During MEOR within sandstone core using Microbe 3, $d_x = 2.88 \times 10^{-2}$ h$^{-1}$, $t_{\text{pulse}} = 57.6$ h and $k_w/k_d = 6.40$, temporal distributions of the following parameters at $x = 0.004$ m, 0.2 m, 0.4 m, 0.6 m, 0.8 m, 1.0 m and 1.1 m from the influent point: (a) temperature; (b) $\gamma$-function of temperature [$\gamma(T)$] for microbial maximum specific growth rate; (c) total brine salinity ($C_{\text{sal}}$); (d) $\gamma$-function of total salinity [$\gamma(C_{\text{sal}})$] for microbial maximum specific growth rate; (e) brine pH; and (f) $\gamma$-function of pH [$\gamma(pH)$] for microbial maximum specific growth rate.