



Vintage chromogenic print, Viking 1, watermarked "This Paper Manufactured by Kodak".

THE FIRST COLOUR PHOTOGRAPH FROM THE MARTIAN SURFACE TAKEN BY VIKING 1

Mars taken by Viking 1, July 1976

Author

NASA

Publication date

1 July 1976.

Publisher

NASA/ Jet Propulsion Laboratory,

Publication place

Physical description

Vintage chromogenic print, Viking 1, watermarked "This Paper Manufactured by Kodak".

Dimensions

193 by 220mm. (7.5 by 8.75 inches).

Notes

This example printed in reverse.

"First color picture taken on the surface of Mars today by the Viking 1 Lander shows that the Martian soil consists mainly of reddish fine-grained material. However, small patches of black or blue-black soil are found deposited around many of the foreground rocks. Most of the rocks also are coated

with a reddish stain except where the rock's surface has been freshly fractured or abraded. There is a group of black or blue-black rock near the horizon which appear free of the reddish stain. They may be relatively young volcanic rocks or older volcanic rocks very recently excavated from the sub-surface. The horizon is about three kilometres (1.8 miles) from Viking 1's camera. The scene, covering about 67 degrees from left to right, was scanned three times, each time with a different color filter. The colour was reconstructed with computer processing" (caption by NASA).

"NASA's Viking Project found a place in history when it became the first U.S. mission to land a spacecraft safely on the surface of Mars and return images of the surface. Two identical spacecraft, each consisting of a lander and an orbiter, were built. Each orbiter-lander pair flew together and entered Mars orbit; the landers then separated and descended to the planet's surface.

The Viking 1 lander touched down on the western slope of Chryse Planitia (the Plains of Gold), while the Viking 2 lander settled down at Utopia Planitia.

Besides taking photographs and collecting other science data on the Martian surface, the two landers conducted three biology experiments designed to look for possible signs of life. These experiments discovered unexpected and enigmatic chemical activity in the Martian soil, but provided no clear evidence for the presence of living microorganisms in soil near the landing sites. According to scientists, Mars is self-sterilizing. They believe the combination of solar ultraviolet radiation that saturates the surface, the extreme dryness of the soil and the oxidizing nature of the soil chemistry prevent the formation of living organisms in the Martian soil.

The Viking mission was planned to continue for 90 days after landing. Each orbiter and lander operated far beyond its design lifetime. Viking Orbiter 1 continued for four years and 1,489 orbits of Mars, concluding its mission August 7, 1980, while Viking Orbiter 2 functioned until July 25, 1978. Because of the variations in available sunlight, both landers were powered by radioisotope thermoelectric generators — devices that create electricity from heat given off by the natural decay of plutonium. That power source allowed long-term science investigations that otherwise would not have been possible. Viking Lander 1 made its final transmission to Earth November 11, 1982. The last data from Viking Lander 2 arrived at Earth on April 11, 1980" (description by NASA).

Bibliography

Provenance

Price: £15000

Inventory reference: 20456