IN 02-1

EIDMU-330-a
MD-400 112 (Purdue)

Box 32/5 In 2 ORMOD

15 March 1945 JDI/cm

Dr. E. T. McBee,
Department of Chemistry,
Purdue University,
Lafayette, Indiana.

CLASSIFICATION CANCELLED OR
CHANGED TO UNCLASSIFIED
BY AUTHORITY OF P.F. BROWN
BY KA WALTERS DATE 3/10/81

Dear Dr. McBee:

In accordance with the approved scope of work under contract W-7405-eng-74, and confirming our recent conversations, it would be appreciated if you could study the following problem:

Hydrochlorination of T salts precipitated from gunk, followed by a vapor phase chlorination of the resulting residue to give a satisfactory TCl_4 product with no appreciable loss of T material.

If initial investigation indicates that this hydrochlorination method for obtaining TCl_4 is practicable, construction of equipment for carrying out this process on a one-pound per hour basis should be undertaken. Design features of a 25-pound per hour reactor should be considered when planning the one-pound per hour unit.

Should both this problem and the chlorination problem be satisfactorily solved, it would be desirable to couple these two problems together to demonstrate a possible overall process on a one-pound, and possibly later on a 25-pound per hour, basis.

At the present time, it would be appreciated if you consider these problems of about equal importance:

1. Recovery of T from graphite.
2. Preparation of TCl_4.
3. Hydrochlorination of gunk.

For the District Engineer:

CLASSIFIED FILE SECTION
ENGINEER OFFICE
MANHATTAN DISTRICT
DISPATCHED
MAR 16 1945
A. M. P. M.
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Very truly yours,

C. E. WINTERS,
Engineer (Chemical)
Assistant.

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