Formation of Enols

Reaction:

\[
\begin{align*}
\text{O} & \quad \xrightarrow{\text{H}_2\text{SO}_4 / \text{H}_2\text{O}} \quad \text{OH} \\
\begin{array}{c}
\text{CH}_3 \\
\text{CH}_2
\end{array} & \quad \xrightarrow{\text{H} \text{OH}_2} \quad \begin{array}{c}
\text{CH} \\
\text{H}_2\text{O}
\end{array}
\end{align*}
\]

Mechanism:

An enol is a constitutional isomer of the keto form. These are called *tautomers*. This equilibrium is achieved by migration of an atom or group.