tures, or the third incubation of cultures in Kolle flasks, the cells are suspended in a small volume of neutral formalinized saline (0.3 per cent formalin), filtered through gauze, and stored in the refrigerator. The antigen is prepared for use by adding sufficient formalinized saline to yield a density corresponding to a McFarland nephelometer reading of 1.5.

The procedure described provides a means of obtaining relatively large amounts of *V. foetus* cells. Antigens prepared from several old and newly isolated strains have been specifically agglutinable and have shown less tendency to autoagglutinate than antigens prepared from cells grown in semisolid mediums.

THERMOPHILIC BACTERIA FROM DEEP OCEAN BOTTOM CORES[1]

JAMES W. BARTHOLOMEW AND S. C. RITTENBERG

Department of Bacteriology, University of Southern California, Los Angeles, California

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Two cores were obtained. Core no. 1 was 50 inches long and was taken about 10 miles off Point Firmin, California, at a depth of 2,880 feet. The second core was 70 inches long and was taken about 30 miles off shore at a depth of 4,320 feet. The *in situ* temperatures of both cores were below 10 C. Mud samples were aseptically dissected from the interior of the core and stored in sterile bottles. Within 24 hours of collection the mud samples were plated out in 1:100 dilution, using sea water, peptone, beef extract agar. The plates were sealed with scotch tape and placed in a 60 C incubator for 72 hours. The thermophile counts obtained are presented in table 1.

TABLE 1

Thermophilic bacteria per gram of core mud

DEPTH IN CORE	CORE 1	CORE 2
Top (12 inches)	800	600
Middle	<100	200
Bottom	<100	<100

Twelve of these colonies were then picked to sea water agar slants and incubated at 60 C. Successful isolations were made of four cultures. These four did not grow at room temperature, 30 C, or 37 C, but grew within 24 hours at 60 C. They consisted of large gram-positive sporeforming rods.

To our knowledge, this is the first report of thermophilic organisms from this environment. Their presence and significance in such an environment awaits explanation.

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