Solving the equation for z gives $z^2 = 1 - 2x^2 - 3y^2 \quad \Rightarrow$ $z = -\sqrt{1 - 2x^2 - 3y^2}$ (since we want the lower half of the ellipsoid). If we let u and v be the parameters, parametric equations are $x = u$, $y = v$, $z = -\sqrt{1 - 2u^2 - 3v^2}$.

Alternate solution: The equation can be rewritten as

$\dfrac{x^2}{(1/\sqrt{2})^2} + \dfrac{y^2}{(1/\sqrt{3})^2} + z^2 = 1$, and if we let $x = \dfrac{1}{\sqrt{2}} u \cos v$ and

$y = \frac{1}{\sqrt{3}} u \sin v$, then $z = -\sqrt{1 - 2x^2 - 3y^2} = -\sqrt{1 - u^2 \cos^2 v - u^2 \sin^2 v}$

$= -\sqrt{1 - u^2}$, where $0 \le u \le 1$ and $0 \le v \le 2\pi$.