

Table 6-3. Predicted Nitrite and Nitrate Concentrations in Simulation of Experiment EC-237 of the Statewide Air Pollution Research Center of the University of California, Riverside, Using the Chemical Mechanism of Falls and Seinfeld⁸

	<u>Concentration, ppm</u>		
	60 min.	180 min.	300 min.
HONO	0.0061	0.00040	0.00036
HONO ₂	0.067	0.22	0.29
HO ₂ NO ₂	0.00083	0.0019	0.0025
RONO	0.0030	0.00054	0.000080
RONO ₂	0.0041	0.0070	0.0072
O			
"			
RCOONO ₂	0.025	0.089	0.13
RO ₂ NO ₂	0.034	0.075	0.098

Conditions of the experiment: T = 303°K, $k_2 = 0.3 \text{ min}^{-1}$, $[\text{NO}_2]_0 = 0.106$, $[\text{NO}]_0 = 0.377$, $[\text{H}_2\text{O}] = 2.4 \times 10^4$, $[\text{CO}]^2 = 0.96$, $[\text{Aldehydes}]_0 = 0.0012$, $[\text{Alkanes}]_0 = 1.488$, $[\text{Non-ethylene Olefins}]_0 = 0.15$, $[\text{C}_2\text{H}_4]_0 = 0.875$, $[\text{Aromatics}]_0 = 0.177$, $[\text{HONO}]_0$ (assumed) = 0.1 (All concentrations in ppm). Dilution rate = $2.93 \times 10^{-4} \text{ min}^{-1}$.