From the Bureau of Drug Abuse Control

. . . MICRO-GRAM . .

Vol. I No. 1 November 1967

NEW SERVICE STARTS

This is the first issue of our Micro-Gram. When, and if, the next issue appears depends on reader reaction. Let us know what you think and give us suggestions for future issues. We have attached a sheet for your convenience in commenting to us.

WIRE SERVICE

Do you have TWX service? If you have, let us know your identification number. When there is information that you should receive promptly, we will put it on the wire. Such might be news of newly abused drugs, new information about drugs already abused, or some other item which you should know without waiting to get your next issue of the Micro-Gram.

SEEN ANY?

LSD capsules with wheat flour diluent have been bought on the street. A negative screening test usually results, unless the brown or black specks are isolated and the reaction observed under the microscope. If you get any of these capsules, we would like to know about it.

STP

We first heard about STP early in the Spring, 1967 from articles in underground newspapers. We also had reports that psychedelic promoters, such as Timothy Leary had referred to a new hallucinogen called "STP", reportedly stronger than LSD.

Late in April, tablets purported to contain the new hallucinogen were acquired by BDAC on the East and West coasts. In early June, allegedly several thousand "STP" tablets were distributed free at a "LOVE IN" in the San Francisco area. After this, we received reports, particularly on the West coast of many hospitalizations of people having bad trips from "STP." The normal treatment forLSD, the tranquilizer Thorazine, seemed to be contra-indicated in treatment of "STP freakouts".

We acquired more tablets and analysis was completed. The compound was identified as 4 methyl 2, 5-dimethoxy amphetamine. It was identical to DOM, a research drug produced by DOW Chemical Company. DOW never published information on DOM, nor allowed DOM into the hands of unauthorized researchers.

The tablets BDAC obtained were white, blue or peach color; single-scored; and biconvex. The excipient in all was lactose monohydrate, and the only active ingredient found was DOM.

Little is known about the therapeutic, pharmacological, or psychological effects. We have a contract with Johns Hopkins University, Baltimore, Maryland, to study the effects of the drug on humans. A shorter term study is being conducted on humans at the Veterans Administration Hospital, Palo Alto, California.

Dr. Solomon Snyder of Johns Hopkins University, a psychiatrist, pharmacologist and director of the research project, reported on administering DOM to five volunteers. He found that low doses produced euphoria while doses of more than 3 milligrams had pronounced hallucinogenic effects lasting eight to ten hours. One volunteer reported being "high" for two days after taking the drug. Dr. Snyder reports that the drug is almost 200 times more powerful than mescaline, but only about one-tenth as potent as LSD. Some of "STP" tablets sold on the West coast contained up to 10 milligrams DOM, more than triple the largest dose given in the Hopkins study. This may explain the prolonged adverse reactions to "STP" tablets.

The characteristics and analysis for 4 Methyl 2,5-Dimethoxy Amphetamine (STP, DOM) is attached.

BDAC SCHOOL FOR POLICE CHEMISTS

We are holding the first session of a seminar for local and state police chemists from November 13 through 17, 1967. It is designed to increase chemists's knowledge of the drug abuse problem, and to aid in the analysis of stimulant, depressant and hallucinogenic drugs.

The program will include instruction in pharmacology; lectures and laboratory workshops on the analysis of stimulant, depressant and hallucinogenic drugs. Because of limited laboratory space, the class will be limited to sixteen students.

Interested candidates should contact the Director of the local BDAC Field Office.

Please complete the following questionnaire and return to:

John Finlator, Director
Bureau of Drug Abuse Control
Box 2079, South Eads Station
Arlington, Virginia 22202

1. Do you feel the service rendered by the BDAC Micro-Gram will be of value to you? _____

2. If you wish to receive important information via TWX, what is your identification number?_____

3. Are you or any of your staff members interested in attending one of BDAC's week-long schools in Washington, D.C. for state and local police chemists?_____ If yes, how many would attend?_____ and what months would be most convenient for scheduling?_____

4. Criticism and Suggestions

Thank you for your cooperation.

LABORATORY INFORMATION BULLETIN

Bureau of Science
Division of Pharmaceutical Sciences
August 30, 1967

No. 595
Hallucenogenic Drugs

CHARACTERISTICS AND ANALYSIS OF 4 METHYL 2,5-DIMETHOXY AMPHETAMINE (STP, DOM)

By

Thomas G. Alexander, ISRB, DPS, SCI

Appearance -

Hydrochloride - finely granular, white powder.

Free base - white powder

Melting Point -

Hydrochloride - 188 - 9°C

Free base - 69 - 70°C

Ultraviolet Absorption Spectrum

1 mg. of hydrochloride in 25 ml. of N H_2SO_4.

max = 288, 220 mμ.
min = 252 mμ.

Abs. 288 = ca. 0.60

Abs. 288/Abs. 252 = Ca. 9.0

Infrared Absorption Spectrum

KBr disc, 1 mg./200 mg. KBr

Both the hydrochloride and free base exhibit strong methoxy stretching signals at 1045 cm-1 and 1215 cm-1.

Photocopies of the infrared and U.V. spectra are attached.

A Quick Screening Test for Tablet Preparations Containing 5-10 mg STP:

Scrape off a fragment (about 1/20) of the tablet into a mortar and triturate with five ml. of water. Pass the solution through a filter into a 1-cm. curvette. Obtain the U.V. scan, including the region around 290 mμ. A rather sharp peak at 288 mμ indicates the presence of STP.

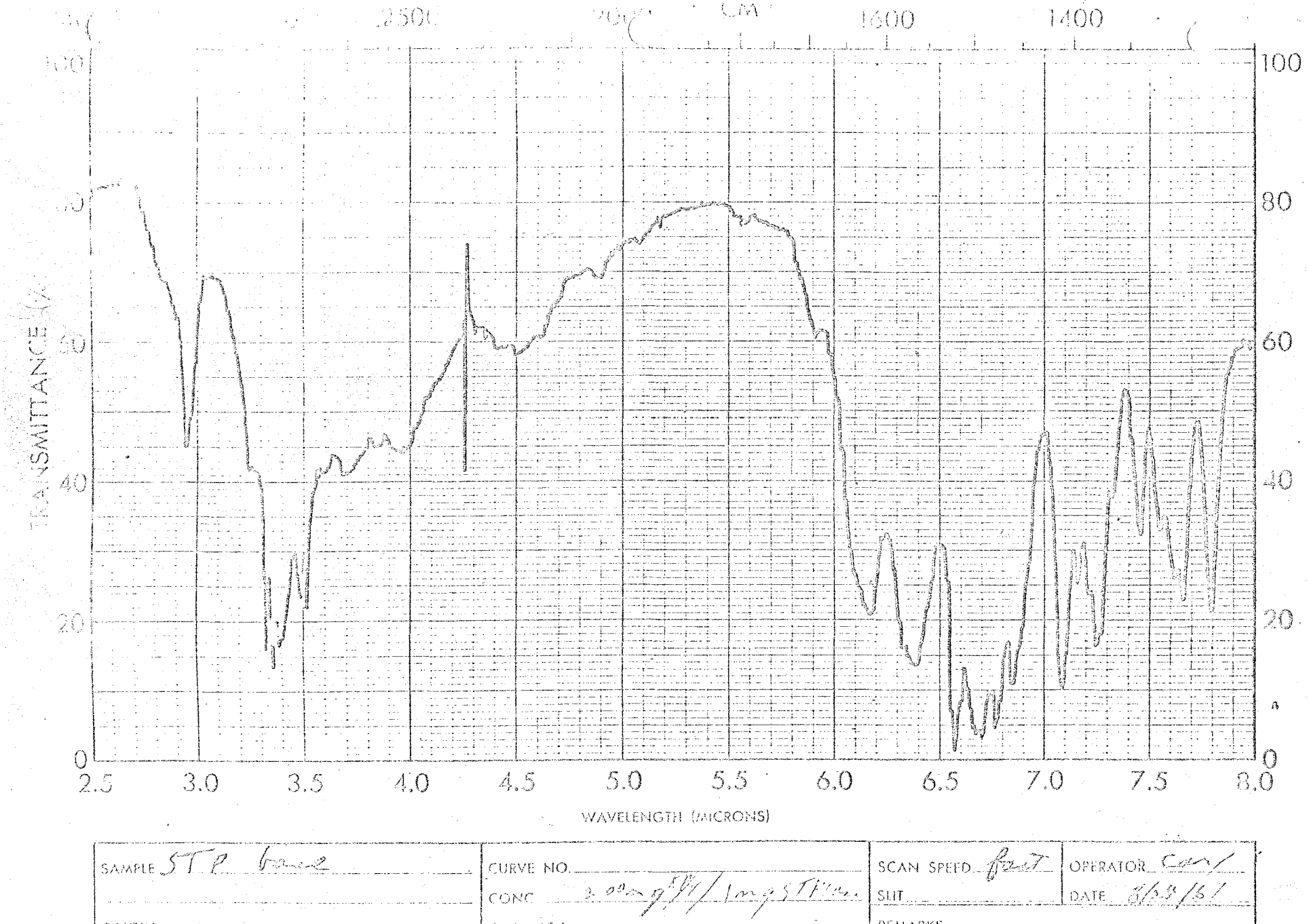
To Analyze Tablet Preparations:

Triturate a weighed portion of ground powder equivalent to one mg. of STP (1/5 or 1/10 of a tablet) with 25 ml. of 1 N H_2SO_4. Transfer the mixture quantitatively into a 125 ml. separator with the aid of 1 N H_2SO_4. Extract stearic acid and other chloroform-soluble materials with three 5-ml. portions of chloroform. Discard the chloroform.

Render aqueous solution alkaline with 2 N NaOH. Extract STP with 4 ml., 3 ml., and 3 ml. portions of chloroform. Collect the extract in mortar; evaporate off the solvent with dry air under moderate heating on a steam bath.

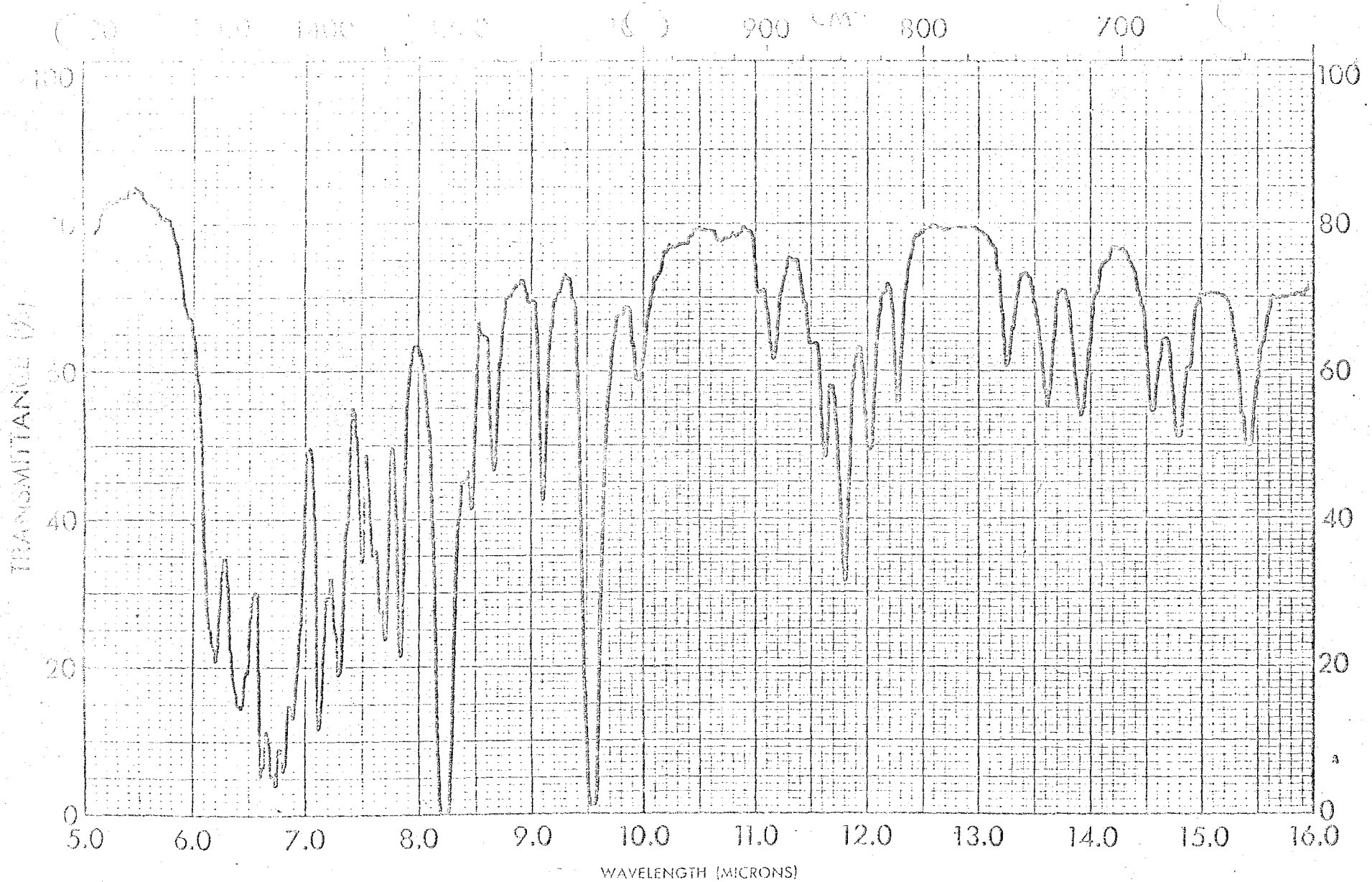
Prepare a KBr disc of the dry residue using 200 mg. of KBr per mg. of STP. Obtain the infrared absorption curve and compare to the standard curve.

Dissolve the disc in 1 N H_2SO_4 and transfer solution, together with washings from the mortar, to a 25-ml. volumetric flask. Obtain the ultraviolet absorption curve and compare to that of a standard solution. The peak at 288 mμ should be symmetrical and the max./min. ratio should be near 9.



SAMPLE STP base	CURVE NO.	SCAN SPEED fast	OPERATOR Carl
	CONC 2.00 mg/ml in CS2	SLIT	DATE 8/23/61
ORIGIN	PATH	REMARKS	
SOLVENT KBr	REFERENCE air		

PERKIN-ELMER



SAMPLE SIT base	CURVE NO.	SCAN SPEED 1 x 1	OPERATOR cap
	CONC. 260 mg KBr / 1 mg SIT base	SLIT	DATE 8/27/6
ORIGIN	PATH	REMARKS	
SOLVENT KBr	REFERENCE air		

PART NO. 32-1031

PERKIN-ELMER

2,5-Dimethoxy-4-methylamphetamine hydrochloride