BOOK REVIEWS

The Quality of American Life, reviewed by C. Y. Glock; Gaze and Mutual Gaze, S. Weitz; Grain Boundary Structure and Properties, B. L. Averbach; Gasdynamic Lasers, G. H. C. New; The Seeds of Dicotyledons, S. Carlquist

REPORTS

Status of the Viking Missions: G. A. Soffen

Mission Operations Strategy for Viking: B. G. Lee

Search for the Viking 2 Landing Site: H. Masursky and N. L. Crabbill

Isotopic Composition of the Martian Atmosphere: A. O. Nier, M. B. McElroy, Y. L. Yung

Isotopic Composition of Nitrogen: Implications for the Past History of Mars' Atmosphere: M. B. McElroy, Y. L. Yung, A. O. Nier

Search for Organic and Volatile Inorganic Compounds in Two Surface Samples from the Chryse Planitia Region of Mars: K. Biemann et al.

The Atmosphere of Mars near the Surface: Isotope Ratios and Upper Limits on Noble Gases: K. Biemann et al.

Mars Climatology from Viking 1 After 20 Sols: S. L. Hess et al.

Preliminary Results from the Viking X-ray Fluorescence Experiment: The First Sample from Chryse Planitia, Mars: P. Toulmin III et al.


Fine Particles on Mars: Observations with the Viking 1 Lander Cameras: T. A. Mutch et al.

The "Soil" of Mars (Viking 1): R. W. Shorthill et al.

Viking Orbital Colorimetric Images of Mars: Preliminary Results: L. A. Soderblom

The Viking Biological Investigation: Preliminary Results: H. P. Klein et al.

Sanidine: Predicted and Observed Monoclinic-to-Triclinic Reversible Transformations at High Pressure: R. M. Hazen

Jupiter's Spectrum Between 12 and 24 Micrometers: H. H. Aumann and G. S. Orton

Abnormal Visual Resolution in the Siamese Cat: R. Blake and D. N. Antoinetti

COVER

Color mosaic of Viking 1 Orbiter pictures. Fifteen frames taken through three color filters (violet, green, and red) were reconstituted by the U.S. Geological Survey, Flagstaff, Arizona. The scene covers approximately 1800 by 2000 kilometers and contains part of the "Grand Canyon of Mars" (Vallis Marineris). The Viking 1 landing site is north of the scene. See page 97.