Abstract: The surface sampler on Surveyor III was operated on the lunar surface in April 1967 in a variety of bearing and trenching tests of the lunar soil. At the end of its first lunar day it was fully extended and elevated so that the scoop was at a height of about 80 cm above the lunar surface. In this position it remained until November 1969 when the scoop was removed by astronauts Conrad and Bean and brought back to earth. In transit, and since its return, no attempt has been made to maintain the scoop in either a vacuum or a controlled nitrogen atmosphere. Since visible changes of the original blue paint to a light brownish or tan color have taken place and the scoop was in addition, coated with lunar soil, a detailed examination of its surface, both inside and outside, has been undertaken. Macroscopic and microscopic photographs have been made on black and white and color film under natural, infrared and ultraviolet illumination. Some of the results of this study are presented and discussed in the paper.