

DEWATERING, PUMPING & WATER TREATMENT SOLUTIONS

ENGINEERING SUPPORT - TURN-KEY - RENTAL - SALE - SERVICE



AQUATECH[®]

Aquatech is the Industry Leading Provider of Full Service Dewatering, Bypass Pumping, & Water Treatment Solutions

Founded in 2006, AQUATECH Group of Companies is now one of North America's largest contract dewatering service providers with equipment distribution. Our Canadian Head Office is located in Vaughan, Ontario, with strong representation throughout Ontario and Eastern Canada. Recently we have expanded, having offices in the US South East with our US Head Office in Tampa, Florida.

AT OUR CORE:

We are **dewatering and bypass pumping solutions specialists** for all fluid handling and transfer applications. Our focus is in groundwater management, surface water and industrial fluid management, telemetry monitoring, and discharge water treatment systems. We also offer a wide range of groundwater and surface control pumping and dredging equipment.

Delivering Proven and Innovative Solutions.



WE'RE UNIQUE TO THE INDUSTRY:

Aquatech is a **Distributor of Pumping Equipment**

+

We Offer **Full Engineering, Contracting and Professional Services** Related to On-Site Fluid Management Requirements

Comprehensive Solutions:



Specialized Pumps

+

Support Equipment

+

Pipe, Hose & Accessories



Environmental Studies

+

Engineering Plans

+

Environmental & Permitting Obligations and Reporting



Rental/Sale Equipment

+

Turnkey Installation & Operation

+

Stakeholder Coordination



24/7 Field Service

+

Project Monitoring

+

Technical/Engineering Support



24/7 EMERGENCY RESPONSE:

Comprehensive emergency pumping response 24 hours a day, 7 days a week to provide a wide range of services



EACH PROJECT HAS **UNIQUE REQUIREMENTS AND AQUATECH SETS THE BAR IN THE INDUSTRY FOR USING ENGINEERED SOLUTIONS AND CONTINUOUS INNOVATION TO PROVIDE EACH PROJECT WITH THE BEST POSSIBLE SOLUTION**



Unmatched Dewatering Expertise

Our combined experience and knowledge in fluid management and associated environmental regulations allows us to manage the most demanding solutions.



Reliable Solutions, Trusted Partner

24/7 support, equipment, solutions, engineering, and technical support you can rely on.



Always Ready to Go

We understand urgency is important and have boots on the ground when you need us. With our large equipment fleet, we are ready when needed.



Safety First

Aquatech's safety record is unparalleled. The safety of our workers and yours, the public and property, is paramount. We are in the process of being enrolled in the IHSA COR™ program.

EQUIPMENT RENTAL, SALE AND FULL TURN-KEY CONTRACT SERVICES OVERVIEW

CORE SERVICES

- Contract Dewatering - pg 6
- Vacuum Wellpoint Systems
- Vacuum Eductor Systems
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- Sock Dewatering
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CORE RENTAL EQUIPMENT FLEET

- Sale & Rental - pg 22
- Diesel, Electric and Hydraulic Pumps
- Maintenance Free and Silenced Electric Wellpoint Pumps
- Heavy Duty Suction and Discharge Hose
- PVC, Galvanized and HDPE Header and Discharge Piping
- Portable Fuel Tanks
- Spill Containment for Pumps, Fuel Tanks
- Telemetry And Hand-Held Monitoring Instruments
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Construction Dewatering

Dewatering is the temporary lowering of the groundwater level to enable excavations to proceed below the static watertable. Groundwater control consists of positive or passive dewatering.

Positive dewatering involves pre-drainage, which includes dewatering and depressurization, and involves lowering of the water level to a safe distance below the target excavation depth prior to the excavation occurring. This is typically achieved with wells in the form of wellpoints, eductor wells and/or deep wells. Passive dewatering is typically performed in the form of conventional sump pumping and entails excavating to the watertable and pumping water within the excavation as encountered.

The proper system design and type(s) of required dewatering depends on multiple factors such as soil type, depth of excavation, and expected flow rates.

Keeping your work site well drained and safe eliminates downtime and consequential costs.

Complete Project Solutions

- Environmental Permitting
- Hydrogeological Assessments & Pumping Tests
- Well Design & Installation
- Dewatering System Design and Product Recommendation
- Specialized Pumps & Support Equipment
- Remote Monitoring, Alerts & Reporting
- On-Site Operation & Maintenance

VACUUM WELLPOINT SYSTEMS

Common and versatile method of effective dewatering, ideal for shallow aquifers less than 7m (23ft) and in a wide variety of soil conditions and permeability. Aquatech utilizes rotary drilling/jetting to install small diameter wellpoints up to 4in (100mm) and diesel/electric high vacuum pumps. While these systems are economical when close spacing is required, they are limited by the vacuum limitation of the pump.

VACUUM EDUCTOR SYSTEMS

Also known as ejector systems, these are ideal for deeper drawdowns up to 30m (100ft) with low permeability soils. Jetting or rotatory drill rigs install wells with tight spacing and small diameters, and one high pressure pump can often operate up to 100 wells. The high vacuum is also effective in stabilizing soil conditions. Although eductor systems are not limited in drawdown like wellpoint systems, they are limited in the amount of volume they can handle and often require more expertise and maintenance.

SUMP PUMPING/TRENCH DEWATERING

With discharge heads up to 200m (650ft), Aquatech uses automated solids handling portable pumps with high efficiency up to 60,000 LPM each. We also have stainless steel pumps available for low/high pH fluids.

DEEP WELLS

Ideal for large volumes of groundwater and medium to highly permeable formations. Aquatech utilizes dual rotary and reverse circulation drilling to install boreholes with diameters up to 24in (600mm). Deep wells can lower the water table more than 300m (1000ft) without staging and uses electrical submersible pumps. The wells can also be vacuumized for higher discharge capacities.

SOCK DEWATERING

Often the most cost-effective method of dewatering and with minimal disruption to your site. With no need for prior dewatering, horizontal or trenched tile systems can be quickly installed for drawdowns of up to 6m (20ft) in a variety of soil conditions.



Drilling

Aquatech's experienced drilling specialists set the bar beyond the minimum standard by utilizing best management practices and advanced technologies to achieve effective boreholes while minimizing the potential for negative impacts to the natural environment.

 Certified Well Technicians

Groundwater

- Deep Well Dewatering
- Pumping Tests
- Ventilation Wells
- Relief Wells
- Municipal Supply Wells
- Recovery and Recharge Wells
- Irrigation Wells

Mining Application

- Service Boreholes
- Deep Boreholes
- Grade Control
- Exploration Drilling
- Probe Holes
- Pressure Grouting
- Tunnell Alignment Holes
- Bulk Sampling

Environmental & Studies

- Monitoring Wells
- Water Treatment Extraction Wells
- Chemical Injection Wells
- Test Drilling / Core Samples
- Hydrogeological Studies
- Geothermal Drilling

Foundation Enforcement

- H-Pile and Caisson Installations
- Drilled Pileings (4 to 24inch)



We understand that each project poses different demands and have engineered and procured our drill rigs accordingly

TRACK MOUNTED DUAL ROTARY SOILMEC SM22



VERTICAL, ANGLED & HORIZONTAL DRILLING

The SM22 track mounted Dual Rotary drill rig is extremely versatile and cost efficient for drilling in difficult formations and operating conditions. Equipped to efficiently drill through consolidated and unconsolidated formations at a large range of angles using either air or water as a flushing media, our SM22 is ideal for dewatering wells, tie-backs, anchors, and jet-grouting. The ability to case the borehole as depth increases ensures that the native formations remain clean and free of artificial additives such as polymers and bentonites, reducing development time, as well as minimizing soil loss, preventing ground settlement. Its' compact design makes it easy to transport and suitable for areas with limited access.

TRACK MOUNTED AUGER RIGS



VERSATILE MULTIPURPOSE PLATFORM

Excavator carrier based rigs are used for efficient wellpoint and eductor well installations using continuous flight auger, hollow stem auger, wash rotary or jetting methodologies. Capable of drilling holes from 4 inch to 36 inch in diameter.

TRUCK MOUNTED DUAL ROTARY FOREMOST DR24



LARGE DIAMETER PRODUCTION WELLS

The Dual Rotary drilling method has been proven repeatedly where conventional drilling techniques find challenges such as drilling in unconsolidated and loose overburden material including glacial deposits, blasted rock and industrial debris. Our DR24 can set casing up to 24" (610 mm) in diameter and 500' deep. Its' capability for both straight and angle drilling, as well as the ability to drill with Reverse Circulation technology, is often a crucial advantage in construction applications including dewatering wells, well abandonment, casing recovery, and pressure relief wells. Whether using the conventional dual rotary or the reverse circulation method, the DR24 has the ability to control cuttings to ensure a clean drill site.

TRACK MOUNTED SONIC DRILL



TRUE REPRESENTATIVE SOIL SAMPLES

Sonic drilling uses high frequency energy to penetrate a large range of subsurface formations with maximum efficiency while significantly reducing friction on the drill string. With the capability to run dry, collect continuous core samples, and drill at angles, sonic is often the preferred drilling method for geotechnical, environmental and geothermal applications.



Mine Dewatering

The challenging conditions of Mining projects poses a unique set of demands on the products and services offered. Aquatech understands the challenges of working in remote areas, in complex geology, corrosive and abrasive applications, as well as tight timelines and budgets.

Our pumping equipment is amongst the most advanced, efficient and reliable in the world; you can rely on our products in the harshest conditions, delivering the consistent performance you need.

DEEP WELLS

Turn-key deep well solutions for lowering the watertable up to 300m (1000ft)

HIGH VOLUME & HIGH PRESSURE

Pumping services and equipment in support of surface mining including low/high pH applications

WATER TAKING APPROVALS & DISCHARGE AGREEMENTS

Perform aquifer studies including zone of influence studies and pumping tests, and attain permits

TAILINGS POND MANAGEMENT

Electric, diesel or hydraulic pumping systems with remote monitoring

HDPE FUSING

On-site installation, sale, and rental of leak-free pipe system

ENGINEERED SOLUTIONS

Forecast yeild and flow rates and reliable system engineering critical to eliminate significant cost and schedule implications






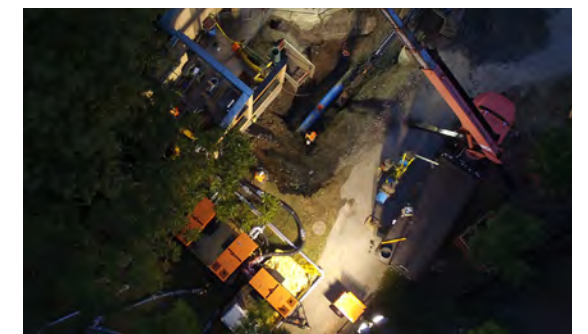
Sewer Bypass

Sewer flow diversion is critical in many planned infrastructure work projects such as sewer relining, sewer pipe upgrades, pump station upgrades, etc. as well as unplanned/emergency sewer works such as pipe breaks and blockage.

Aquatech is one of the few companies in the country that truly specialize in temporary sewage bypass pumping, and we offer incomparable experience with both small and large projects throughout North America.



-  Engineered system design, stamped engineering plans, supply and install to meet governing regulations
-  Large fleet with a broad selection from 3" to 36" sewage pumps
-  Pumping solutions to overcome site restrictions
-  Qualified water and wastewater operators



24/7 EMERGENCY RESPONSE



Industrial Pumping

Our pumps and pumping solutions are designed to handle an array of applications in some of today's most demanding environments. We have you covered from hazardous fluid transfer, pipeline repair, temporary pumping systems or liquid transfer in a plant expansion project.

From engineered pumping design, installation to remote 24/7 monitoring and on-site pump watch, our certified technicians are prepared to provide an engineered solution for your next project.

Stormwater & Flood Management

Aquatech's stormwater and flooding experts have specialized, tailored solutions to assist in minimizing the impact of unpredictable stormwater and flooding events, mitigate risks and respond to occurrences in a timely, cost-effective manner.

Aquatech can manage all risk assessments, regulatory requirements, mitigation plans, and flood monitoring systems with remote, real-time notifications.

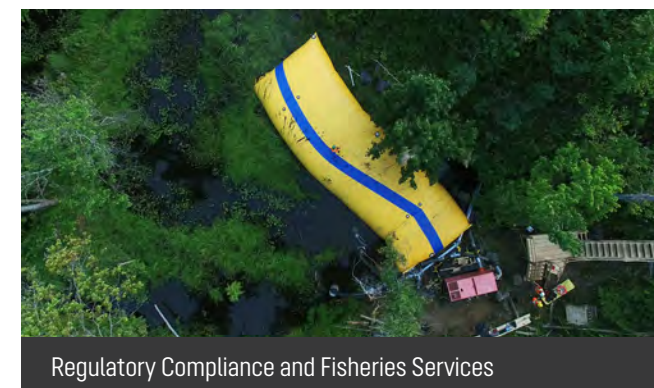


INDUSTRIES SERVED

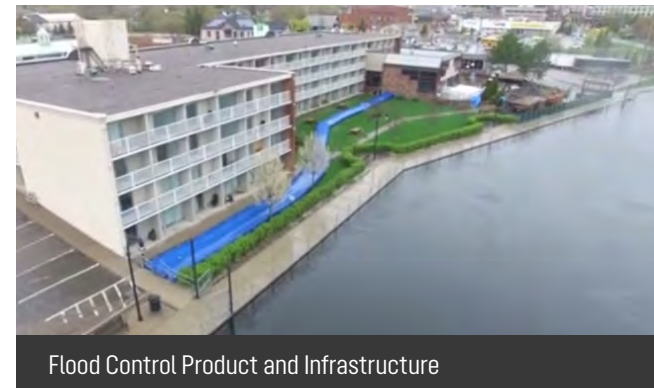
-  MANUFACTURING
-  PETROCHEMICAL
-  STEEL MILLS
-  POWER PLANTS
-  MINES AND QUARRIES
-  MARINE CONSTRUCTION
-  OIL AND GAS EXPLORATION



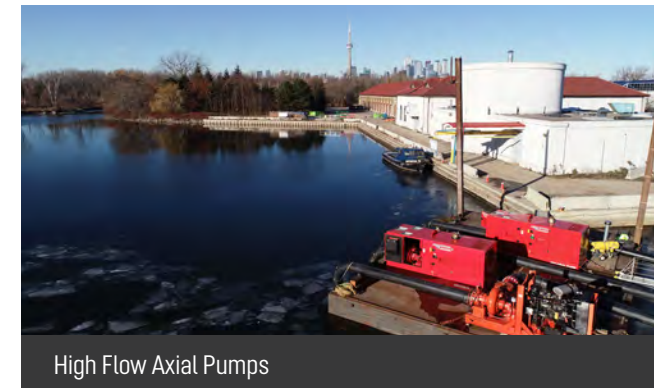
Flood Risk Assessment and Mitigation Planning



Regulatory Compliance and Fisheries Services



Flood Control Product and Infrastructure



High Flow Axial Pumps



Discharge Water Treatment

Non-compliant discharge can lead to costly fines, charges and extensive delays on your project. Aquatech has extensive experience in treating discharge to comply with regulatory requirements.

We have a fleet of innovative technology for filtration and treatment. In addition, Aquatech provides installation, on-site support, testing, and rigorous continuous monitoring of the system. Systems can be employed to meet sanitary sewer, storm sewer, and natural watercourse bylaws.

PERMITTING

We can help attain all required permits and approvals from regulatory bodies for discharging treated water

REMOTE MONITORING SYSTEMS







Maintain awareness of site parameters with our smart remote monitoring systems complete with custom alerts

MOBILE ECA

We hold one of the most the most versatile and flexible mobile ECAs to discharge anywhere in Ontario



EQUIPMENT FOR TREATING

-  VOC's and inorganics
-  Hydrocarbons – liquid and soluble phase
-  Total suspended solids and turbidity
-  Ammonia
-  Metals including manganese, zinc, iron and arsenic
-  pH adjustment for acidic and alkaline environments

Creek/River Bypass

Aquatech provides creek/river bypass pumping solutions to temporarily divert baseline flows in a natural watercourse when there are in-water works such as culvert replacement or upgrades. Aquatech offers specialized resources and expertise in designing bypass pumping systems and obtaining all required assessments and permits.

Aquatech can manage the entire project from accessing project requirements, design, permitting, to rental/sale of equipment, technical support, and implementation/operation.

ENVIRONMENTAL SERVICES

- Dry weather, wet weather and storm flow monitoring and assessment
- Permit studies and submittals
- Expert management and protection of fish and fish habitat



REMOTE MONITORING & CONTROL

Aquatech designs and supplies remote monitoring systems that allow for real-time monitoring and alerts of operating and compliance parameters as well as equipment service and maintenance. With accurate, real-time data and our alerting system, projects can achieve their end result with significantly less liabilities, cost, and time.



24/7 MONITORING

Continuous monitoring provides full awareness of your project parameters



CUSTOM ALERTS

Alarms & notifications triggered when custom thresholds are met



ONE PLATFORM

Central cloud-based platform for streamlining all project data

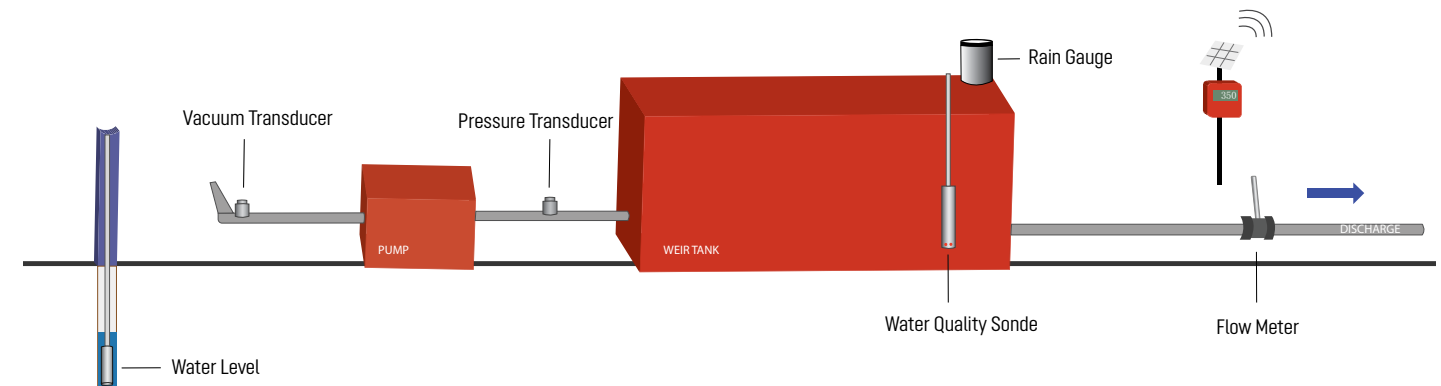


RELIABLE INSTRUMENTS

Rugged self-powered instruments with satellite connection



PACKAGED MONITORING SYSTEMS



Real-Time Data Helps Achieve Your End Result and Saves You Money

- ✓ Proactively anticipate and resolve operations, environmental and equipment issues and delays
- ✓ Remote controls of pumping equipment
- ✓ Make live adjustments to your system to achieve maximum performance
- ✓ Share and maintain accurate records of your operating data and environmental compliance due diligence

MONITORING PARAMETERS

- WATER QUALITY**
Turbidity, TSS, pH, Temperature, DO, ORP, TDS, RDO, Barometric Pressure, Salinity, Conductivity, Ammonium, Nitrate, Chloride, Manganese, Iron, Lead, Gold, Zinc, Copper
- WATER & WASTEWATER FLOW**
- VACUUM & PRESSURE**
- PUMP OPERATIONS**
Engine Speed & Temperature, Fuel Level, Oil Pressure, Power
- WATER LEVEL & RAINFALL**
- AIR QUALITY & WEATHER**
Dust, Temperature, Gases, Wind Speed/Direction, Rainfall, Humidity, Sunlight
- GEOTECHNICAL & MORE**





HDPE Fusion

HDPE systems provide companies, communities and municipalities with sustainable solutions for infrastructure.

Due to the absence of joints, HDPE provides a leak-free pipe system that eliminates water loss, conserves natural resources, eliminates infiltration and exfiltration of contaminants, and allows the use of cost-effective methods that are less disruptive to the surrounding environment.



SERVICES INCLUDE

- Free site assessment
- Pipe & fittings sale and rental
- Fabrication of custom fittings
- Fusion by certified service technicians
- On-site installation (up to 63")
- Engineering support in selecting the appropriate pipe size and material
- Insulated pipe & heat tracing supply and installation



Engineering

Aquatech's engineering team has a deep understanding of local and governing regulations as well as local hydrogeology. We provide efficient start to finish services & project management for any size project.

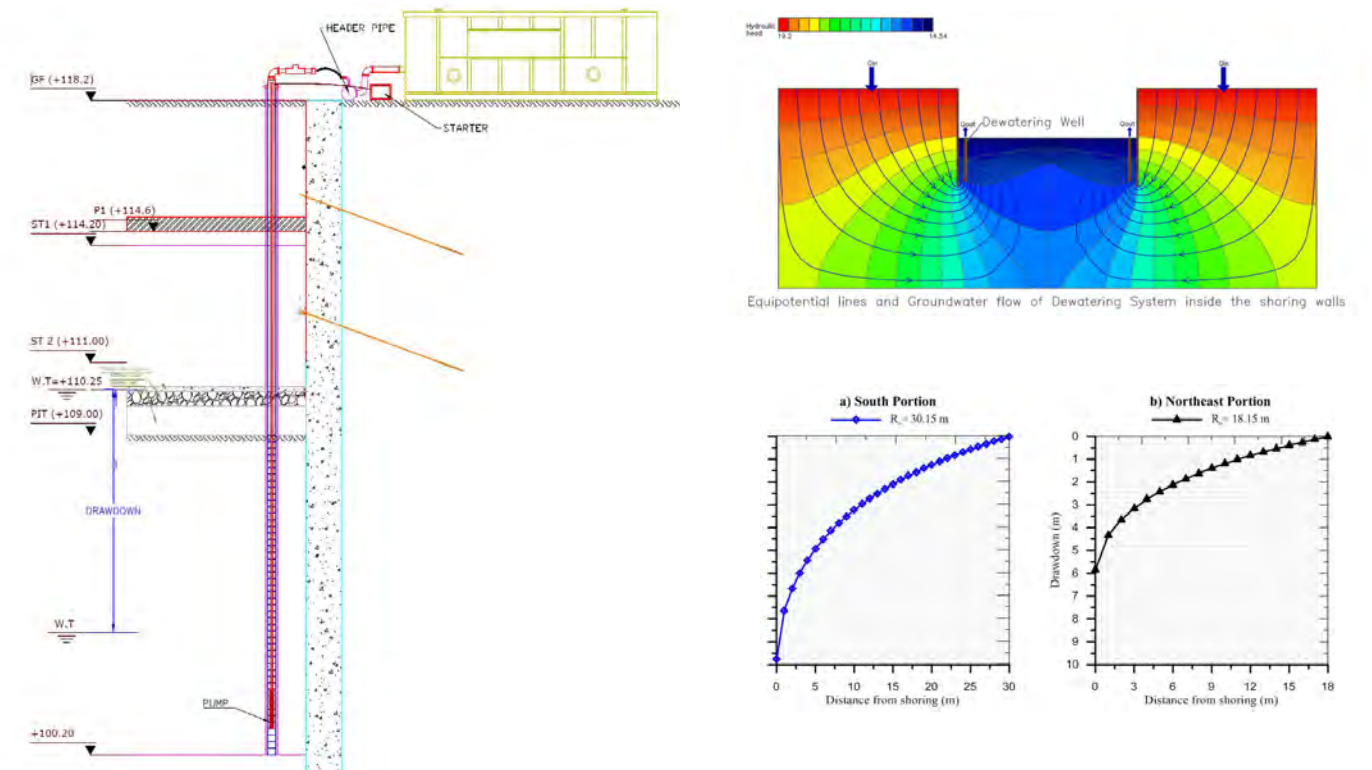
We work from the pre-construction and engineering stage of projects to design or improve your system, or with project engineers to build specifications for projects.

DESIGN & PLANS:

- Engineering, Consulting and Preparation of Engineer Stamped Bypass Pumping and Dewatering Plans
- Pumping Tests for Reliable Dewatering Estimates
- Design of Production Wells
- Design of Filtration System

HYDROGEOLOGICAL:

- Dewatering and Impact Studies
- Permits and Approvals
- Groundwater Modeling
- Water Balance Calculations
- Aquifer Tests: Including Pumping and Slug Tests
- Dewatering Feasibility Plans
- Uplift Pressure Calculations
- Dewatering Flow Calculations
- Water Quality Analysis
- Zone of Influence Predictions
- GUDI Studies
- Settlement Studies
- Surface Water/Groundwater Interaction
- Surface Water/Well Head Protection



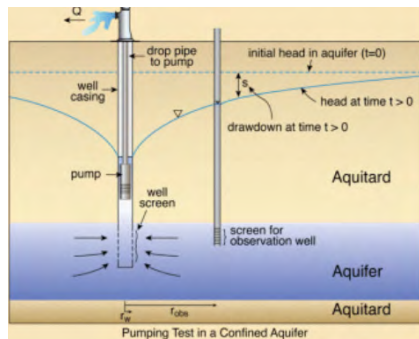
Pumping Tests

Pumping tests are completed to estimate hydraulic properties of sub-surface materials in-place. In its simplest form, a Pumping Test involves pumping a well at a known rate to produce a change in water level, while measuring the change at the pumped well and in nearby wells.

The tests let our Specialists forecast how long it will take to lower the water table, predict the Zone of Influence of pumping, and understand the source of water. Aquatech uses all of this information to design the right dewatering plan and choose the best pumps and equipment for the site conditions.

PUMPING TESTS

- Geological evaluations; establishing well locations
- Establishing zone of influence
- Predictive modeling for number of wells
- Expected drawdown from dewatering areas
- Forecast discharge flow rates



Environmental Permitting & Investigations

Aquatech was founded on the principals of providing superior environmental standards. There are governing regulations that must be met and our specialists are very experienced in dealing with permitting and compliance monitoring.

Aquatech places significant emphasis on managing projects in an **environmentally secure manner**. Our staff is trained in environmental regulations and safety procedures, and hold the licensing necessary to meet the requirements of any project.

Professional Geoscientists (P.Geo)

CAN-CISEC Certified Inspectors



WATER TAKING/DISCHARGING PERMITTING

Obtaining dewatering & discharge permits/applications



ENVIRONMENTAL INVESTIGATIONS & STUDIES

From baseline studies and risk assessments to ESC and real-time monitoring



FISHERIES & WILDLIFE

Ecological assessments and surveys, plans, rescues, and approvals



SURFACE WATER/GROUNDWATER REMEDIATION

Contaminate sampling, tracking, and assessments, as well as treatment solutions

Sale & Rental

Industry's most advanced and reliable pumping equipment:
the same tools we trust to perform on our own projects



DIESEL & ELECTRIC VACUUM WELLPOINT PUMPS

Designed specifically for Wellpoint Systems: known for their efficiency and using oil-free, low maintenance rotary pumps

- Wellpoint & Sock Dewatering
- High Air Handling
- Dual-Phase Extraction



JETTING PUMPS

For heavy duty use on construction sites

- Self/Hand Jetting
- Higher Volume Casing Jetting
- High Volume/Pressure



TRASH PUMPS (3"-30" PUMPS)

Designed to effectively handle a wide range of liquids from water and sewage, to sludge that can contain solids and other materials

- Dewatering
- Solids Handling (Sewage)
- High Pressure
- High Volume



ELECTRIC SUBMERSIBLE TURBINE PUMPS

Utilizes high grade stainless steel materials for maximum performance in the most demanding applications

- Dewatering
- High Pressure



ELECTRIC & HYDRAULIC SUBMERSIBLES

Made with exceptional structural quality to achieve low maintenance costs, and designed to handle the heaviest slurries

- Dewatering
- Wastewater
- Slurry
- Dredging



DREDGES

Specifically designed for easy assembly and easy handling: Our multipurpose dredges have extreme mobility in many environments

- 11 kW/30 RPM to 30 kW/50 RPM excavators
- 30 to 200 m³/h at 6-8 bar jet rings

DISCHARGE WATER TREATMENT

Variety of specialized and rugged equipment for discharge filtration and treatment

- Weir Tanks/Settlement Tanks
- Multi-Media Vessels
- Bag & Sand-Media Filters
- Polymers & Flocculation
- Aqua-Kleen Filters
- pH Adjustment Systems
- Polymer Mixing Tanks
- Oil/Water Separators



SPILL & CONTAINMENT BERMS

Essential tools for keeping your site dry and/or protected from spills

- Pump and Fuel Tank Spill Guards
- Portable Cofferdams, Water Inflated Property Protectors



WHEEL WASH

Automated wash solutions for both on and off road trucks, and tracked and wheeled vehicles. Designed to work at field level



MONITORING SYSTEMS & INSTRUMENTATION

Rugged monitoring equipment for real-time site data accessible via your smartphone or desktop

- Discharge Flow Rate, Water Quality, Water/Fluid Level
- Vacuum, Pressure, Rainfall, and More
- Telemetry Systems with Automated Alerts
- Pump Control



PUMP, POWER & LIGHTING

Sound attenuated and reliable equipment

- Generators
- Light Towers
- Multipurpose Units



PIPE, HOSE & ACCESSORIES

- HDPE Piping
- Galvanized/HDPE Type B Pipe and Fittings
- Suction/Discharge Manifolds
- Pipe Floats
- Sewer Plugs
- Fish Suction Baskets
- Heat Tracing
- Temporary Fuel Tanks

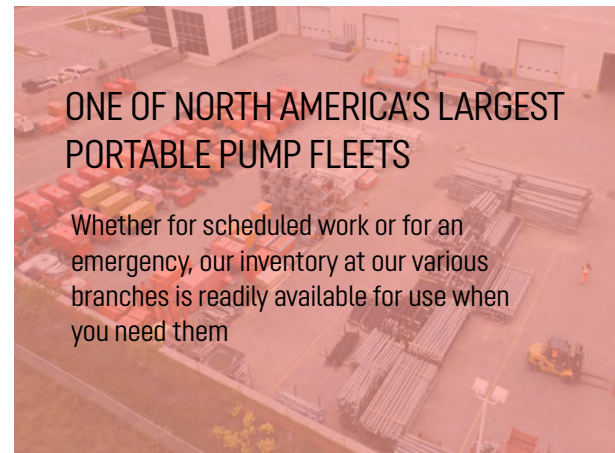


SALE/RENTAL

SALE/RENTAL

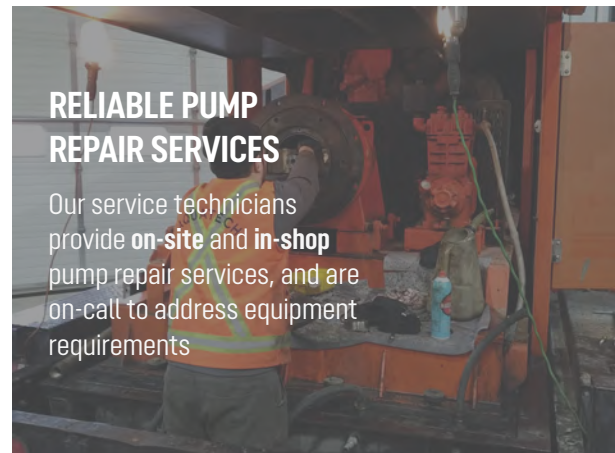


Parts & Service



ONE OF NORTH AMERICA'S LARGEST PORTABLE PUMP FLEETS

Whether for scheduled work or for an emergency, our inventory at our various branches is readily available for use when you need them



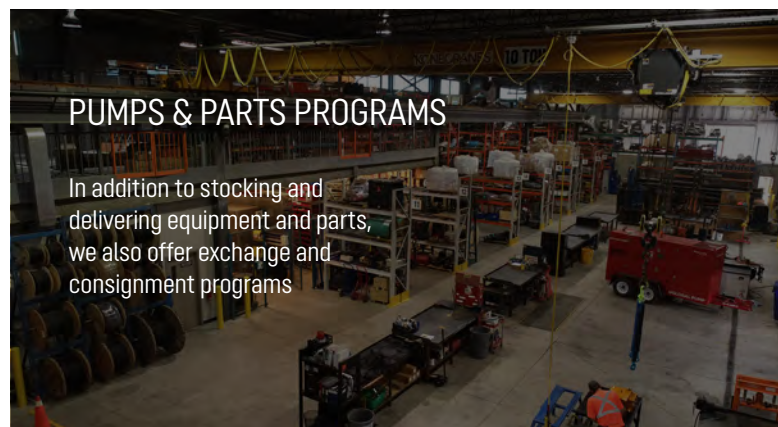
RELIABLE PUMP REPAIR SERVICES

Our service technicians provide **on-site** and **in-shop** pump repair services, and are on-call to address equipment requirements



TECHNICAL TRAINING & SUPPORT

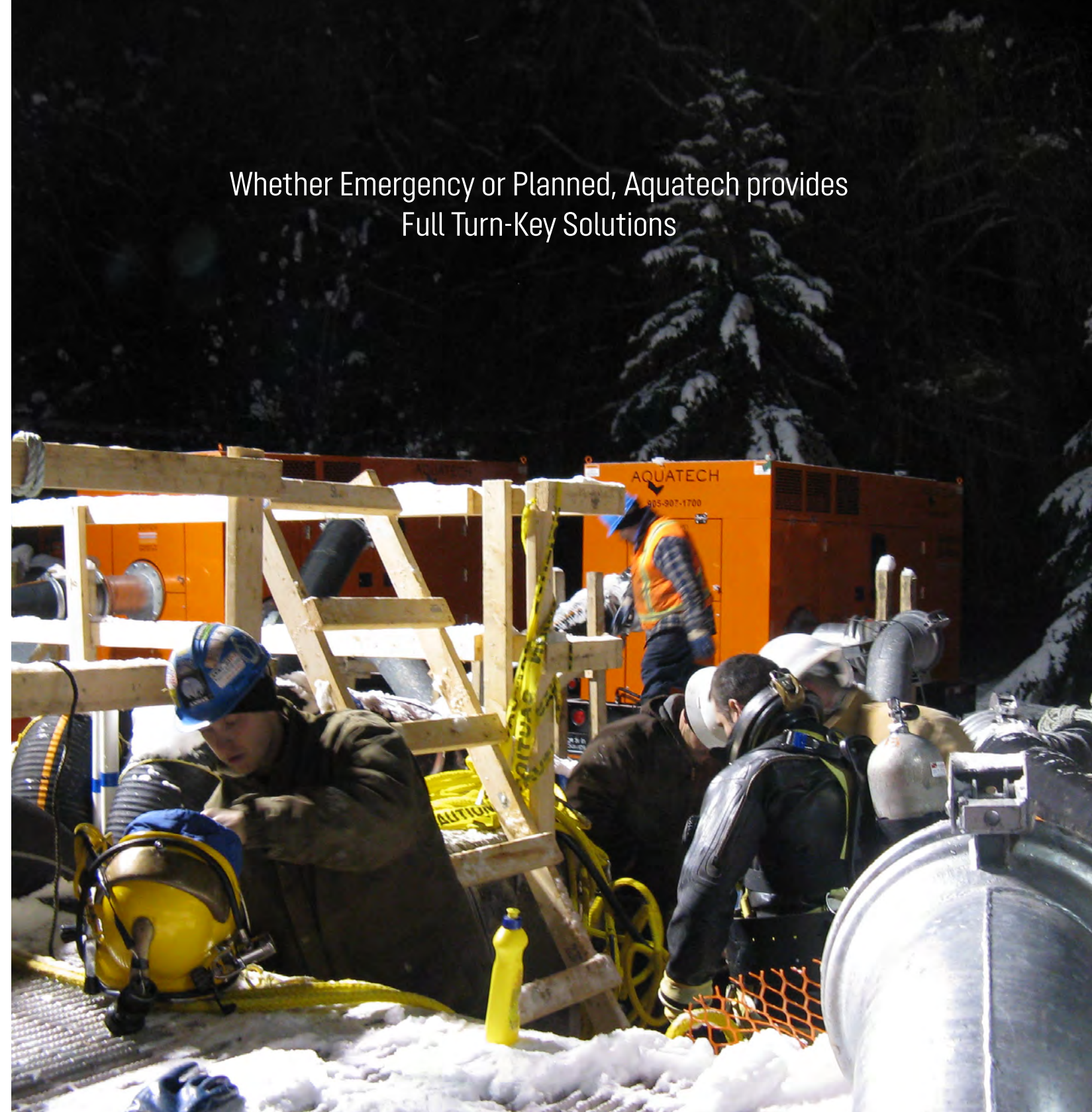
We offer operator and equipment service training in our equipment facility



PUMPS & PARTS PROGRAMS

In addition to stocking and delivering equipment and parts, we also offer exchange and consignment programs

Whether Emergency or Planned, Aquatech provides Full Turn-Key Solutions



Untouched Quality Assurance

We completely understand the essential nature of reliability in pumping system operations: we are committed to continuous improvement and **utilize the highest level of QA/QC** in the industry.

Our quality control systems allow us to confidently stand behind all our equipment:

PUMP PERFORMANCE TESTING FACILITY

All pumps are performance tested and certified to meet manufacturer's published pump curve: this demonstrates hydraulic performance and mechanical integrity

HYDROSTATIC PRESSURE TESTING FACILITY

In order to ensure integrity and identify any leaks, Aquatech performs a non-destruction pressure test on all hose and pipes prior to shipping to a job site

24/7 EMERGENCY RESPONSE

REMOTE/ON-SITE PUMP WATCH OPERATIONS

EQUIPMENT & PERSONNEL

PUMP FLEET & SERVICE SOLUTIONS



SERVICE



Dewatering & Pumping Specialists
Serving Canada & USA



CANADA
1.877.907.7852
AquatechDewatering.com
info@aquatd.com

TORONTO 905.907.1700
SUDBURY 705.525.1700
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