



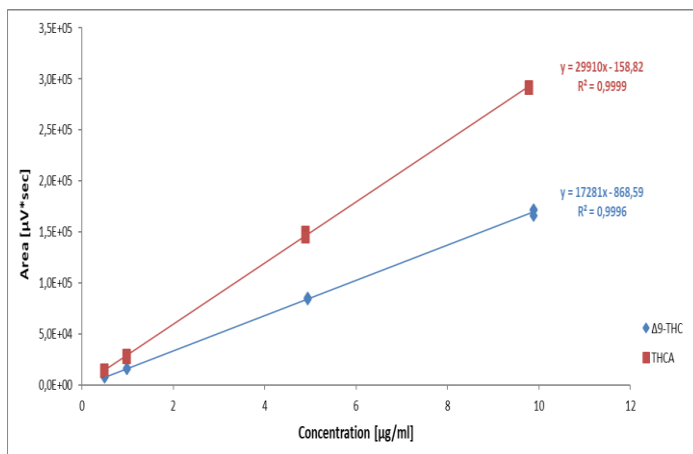
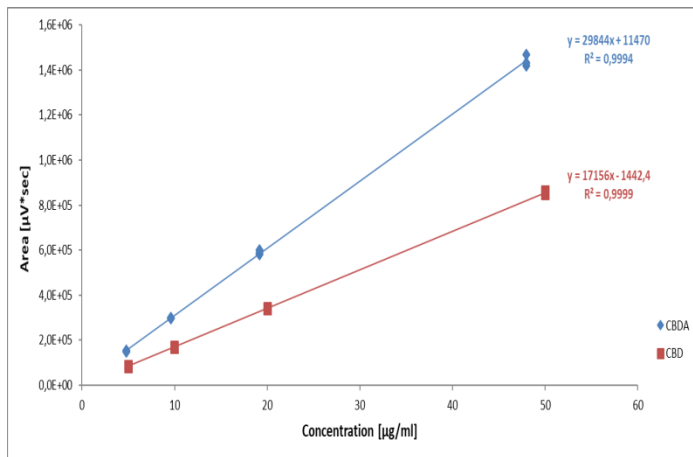
**ŁUKASIEWICZ RESEARCH NETWORK
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QUALITY CERTIFICATE 224/2019

Type of sample: Oil
Sample name /Batch: CBD 22% + CBG 2% + CBC 1,7%
Client's name: Wanda Broker Wota Beata
Jeziorna 2
84-360 Nowęcín, Łeba
No sample identification: 53/2019/22
Date of start testing: 06.11.2019
Date of end testing: 08.11.2019
Operator: E. Jóźwik

Calibration:



Test results¹⁾:

CBDV (cannabidivarine)	< L.O.Q.
CBDA (cannabidiolic acid)	0,583 ± 0,018 % (w/w)
CBG (cannabigerol)	1,828 ± 0,055 % (w/w)
CBD (cannabidiol)	21,527 ± 1,156 % (w/w)
CBN (cannabinol)	< L.O.D.
Δ-9-THC (delta-9-tetrahydrocannabinol)	< L.O.D.
Δ-8-THC (delta-8-tetrahydrocannabinol)	< L.O.D.
CBC (cannabichromene)	1,438 ± 0,084 % (w/w)
THCA (delta-9-tetrahydrocannabinolic acid)	< L.O.D.

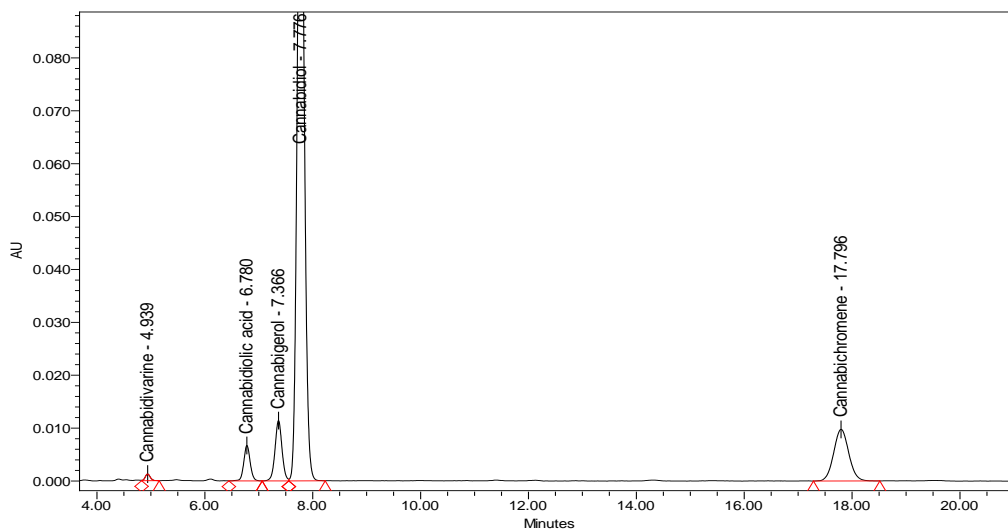
$\Sigma\text{THC} = \text{THC} + (0,8772 \times \text{THCA})$ < L.O.D.

L.O.Q (limit of quantification) = 0,150% (w/w)

L.O.D (limit of detection) = 0,063% (w/w)

¹⁾ the given extended uncertainty (U) is based on standard uncertainty multiplied by extension factor $k=2$ providing confidence level of 95%. Sampling uncertainty was not taken into account in calculations.

According to the High Performance Liquid Chromatography (HPLC) method with a Photodiode Array Detector (PAD)



It declares that the above results relate only to the sample identification number 53/2019/22, and that without the written consent of the Head of the Laboratory of Analytical certificate may not be reproduced otherwise than in its entirety.

Date of issue: 08.11.2019

Quality manager: Mariusz Chmiel

END