Consider \( \text{Cr(CO)}_6 \). Shown below are pictures of calculated molecular orbitals. Assign each orbital as \( \sigma/\sigma^* \), \( \pi/\pi^* \), or non-bonding with respect to the M-ligand interaction. Name the contributing metal based orbital. List the Mulliken symbol of each orbital.
Consider $[\text{CrF}_6]^{3-}$. Shown below are pictures of calculated molecular orbitals. Assign each orbital as $\sigma/\sigma^*$, $\pi/\pi^*$, or non-bonding with respect to the M-ligand interaction. Name the contributing metal based orbital. List the Mulliken symbol of each orbital.

(another view along Cr–F bond)