Energy levels of nearly degenerated $^6\Delta$ and $^5\Sigma$ states have been studied by the MR-SDCI + Q/ Roos-ANO (or various combinations of other basis sets) method with Breit-Pauli Hamiltonian for relativistic effects and spin-orbit coupling interaction corrections. The $^5\Sigma$ state has been predicted to be situated between $^6\Delta_2$ and $^6\Delta_1$ substates, and hence the ground state is $^6\Delta_4$. Spectroscopic constants for $^6\Delta$ state (and those for $^5\Sigma$ state) are predicted as follows: $r_e = 2.0247$ (1.9963) Å; $B_0 = 6043.2$ (6217.1) MHz; $D_0 = 3.80$ (3.64) kHz; $\nu = 510.4$ (543.9) cm$^{-1}$; $\mu_e = 5.92$ (4.88) D.