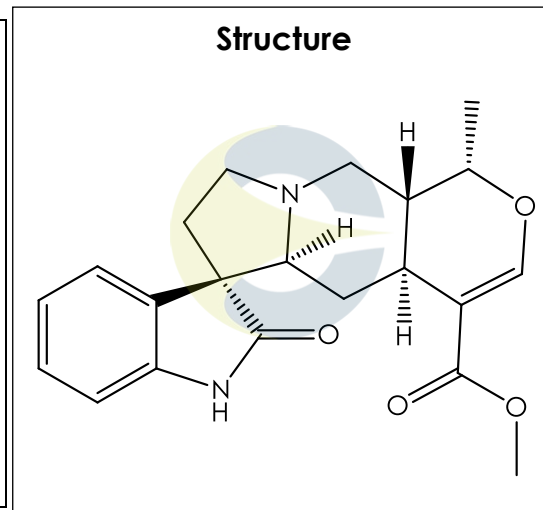


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PRODUCT NAME	Isomitraphylline
PART NUMBER	00009417
STANDARD TYPE	Primary (P)
LOT NUMBER	00009417-11B
REPORT NUMBER	CDXA-RSS-5860-01
SAMPLE NUMBER	CDXA-13-7482
DATE OF SAMPLE	09/30/2013
DATE OF RE-EVALUATION	11/02/2018
DATE OF REPORT	11/30/2018



CHEMICAL NAMES	7-Isomitraphylline; Ajmalicine oxindole A
CHEMICAL FORMULA	C ₂₁ H ₂₄ N ₂ O ₄
MOLECULAR WEIGHT (MW)	368.43
CHEMICAL FAMILY	Alkaloids
CAS NUMBER	[4963-01-3]
EC#(EINECS)	NA
RTECS	WH1312422

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	90.0%
HPLC	99.1-04-1.0-000684	NA	97.9%
NMR	99.1-CD-1.0-000122	Conforms to structure	Conforms to structure
Mass Spectrum	Direct Infusion, ESI (-)	Conforms	Conforms
Residual Solvent	99.1-CD-7.0-000115	NA	Dichloromethane – 0.4%; Ethyl acetate – 1.6%; Chloroform – 5.2%
Water	99.1-04-9.0-000094	NA	0.9%
Appearance	NA	NA	White powder

ADJUSTED PURITY: 90.0% IS BASED ON (100 - 7.2 SOLVENTS - 0.9 WATER) X 97.9% HPLC

STORAGE CONDITIONS

STORAGE	-20 °C in a dry place.
EXPIRATION DATE	11/2023 under the above conditions.

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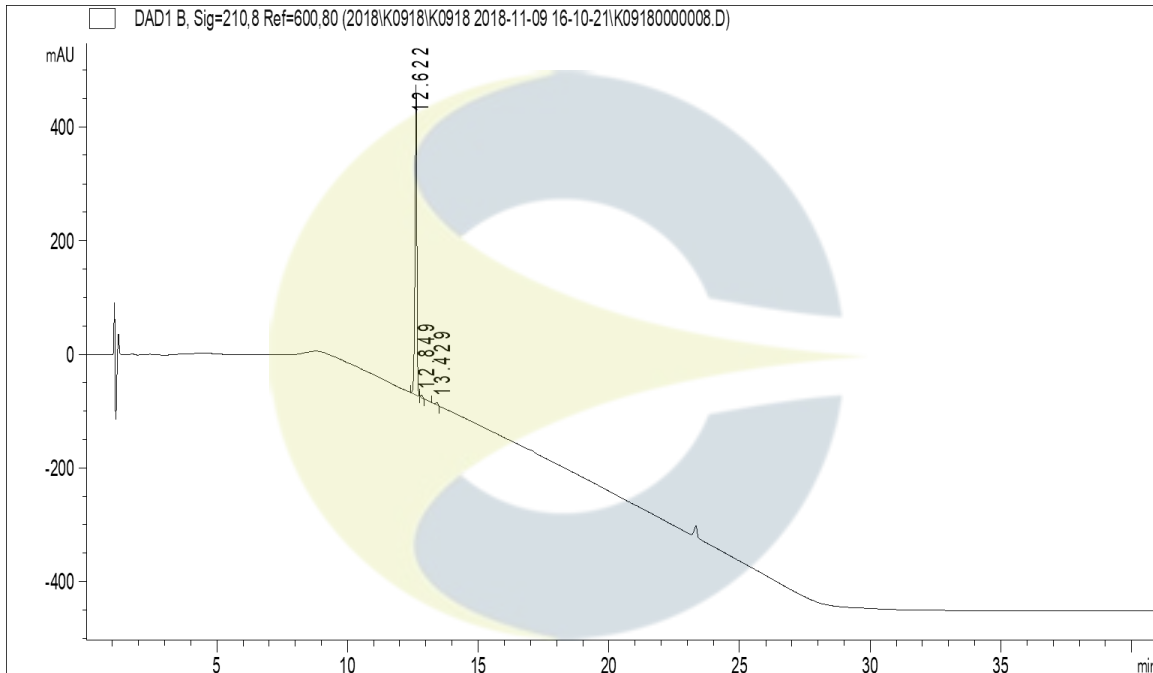
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ANALYTICAL CONDITIONS

INSTRUMENT	AGILENT 1260 HPLC UV-VIS (DAD) AGILENT 6510 QTOF
COLUMN	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
MOBILE PHASE	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes.
COLUMN TEMP.	60 °C
FLOW RATE	0.4 mL/minute
INJECTION VOL.	0.4 µL
INJECTION CONC.	0.7 mg/mL in Methanol
DETECTION	210 ± 4 nm

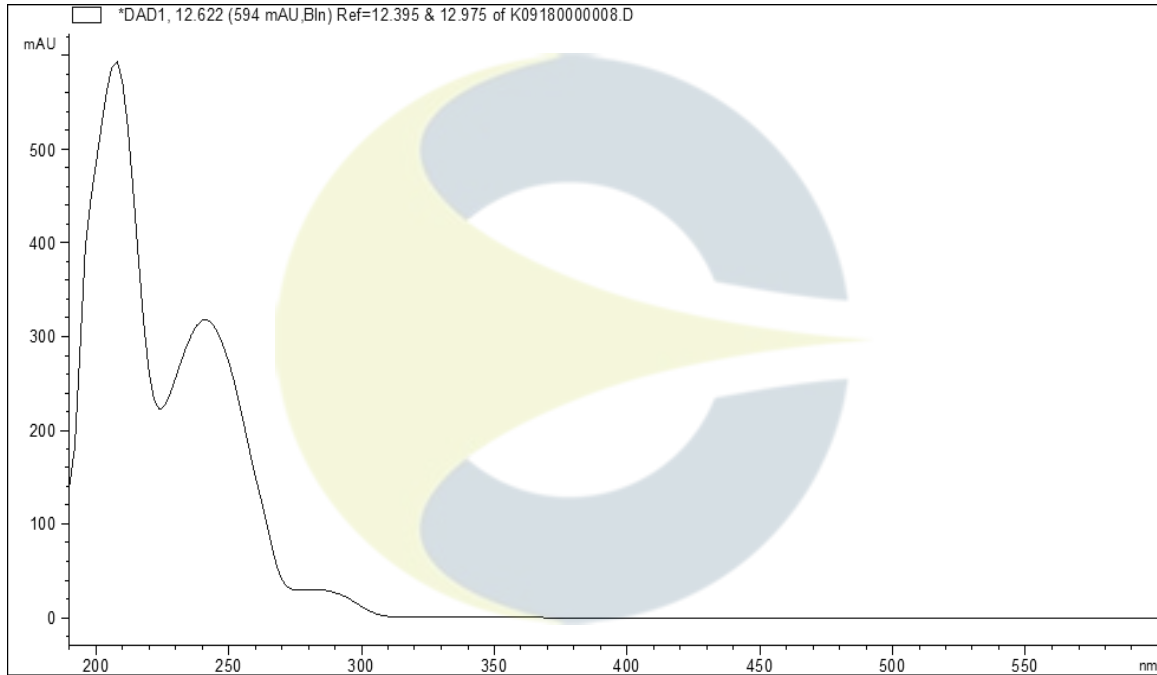
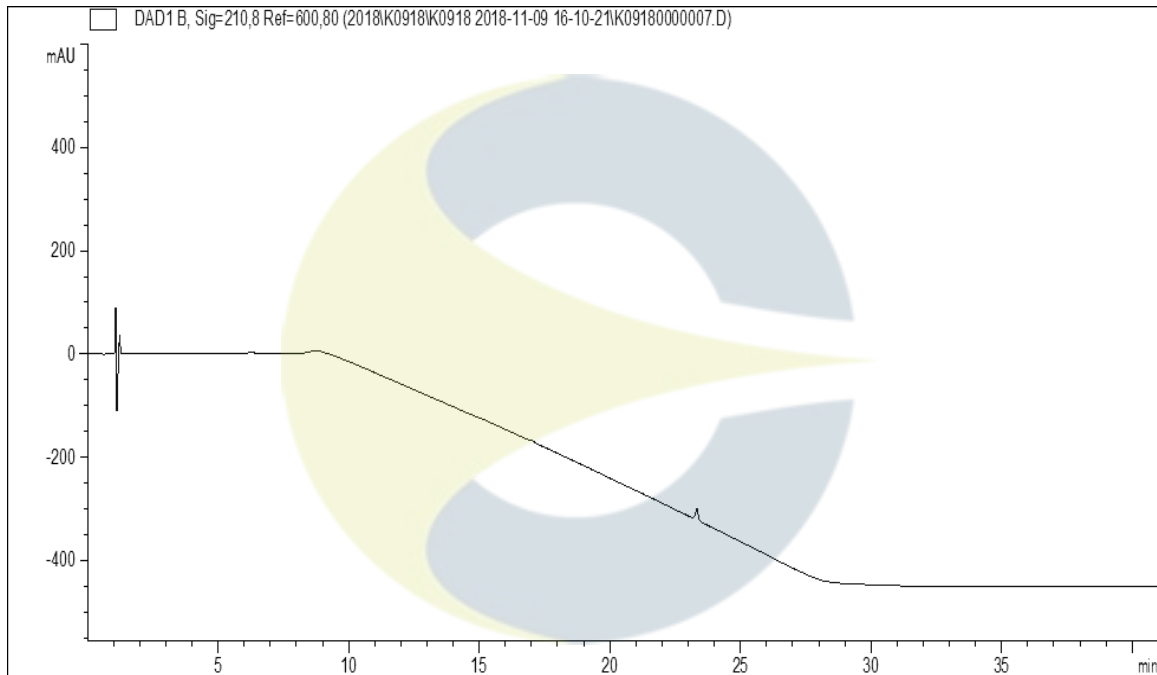
HPLC CHROMATOGRAM OF ISOMITRAPHYLLINE (CDXA-13-7482)



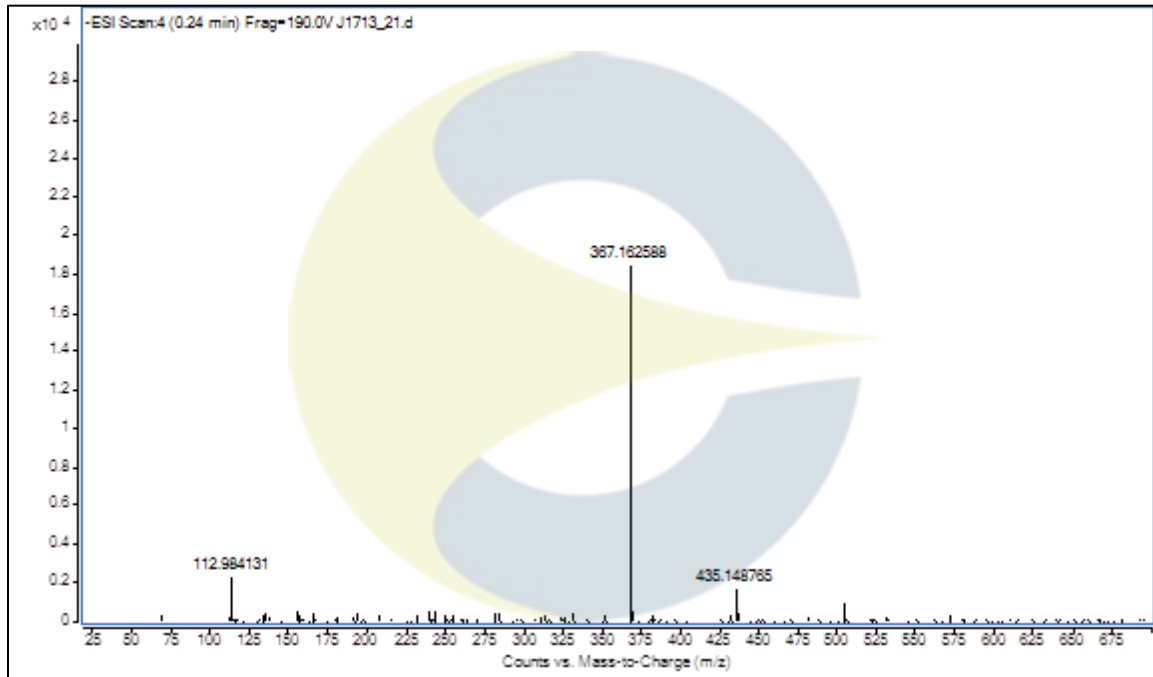
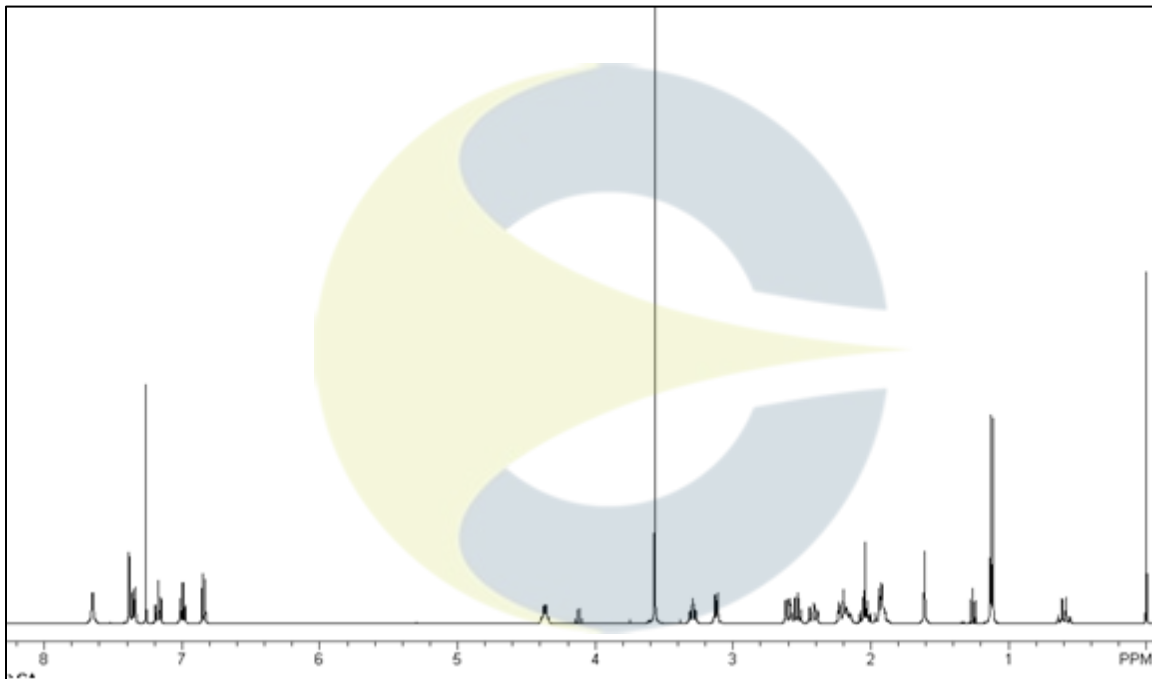
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Certificate of Analysis

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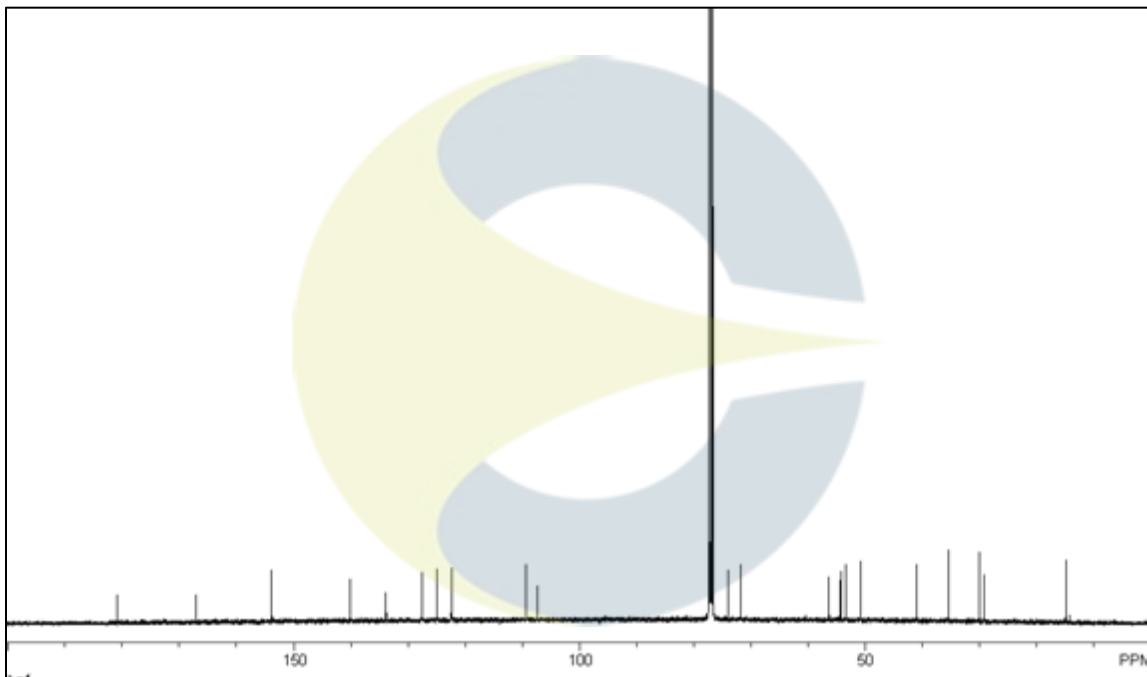
UV SPECTRUM AT RT = 12.6 MINUTES**HPLC CHROMATOGRAM OF DILUENT BLANK**

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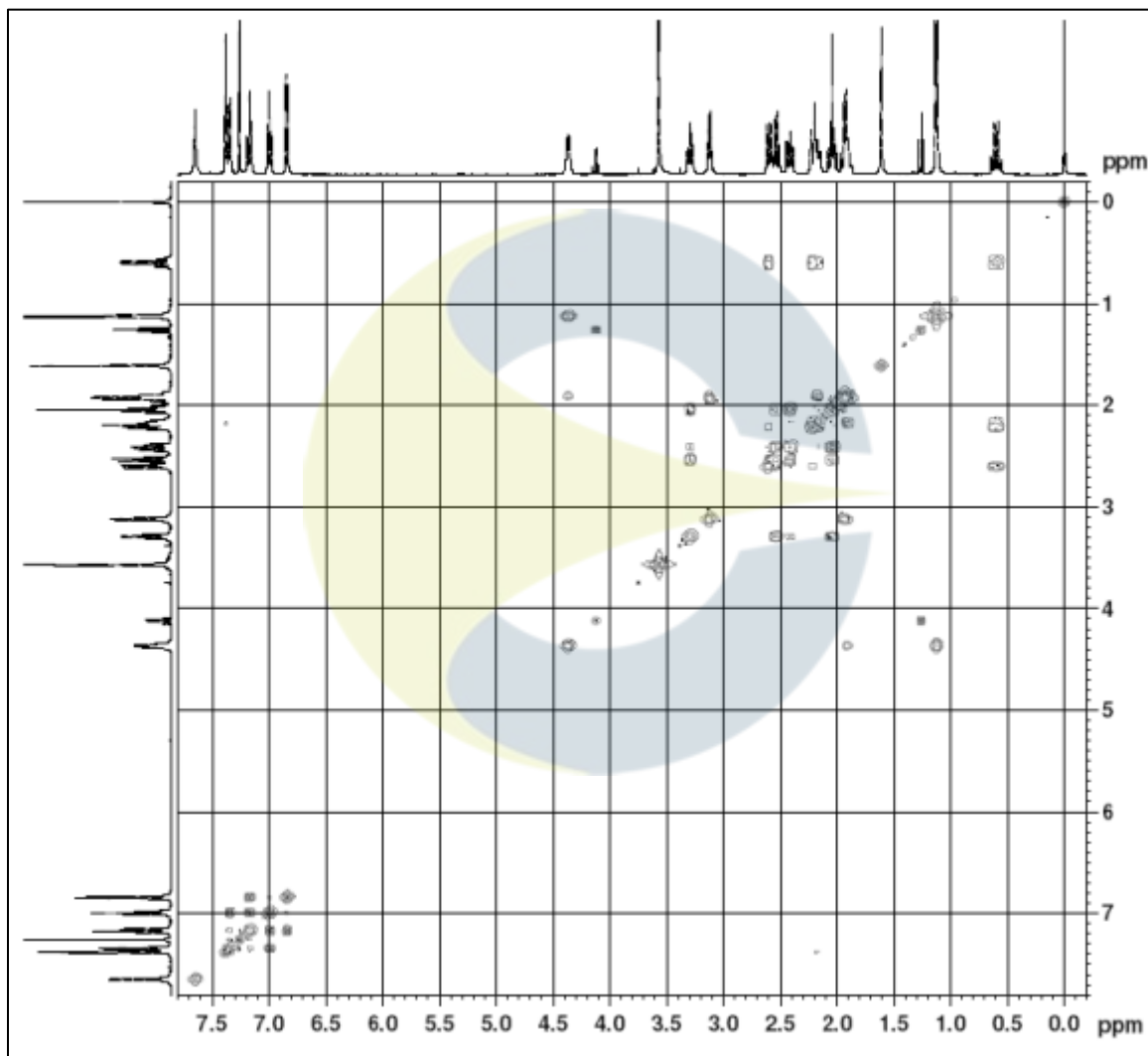
MASS SPECTRUM OF ISOMITRAPHYLLINE (CDXA-13-7482)**¹H-NMR SPECTRUM OF ISOMITRAPHYLLINE (CDXA-13-7482) IN CDCl₃**

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¹³C-NMR SPECTRUM OF ISOMITRAPHYLLINE (CDXA-13-7482) IN CDCl₃



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COSY-NMR SPECTRUM OF ISOMITRAPHYLLINE (CDXA-13-7482) IN CDCl₃

REVISION HISTORY

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	10/23/2013	New report
01	11/30/2018	Passed re-evaluation by HPLC and water content. Updated Results, Analytical Conditions, chromatograms, UV spectrum, structure and expiration date. Added RTECS.

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