

ARGONNE  
NATIONAL  
LABORATORY

INTRA-LABORATORY MEMO

December 5, 1978

TO: J. Sedlet OHS

FROM: J. Rundo RER



REPOSITORY Argonne/CHR  
COLLECTION Other Radioelements... Subseries  
BOX NO. 110  
FOLDER Smoky

I refer to our telephone conversation of to-day's date, when you kindly agreed to analyze a 24-hour urine sample from each of about 16 subjects. The men concerned are former military personnel who were participants in the nuclear weapon test "Smoky" in 1957 and we shall be examining them for  $\gamma$ -ray emitting radionuclides in vivo, as a result of a request for this from DOE headquarters in Washington, D.C. The 16 were selected because they had relatively high film badge readings (mean 2 r, range 0.48 - 9.5 r), and they wandered around "in the dirt" after the test.

We shall be bringing the subjects in for measurements on Mondays and Fridays, two on each day, starting in January. They will be here long enough to provide us with a full 24-hour urine sample. We shall determine the  $^{239}\text{Pu}$  content of the urine and we shall store a fraction of each sample for other possible analyses in the future, although none are currently planned. Please advise Dr. R. P. Larsen as to how much urine you will require and what, if any, additives should be in it.

Mrs. B. C. Patten is making the arrangements to call the men in and she will notify you of names and dates.

We appreciate your assistance in this work.

cc: R. P. Larsen  
B. C. Patten  
A. F. Stehney

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