



SAFETY ALERT

ADVANCED TRACKING 20 FEBRUARY 2015

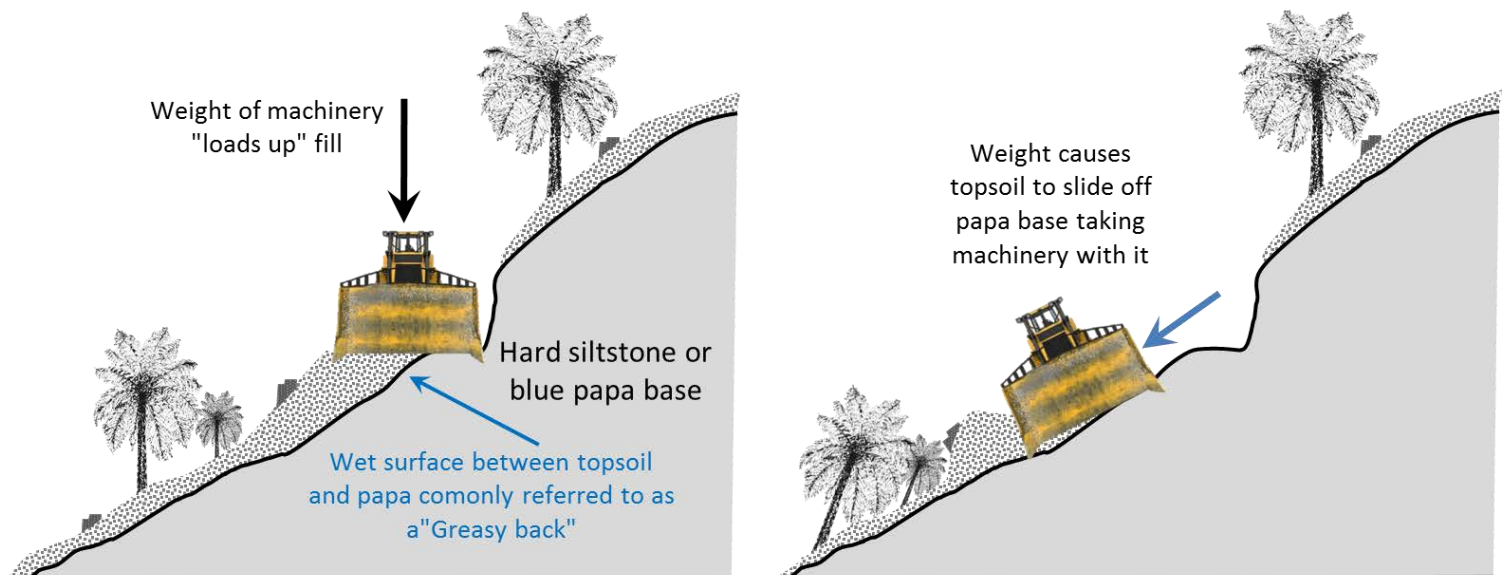
ISSUE:

A Bushman operating a Bulldozer was positioning the tractor when it slid off the ridge into a gully, travelling around 30m before stopping.

Other machine operators working in papa country have gone for some very hairy rides, mainly when they hit "Greasy Backs" or pockets of soil sitting on a wet siltstone (papa) base. The terrain is similar in many ways to the sedimentary soil types and geology found in Ernslaw One East Coast forests, Hunterville and Titoki.

In the Waimarino Forest, volcanic soils that sit on a very hard and steep papa base tend to slide off very easily, especially when wet. Add some extra weight to the surface soils in the form of sidecast material or a piece of machinery and they have the potential to slip out from underneath you. Notice how "heavy-weights" on the downhill portion of a bike ride or on the hydroslide go much faster than everyone else and that that downhill pointing ski will sit on the skislope until you stand on it causing it to take off? It's the same principle on steep papa country where there is not much top soil.

Harvest tracking in steep papa country (15-20 degrees +) is generally limited due to environmental considerations and the practicality of Ground Based Logging on such areas, however roadlining crews do encounter these challenges regularly, especially when trees to facilitate road construction.



1. EQUIPMENT AND TRAINING:

- Advanced tracking should be part of the Ground Based/ Roadlining operation, which basically means the crew has to have a machine that is capable of tracking in papa country.
- Due consideration should be given to the slope, ground conditions, type of material, weather, alternatives and constraints when deciding the requirements for Ground Based operations on steep papa country.
- Only allow competent operators to work in slip prone areas. These operators must be aware of the hazards and controls associated with the soil type and conditions they are working in.

2. CONTROLS TO MANAGE SLIP PRONE AREAS:

- Identify slip prone areas and areas where greasy backs are likely to be, i.e. in bends, guts and depressions likely to carry water.
- Work on a hard papa bench where possible, or bench (onto hard **soil/surface**) and fill with good material where required.
- Direct water away from potential risk areas.
- Always be cautious when working on unstable soil pockets, e.g. weak volcanic soils that form the basis of all overlying soils in the Waimarino area.
- Be mindful of weather conditions and ground moisture, whilst always remembering that moisture may be seeping out between layers of sedimentary rock, even in the driest conditions.
- Machinery needs to be:
 - fit for purpose
 - capable of tracking safely and efficiently
 - have adequate power
 - have the correct attachments and be fitted with appropriate cutting edges and tips.
- Excavators are better suited to tracking on hard papa, as they can minimize cut and fill volumes and build a solid platform as they go.

EVERYONE GOES HOME SAFELY AT THE END OF THE DAY!