





WATER RESOURCES





Layne is a water management and drilling company established in 1882.

We provide responsible infrastructure solutions, while offering innovative, sustainable services with an enduring commitment to safety, operational excellence, and client satisfaction.

In June 2018, Layne became a wholly-owned subsidiary of Granite Construction, Inc.

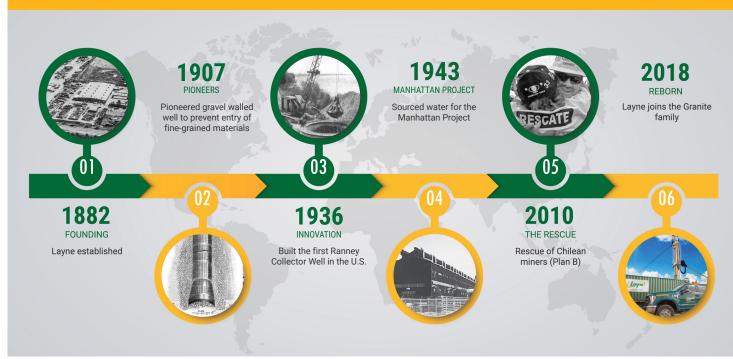
ABOUT LAYNE

With our origins dating to 1882 as a water-well drilling company in South Dakota, Layne has evolved into a global leader in waterwell construction. Using sophisticated technology and specialized equipment, Layne drills high-volume water wells for clients across North America. As growing populations deplete traditional sources of drinking water, Layne has developed drilling equipment and methods that enable clients to access ground water resources that could not be reached previously due to depth and/or adverse drilling conditions.

Layne's expert personnel, who have unparalleled knowledge of aquifer systems, thoroughly evaluate the geologic setting and develop a specialized well design to ensure that the client goals can be met on time and on budget.

With human and environmental safety as top priorities, Layne is also noted for its close working relationships with clients in every phase of the project and beyond.

OUR STORY



SAFETY

- Safety is about people, not projects.
- Safety is about stories, not statistics.
- Safety is about connecting people.
- Safety is deeply personal.







Our safety culture is underpinned with relationship-based training, shared knowledge, and engagement at every level of our organization.

An authentic commitment from all





- WELL DESIGN AND CONSTRUCTION
- PUMP SERVICE AND MAINTENANCE
- WELL REHABILITATION
- PUMP SYSTEM DESIGN AND INSTALLATION
- WATER TREATMENT
- EXPLORATORY DRILLING AND FORMATION ANALYSIS
- RANNEY[®] COLLECTOR WELLS





WELL DESIGN AND CONSTRUCTION

No single method of well construction suits all purposes. Layne considers not only geologic factors, but the intended use and available budget. Our 139 years of experience designing and constructing wells, combined with present day technology, allows us to determine the best method and use of equipment for your drilling needs.



PUMP SERVICE AND MAINTENANCE

With our knowledgeable staff and highly equipped machine shop, Layne offers complete in-house repairs of your pumping equipment. Layne can select the most efficient new pump equipment for your application. Failure of pumping equipment can lead to lost revenue and may create a critical situation. Our service crews are available to respond quickly and minimize downtime.

IN-HOUSE REPAIR SHOPS

All repair and maintenance is conducted at Layne's wholly owned machine shop facilities. Keeping the repair and maintenance of your pumping equipment in-house allows Layne to uphold firm quality controls throughout the repair process.

24/7 EMERGENCY SERVICE

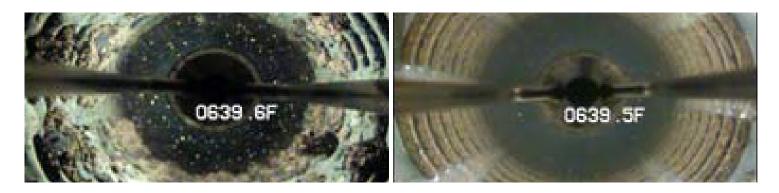
Dependable service means peace of mind for you. Sometimes emergencies happen on weekends or holidays. Layne teams are available 24 hours a day, 7 days a week, 365 days a year to assist in any well or pump issue, whether or not Layne originally installed the well or pumping equipment.

PREVENTATIVE MAINTENANCE

Layne believes in a twofold approach to service-problem solving and problem prevention. Utilizing the problem prevention method will likely avoid any unexpected shutdowns or costly repairs.

SERVICES

- New pump design and installation
- Lineshaft and submersible well pump maintenance and repairs
- Vertical and horizontal booster pump maintenance and repairs



Even under normal operating conditions a well may experience diminished biological activity or mechanical plugging calling for the utilization of chemical treatments, mechanical treatments, or specialized well redevelopment methods. Using one or a combination of these techniques, we can offer the best opportunity to restore a well's capacity.

- Mechanical Methods: Boreblast II[®], Sonar Jet, Roto-Scrub, Agua Freed[®]
- Chemical Methods: Innova Deep Well Chemistry, QC-21, Layne Oximate™
- Self-Contained Mobile Treatment Units (CTU)
- Well Testing Services: Diagnostics and profiling on well conditions, flow, and water quality
- Logging Services: Video, caliper, electrical, and gamma ray logging
- Well Development and Redevelopment
- Well Abandonment



PUMP SYSTEM DESIGN AND INSTALLATION

In the vertical turbine pump repair business for over 100 years, Layne combines its expertise and experience with the latest technology to provide a full line of pump products and services.

Long-standing relationships with many equipment providers allow Layne to design, furnish, and install the most appropriate and efficient pumping solutions for your water system.

IN-HOUSE PUMP DESIGN AND ASSEMBLY

Layne owns and operates its own machine shop facilities and stocks an array of bowl assembly components. This allows Layne experts to quickly design and build custom pumping assemblies to meet the exact needs of a pumping situation.

WELL REHABILITATION

- Traditional Mechanical Methods: Brush, Bail, Dual Swab Airlift, and Test Pump Development



WATER TREATMENT

Serving clients throughout the United States, Layne has been developing practical approaches to water treatment systems for decades, having designed, manufactured and installed thousands of treatment units. Layne combines innovative technologies with experienced personnel to remove water contaminates and optimize water treatment center operational efficiency. Layne offers solutions for the removal of VOC's, radon, nitrate, perchlorate, iron, manganese, arsenic, H2S, and PFAS/PFOS.

- Nitrate and Perchlorate Removal
- Ion Exchange Systems
- Advanced Amberpack[™] and Packed Bed Low Waste
- VOC and Radon Removal
- Air Stripping Systems

- Arsenic, Iron, Manganese, and H2S Removal
- LayneOx[™] (Coag/Filtration) and LayneRT[™] (Adsorption Media)
- Water Purification RO, UF, CCD
- Chrome VI, PFOS Solutions
- Pilot Testing







Layne draws from an impressive inventory of proven techniques to solve water treatment challenges.

- commercially proven solution to nitrate removal.
- + Specialized air-stripping systems, which Layne pioneered for the removal of volatile organic compounds (VOCs).
- + An enhanced and patented reverse osmosis procedure, which reduces brine waste and conserves water resources.
- + A media regeneration program that significantly reduces operating costs associated with the treatment of arsenic, iron, and manganese.

+ Low-waste, high-efficiency ion exchange, which provides an innovative and Layne's additional solutions cover the wide range of water treatment issues that municipalities, power companies and heavy industry often confront.

> Our ability to perform key processes in-house, combined with extensive experience in construction and start-up of treatment facilities, provides a high degree of control over project cost, quality and schedule. With our range of experience in all areas of water treatment, Layne's engineers and field service technicians can recommend and implement appropriate, cost-effective solutions to all water quality issues.



EXPLORATORY DRILLING AND FORMATION ANALYSIS

Layne offers drilling methods and sampling techniques for situations requiring a less conventional drilling approach.

SERVICE OFFERINGS: Specialized Drilling in Complex Geologic Settings, Environmental Investigation & Remediation, Mine-Dewatering, Utility Boreholes, Hydrogeological Investigations, Geotechnical Investigations, Aggregate Exploration, Soil and Water Sampling, Waste Rock/Tailing Investigations

AVAILABLE DRILLING METHODS: Dual Wall Reverse Drilling, Flooded Reverse Drilling, Dual Wall Percussion Hammer Drilling, Conventional Rotary Drilling



RANNEY® COLLECTOR WELLS

Ranney specializes in the design and turnkey construction of high capacity water supply systems including radial collector wells, surface water intakes, infiltration galleries, riverbank filtration, and sea water systems. Collector wells typically combine high yields with lower operating and maintenance costs. Complete hydrogeological services for optimum siting are also available.

From the initial consultation and evaluation to construction, our professionals will create the most cost effective and efficient system to deliver water in the quantity and quality you need. We can provide design-build or complete turnkey services to meet your project specifications for municipal, industrial, and utility needs.



OUR TEAM



KENT WARTICK VICE PRESIDENT & DIVISION MANAGER



GREG MCINNIS VICE PRESIDENT OPERATIONS



STEVE COSTELLO CHIEF ESTIMATOR



TIM OMAN BUSINESS DEVELOPMENT



JEFF HART SR. OPERATIONS MANAGER





BILL STUCKEY GENERAL MANAGER SOUTHEAST



JERRI BURTON GENERAL MANAGER NORTHEAST

TODD HOWARD

TODD HOWARD GENERAL MANAGER WEST



DAVE TORMOEHLEN GENERAL MANAGER CENTRAL



ADAM WARD

CONTROLLER





JENNY JANZ BUSINESS MANAGER

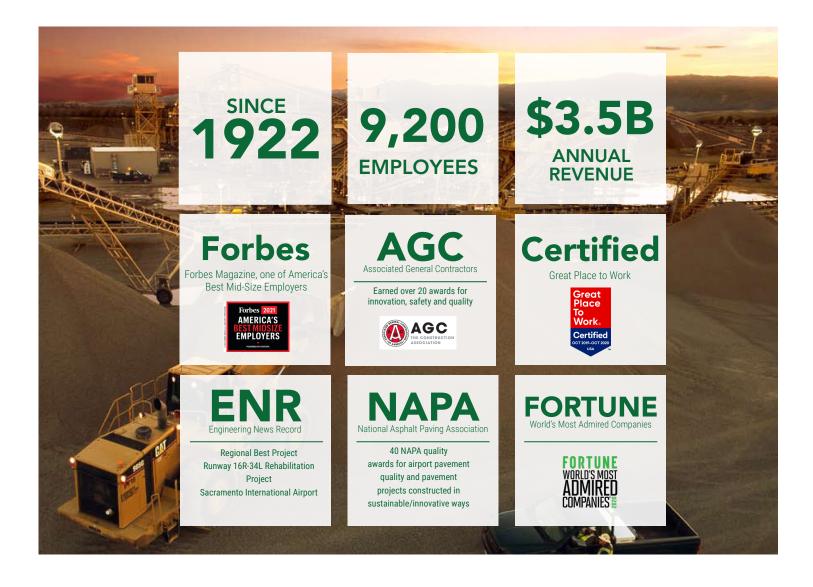
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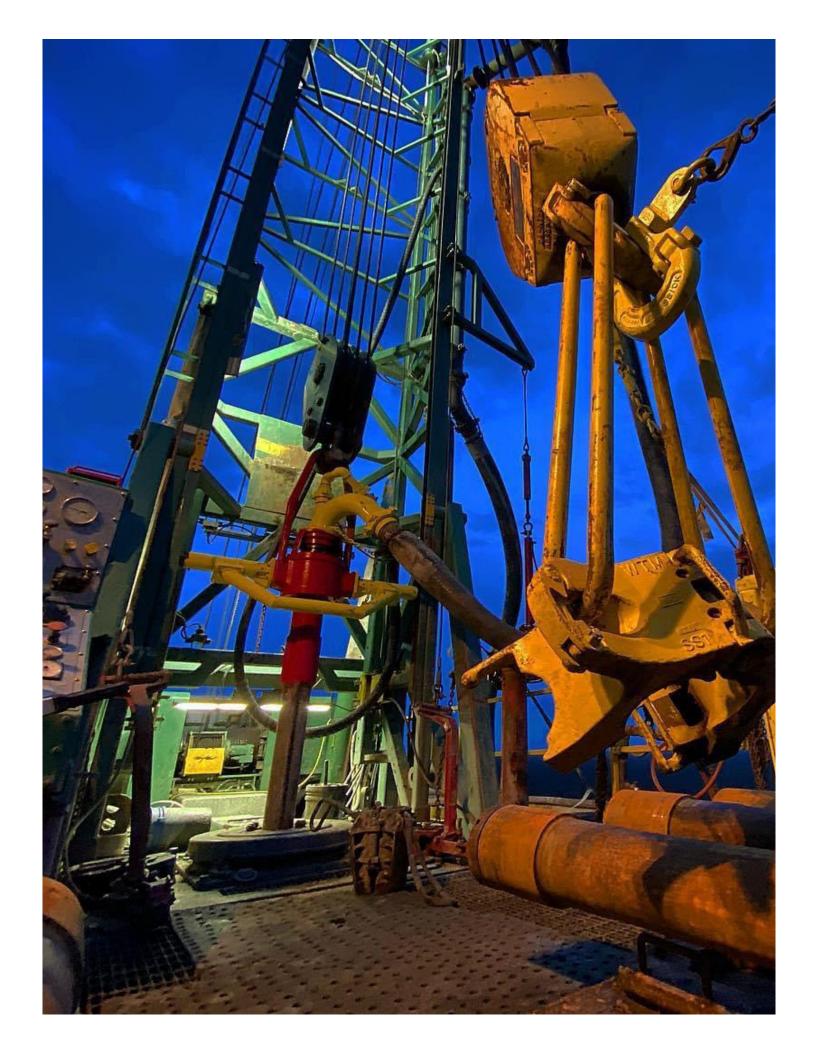




PARENT COMPANY

Granite Construction Incorporated (NYSE: GVA), America's Infrastructure Company, has a workforce of 9,200 and a combined revenue of \$3.5 billion annually. As an industry leader in the transportation, water resources and mining markets throughout North America, Granite provides infrastructure solutions for construction, program management, alternative procurement, and is a vertically-integrated contractor with aggregate materials reserves throughout the U.S.





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