B-2, F-9 and N-17 - Three commercial wells at St David Springs, $155,000 Each

B - 2 – Escalante Crossing
F - 9 - Riverbend
N - 17 – Headquarters

As Built Construction

12-inch casing to depth of 200 feet and concrete encased
8-inch casing to 800 to 850 feet and gravel packed around screened casing to support the formation and filter fines.

Cost to Build

Drilling and Casing - $425 per foot, total $340,000 each at 800-foot depth.
Pump, motor system and tank $45,000

Depth

800 to 850 feet deep to penetrate the clay lens formed at the base of the Dragoon Mountains and running west to St David Springs. The sweet artesian water is elevated to the surface by the hydraulic pressure of an enormous underground lake that originates at the Dragoon Mountains.

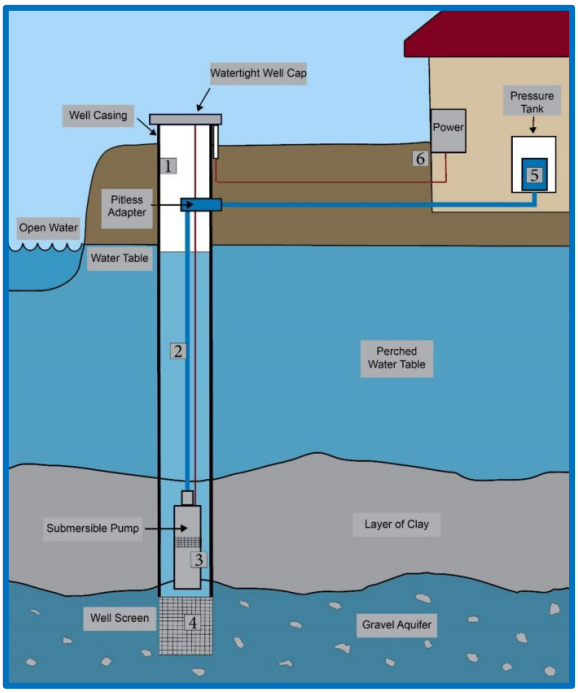
Potable commercial wells: # B-2, F-9 and N-17, were designed to meet the 100-year water supply requirement of ADWR, (Arizona Department of Water Resources). Well B-2 can serve the development of Escalante

Crossing, Well F-9 can serve the development of Riverbend and the Peninsula, Well N-17 is on the Farm Headquarters land.

Well Components

Knowledge of the main components of a private water well system. A drilled well can reach confined aquifers, even at significant depths.

A combination residential and irrigation well water system includes many components. The main components of a drilled well include



1. The wellhead: visible above ground.

2. The well is a bored hole connecting the surface to the groundwater. The casing lines the well to keep material from collapsing into it.

3. In this illustration, submersible pump delivers water to the surface.

4. A screen at the bottom of the well filters out loose soil, such as sand.

5. A pressure tank provides temporary water storage in a single speed system although a variable speed motor can bypass the storage tank for irrigation.
6. The water is pumped to the surface using a power source, usually electricity.
7. Artesian wells at St David Springs that flow water above the surface are known as “flowing artesian wells. Many artesian wells flow above the surface and others rise near the surface. Those that rise near the surface are artesian but not flowing artesian. Artesian wells significantly reduce water pumping cost.
8. You do not need to lift the water from the very bottom of the well. Water only needs to be lifted from the static water level to the discharge point. The static water level is the level to which water naturally rises in the well when it’s not being pumped.