$$
\begin{array}{c}
\Omega_{S[t^{-1}]/R} \\
\downarrow{\scriptstyle D\alpha} \\
\Omega_{S[x]/R}/d_{S[x]}(tx-1) \\
\downarrow{\scriptstyle \gamma} \\
(S[x]\otimes_S \Omega_{S/R} \oplus S[x]d_{S[x]}x)/((tx-1)d_{S[x]}(tx-1)) \\
\downarrow{\scriptstyle \beta} \\
(S[t^{-1}]\otimes_S \Omega_{S/R}) \oplus S[t^{-1}]d_{S[x]}(x)/d_{S[x]}(tx-1) \\
\downarrow{\scriptstyle f} \\
S[t^{-1}]\otimes_S \Omega_{S/R}
\end{array}
\qquad
\begin{array}{c}
d_{S[t^{-1}]}((\frac{s}{t})_t) \\
\downarrow{\scriptstyle D\alpha} \\
[d_{S[x]}(sx)] = [xd_{S[x]}(s) + sd_{S[x]}(x)] \\
\downarrow{\scriptstyle \gamma} \\
[x\otimes d_S(s), sd_{S[x]}(x)] \\
\downarrow{\scriptstyle \beta} \\
[(\frac{1}{t})_t \otimes d_S(s), sd_{S[x]}(x)] \\
\downarrow{\scriptstyle f} \\
((\frac{1}{t})_t \otimes d_S(s)) - ((\frac{s}{t^2})_t \otimes d_S(t))
\end{array}
$$