

NM OSE Comments Continued 5-29-09
Review of April 2009 SAP for Roca Honda uranium mine

17. Appendix A., Pre-Test Activities No. 3 & 4. Please clarify the time interval of water level measurements for wells prior to the aquifer tests and during the recovery phase. There is mention of hourly barometric readings without a corresponding frequency for water level measurements. For background transducer measurements a more frequent measurement interval (e.g., every 15 minutes) would better assess the barometric effect on the water levels.
18. Appendix A, Constant Rate Test - Introduction; Constant Rate Test No. 13; General Test Guidelines No. 5; Pre-Test No. 9; General Test No. 2 & 8; Constant Rate Test No. 9 & last paragraph; Constant Rate Test, Tables A-1 & A-2; Pre-Test No. 5; and Constant Rate Test No. 8. NM OSE concurs and in some instances expands upon for greater emphasis on the following aquifer testing procedures: allow full recovery of water levels to background after the step test and before the constant rate test; continue measurements during recovery phase for possibly weeks until full recovery of water levels is reached; refuel and maintain the generator without shutting down pump during the test; record in the field log all adjustments to valve position and flow rate even when flow checks result in no changes; append field log to data tables; and collect more frequent transducer data for early and late time recording because the data may be useful in identifying regional background trends and indicating equipment malfunctions
19. Appendix A, General Test No. 3; and Pre-Test No. 7. Check manufacturer specifications for totalizing flow meter placement relative to discharge plumbing such as the proximity to elbows, valves, diameter changes and the gate valve for proper function.
20. Appendix A, General Test No. 3; and Constant Rate No. 9. Check manufacturer specifications for correct use of orifice meter and manometer (or orifice plate and manometer) regarding proximity to plumbing transition and limitation for diameters selected.
21. Appendix A, Pre-Test No. 5. Check the ratings of the transducers, particularly in the pumped well, to avoid exceeding the tolerance of the device. This would most likely be an issue with setting the transducer near maximum submergence, then having pumping shut off in a transmissive aquifer, where recovery bounce occurs, possibly exceeding original static water level vigorously. It might also occur subtly if there is a regional rise in water level over the duration of data collection, and again the transducers were set at extreme submergence. Transducers provide most accurate data when operated in the middle of their pressure range.