Let us define a function:

$$\phi : \mathcal{F}_{q_{\mathbf{z}|\mathbf{x}}} \to \mathbb{R}, \quad q_\psi(\mathbf{z}|\mathbf{x}) \mapsto -D_{KL}(q_\psi(\mathbf{z}|\mathbf{x})||p_\theta(\mathbf{z}|\mathbf{x})) + log(p_\theta(\mathbf{x}))$$

The term, $log(p_\theta(\mathbf{x}))$, is in that function just a constant. Then the following statement holds true up to a constant:

$$\underset{q_\psi(\mathbf{z}|\mathbf{x}) \in \mathcal{F}_{q_{\mathbf{z}|\mathbf{x}}}}{\arg\min} \; D_{KL}(q_\psi(\mathbf{z}|\mathbf{x})||p_\theta(\mathbf{z}|\mathbf{x})) = \underset{q_\psi(\mathbf{z}|\mathbf{x}) \in \mathcal{F}_{q_{\mathbf{z}|\mathbf{x}}}}{\arg\max} \; \phi(q_\psi(\mathbf{z}|\mathbf{x}))$$