

NATIONAL ACADEMY OF SCIENCES -- NATIONAL RESEARCH COUNCIL  
Office of Information, Washington 25, D. C.  
EXecutive 3-8100 x 310; EM 2-2204  
Los Angeles, Calif., MADison 7-0951

NATIONAL SCIENCE FOUNDATION  
Public Information Office  
Washington 25, D. C.  
STerling 3-2140, x 222; JE 2-1339

FOR RELEASE ON RECEIPT

Monday  
April 3, 1961

The National Academy of Sciences and the National Science Foundation announced today that the experimental drilling ship, CUSS I, operating in 12,000 feet of water off the west coast of Mexico, has obtained, for the first time, a sample of the so-called second layer under the softer sediments of the ocean floor. This layer, whose presence had been previously indicated to scientists only by reflections of seismic soundings, has been revealed as basalt, a hard rock formed by the solidification of molten material within the earth.

The announcement was based upon the following telegram from Willard Bascom, director of the experimental drilling program for Project Mohole, to Dr. Detlev W. Bronk, president of the Academy:

FROM CUSS I DAYTIME GROUP 021200

On April 1, at 1600, second hole of experimental deep-sea drilling project at Guadalupe Island site passed completely through soft sediments into basalt.

This hole, which was begun at 1930 on March 31, reached a depth of 490 feet by 0630 the following morning. Coring then began and cores of soft, gray-green clay of Miocene age were obtained to a depth of 560 feet. At that depth the drilling rate abruptly decreased and when the core barrel was retrieved, it was found to contain a hard, fine-grained basalt.

- MORE -

This is apparently the upper surface of the so-called second layer, which has long puzzled oceanographers, for its depth corresponds to that predicted by seismic surveys.

The reaching and sampling of these layers was a major scientific objective of the present test and its identification is a milestone in the exploration of the ocean. All aboard CUSS I are jubilant.

A second core of basalt 10 feet long was then obtained. Drilling continues.

Wind and waves have been high but in a week on station the drilling ship is not believed to have moved over 350 feet from its intended position.

The weather now appears to be moderating.

Willard Bascom  
Project Director

In making public the contents of the telegram, Dr. Bronk said:  
"This is history-making news of further progress in drilling through the crust of the earth by which we shall gain new understanding of the earth's structure and new evidence concerning the history of life.

"That we should in two short days hear that the previously unexceeded penetration of the ocean floor has been more than doubled is spectacular evidence of the rate at which scientific progress is made in these exciting times."

---

For further information, please write to the Information Office, National Academy of Sciences or the Public Information Office, National Science Foundation. A limited number of press kits are still available to science writers.