

OFFICE MEMORANDUM

TO : File

DATE: October 4, 1977

FROM : D. R. Jackson, H-8 *DRJ.*

SUBJECT : SEPTEMBER PROGRESS REPORT

SYMBOL : H8-77-724

MAIL STOP: 490

10/10 Report

Preliminary results have been obtained from extraction studies performed on core samples from Area T absorption beds (Pit #3). Samples from a single core were taken at 3-ft intervals to a depth of 15 ft. The samples were extracted with 1 N HCl using a solid/solution ratio of 1:10. Soluble Na, Ca, Mg, and K were analyzed in the extracts to determine the depth of leaching which was attained by these mobile ions (Table I).

These results indicate that all elements, including Pu, were leached to the maximum 15-ft. depth of the core. However, a more conclusive statement can be made after background core samples have been analyzed. Pu concentrations extracted from the core samples were comparable to previous analyses of the cores. However, sample processing should be improved to lower within sample variability.

P.S. Can you believe we finally have some data??

- DRJ:tj
- Attach: Table I
- cc: W. R. Hansen
- W. V. Abeele
- J. C. Rodgers
- M. A. Rogers
- W. J. Smith
- L. K. Trocki
- M. L. Wheeler



Table I. Extractable cations and Pu²³⁹ concentrations in cores obtained from Area T absorption beds.

Core Depth (ft)	Na	Ca μg/g	Mg	K	Pu ²³⁹ pCi/g
0	130	635	310	735	753
3	152	175	103	385	17
6	86	170	28	160	87
9	85	172	25	125	109
12	95	340	20	135	14
15	73	260	14	9	2

Very high

much less than

Indicates... was working... about 100 ft... partly good.

Need to... the job... samples... maybe 30-40 ft.