ABSTRACT

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The Labeled Release Experiment --New Laboratory and Mars Data.

The Labeled Release (LR) life detection experiment on Mars obtained positive responses indicating the presence of microbial life. However, the extreme nature of the environment, the failure of the Molecular Analysis experiment to find organic matter and the possible presence of exotic chemicals on the surface of Mars require that the positive responses be regarded very cautiously. An intensive effort has been underway to determine if chemicals conceivably present on Mars could be responsible for the LR Mars results. Recent laboratory tests and results will be presented. In addition, Mars LR data obtained late in the Mission and not yet published will be reported and analyzed. Other relevant Viking data may also be presented.