

SAFETY over all factors

– by Dan Carrocci
Ontario, Canada

Canada's drilling industry recently experienced a tragedy as our good friend Dan Grieves became entangled in the augers of a CME 55 drill rig. Dan was a professional, safety-conscious driller who simply had a bad day at work. The bottom line is no matter how good of a driller you are, accidents can happen. Take a moment - employers and employees - no matter what your profession, to take a step back and assess your daily activities. Isolate any potential hazards in your workplace; and brainstorm ways to safeguard against them. Communication within your industry is a key factor to the improvement of health and safety as everyone has different practices and protocols. Even talking about an incident or near-miss may lead to a method of prevention which others can apply. We at Determination Drilling are free for discussion at any time. Please don't hesitate to contact us.

After this incident, we were faced with the task of guarding our drill string to the specifications of the CSA Standards Act Z432 – Safeguarding of Machinery. This device had to be effective, functional with all applications of the drill, fixed to the rig, user friendly and durable. Not an easy undertaking by any means, but through brainstorming, trial and error, constructive criticism, teamwork and determination, we have designed what we call the Grieves Guard. With this in place, not only is the hazard of a rotating drill string completely eliminated, but the drilling technicians are also protected from any potential projectiles. This ensures that no matter how bad a day you have at work, you at least get to go home. This guard does not introduce any pinch points and is functional with all drilling techniques. It is compatible with any type of soils drill which uses an automatic hammer regardless of carrier vehicle whether it be a truck, track, buggy, or trailer.

I look at this guard as the most important piece of equipment on my drilling rigs and look back at the way we were operating as

primitive. The 'old school' mentality that it is acceptable to stand at the control panel, no less than 2 feet away from a rotating drill string, while the safety procedure to safeguard the worker is "don't go near it". The Grieves Guard will be made available through Determination Drilling and proceeds will go towards the Dan Grieves Safety Award/Bursary for the Drilling & Blasting Program at Sir Sandford Fleming College. Please visit our website www.determinationdrilling.com for more details.

Drilling safety is very important in maintaining the integrity of our industry. A list of safety devices and paperwork

requirements for all drilling equipment in Ontario has been compiled with input from all different facets of the industry (see below). These items can be adapted to all drilling methods/rigs, and other than the certain paperwork requirements, should be standardised around the world. The only way to make this standard is if everyone takes part and ensures your drills are outfitted with these items for the protection of your drilling technicians and your equipment. I encourage everyone to take a proactive approach to safety and look forward to how the drilling industry responds to this challenge.

SAFETY STANDARDS ON ALL DRILLING EQUIPMENT

- > 2 strategically located push button style kill switches
- > 2 strategically located multi-directional wobble switches
- > Physical auger guard in accordance with CSA standard Z-432 Safeguarding of Machinery
- > Back up Alarm
- > Cathead guard/detection system
- > Engine guards where possible
- > Lockout box off negative terminal of battery
- > Guarding of any/all rotating equipment
- > Whip checks on pressurised hoses
- > Kevlar hose wrap around all exposed hydraulic hoses
- > Clutch lock or hold to rotate device
- > Long handled shovels
- > Steps up to deck surface to eliminate jumping on & off
- > Grounding device where required
- > Safety hooks for winch lines
- > Seatbelt in all vehicles on-road or off-road
- > Manual device for cuttings removal (wheel barrow/drum dolly)
- > Amber light
- > Pylons or equivalent to section off work environment
- > Reflective stickers on equipment
- > Spare PPE
- > All controls properly labelled
- > Strategically located fire extinguisher/first aid kit/eyewash station
- > Spill Kit
- > Respirators
- > Cell phone w. emergency contact info.
- > OHS Green Book
- > Form 1000 –Registration of Constructors and Employers Engaged in Construction
- > Operators Manual
- > Drivers License/Drivers Log
- > M.O.E. Water Well Technician/Assistant Technician Licenses

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