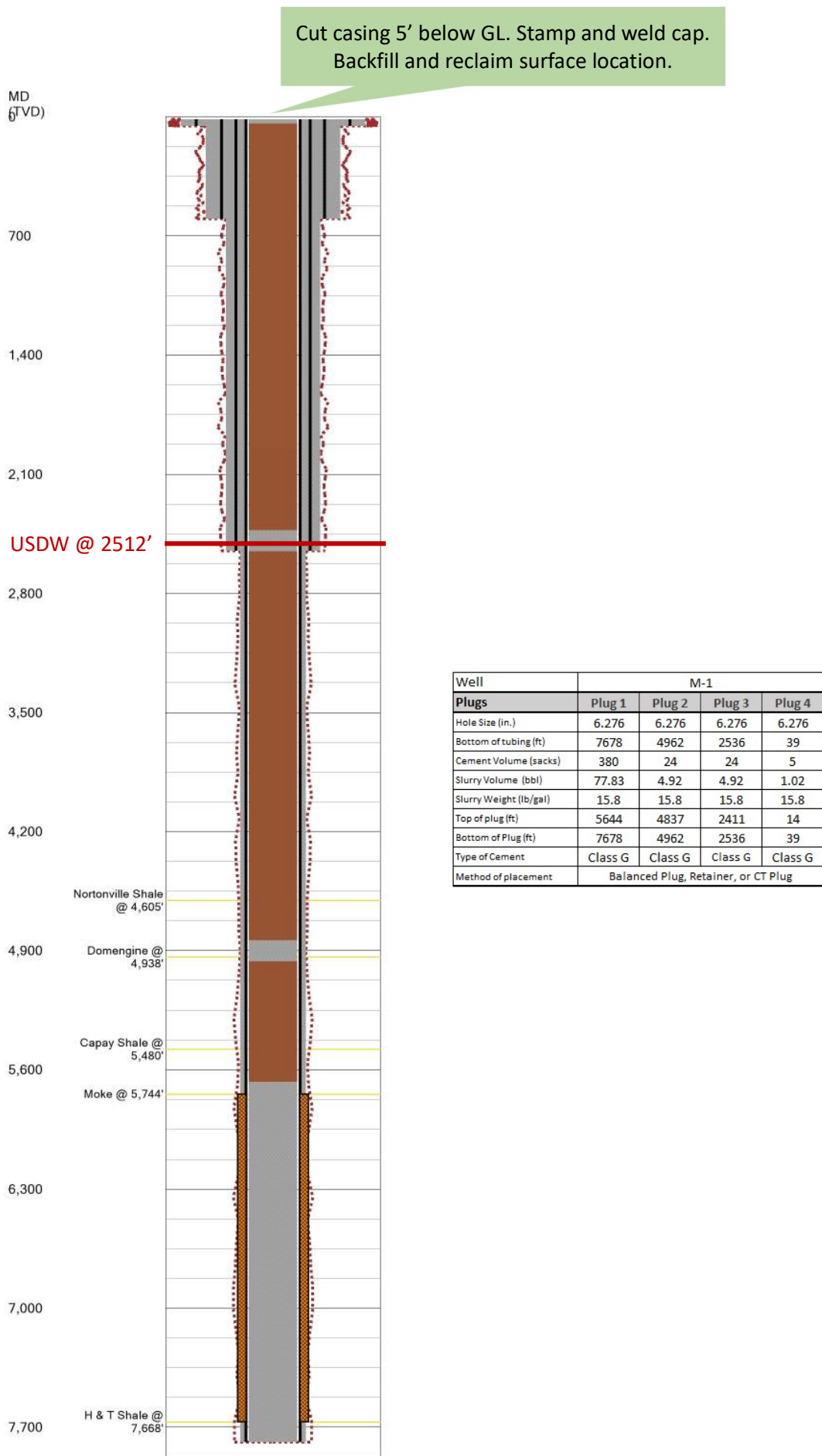




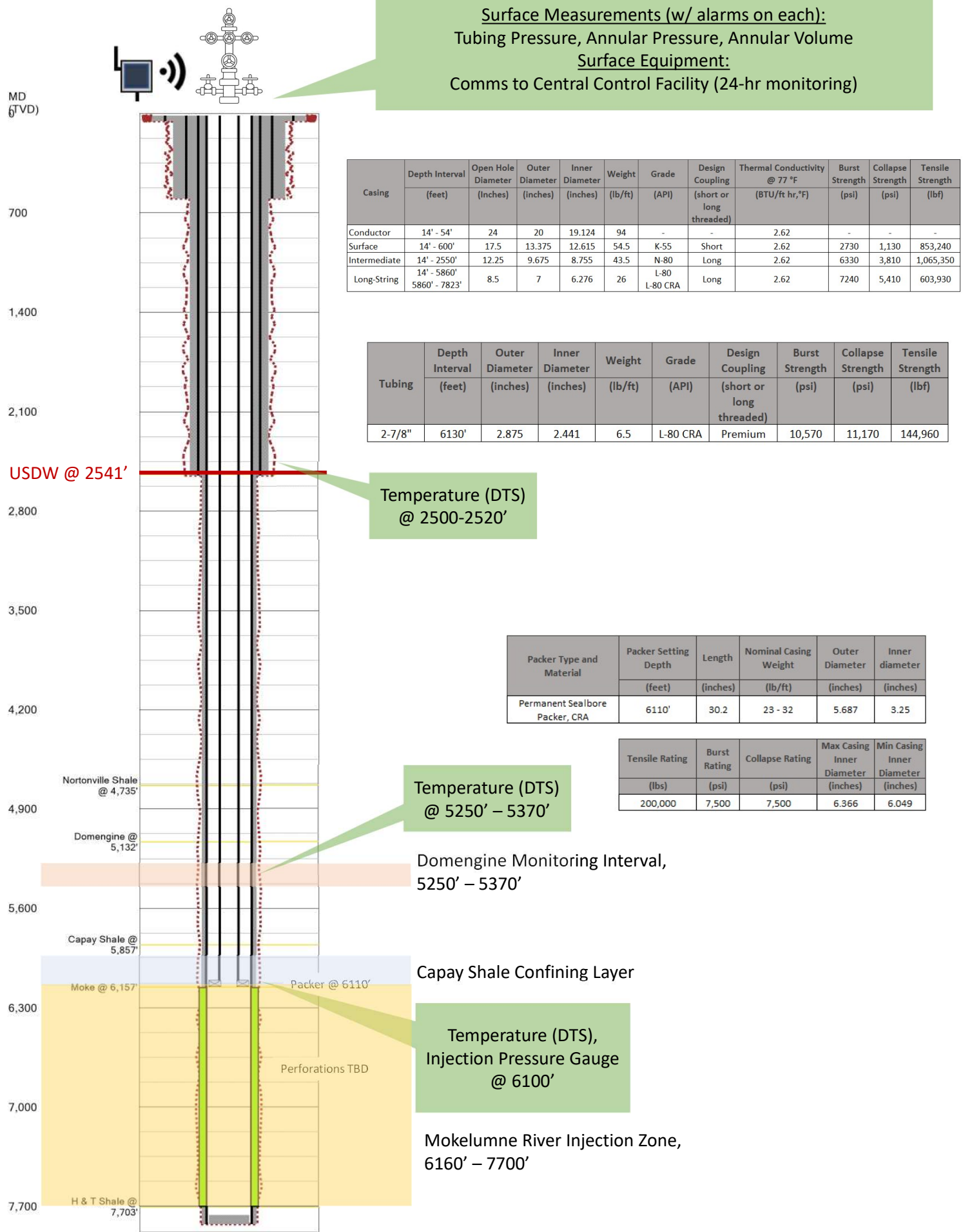
**Figure 18. Domengine Monitoring Well D-1, Abandonment Schematic**



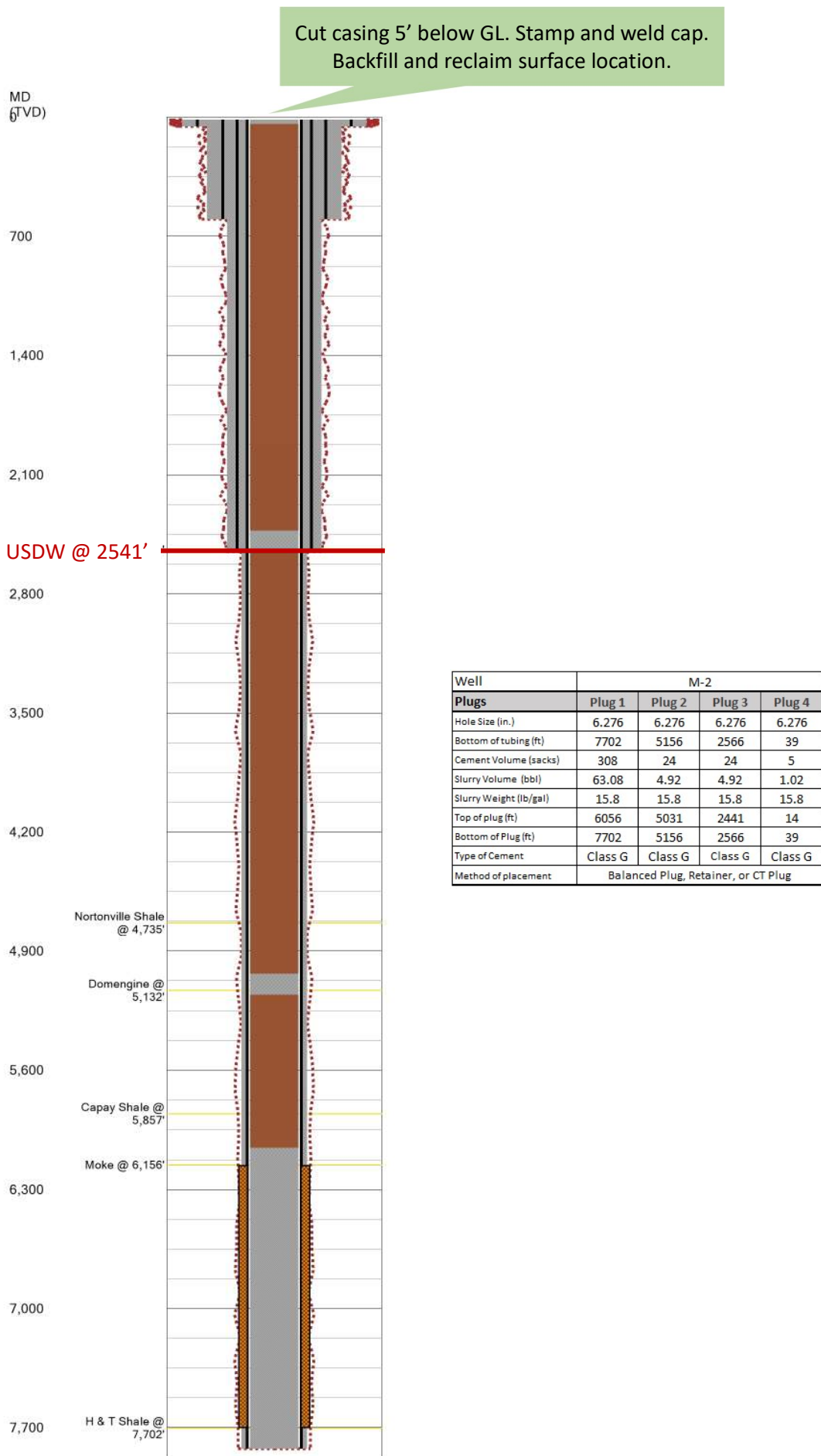
**Figure 19. Mokelumne River Monitoring Well M-1, Monitoring Schematic**



**Figure 20. Mokelumne River Monitoring Well M-1, Abandonment Schematic**

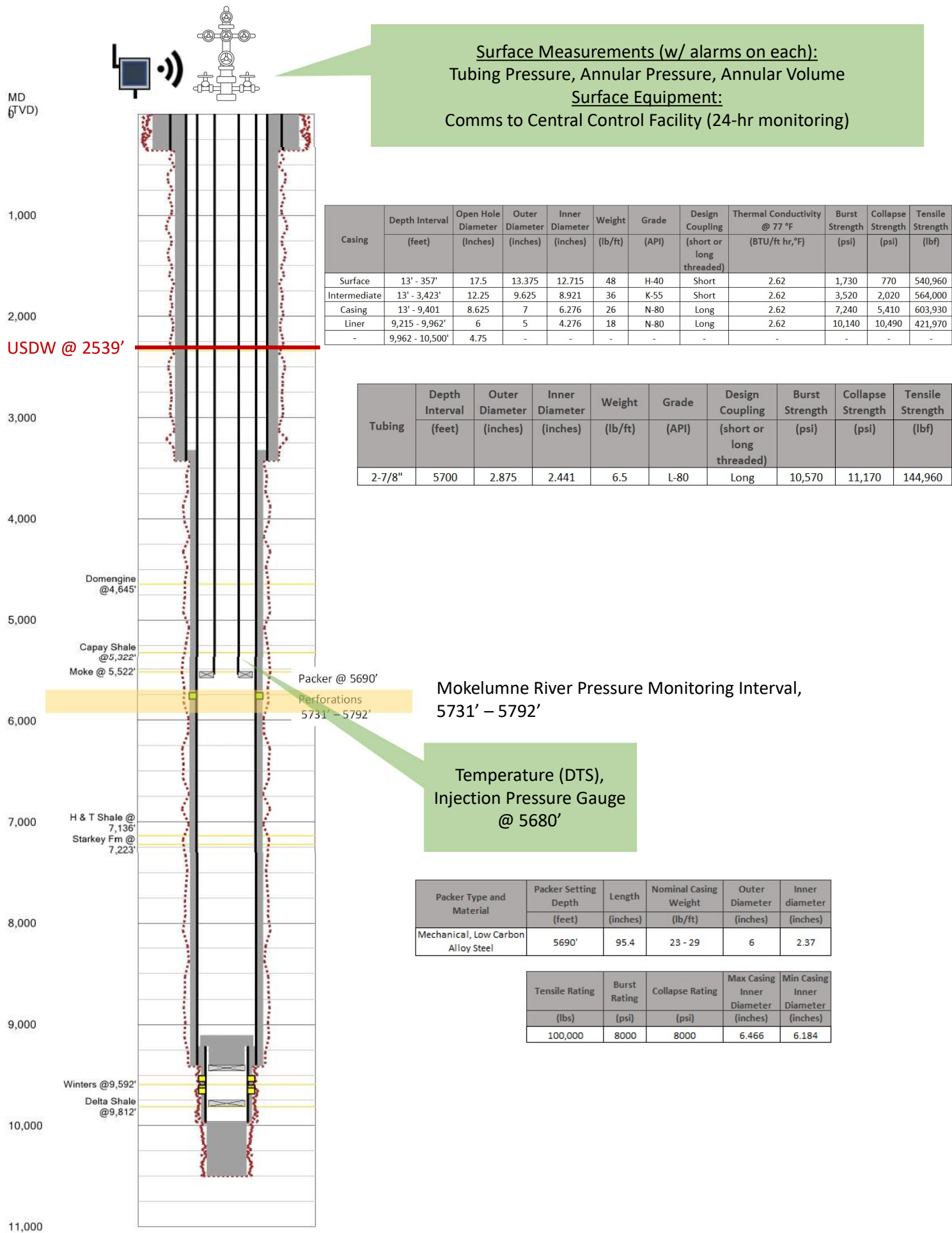


**Figure 21. Mokelumne River Monitoring Well M-2, Monitoring Schematic**

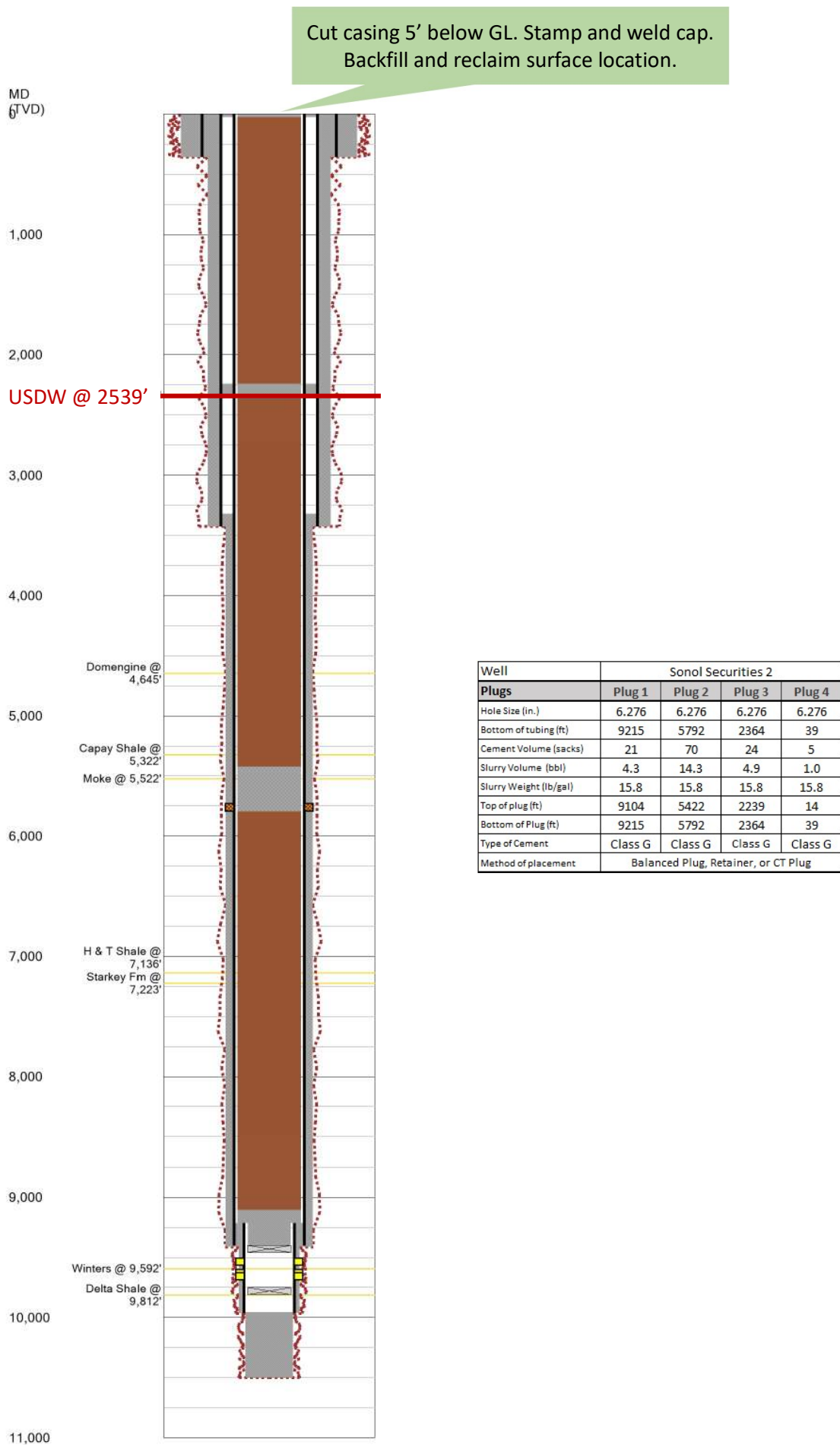


**Figure 22. Mokelumne River Monitoring Well M-2, Abandonment Schematic**





**Figure 23. Mokelumne River Pressure Monitoring Well, Sonol Securities 2 (Union Island Gas Field), Proposed Monitoring Schematic**



**Figure 24. Mokelumne River Pressure Monitoring Well, Sonol Securities 2 (Union Island Gas Field), Proposed Abandonment Schematic**