

Incorrect. Find and add the volumes of the cylinder and the hemisphere.

The volume of a cylinder is given by $V = \pi r^2 h$ and the volume of a hemisphere is given by $\frac{1}{2} \cdot \frac{4}{3} \pi r^3$. Substitute the values $r = 20$ and $h = 50$ into the formulas, simplify, and add. Then round to the nearest thousand. The correct answer is 80,000 cubic feet.