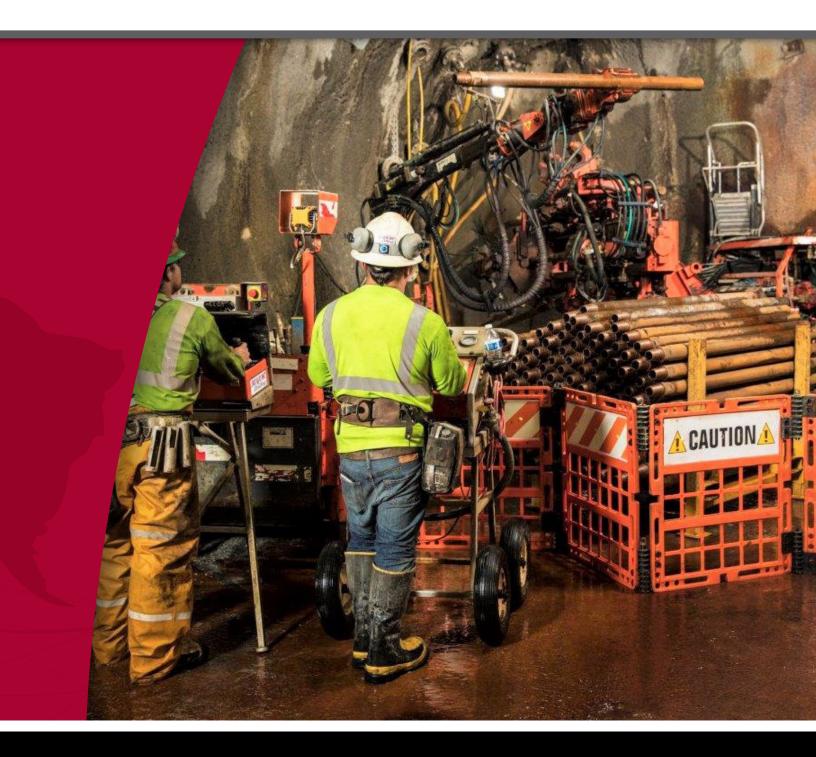


Underground Dewatering



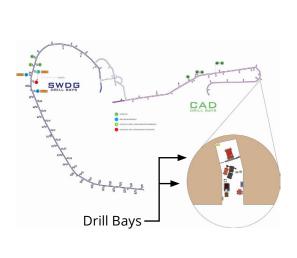
QUALITY • SAFETY • RESULTS

Effective High-Wall Ground Pressure Relief



80-100 gpm

Via Underground Drilling & Subsequent Installation of Drainage System.







Our goal is to safely reduce high-wall pressure through existing or targeted underground dewatering locations.

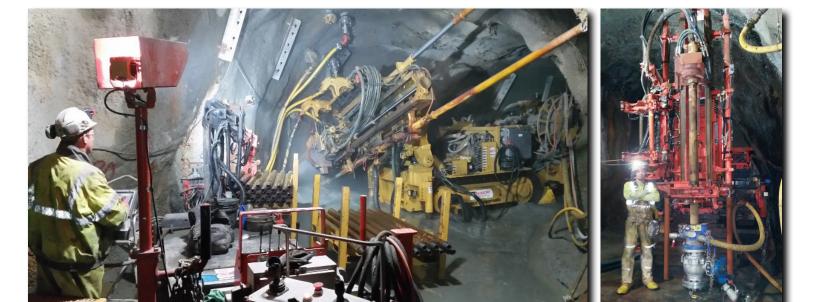
Methods

ITH & Rotary:

- Various sizes
- Performs at all inclinations (360 Degrees)
- Implementation of surface techniques and tooling

Large-diameter well-hole drilling (6.75" or Greater):

- ITH and rotary
- Typically performed at -65° to -90°
- Implementation of surface techniques, tooling and mud systems



Tooling Selection Examples (Based on expected drilling conditions)





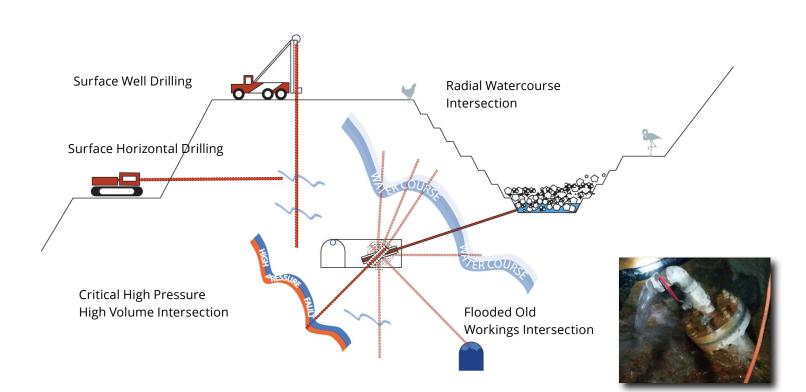


Application-Specific Engineered Mud Systems

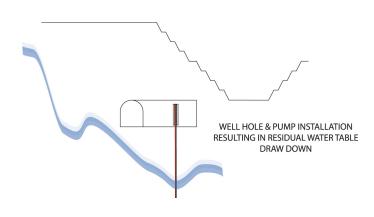




Dewatering Variations



Well Holes







Pre-collar Checklist

- Pilot and ream 25-50 ft
- Perform pre-collar survey
- Install 25-50 ft stainless steel casing
- Grout in place
- Perform pressure test
- Pressure grout if required

Safety Device Examples

- Hydraulic BOP
- Washington Head Assembly
- Emergency shut-in tooling and procedures





BOP -Valve- Diverter



Total Depth Drilling



Proven 1300' Holes



Rod Handling



Drilled at all Inclinations

Screen Installation

Screen installation

incorporates the following:

- Multiple sizes and materials
- All inclinations with proven safe-install procedures
- Assistance with the drainage system integrity



3/8" Holes PVC

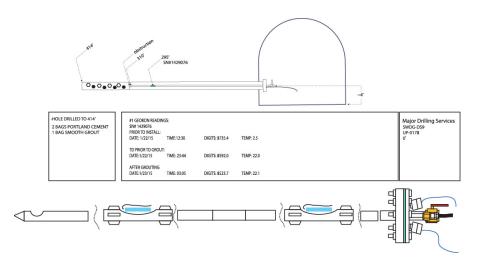


Slotted Metal Pipe



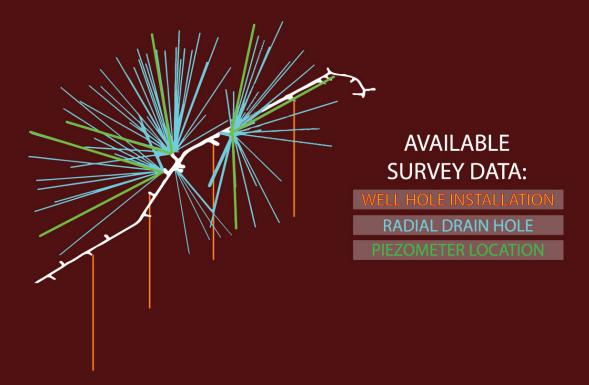


Piezometer Installation

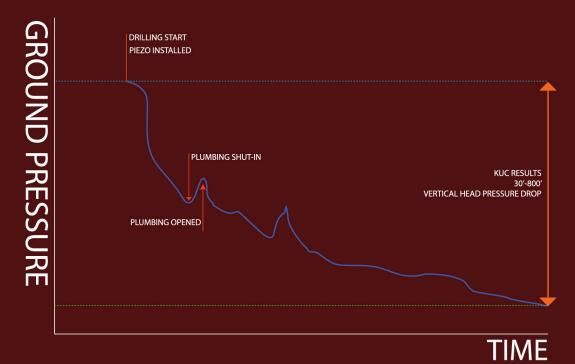




Results



TYPICAL PIEZOMETER RESULTS & PRESSURE BEHAVIOR





Final Plumbing & Manifold Installation Examples



Through extensive research and development, Major Drilling has the proven resources, experience, and technical ability to safely and productively execute a variety of underground drainage systems in order to successfully dewater, and thereby reduce ground pore pressures.

<u>_______</u>

Major Drilling = Major Success

Our team unites to produce unparalleled service:

- Specializing in safety, quality and productivity
- Offering many cumulative years of drilling experience and resources
- Possessing extensive technical resources
- Including self-sufficient mechanical and fabrication facilities

We are the leader in technical underground drilling and dewatering services.



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