

# Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

## Towing / Vehicle Recovery Expert, Doug Rowland, P.E. Lifts & Loads a Log Processor in Freezing Conditions

A call was taken to assist with the recovery of an industrial log chipping machine. The customer stated that they needed a machine lifted onto a flatbed trailer. A representative for the manufacturer would have the machine all set to lift when we arrived, and we could back right up to it.

Our 2000 Mack CH613 with a Vulcan NV-50 was dispatched. Once on site, our 1996 Chevy P-30 Service truck was called to provide heat, tools, and cutting torches.



**Upon arrival on site, it was determined that five separate lifts would be necessary:**

- Electric Motor Platform
- Electric Control Cabinet
- Hydraulic Power Supply
- Log Hopper
- Chipper Frame & Cutters

The machine was about seven feet wide, and thirty feet long, and estimated to weigh sixteen tons. We could back up to the one end of the machine, but there was no room to pull the truck or machine forward due to the terrain. The machine would have to be dragged out, and then lifted, and “walked” to where the outbound step deck could get in.

The motor platform was attached to the machine and had to be removed first. However, the platform was still attached to the machine via a hydraulic cylinder which shuttled the motors in and out for service. The cylinder was underneath the platform. No problem, we can lift and crib the end of the machine and motor platform for access. Not that easy!

*For more information on Doug Rowland, P.E., including contact information, click [here](#)*

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The high temperature for the day was 14F, with lows around zero. Only four days prior we had experienced a January thaw of almost 60F and rain. The machine was buried in wood chips which absorbed the rain, and of course froze. The frame of the machine had a four inch lip on each side. To give you an appreciation of the adhesive characteristics of ice, when the machine was finally free, some of the paint from the machine was left in the ice.

In addition to the ice, it was discovered that the machine was bolted to the concrete pad. The bolts were all well concealed by the frozen wood chips.

Cracking a hydraulic line loose allowed the motor platform to slide out enough to provide access to remove the bolt attaching the cylinder end. The motor platform was then lifted and set aside.



Chipping and picking at the chips (for literally hours) exposed the anchor bolts. With all of the nuts removed, the ice still would not give up its grip on the machine. With tension on the one end of the machine, pounding on the machine frame with a sledge hammer freed the machine two or three feet at a time. After seven hours on site, the Machine was finally ready to be skidded out, but darkness and colder temps were setting in fast. Tomorrow is another day.

The next morning our service truck was required to cut off bolts for the motor platform rails. The machine was then lifted at the one end, and small logs were placed under the machine to facilitate rolling it out.

The log hopper was removed and set out of the way. The machine was then picked, and secured to the under-reach so that the wrecker could be backed up to where the trailer could back under the machine. Once the machine was on the trailer, the log hopper was replaced; the motors, hydraulic power supply and electrical control cabinet were loaded one at a time.

Although not a glamorous, adrenaline pumping recovery, this job and others like it help our trucks earn their keep.

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