1024-49-24 **Jesus A. Pascal*** (`pascal@math.lsu.edu`). *On the Value Function for an Optimal Control Problem.*

This work refers to a class of infinite horizon singular deterministic optimal control problem with unbounded control set. Using the dynamic programming approach we prove that the value function is convex and continuously differentiable along the free boundary. Also we find the free boundary in terms of the parameters of the problem. (Received November 21, 2006)