



## WORKER FALLS FROM FRONT END BUCKET LOADER

Date 2008

### ▶ INCIDENT

A front end bucket loader unintentionally moved forward trapping a worker located in the bucket. The worker was trapped across the chest and back between the top of the loader bucket and the excavator boom the worker had been lifted to clean. The victim was left dangling for 10-15 seconds. When the loader was reversed the man fell to the ground landing on his feet then falling heavily on his face as he hit the ground. He suffered serious face, head and internal injuries.

### ▶ CIRCUMSTANCES

Three gold mine workers were asked to cleaning the grease off the boom of an excavator. The boom of the excavator was lowered and the workers were required to work approx 1.5m above the ground, to clean the boom at 3m height.

The method chosen was to work out of a front-end loader's (FEL) bucket.

Two of the workers stood in the bucket while the third operated the loader. This way the workers could scrape the grease off the excavator boom.

When the task was almost complete, directions were given for the driver to reverse the loader. The loader unintentionally moved forward at the same time as the bucket crowded forward trapping the victim across the chest and back between the top of the loader bucket and the excavator boom.

### ▶ INVESTIGATION

Working around mobile plant often requires employees to work at heights. Employees saw the option of working out of the FEL bucket as a practical solution to the problem.

It appears the FEL operator accidentally knocked the crowding of the bucket control as he released the handbrake. Once the handbrake was released, the loader rolled forward.

### ▶ RECOMMENDATIONS

- FEL are not designed as power operated work platforms
- Burst hydraulic lines will result in the bucket falling quickly to the ground.
- Inadvertent contact with bucket controls can easily occur with dangerous consequences
- The loader may roll downhill in the opposite direction once the brakes are released.
- The wrong directional gear can easily be chosen, the open bucket has no protection to safely guard persons.
- Working at height on mobile plant requires an assessment of the hazards involved and safe work methods must be put in place based on those hazards.
- Options for working at heights such as work platforms, scaffolds and power elevated work platforms must be available for all height work.
- Working out of the bucket of a FEL is dangerous. This practice should not occur on any site.
- Strict rules against working in buckets need to be communicated and monitored at all workplaces so employees do not work in the FEL buckets.



*Figure 1 – The bucket positioned as a work platform to clean the boom of the excavator. This is not a safe practice.*