Case Study: Clean, Safe, & Delicious Water for a Family on Well Water

Client Background

A family of four, along with their two energetic dogs, relied on a private well to supply water to their three-bathroom home in Utah. Unfortunately, their water was far from refreshing. It came out of the tap black and foul-smelling. Testing revealed high levels of iron, manganese, hydrogen sulfide, and troubling bacterial contamination—including iron-related bacteria, sulfate-reducing bacteria, HPC bacteria, and HAB bacteria. Counts exceeded 1,000,000 CFU in untreated water, creating both aesthetic and health concerns.

Goals & Objectives

The family's top priorities were clear:

- Safe, bacteria-free drinking water for their children and pets
- Protecting appliances and plumbing from iron and scale damage
- Eliminating bad odors and tastes that made water unpleasant
- Choosing a Made in the USA system, with NSF certification, professional installation, and strong local support

The Solution

They evaluated numerous alternatives and finally selected a Licensed Local Plumbing Contractor who provided expert system selection and installation. After an initial treatment step with a Crusader FE-BAC system (targeting iron, manganese, and hydrogen sulfide) and a Crusader Enhanced Softening system (targeting hardness and sulfates), the family needed a final safeguard to provide absolute protection. Located in the home's mechanical space, the Symphony 2 Ultrafiltration system was installed to protect the home from biological threats.

Key features included:

- Stage 1: Sediment filter with Active Armour™ for scale and corrosion protection (150,000 gallons capacity)
- Stage 2: Self-cleaning Inge® ultrafiltration membrane filtering down to 0.015 micron, providing >99% bacterial reduction and lasting up to 1,000,000 gallons
- Stage 3: Dual carbon block cartridges polishing water to control color, odor, pesticides, herbicides, and organics (capacity: 530,000 gallons combined) NSF/ANSI certifications for chlorine taste and odor reduction

Results & Outcomes

The difference was immediate and measurable:

- Laboratory testing confirmed >99% reduction in bacteria
- Water became clear, odor-free, and great tasting

The family finally had peace of mind knowing the water is safe for children and pets. Active Armour provided reduced scale and corrosion risk for plumbing and appliances. They have simple maintenance and lower operating costs compared to alternatives.

Contaminant	Raw Water	Treated Water
Iron (mg/L)	4.3	Not Detected
Manganese (mg/L)	0.11	Not Detected
Sulfate Reducing Bacteria (CFU)	>1,000,000	50
Iron Related Bacteria (CFU)	>1,000,000	10
Heterotrophic Aerobic Bacteria (CFU)	>1,000,000	Not Detected
Heterotrophic Plate Count Bacteria - HPC (CFU)	>1,000,000	5
Hardness (mg/L)	308	11.5
Sulfate (mg/L)	290	20

SYMPHONY



Comparison of Raw and Treated Water

powered by inge heart of pure water a DuPont brand

Unexpected Benefits

Beyond the science, the impact on daily life was profound. The homeowner shared: "**We can finally have a relaxing bathing experience in water that feels good, smells good, and that we know is safe**." They also reported better overall water aesthetics, improved bathing comfort, and fewer complaints from the kids. The family was so impressed they continue to refer their neighbors facing similar challenges.

Why Symphony 2 Ultrafiltration

For this family, the Symphony 2-UF system was more than just a filter—it was trust, safety, and comfort in every drop. With American-made quality, certified performance, and advanced ultrafiltration technology, Symphony delivers a reliable long-term solution to complex water problems.