

PETER WHITE

Professional Summary:

A professional engineer with over 25 years of diversified experience including corporate, administrative, management, supervisory and technical responsibilities in project evaluation, construction, operation, contracting and consulting at project locations in Canada, United States, Europe and Asia.

Education and Professional Affiliations:

B.Sc. Mining, 1971 - Queen's University
M.B.A., 1976 - Queen's University
Professional Engineer, Ontario
Designated Consulting Engineer, Ontario

Career History:

1988 to date Multiurethanes Ltd., Mississauga, Ontario
Multiurethanes Inc., Buffalo, NY

Owner of service companies providing materials, equipment and engineering support services for grouting operations in heavy civil construction, utility and mining industries

1987 to date Brampton Mining Company Ltd.,
Self-employed independent mining and grouting consultant

1971 - 1987 Mining engineer employed by various mining contractors and mining companies at project locations across Canada, USA and overseas

Areas of Grouting Expertise:

- rock and soil grouting using ordinary cements
- rock and soil grouting using microfine cements
- rock and soil grouting using polyurethane resins
- water cut-off operations (i.e. control of major water inflows through rock or concrete structures)
- waterproofing operations (i.e. elimination of water infiltration through concrete structures)
- quality control for cement grouting projects
- troubleshooting difficult grouting projects

Selected Grouting Experience:

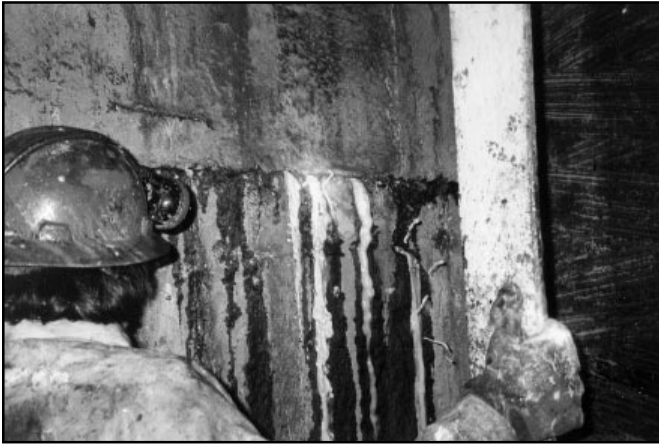


MARCOPPER MINING CORPORATION, Philippines
Technical consultant to ECO Grouting Specialists during plugging of drainage tunnel located 500 feet below abandoned open pit filled with tailings using cement, polyurethane and hot bitumen grouting materials (7 months duration)



SUDBURY CONTACT MINES, Kirkland Lake, Ontario
Designed and supervised grouting of shaft collar in fractured rock to a depth of 600 feet using ordinary and microfine cements to reduce potential for high water inflows during shaft sinking

Peter White Selected Grouting Experience



AURORA-THYSSEN, Onaping, Ontario
Directed microfine cement and polyurethane injection operations to reduce water infiltration through concrete shaft liner into East McCreedy Ventilation Shaft.

E.B. EDDY LTD., Hull, Quebec
Assisted a grouting contractor to modify available grouting equipment and the cement grout formulation for a successful tremie grout installation into formwork below water level and under flowing water conditions



S. McNALLY & SONS LTD., Toronto, Ontario
Designed and supervised a cement grouting program that successfully consolidated unstable water-bearing soils at two shafts in reclaimed land on the shore of Lake Ontario

AGNICO-EAGLE MINES LIMITED, Cadillac, Quebec
Specified and supervised a cement grouting program using sodium silicate as an accelerator which successfully stopped substantial water inflows into an orepass and a ventilation raise at depths of 300 feet below surface

TVX GOLD INC., Gardiner, Montana
Assisted company personnel to assemble grout mixers, pumps, headers and related equipment for grouting water inflows into mine access tunnel; conducted water pressure testing to evaluate site conditions; formulated stable cement grout to suit site conditions; trained company crews in mine grouting procedures; provided grouting-related guidelines and documentation for future reference

THOMASVILLE STONE & LIME CO., Thomasville, PA
Evaluated 500 GPM inflow through solution cavity into underground limestone mine; recommended grouting materials and procedures for establishing control of water inflow

GAZODUC TMQ, St-Nicholas, Quebec
Conducted site investigation and prepared recommendations for remedial action regarding water infiltration problems associated with 3 m diameter TBM tunnel project beneath the St. Lawrence River



UNITED PARAGON MINING CORP., Philippines
Undertook site investigation involving 800 GPM inflow into the bottom of an 800 foot deep mine shaft, including water pressure testing through adjacent boreholes

Developed detailed grouting program and bills of materials and equipment required for stopping 800 GPM inflow and for stage grouting through associated fault zone prior to resumption of shaft sinking operations

Supervised and trained local manpower to successfully stop 800 GPM shaft bottom water inflow using cement grouts accelerated with sodium silicate

Peter White Selected Grouting Experience

C & M McNALLY ENGINEERING, Mississauga, Ontario
Directed void-filling operation using polyurethane resin to stabilize an underground cavity created by a 3 m diameter TBM after encountering an underground geological fault

AUR RESOURCES INC., Val D'Or, Quebec
Provided technical supervision of grouting operations to seal two diamond drill holes intersected underground at the 1000 foot level against hydrostatic pressure of 400 psi and flow rates in excess of 500 GPM using cement grout and thixotropic grout modifiers

Directed polyurethane grouting operation underground on the 3000 foot level to seal major access drift against water infiltration from underground water sump



H.F. DARLING, INC., Niagara Falls, NY
Undertook review of site conditions and developed grouting strategy for pre-grouting rock and overburden prior to shaft excavation located adjacent to Niagara River; supervised initial grouting operations; contractor subsequently excavated shaft 60 feet deep to bedrock and 15 feet into rock before encountering small quantities of water infiltration; remaining shaft excavation completed without encountering major water inflows

TALPA DYNATEC, Val D'Or, Quebec
Supervised the successful grouting of a water-bearing fault zone beneath a shaft sinking operation at a depth of 2200 feet below surface; existing water pressures of 800 psi were controlled using a combination of microfine cement and multiple hole grouting techniques.

NYDOT, Rensselaer, NY
Developed remedial grouting program and supervised drilling and grouting operations to correct damage caused to highway roadbed due to soil erosion encountered during pipe jacking operation beneath highway



HEMLO GOLD INC., Matheson, Ontario
Provided technical supervision of grouting operations to overcome quicksand conditions which had halted excavation during sinking of 24 foot diameter caisson through 60 feet of plastic clays and water-bearing sand formations; successfully grouted artesian borehole in shaft bottom

Reviewed rock-grouting procedures when the shaft bottom was at a depth of 400 feet and made recommendations to improve shaft grouting performance using cement grout modifiers



CP RAIL, Rogers Pass, British Columbia
Undertook site investigation and prepared technical recommendations and cost estimates for reducing water infiltration into concrete lined ventilation shaft

Trained railway personnel and directed successful implementation of polyurethane grouting operation to stop water infiltration through shaft walls

Peter White Selected Grouting Experience



PUBLIC WORKS CANADA, Smiths Falls, Ontario
Provided day-to-day technical support to PUBLIC WORKS CANADA during successful execution of a cementitious grouting program for reducing water infiltration through limestone formations

KIDD CREEK, Timmins, Ontario
Directed polyurethane grouting operation to seal the rock/concrete interface for a cast-in-place concrete bulkhead designed to hold compressed-air within an underground tunnel

PENNDOT, Lancasterville, PA
Undertook review of site conditions and prepared technical recommendations, bills of material, grout formulations and recommended grouting procedures for stabilization of bridge construction site involving ground treatment for sinkholes in soils overlying weathered dolomitic limestone formations

CP RAIL, Windsor, Ontario
Technical consultant coordinating startup of cementitious and microfine grouting in external concrete lining surrounding subaqueous railway tunnel beneath Detroit River and connecting the cities of Windsor and Detroit

HYDRO QUEBEC, LG-1 Project, Quebec
Recommended specific polyurethane injection materials, equipment and techniques which were successfully used to undertake a major concrete crack injection program

BARRICK GOLD CORPORATION, Matheson, Ontario
Supervised water pressure testing and grouting operations to reduce water infiltration into existing backfill raise using a combination of cement grouting and polyurethane injection through drill holes 300 feet long

Designed polyurethane and cement grouting programs used to stop water infiltration into a new backfill raise at depths to 500 feet; provided grouting equipment, materials and training for contractor personnel

STCUM, Montreal, Quebec
Recommended polyurethane injection materials, equipment and techniques, and provided training of STCUM personnel for sealing of cracks in underground concrete structures throughout the Montreal subway system



NIAGARA MOHAWK, Deferiet, New York
Planned and directed successful implementation of cementitious grouting into limestone foundation to reduce 10,000 GPM water inflows beneath coffer dam

FOR MORE INFORMATION, CALL US TOLL FREE

1-800-663-6633

OR CONTACT US BY E-MAIL

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OR VISIT OUR WEBSITE

www.multiurethanes.com