NEW LIMITATION CHANGE

TO
Approved for public release, distribution unlimited

FROM
Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Sep 1952. Other requests shall be referred to Commanding Officer, Chemical Corps, Army Chemical Center, MD.

AUTHORITY
EA D/A ltr, 6 Oct 1972
Task 3. Analogs of Tetrahydrocannabinol

for

Chemical Corps Procurement Agency

Contract No. DA 18-108-CML-4584
Progress Report
From
Inception thru September, 1952

UNCLASSIFIED

Approved for public release; distribution unlimited.

SHELL DEVELOPMENT COMPANY
EMERYVILLE, CALIFORNIA
Bi-Monthly Report No. 1

on

TASK 3

for

Chemical Corps Procurement Agency

under

Contract No. DA18-108-CML-4564

Period Covered: Inception through September, 1952

Written by: D. E. Winkler
Participants: R. E. Benson
D. D. Campbell
D. E. Winkler

Approved by: R. R. Whetstone

SHELL DEVELOPMENT COMPANY
EMERYVILLE, CALIFORNIA

Approved for public release; distribution unlimited.

S-13386
The pertinent literature has been reviewed and synthesis of intermediates is in progress for preparation of tetrahydrocannabinol analogs for trial as agents. In addition to the two most active tetrahydrocannabinols previously prepared by Adams, (J Am Chem Soc, 70, 664 (1948)) synthetic routes to analogs, in which the pyran oxygen is replaced by nitrogen and sulfur, have been formulated.