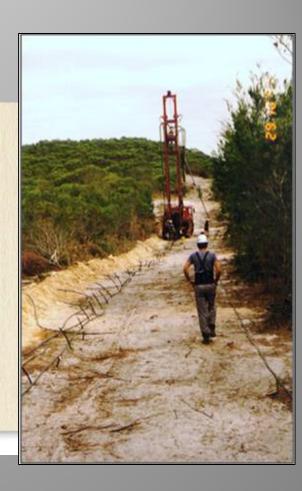


Welcome to Grou Tech



From
Mr Dan Muntz
Mr Matt Howell and
Mr Norm Howell





Overview - GrouTech

Professional

- **✓** There's depth to the image
- ✓ Specialised Grouting designs
- **✓** Large volumes placed and in short time frames
- **✓** Large capacity equipment

Technical

- ✓ Knowledge to mix & place products that react and set
- ✓ An in depth understanding of grouts
- ✓ Pre site trials

Track Record

- ✓ Mining Xstrata, BMA, Rio Tinto, Peabody & Anglo
- **✓** Commercial & Industrial Q Rail, Main Roads
- **✓** Ports Corporation, Eastern Pipeline Alliance
- ✓ Origin, Santos, Boral, Coke a Cola, ABB, Hanson



Void formation below slabs



 Pumping of fines causing voids to form

Re-support slabs, save on slab removal replacement and disruption delays



Void filling – Safety and Productivity

Where?

- Sites with heavy or dynamic loads
- Sites with water problems
- Swampy sites with poor sub-base





- Slab life extended
- Site delays and closure prevented



Void filling Bridges – Road Safety

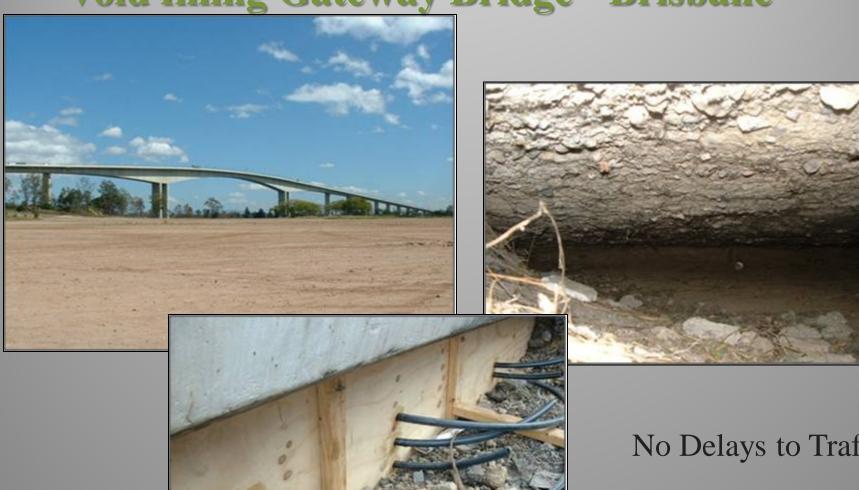




Re-level & support relieving slabs for safety



Void filling Gateway Bridge - Brisbane



No Delays to Traffic



Void filling Rail Culverts

Rail transport for coal mines







Road Culverts





This grouting saved catastrophic failure during the wet season



Subsided Industrial Slabs - Safety and Productivity





Re-level subsided slabs
taking away tripping hazards and
loads falling from forklifts



Subsided Slabs Re-levelled

Controlled Lifting





No downtime or yard closure – job completed in one shift



Mine Fault Zone Pre-Consolidation – Safety







Surface to Seam Longwall Coal Mines

Pre – Consolidate for Safety and Productivity





- Over 300 metres in depth
- Pre-consolidate by pressure grouting
- Improve strata 15 metres above seam



Grout Penetration in Faulted Strata

Siltstone/Mudstone From roof above seam



Grout in strata





Coal Mine - Spontaneous Combustion Control



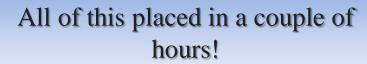






Crane Rail Support – Time is money

GROUTECH AUSTRALIA PTY LTD - Copyright 2011











Large Capacity Non Shrink Grouting



- 500 litres per batch
- A pallet of grout per mix!
- 6 cubic metres placed in 80 minutes
- Grouts that set in less than 10 minutes



Dam Construction Non-Shrink



- Large volumes placed to meet your schedule
- High capacity





Gas Compressor Bases



- Coal Seam Gas Compressor Base
- 3,600 litres epoxy grout in less than 1 hour



Nonshrink grouting



Gas Compressor Bases



Epoxy Grouting







Subsidence Correction at Weipa Dump Hopper



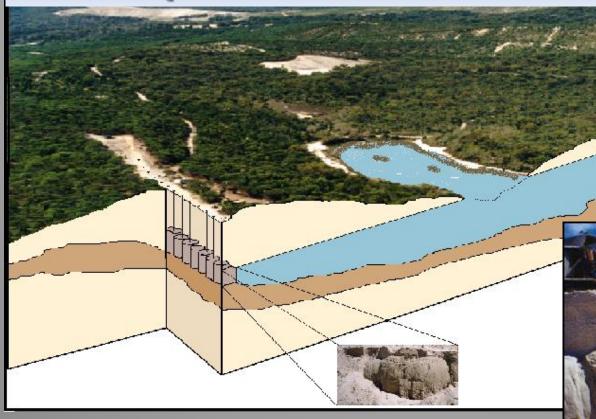


- 400mm subsidence correction
- Consolidation of fill material



Environmental Damage Repair

Lake Kounpee Stradbroke Island Brisbane!



- Underground dam construction
- Dam Size 275m x 12m x 1.5m
- Constructed 50m below the surface
- In sand!



• Unique





Underground Dam Wall Leeching Control



- Solidify sand
- Increase bearing capacity
- Reduce permeability



Quintel Beach Indigenous Community - Wharf Repairs





Maintaining access during wet season



Professional Personnel and Quality In House Training



Written procedures for all services & products

Theory & Practical

Training & Testing



Valuable - Details

GrouTech (Aust) Pty Ltd

Ph 07 3284 4033

Fax 07 3284 4795

E-mail reception@groutech.com.au

Web site: www.groutech.com.au

Important Contacts

Norm Howell – GM norm.howell@groutech.com.au 0418 328 424

Dan Muntz – Senior Civil Estimator dan.muntz@groutech.com.au 0409 926 594

Matt Howell – Systems Manager systems@groutech.com.au 0433 315 660

Aaron Davies - Operations aaron.davies@groutech.com.au 0499 977 811

