The near-infrared spectrum of nickel chloride, NiCl, has been recorded at high resolution using intracavity laser absorption spectroscopy. The NiCl molecules were produced in a plasma discharge of a nickel hollow cathode from a trace amount of CCl$_4$ using Ar as the sputter gas. Spectra were collected from 12,490-12,660 cm$^{-1}$ and 13,200-13,350 cm$^{-1}$ as a series of overlapping 5 cm$^{-1}$ scans. The (0,1), (1,0), and (2,1) bands of the $^{2} \Pi_3/2$-$X^{2} \Pi_3/2$ transition, System G, were observed at 12,537 cm$^{-1}$, 13,352 cm$^{-1}$, and 13,318 cm$^{-1}$, respectively. The (1,0) band of the $^{2} \Sigma^-$-$X^{2} \Pi_{3/2}$ transition, System H, was observed at 12,645 cm$^{-1}$. Analyses of these bands will be presented.