

MASTER
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ARMOUR RESEARCH FOUNDATION OF ILLINOIS INSTITUTE OF TECHNOLOGY

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October 26, 1959

C-127

Mr. J. Z. Holland, Chief
Fallout Studies Branch
Atomic Energy Commission
Division of Biology and Medicine
Washington 25, D. C.

Subject: Report No. ARF 3127-9 (Letter Report)
Contract No. AT(11-1)4626

Dear Mr. Holland:

I. INTRODUCTION

This is the ninth letter report on ARF Project C 127, entitled "Preliminary Studies of Scavenging Systems Related to Radioactive Fallout." This report covers the period from August 1 to October 1, 1959.

II. PHASE I - AIR SAMPLING

During this report period one test with the Andersen sampler and three with the cyclone separator were completed. The Andersen sampler covers the period from May 28 to September 8, 1959; approximately 103,000 cu ft of air was sampled in this time. A new test started September 10, 1959, has sampled about 29,000 cu ft to date. The cyclone separator samples cover the periods from July 28 to August 17, August 20 to September 8, and September 11 to September 30, 1959. The volumes of air sampled during these periods were 98,176, 100,590, and 109,503 cu ft, respectively. The dust retained in each separator and on the millipore filter was weighed before it was sent to the New York Operations Office for analysis.

The strontium-90 and total beta activities of the samples analyzed to date are presented in Tables 1 and 2. Data on precipitation in the Chicago area during the sampling periods are given in Table 3, Table 4, and Fig. 1.

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