Any formation of nilpotent groups is $\Sigma_2^{T_1}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{T_2}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{T_3}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_{sn}}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_n}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{sub_{\mathfrak{F}}}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_{an}}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_{cn}}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_{\mathfrak{X}-at}}$ - recognizable. Any formation of nilpotent groups is $\Sigma_2^{S_{\mathfrak{X}-san}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{T_1}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{T_2}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{T_3}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_{sn}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_n}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{sub_{\mathfrak{F}}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_{an}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_{cn}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_{\mathfrak{X}-at}}$ - recognizable. Any formation of nilpotent groups is $\Omega_2^{S_{\mathfrak{X}-san}}$ - recognizable.