In many longitudinal studies, longitudinal responses are often subject to left-censoring and may be correlated with observation times. In this article, we propose a Tobit quantile regression model for the analysis of left-censored longitudinal data with informative observation times, and the longitudinal responses are allowed to depend on the past observation history. Estimating equation approaches are developed for parameter estimation, and the resulting estimators are shown to be consistent and asymptotically normal. A modified Majorize-Minimize algorithm is proposed to compute the proposed estimators. Simulation studies show that the proposed estimators perform well. An application to a data set from an AIDS clinical trial study is provided.