Well Depth

Readings Oct 30, 2023

Peterson Well Depth = 448 feet
Mooney Well Depth = 458 feet

Solinst Sonic Water Level Meter Model 104

Future Readings:

- Seasonal changes during the year
- Yearly trends from year to year
- Drawdown - drop in level from static level to the pumping level
- Recovery Time - time required for well to return to static level
- Well Yield - rate of well can be pumped (gpm)
- Specific Capacity - Well Yield ÷ Drawdown (gpm/feet)

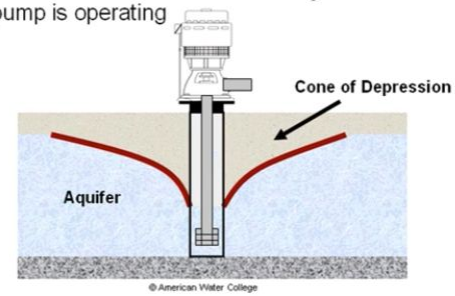
Petersone Well Elevation = ~984 feet
Peterson Well Opening above ground = 1 feet

Mooney Well Elevation = ~972 feet (on road near gate)
Mooney Well opening above ground from road = 10 feet

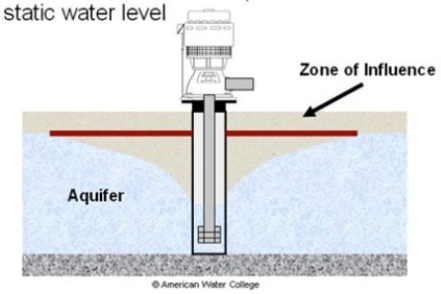
The two wells are near each other (0.4 miles) and their depth readings are about the same **could indicate that both wells use the same Aquifer.**

Well Depth Knowledge

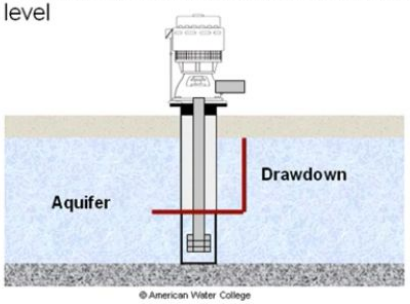
Cone of Depression
The depressed water surface surrounding the well when the well pump is operating



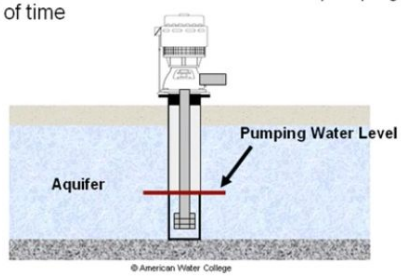
Zone of Influence
The distance that the cone of depression affects the normal static water level



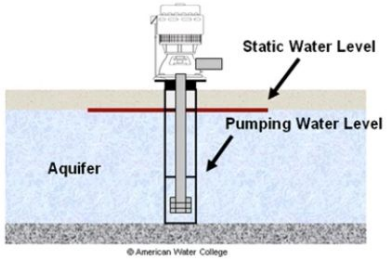
Drawdown
The drop in water level from the static level to the pumping level



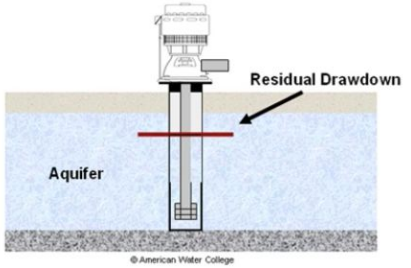
Pumping Water Level
The water level in the well after it has been pumping for a period of time



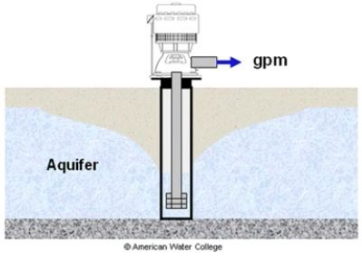
Recovery Time
The time required for the well water level to return to the static level after pumping has stopped



Residual Drawdown
A water level below the static level that remains after the pump is stopped for a period of time

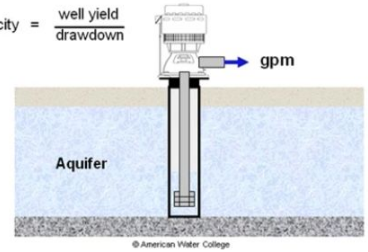


Well Yield
The rate at which a well can be pumped over a long period of time (recharge rate of the aquifer)



Specific Capacity
The well yield per unit of drawdown

$$\text{specific capacity} = \frac{\text{well yield}}{\text{drawdown}}$$



Water Aquifer Volume Indicators
- Fast recovery time
- Small drawdown after much pumping
- Large Specific Capacity