Milk with a density of 1020 kg/m^3 is transported on a level road in a 7-m-long, 3-m-diameter cylindrical tanker. The tanker is completely filled with milk (no air space), and it accelerates at 2.5 m/s^2. If the minimum pressure in the tanker is 100 kPa, determine the maximum pressure and its location.

$$p = \rho g h + \rho a l = 1020 \times (9.81 \times 3 + 2.5 \times 7.0) = 47{,}868 \text{ Pa} = 47.9 \text{ kPa gage}$$