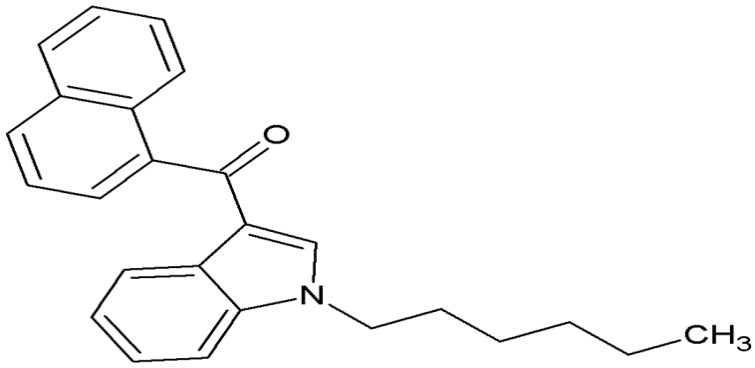
JWH-019

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



1. GENERAL INFORMATION

IUPAC Name: (1-Hexyl-1*H*-indol-3-yl)(naphthalen-1-yl)methanone

CAS #: 209414-08-4

Synonyms: Not Determined

Source: DEA Reference Material Collection

Appearance: White crystalline powder

UV_{max}: Not Determined

2. CHEMICAL AND PHYSICAL DATA

2.1 CHEMICAL DATA

Form	Chemical Formula	Molecular Weight	Melting Point (°C)
Base	$C_{25}H_{25}NO$	355	89.8

3. QUALITATIVE DATA

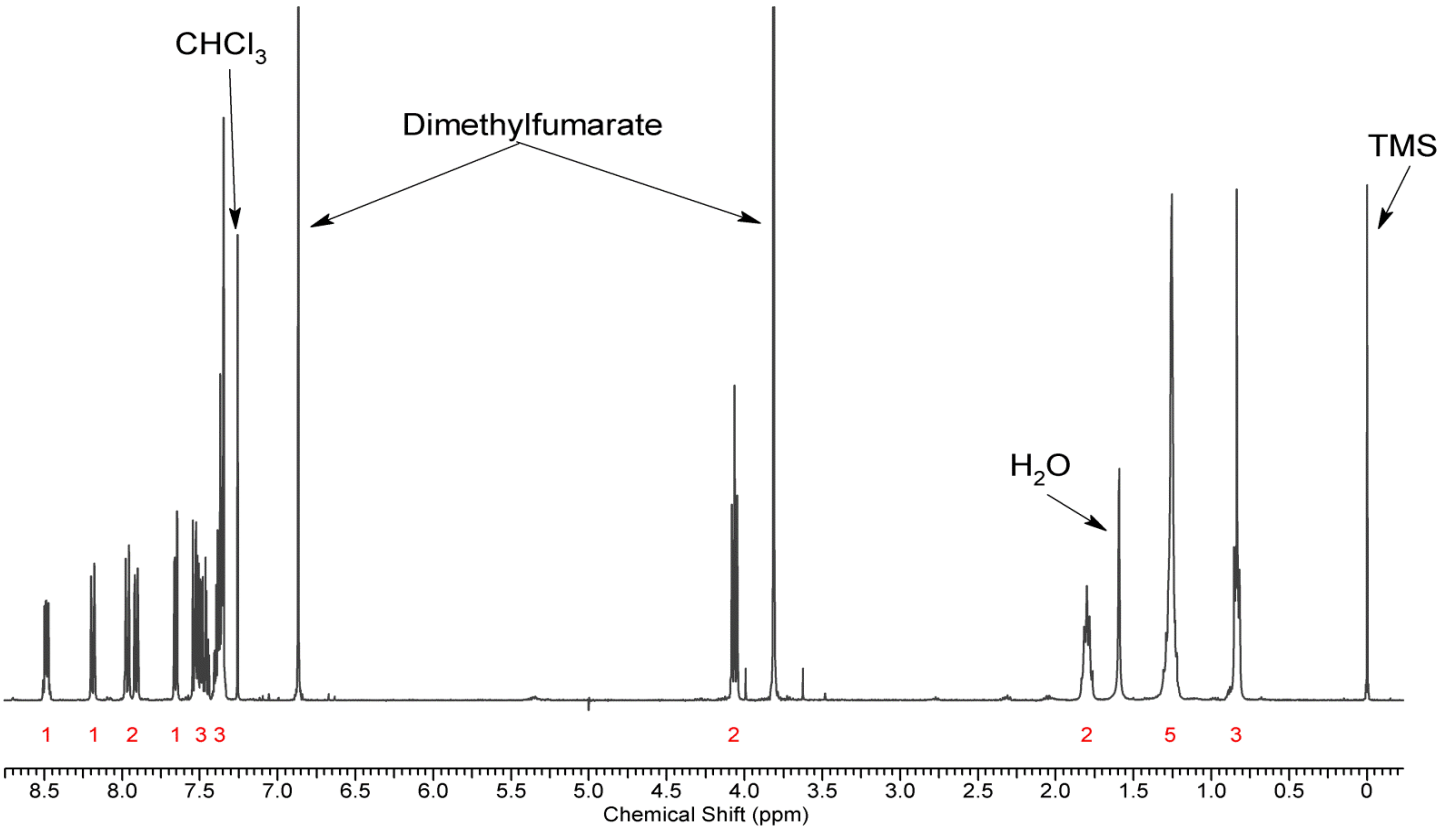
3.1 NUCLEAR MAGNETIC RESONANCE

Method NMR $CDCl_3$

Solvent: Sample diluted to ~10 mg/mL in deuterochloroform ($CDCl_3$) containing TMS for 0 ppm reference and dimethylfumarate as quantitative ISTD

Instrument:	Varian Mercury 400 MHz NMR spectrometer with proton detection probe
Parameters:	Spectral width: at least containing -3 ppm through 13 ppm Pulse angle: 90° Delay between pulses: 45 seconds Number of scans (NT): 8 Number of steady state scans: 0 Oversampling: 4 or more Shimming: automatic gradient shimming of Z1-4 shims Phasing, Drift Correction: automatic or manual

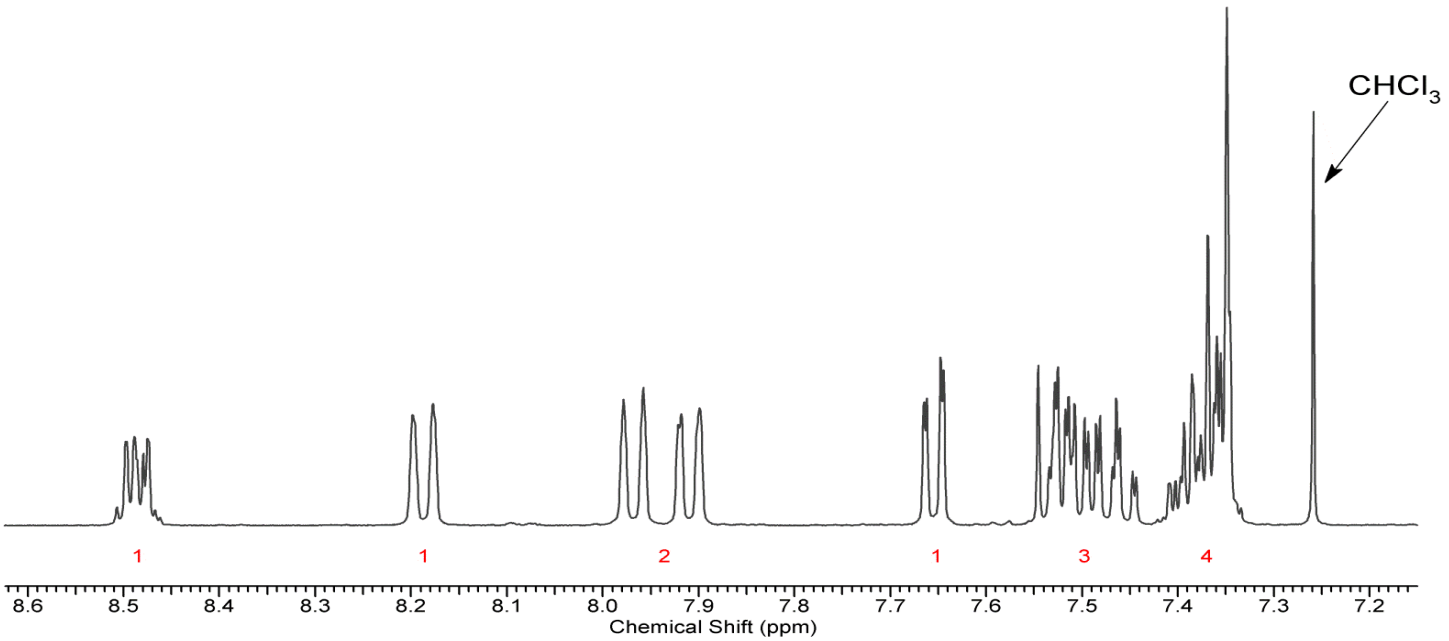
1H NMR: JWH-019 Lot # K8H81106 $CDCl_3$, 400MHz



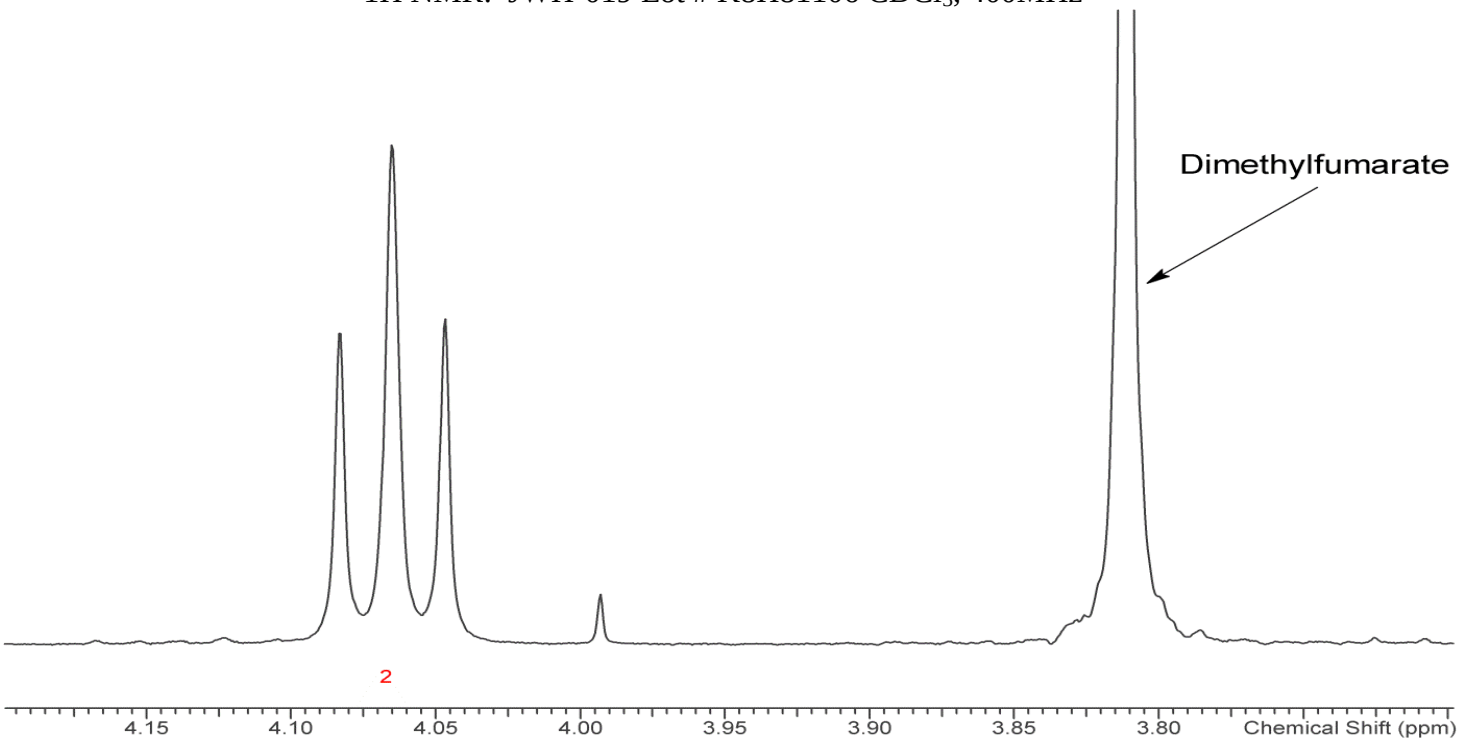
1H NMR: JWH-019 Lot # K8H81106 $CDCl_3$, 400MHz

JWH-019

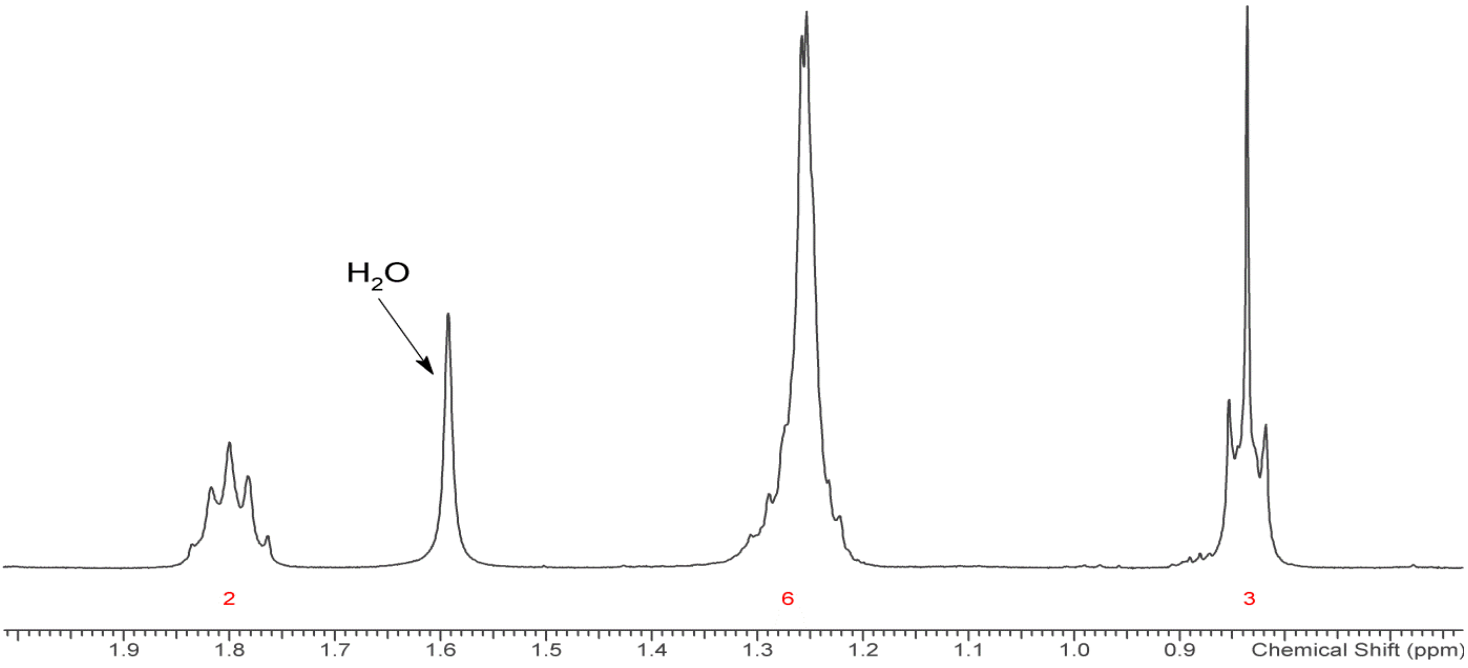
The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.



1H NMR: JWH-019 Lot # K8H81106 $CDCl_3$, 400MHz



1H NMR: JWH-019 Lot # K8H81106 $CDCl_3$, 400MHz

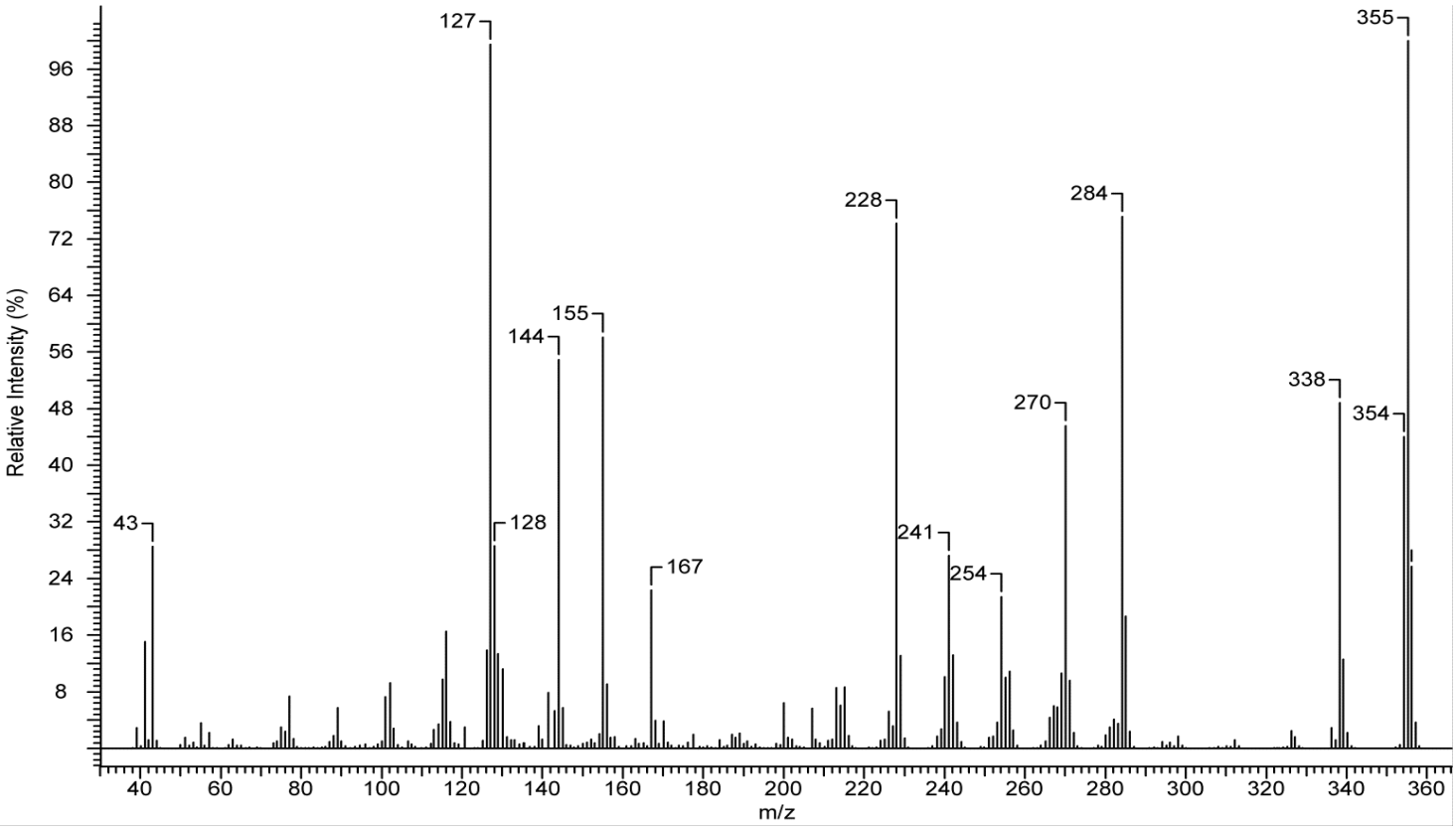


3.2 GAS CHROMATOGRAPHY/MASS SPECTROMETRY

Sample Preparation: Dilute analyte to ~1 mg/mL in $CHCl_3$

Instrument:	Gas chromatograph operated in split mode with MS detector
Column:	DB-1; 30m x 0.25mm x 0.25µm
Carrier Gas:	Helium at 1 mL/min
Temperatures:	Injector: 280°C MSD transfer line: 280°C MS Source: 230°C MS Quad: 150°C Oven program: 1) 100°C initial temperature for 1.0 min 2) Ramp to 300°C at 12°C/min 3) Hold final temperature for 9.0 min
Injection Parameters:	Split Ratio = 25:1, 1 µL injected
MS Parameters:	Mass scan range: 34-550 amu Threshold: 100 Tune file: stune.u Acquisition mode: scan
Retention Time:	21.483 minutes

EI Mass Spectrum: JWH-019, Lot # K8H81106



3.3 INFRARED SPECTROSCOPY (FTIR)

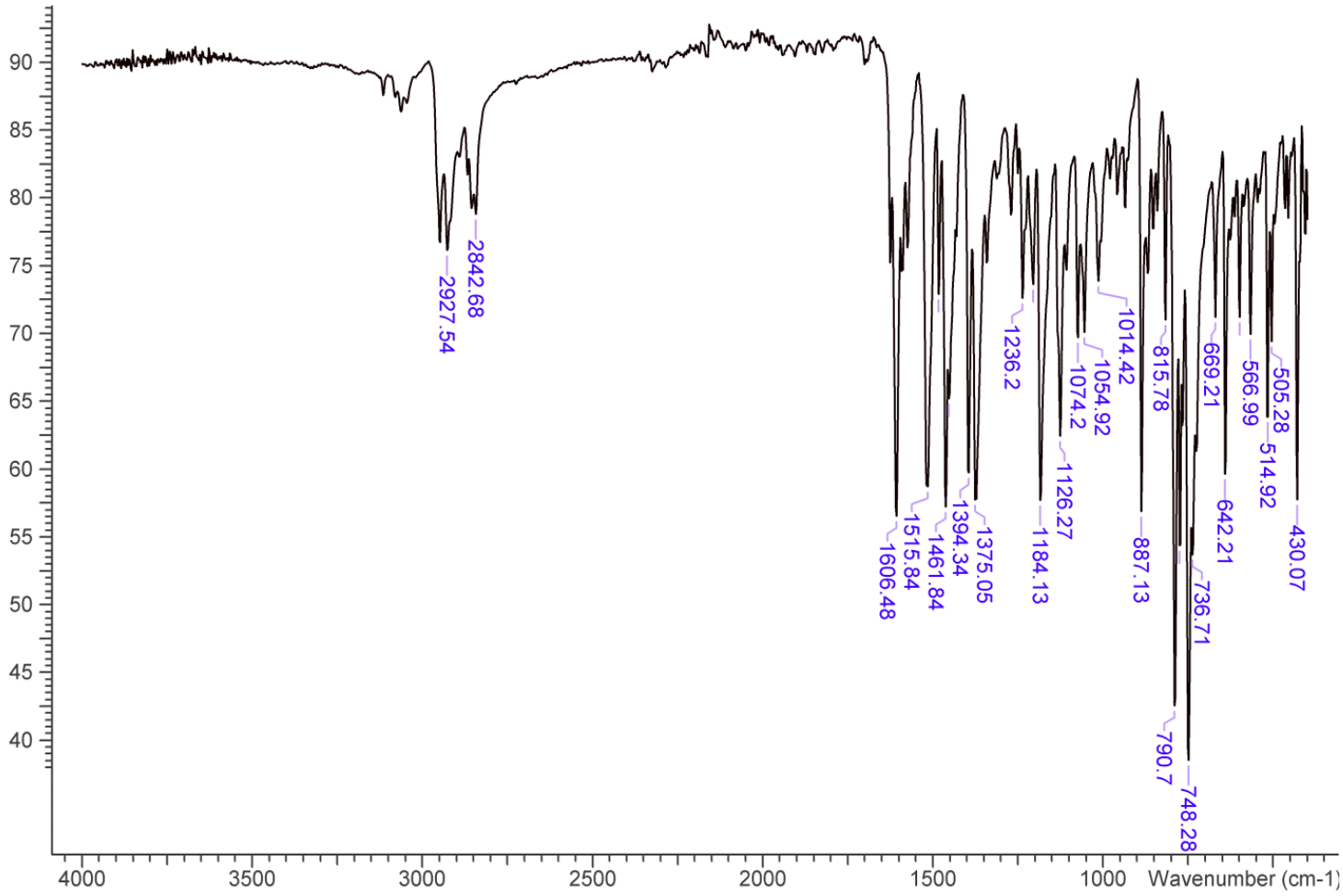
Instrument: FTIR with diamond ATR attachment (3 bounce)

Scan Parameters:
Number of scans: 32
Number of background scans: 32
Resolution: 4cm^{-1}
Sample gain: 8
Aperture: 150

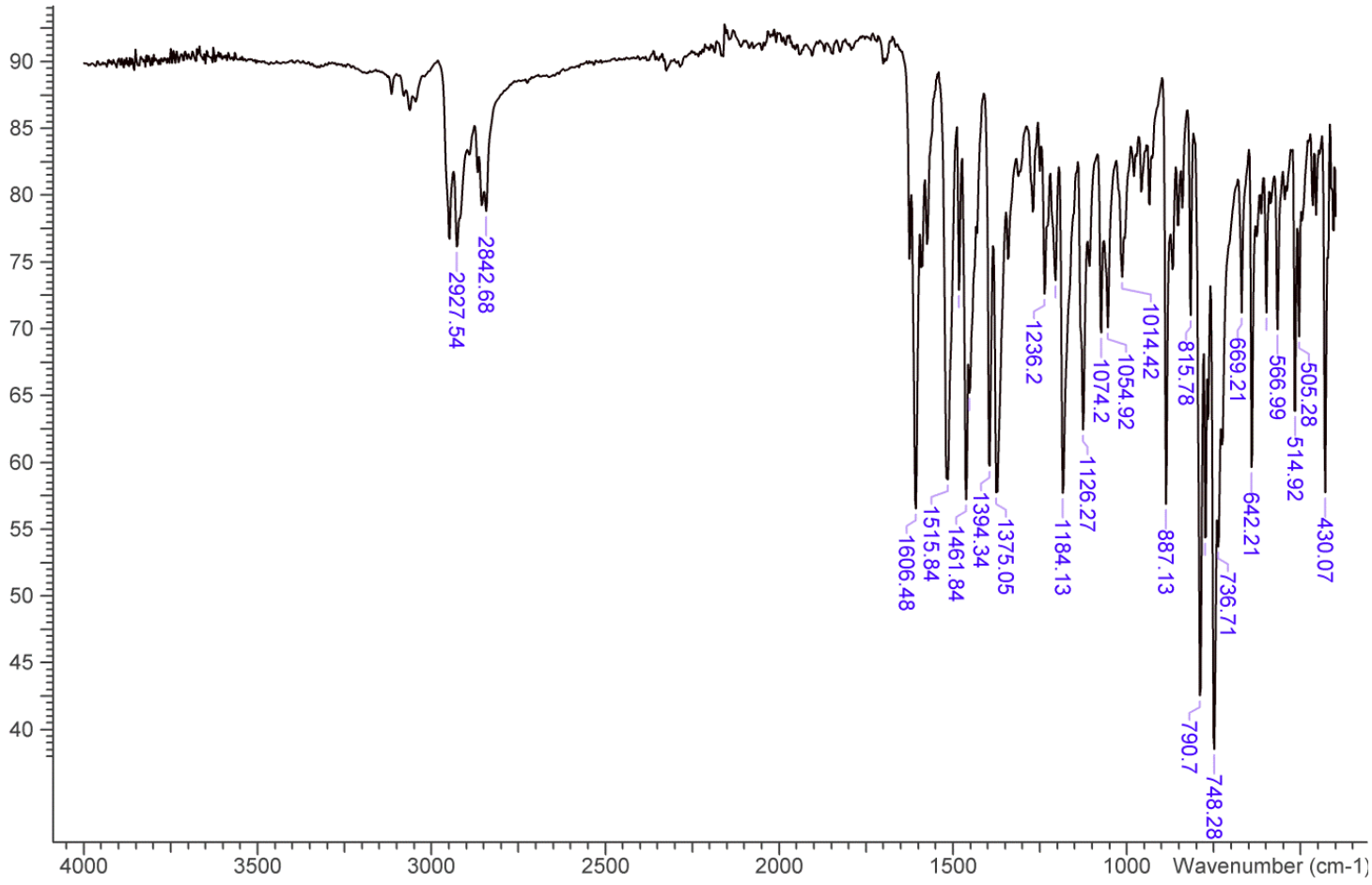
JWH-019

The Drug Enforcement Administration's Special Testing and Research Laboratory generated this monograph using structurally confirmed reference material.

FTIR (Diamond ATR, 3 Bounce): JWH-019 Lot # K8H81106



FTIR (Diamond ATR, 3 Bounce): JWH-019 Lot # K8H81106



4. ADDITIONAL RESOURCES

Forendex

Wikipedia

Nakajima J, Takahashi M, et al., (2011) Identification and quantitation of two benzoylindoles AM-694 and (4-methoxyphenyl)(1-pentyl-1*H*-indol-3-yl)methanone, and three cannabimimetic naphthoylindoles JWH-210, JWH-122, and JWH-019 as adulterants in illegal products obtained via the Internet. Forensic Toxicology 29:95-110.