

Introduction

The call usually comes at dusk: “No water, no heat, and the house is dropping below 60°F.” In open-loop geothermal systems that rely on a private well, a failing submersible doesn’t just kill showers—it knocks out the heat pump too. When you’re moving a steady 5–12 GPM through a heat exchanger all winter, the wrong pump will show its weaknesses fast: worn impellers, overheating motors, and efficiency nosedives that send power bills through the roof.

Meet the Santoro family. Paul Santoro (41), a high school chemistry teacher, and his wife, Nadine (39), a nurse, live with their kids Luca (11) and Mira (8) on five acres outside Olean, New York. Their 3-ton open-loop geothermal heat pump needs a reliable 6–8 GPM whenever the thermostat calls. Their 260-foot private well had been running a budget 1 HP unit that promised the world but delivered short cycles, grit-driven wear, and finally, a dead motor in late November. A cracked thermoplastic discharge on that old Red Lion left them with cold radiators and empty faucets for two days. Paul swore he’d never gamble on heat and water again.

This list is for families like the Santoros, for licensed well contractors who get the 2 a.m. Calls, and for anyone sizing a dependable geothermal water source. We’ll cover why the Myers Predator Plus Series shines in geothermal duty, how to size for Total Dynamic Head (TDH) with plate heat exchanger pressure drop, why 300 series stainless steals the show, how the Pentek XE motor shrinks electric bills, and <https://www.plumbingsupplyandmore.com/convertible-shallow-well-jet-pumps-1-2-hp.html> what 2-wire vs 3-wire really means for installations. We’ll also look at continuous-duty realities, sand management, freeze protection at the pitless, and the warranty coverage that actually moves the needle.

Below are ten field-tested reasons—plus real-world numbers and pro tips—showing why a PSAM Myers Pump is the right move for open-loop geothermal and standing column well applications.

#1. Predator Plus Reliability Under Geothermal Duty Cycles – Continuous Flow, Multi-Stage Power with Pentek XE Motor

In geothermal service, a pump isn’t cycling 30 seconds at a time—it’s pushing near-constant flow for hours, sometimes days. That’s where the **Predator Plus Series** and its **multi-stage pump** design pay dividends.

Myers builds the Predator Plus with **300 series stainless steel** on critical surfaces and a **threaded assembly** that stays tight under thermal expansion. A **Pentek XE motor** rated for **continuous duty** couples high thrust with **thermal overload protection** and **lightning protection**. On a 1 HP 10–12 GPM model, expect a **shut-off head** around 360–420 ft (model dependent), with the **best efficiency point (BEP)** near the target flow you need for a 2–4 ton system. Unlike lightweight thermoplastic builds, the Predator Plus tolerates grit and heat exchanger pressure drop without losing its curve.

Paul Santoro’s 260-foot well and 3-ton open-loop require a consistent 6–8 GPM at roughly 210–240 ft TDH accounting for heat exchanger, filters, and vertical lift. Swapping to a Myers 1 HP Predator Plus hit the curve cleanly—no screaming motor, no short cycling—just quiet, steady heat and showers.

Sizing to BEP for Geothermal Stability

Hitting the **BEP** matters more in geothermal than in any other residential application, because run time is long and failures under off-curve conditions multiply quickly. Start with the heat pump’s required flow (often 1.5–2.5 GPM per ton, manufacturer specific), then stack on friction loss through the **plate heat exchanger**, cartridge filter, and interior piping. Add vertical lift and any discharge piping friction to calculate TDH. Choose the Predator Plus stage count that places your target GPM near the BEP. This yields cooler motor temperatures, 80%+ **hydraulic efficiency**, and lower electric costs month after month.

Pro Tip: Don’t Ignore Heat Exchanger Loss

Most geothermal failures I see trace back to underestimating the heat exchanger pressure drop. Plate units vary widely—0.5 to 8 PSI at design flow is common. Convert PSI to feet of head (PSI x 2.31) and add it to your TDH. On the Santoro job, accounting for a 6 PSI drop added 13.9 ft. That’s how we stayed off surge and cavitation and kept the motor in a happy amp draw range.

Key takeaway: For geothermal duty, a Predator Plus matched to BEP is quiet, efficient, and—most importantly—predictable.

#2. Stainless Steel Matters – 300 Series Stainless, Intake Screen, and Wear Ring vs. Acidic or Mineral-Rich Wells

Corrosion doesn't care what season it is. Acidic or iron-heavy aquifers eat lesser pumps alive. The **300 series stainless steel** build of a **Myers submersible well pump** (shell, discharge bowl, shaft, coupling, and suction screen) resists that slow grind.

In an open-loop geothermal, water chemistry matters more because you're moving higher volumes for longer durations. Myers' **intake screen** and **wear ring** maintain stage alignment and protect against fines, while the **engineered composite impellers** won't pit like bare metals. That keeps your flow curve consistent and reduces amp climbs over time.

For the Santoros, lab-tested water showed elevated iron (0.9 ppm) and slightly acidic pH. Their previous **thermoplastic** housing cracked from pressure cycling and temperature swings. With Myers stainless, the discharge housing isn't the weak link—and the motor's thrust bearing stays clean longer.

Standing Column Wells and Mineral Load

Standing column geothermal designs often return water down the same well. With repeated passes, mineral scaling risk rises. Stainless surfaces suppress corrosion initiation sites, and smooth staging components reduce turbulence points where scale grabs hold. Pairing stainless construction with a cartridge filter upstream of the heat pump keeps exchangers clear and pump efficiency stable through shoulder seasons.

Pro Tip: Add a Service Tee at the Pitless

Add a tee and valve on the horizontal run after the **pitless adapter**. You'll grab water samples under full flow for honest chemistry and head-loss checks. It's how we confirmed the Santoro iron issue and set a quarterly filter swap that prevented exchanger fouling and amp creep.

Key takeaway: In geothermal's high-volume world, stainless steel saves motors, staging, and your wallet.

#3. Teflon-Impregnated Staging – Self-Lubricating Impellers That Keep Flowing in Sandy Formations

When your well produces fines or seasonal sand, the wrong impellers chew themselves to dust. Myers' **Teflon-impregnated staging** with **self-lubricating impellers** resists abrasion substantially better than traditional designs. That's more than marketing—it's survival when you're moving 6–10 GPM ten hours straight in January.

Each impeller's engineered composite uses **nitrile rubber bearings** and hydrodynamic film to reduce contact wear. Because the material is self-lubricating, boundary lubrication happens at lower velocities, and startup wear is minimal. Over thousands of thermal cycles, this preserves wheel geometry and keeps you on the same point of the **pump curve** you sized to.

Paul and Nadine had light grit post-storm events. Where the old pump screamed and lost pressure, the Predator Plus shrugged; flow stayed stable and shower temps did too. That's the difference a durable stage stack makes in real homes.

Grit Strategy: Screen + Bleed

If fines spike seasonally, combine a 60–100 mesh screen ahead of the exchanger with a bleed valve to purge sediment at service intervals. The **internal check valve** in the Myers assembly reduces hammer, and a secondary brass check topside keeps columns stable. Less shock equals longer impeller life.

Pro Tip: Torque Arrestor Placement

Install a **torque arrestor** just above the pump and a **cable guard** every 10 feet. This prevents wire scuffing and keeps the assembly centered, minimizing impeller-eye turbulence that can invite abrasive ingress. It's small money with big payoff, especially in open-loop systems where run hours pile up.

Key takeaway: Choose impellers designed to live in gritty realities or plan on replacing pumps when winter's coldest.

#4. Pentek XE High-Thrust Motor – Lower Amps, Cooler Windings, and Proven Continuous Duty

Energy efficiency counts double in geothermal. Your pump can be the hungry appliance you forget about—until the bill hits. The **Pentek XE motor** on Predator Plus models delivers high starting torque, lower **amperage draw**, and smart **thermal protection** under sustained load. It's an **AC electric pump** motor built for the real world: occasional sand, voltage fluctuations, and long calls for heat.

On a 1 HP, you'll typically see 230V single-phase service, with locked rotor and run currents aligned to stay under breaker thresholds even when friction increases slightly due to filters loading up. Because the motor runs cooler at BEP, winding varnish lasts longer. I've pulled 12-year-old Myers motors that still tested close to nameplate—remarkable for open-loop.

With their Myers upgrade, the Santoros saw a measurable drop in monthly kWh during December through February. Same thermostat schedule, steadier GPM, and no “grinding” noises in the basement.

Voltage and Wire Gauge: Don't Skimp

Long runs from panel to well cap demand correct wire gauge. Undersized wire turns any motor into a space heater. Check nameplate FLA and distance; size copper accordingly to keep voltage drop under 3%. For a 1 HP at 230V over 200 feet, 12 AWG usually isn't enough—step to 10 AWG or 8 AWG depending on run length and code.

Pro Tip: Start Clean, Stay Clean

After set, run an initial flush to clear construction debris. Check **amperage draw** against the manual's spec at design flow. If you're high, friction is up—look for partially closed valves, wrong filter micron, or exchanger fouling. Dialing in day one prevents nuisance trips and protects windings for the long haul.



Key takeaway: A cooler-running Pentek XE is quiet, frugal, and absolutely built for geothermal duty cycles.

#5. 2-Wire vs 3-Wire Clarity – Simplified Controls That Cut Install Costs Without Sacrificing Performance

Control simplicity makes service calls painless. Myers offers **2-wire** and **3-wire well pump** configurations to match jobsite needs. In many geothermal applications, a **2-wire configuration** with integral motor controls simplifies the install and saves \$200–\$400 on a separate **control box**. For service technicians, that's fewer failure points in freezing weather.

A 3-wire can be advantageous for certain diagnostics and starting characteristics in very deep or marginal wells, but for most 150–350 ft geothermal supplies, 2-wire performs perfectly when matched to TDH/flow. Both versions from Myers are **UL listed, CSA certified, and factory tested.**

For the Santoro project, we selected a 2-wire Predator Plus. With limited space near the pressure tank and heat pump, dropping a control box from the BOM saved time, money, and wall clutter—while still delivering a steady 7 GPM through the exchanger loop.

Integration With Geothermal Controls

Tie pump calls to the heat pump’s demand signal only if your system design supports it. Many open-loop systems maintain a **pressure tank** and standard **pressure switch** for domestic use while a zone valve opens to the heat pump on call. That separation keeps domestic taps stable even during long heating runs.

Pro Tip: Dedicated Flow Meter

Install a paddlewheel or ultrasonic flow meter on the geothermal branch. With a 2-wire Myers, you’ll verify design GPM under real load, spot filter clogging early, and document commissioning numbers for warranty files. PSAM stocks compact meters that thread directly into a 1-1/4" NPT service tee.

Key takeaway: Myers gives you wiring flexibility; pick the simplest reliable path for your site and pocket the savings.

#6. Head and Flow Sizing Done Right – Using Pump Curves, Plate HX Loss, and Real TDH, Not Guesswork

Geothermal success rides on accurate **pump curve** work. Too many installs guess at “about 200 feet of head.” Don’t. Add vertical lift, friction in drop pipe, lateral runs, elbows, heat exchanger, filters, and a bit for seasonal variance. The goal is setting your target GPM directly on the curve’s **BEP**.

For a 3-ton water-source heat pump needing 6–8 GPM, many 1 HP **Myers deep well pump** models in the 10–12 GPM series hit BEP at ~220–260 ft TDH. If you’re supplying domestic water, size the **pressure switch** cut-in/cut-out in tandem: 40/60 PSI is common, which translates to 92–138 ft of head on the pressure side—add that to static lift and friction. Don’t forget heat pump-only loops often have their own regulating valve and backpressure, so measure under load.

We set the Santoro home at a true 7 GPM @ 240 ft TDH. The result: stable outlet temps and a happy heat pump compressor.

Friction Math That Matters

Every elbow costs you. At 7 GPM [myers deep well pump](#) through 1” pipe, each long-radius 90 can cost ~2–3 ft of head; a plate heat exchanger might cost 10–20 ft; a 25-micron whole-house filter 5–8 ft as it loads. Put numbers to paper, not guesses. Myers’ performance PDFs—available at PSAM—make quick work of curve alignment.

Pro Tip: Use a Differential Gauge

Install a differential gauge across the exchanger. Trending that PSI delta against your flow meter shows fouling early. It’s how you protect pump and compressor efficiency long term—and it takes an apprentice five minutes to read and log.

Key takeaway: Size to BEP with honest TDH and your geothermal system will thank you with quiet, efficient runtime.

#7. Field-Serviceable Threaded Assembly – Real Repairs, Real Savings, Right in the Field

Winter failures don’t wait for warm shops. Myers’ **field serviceable** design with a **threaded assembly** lets qualified contractors perform on-site service without scrapping a whole stack. When you can replace a top stage or address a check valve issue in the field, you save days and dollars.

I've seen submersibles where one worn diffuser killed the curve. With Predator Plus, staged components can be serviced, and parts availability through PSAM is fast. That's mission-critical when a family's heat depends on water movement today, not next Tuesday.

When Paul's line froze above the pitless during a cold snap (valve left cracked open outdoors—quick lesson learned), thawing and re-checking performance was simple, and everything reassembled true. No mystery clips or glue-only assemblies to fight.

Spare Parts Strategy

Stock a spare internal **check valve**, a couple of stage diffusers, and a motor lead **wire splice kit**. For geothermal duty, downtime hurts more. Having parts on the van means you restore heat and water in one visit. PSAM ships same-day on in-stock Myers parts so you can <https://www.plumbingsupplyandmore.com/4-deep-well-package-bronze-hj50d-series-lead-free.html> replenish immediately.

Pro Tip: Document Assembly Torque

Record torque specs on discharge head fasteners and log stage count in your job file. Your future self (or tech) will thank you at 2 a.m. Keeping consistent build tension preserves alignment and sound levels—and maintains the pump's published curve.

Key takeaway: A pump you can service in the field is a pump that keeps families warm. Myers makes that possible.

#8. Warranty, Certifications, and Made-in-USA Confidence – Real Coverage for Real-World Duty

Paper promises don't heat homes. Myers backs the Predator Plus with an industry-leading **3-year warranty**—a full 36 months where manufacturing defects and performance issues are covered. Add **NSF**, **UL listed**, and **CSA certified** credentials, and you get assurance the unit has met the safety and performance bars that matter.

In my decades sizing **myers water well pumps** for domestic and geothermal duty, what separates winners from pretenders is not just build—but support. **Pentair** ownership means national parts distribution and engineering rigor, while PSAM ensures knowledgeable phone support and fast shipping. The combo delivers results the week you need them, not next month.

For Paul and Nadine, the warranty was reassurance; the quiet hum and steady showers were proof. When a product is designed to last 8–15 years—and often longer with good care—you feel it in how the motor starts and how the stages sing.

Why Certifications Matter

Third-party marks protect you from off-brand surprises. UL/CSA compliance ensures electrical safety in wet environments. NSF relevance confirms materials contact standards for potable use, important when the same well supports both geothermal and domestic branches.

Pro Tip: Register the Warranty

Don't toss the paperwork. Register serials online with PSAM's purchase record attached. Keep commissioning photos and GPM/amp logs. If you ever need coverage, a clean file speeds approvals dramatically.

Key takeaway: With Myers and PSAM, coverage is more than a brochure—it's a backbone you can count on.

#9. Competitor Reality Check – Franklin Electric and Goulds vs Predator Plus in Geothermal Installations

There are capable brands in this space, but geothermal punishes weak links. Here's how Myers stacks up against two common choices in the field.

Technically, Myers Pumps uses a full **300 series stainless steel** chassis and **Teflon-impregnated staging** that resists abrasion better than many mixed-material stacks. Paired with the **Pentek XE motor**, Myers often achieves 80%+ efficiency near **BEP**, keeping operating amps lower over long calls for heat. By contrast, some **Goulds Pumps** models rely on cast iron in components that meet acidic or mineral-rich water, raising corrosion exposure. **Franklin Electric** builds solid motors, but their systems can lean on proprietary control schemes and dealer networks, which may slow field service in rural emergencies.



In application, geothermal installs value field serviceability and straightforward wiring. Myers' **field serviceable threaded assembly** allows on-site component swaps, and the availability of **2-wire configuration** can shave \$200–\$400 on control boxes. While Franklin ecosystems are powerful, accessing parts or dealer-only programming can delay restoration. In corrosive or sandy aquifers, the Myers stainless shell and composite stages have shown longer curve stability than mixed-metal stacks, delivering 8–15 years where others limp at 3–7.

If you live on private well water and heat your home with it, the math is simple: fewer service calls, lower power draw, and fast parts support equate to a system that's worth every single penny.

Pro Tip: Evaluate Local Support

Strong brands fail without local stocking. PSAM's same-day ship on Myers core SKUs and parts is a real differentiator for contractors on wintertime calls. When a family's furnace depends on flowing water, next-day isn't a luxury—it's the line between cold and comfortable.

#10. Installation Best Practices for Geothermal – Pitless, Check Valves, Tank Strategy, and Freeze Protection

A great pump can be sabotaged by bad install habits. Geothermal homes demand smart hydraulics and cold-weather details. Use a quality **pitless adapter**, set a brass secondary **check valve** topside, and route the geothermal branch with isolation valves and a purge line. Where frost depth is severe, insulate the well head and horizontal runs; a slow-drip hose bib can freeze lines solid if left cracked on a subzero night.

For open-loop domestic + geo combos, size the **pressure tank** to accommodate normal household draws without chattering the pump during short calls. Your **pressure switch** should be matched to domestic requirements; the geothermal loop should run on its own call with a regulating valve set after the flow meter. Keep service tees around the plate exchanger and mount a differential gauge for quick diagnostics.

The Santoro home got heat back because we sized right and installed smarter: insulated pitless, heated mechanical space, and a clean manifold with labeled valves. That means faster service and fewer surprises.

Return or ReInjection Considerations

Local codes differ. Some regions allow reinjection into a second well; others prefer discharge to surface or drain tile. Reinjection adds backpressure; model it in TDH. Standing column return demands close attention to water chemistry and temperature to protect both pump and aquifer. Myers' stainless components provide a margin of safety in these complex hydrologies.

Pro Tip: Commissioning Checklist

- Verify GPM with meter under heat call
- Record pump amps and voltage
- Check pressure before/after exchanger
- Confirm pressure tank precharge
- Inspect for air entrainment at returns
- Log all readings in the job file

Key takeaway: Flawless installs make top-tier pumps look even better. Follow best practices and your Myers will run like a sewing machine.

Detailed Comparison: Myers vs Red Lion in Geothermal Use

Materials and motors decide your fate in January. Myers uses a full **300 series stainless steel** shell and discharge, with **engineered composite impellers** and **Teflon-impregnated staging** that shrug off fines. The **Pentek XE motor** is thermally protected and optimized for **continuous duty**, sustaining efficient operation near BEP. Many **Red Lion** models lean on **thermoplastic** housings that can crack under thermal and pressure cycling, and standard motor designs that run hotter in long-duration calls, especially when friction climbs due to filter loading.



In the field, geothermal is almost never “light duty.” You’re moving 5–10 GPM for long stretches. Field serviceability on a cold driveway matters, as does readily available stainless hardware that won’t crumble in slightly acidic wells. Myers’ **field serviceable threaded assembly** and PSAM’s parts stocking mean you’re not waiting through a cold snap. Service life from Predator Plus in clean, sized-right installs regularly lands in the 8–15 year band; I’ve pulled Red Lion units at 2–5 years, often with cracked discharges or worn stages leading to underflow and high amps.

Total ownership math tells the story: fewer replacements, lower kWh, and real warranty coverage. For geothermal workloads, the upgrade to Myers is worth every single penny.

FAQ: Myers Submersible Well Pump for Geothermal Applications

1) How do I determine the correct horsepower for my well depth and household water demand?

Start by defining two things: required flow (GPM) and total dynamic head (TDH). For open-loop geothermal, manufacturer specs typically call for 1.5–2.5 GPM per ton. A 3-ton unit often needs 6–8 GPM. TDH equals static lift (water level to discharge), plus friction losses through drop pipe, fittings, a plate heat exchanger (convert PSI to feet by multiplying by 2.31), filters, and any backpressure from reinjection or discharge lines. Once you know flow and TDH, overlay them on the Myers Predator Plus pump curve. For 200–280 ft TDH at 6–8 GPM, a 1 HP 10–12 GPM model often lands right at BEP. Domestic water use running off a pressure tank and 40/60 switch adds 92–138 ft of pressure head to the math. When in doubt, call PSAM—my team will run your numbers, confirm voltage (usually 230V single-phase), and make sure you’re not oversizing. Bigger isn’t safer; it’s noisier, pricier, and can short-cycle.

2) What GPM flow rate does a typical household need and how do multi-stage impellers affect pressure?

Most homes are comfortable with 7–12 GPM peak domestic capacity; steady-state geothermal adds a dedicated 5–10 GPM depending on tonnage. With Myers’ multi-stage design, each stage contributes head (pressure), not more volume, stacking pressure to overcome TDH while maintaining target GPM. That’s why a 10–12 GPM Predator Plus can deliver steady 7–8 GPM through your heat pump at 200+ ft TDH. Staging also improves efficiency at a given point on the curve, so the motor runs cooler. In the Santoro installation, a 1 HP 10 GPM stack at ~240 ft TDH produced a reliable 7 GPM for the geothermal branch while still feeding domestic needs via a pressure tank. Multi-stage geometry matters—engineered composite impellers and close tolerances keep pressure delivery consistent even as filters load slightly.

3) How does the Myers Predator Plus Series achieve 80% hydraulic efficiency compared to competitors?

Efficiency comes from matched hydraulics and materials. Myers uses precision **engineered composite impellers** and diffusers with tight tolerances, minimizing recirculation and vane losses. Pair that with **300 series stainless steel** housings that hold alignment under temperature swings and you reduce internal leakage. The **Pentek XE motor** keeps slip and copper losses in check at continuous duty load, so electrical input translates better into hydraulic output. Operating near the **best efficiency point (BEP)** is the last piece—size your pump so design GPM lands at BEP given your TDH. I regularly measure 80%+ pump efficiency (not system efficiency) at BEP on Predator Plus units. Budget brands with loose tolerances, thermoplastic housings, or less efficient motors lose ground—especially after a season of grit or minor scaling.

4) Why is 300 series stainless steel superior to cast iron for submersible well pumps?

Submerged metals face oxygen-poor, mineral-rich water. **300 series stainless steel** forms a passive chromium oxide layer that resists corrosion in low-oxygen, mildly acidic, or iron-laden aquifers. **Cast iron** can pit or scale in those same conditions, especially around dissimilar metal joints. On geothermal duty, higher run hours accelerate any corrosion pathway. Stainless discharge bowls, suction screens, and couplings maintain geometry longer, so stages stay aligned and curves stay true. That translates into steady GPM and lower amps over years. Stainless also tolerates thermal expansion and contraction better than many composites; I’ve seen thermoplastic discharges split after freeze-thaw cycles or hammer events. Bottom line: stainless protects your investment, particularly in open-loop or standing column wells.

5) How do Teflon-impregnated self-lubricating impellers resist sand and grit damage?

Myers’ **Teflon-impregnated staging** uses low-friction materials and **self-lubricating impellers** to reduce boundary wear during startups and under light abrasive load. The Teflon lowers the coefficient of friction at the impeller/diffuser interface, while composite construction resists pitting that would distort vane shape. Hydrodynamic film lubrication establishes quickly, minimizing contact wear. In sandy wells, properly placed screens, straight drop pipe, and torque control keep the assembly centered so abrasive particles don’t concentrate on one side of the eye. Over time, this combination preserves the impeller profile, keeping you closer to the original **pump curve**. Compared to standard materials, I’ve seen Myers stages look serviceable after years in mild grit where other brands lost 10–20% flow by season two.

6) What makes the Pentek XE high-thrust motor more efficient than standard well pump motors?

The **Pentek XE motor** couples high-thrust bearings—vital for multi-stage axial loads—with optimized winding design to reduce I²R losses. Thermal paths are engineered for **continuous duty** so windings stay cooler at BEP, extending varnish life. Integrated **thermal overload protection** and **lightning protection** shield against real-world spikes. On a 1 HP 230V single-phase, run amps at design flow commonly land a bit lower than commodity motors, and startup behavior is more controlled. That means fewer nuisance trips and reduced breaker oversizing. In geothermal, where the motor may run for hours at a time, this efficiency compounds into real kWh savings over a heating season. The Santoro home shaved winter electric costs noticeably after switching to a properly sized Myers with the XE motor.

7) Can I install a Myers submersible pump myself or do I need a licensed contractor?

If you're handy and understand electrical safety, plumbing codes, and well construction, a DIY install is possible. However, geothermal adds complexity: you'll be calculating **TDH**, setting flow with regulating valves, integrating a **pressure tank**, possibly coordinating reinjection, and commissioning with amp/flow/pressure readings. You'll also need a **pitless adapter**, correct **wire gauge**, properly crimped and heat-shrunk **wire splice kits**, and backflow protection if required by code. For most homeowners, I recommend a licensed contractor, especially in freeze-prone regions. PSAM supports both DIYers and pros with kit bundles (pump, drop pipe, torque arrestor, safety rope, check valves) and over-the-phone commissioning help. If you DIY, at least have a pro verify your curve math and initial readings. Incorrect sizing or wiring is the fastest path to premature failure.

8) What's the difference between 2-wire and 3-wire well pump configurations?

A **2-wire well pump** integrates the start components within the motor, eliminating a separate above-ground **control box**. It simplifies installation and removes an external failure point—excellent for many 150–350 ft geothermal + domestic setups. A **3-wire well pump** uses an external control box with start capacitor and relay, offering certain diagnostic advantages and, in some deeper wells, preferred starting characteristics. From a performance standpoint, both work when correctly sized; choice often comes down to service preferences, site space, and budget. With Myers, both versions are **UL listed**, **CSA certified**, and engineered for continuous operation. Many contractors prefer 2-wire for geothermal because it saves \$200–\$400 and reduces wall clutter in tight mechanical rooms. Confirm local code requirements and your heat pump control strategy before deciding.

9) How long should I expect a Myers Predator Plus pump to last with proper maintenance?

In clean, correctly sized installs, Myers Predator Plus units routinely deliver **8–15 years** of service; I've seen systems surpass 20 years with excellent water chemistry and maintenance. Geothermal adds hours, so maintenance discipline matters: keep filters clean, monitor flow/pressure drops, log pump amps, and test water annually for iron, hardness, and pH. Ensure **pressure switch** and **pressure tank** are set correctly (precharge 2 PSI below cut-in) to minimize rapid cycling when domestic-only calls happen. If your well produces fines, add staged filtration and schedule a purge. The Santoros, running 7 GPM steadily in winter, are on a quarterly filter check and annual chemistry test plan—cheap insurance for long pump and compressor life.

10) What maintenance tasks extend well pump lifespan and how often should they be performed?

- Quarterly: Check geothermal branch flow (GPM), log pump amperage, read differential pressure across the exchanger and filters. Replace filters when ΔP rises beyond spec.
- Biannually: Inspect electrical connections, verify **pressure tank** precharge, cycle isolation valves, and confirm pressure switch cut-in/cut-out.
- Annually: Pull water samples, test iron, hardness, pH, and adjust filtration. Inspect well cap, conduit seals, and insulation at the pitless for moisture ingress or freeze risk.
- As needed: If amps rise at the same flow, suspect fouling or a partially closed valve. If flow drops at constant head, review exchanger and filter loading first, not the pump. Keeping impellers out of abrasive environments and maintaining clean hydraulics does more for lifespan than any miracle additive.

11) How does Myers' 3-year warranty compare to competitors and what does it cover?

Myers leads with an industry-strong **3-year warranty**—36 months of coverage on manufacturing defects and performance issues. Many budget brands offer 12–18 months, which often expires just as geothermal duty cycles start to reveal weaknesses. Coverage is strongest when you register the install, log commissioning data (GPM, amps, pressures), and retain proof of correct

sizing. Contrasting with brands like **Wayne Pumps** or certain big-box labels with shorter terms, Myers reduces your long-term risk and stabilizes total ownership costs by 15–30% in my experience. Pair that with PSAM’s support and parts availability and you have practical protection, not just paper. As always, improper installation or water-quality extremes outside spec can void coverage—so document and maintain.

12) What’s the total cost of ownership over 10 years: Myers vs budget pump brands?

For a geothermal + domestic system running 6–8 GPM many hours a day in winter, I see the following ballpark: A properly sized **Myers deep well water pump** might cost a bit more upfront, but with 8–15-year service life, fewer calls, and 5–15% lower kWh from operating near BEP with a **Pentek XE motor**, you typically come out ahead within 3–4 years. Budget pumps (Everbilt/Flotec tier) often last 3–5 years under this load; two to three replacements in a decade erase any initial savings. Add parts availability, warranty, and the value of heat and water continuity, and the Predator Plus wins decisively. That’s why I recommend buying right once, registering the warranty, and maintaining the system. Over ten years, the Myers path is the safer, cheaper, calmer ride.

Conclusion

Geothermal applications don’t forgive sloppy math or flimsy materials. The Myers Predator Plus Series—built with 300 series stainless steel, Teflon-impregnated staging, and a Pentek XE continuous-duty motor—was engineered for exactly the kind of long, steady run times that home heat pumps demand. When you size to BEP, respect TDH, and install with best practices, the result is simple: quiet performance, stable GPM, lower amps, and a decade-plus of dependable service.

As PSAM’s technical advisor, I’ve seen what happens when homeowners and contractors bet on bargain brands for open-loop duty. It costs more, faster. A PSAM Myers Pump turns that story around. For the Santoro family, it meant warm bedrooms and hot showers the same night we commissioned. For your project, it means real reliability backed by a 3-year warranty, Made-in-USA quality, and fast parts support. Choose right, size right, and your Myers will be, quite frankly, worth every single penny.