



3 CASE STUDIES - STUCK TUBING ANCHOR WITH RODS IN TUBING STRING RECOVERY RATE OVER 60% ON FIRST CALL, PRICING - \$7,000-\$18,000 DEPENDING ON SUCCESS

Case 1 – Pulling Rods and Tubing Together

SITUATION:

When Vibration Technology representatives arrived on location, the operator had 122 ¾" rods stuck in the well at a depth of 3,000 ft., so the tubing string's total weight was 92,000 lb. Because of equipment limitations on the rig, hook load was limited to 130,000 lb.

SOLUTION:

An 180K VT oscillator was rigged up in less than two hours, and operation began at 9:00 am. After vibrating while holding 92,000 lb. for 10 minutes, an 8 ft. sub could be pulled and laid down. Vibration resumed for another 3 hours and 15 minutes, before the pipe came free and could be pulled without drag.

RESULTS:

- + Vibration Technology solved a complex tubing recovery problem by freeing a stuck tubing anchor and enabling simultaneous retrieval of 11,000 ft. of tubing and 3,000 ft. of sucker rods.
- + Vibration Technology freed stuck tubing anchor after just 3 hours and 25 minutes of vibration.

Case 2 – Vibrating Rods Frees Up Parted Tubing

SITUATION:

Operator had tried to pull rods but had to back off leaving about 5,000' of rods in the tubing. They then attempted to pull tubing and parted the tubing.

SOLUTION:

VT was called out, rig latched on to tubing with overshot and pulled tension and then ran rods in the hole. VT rigged up 50k oscillator and vibrated on rods, freeing rods and pump in 15 minutes. Rig then latched on to tubing and noticed that the tension was gone indicating movement of tubing. Rig was able to work tubing free without additional vibration.

RESULTS:

- + Vibration Technology solved a complex tubing recovery problem by freeing stuck rods and pump and in the process also freed the tubing, allowing for the complete retrieval of the tubing string.
- + Vibration Technology freed rods and tubing after just 15 minutes of vibration on the rods.

Case 3 – Vibrating Rods Free, Then Vibrating Tubing Free on Same Day

SITUATION:

When Vibration Technology representatives arrived on location, the operator had been on the well for several days and moved the rods only 60 ft. in that time. The operator was attempting to retrieve approximately 8,790 ft. of rods and tubing with a tubing anchor.

SOLUTION:

A 50K VT oscillator was rigged up on the rods and after beginning vibrating, saw the weight dropping off. After pulling one rod, the rig was able to pull the rest of the rods. The pump was not retrieved. A 180k VT oscillator was rigged up on the tubing. Neutral point was calculated at 64,000#. After vibrating above and below the neutral point, the rig pulled to 105,000# and immediately the tubing anchor was released. Vibrated out one joint with drag and then the rig was able to retrieve the balance of the tubing.

RESULTS:

- + Vibration Technology was able to free both the rods and the tubing by rigging up VT oscillators on each string separately.
- + Vibration Technology freed stuck rods and tubing in less than one day after the operator had been working for several days with no success.