



## CANNABINOID TEST REPORT

Date of Delivery: 02/26/2019

Type of Sample: REG WATERSOL EXTRA STRENGTH-NATURAL

Date of Analysis: 02/27/2019

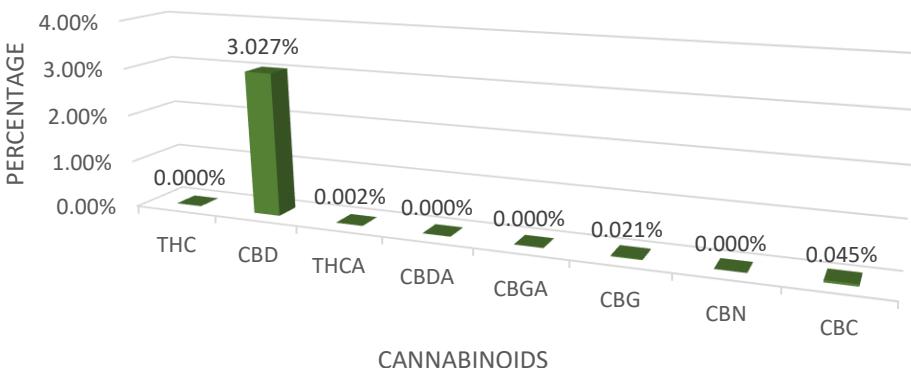
Method: HPLC-UV

Sample Name: REG Watersol-ES

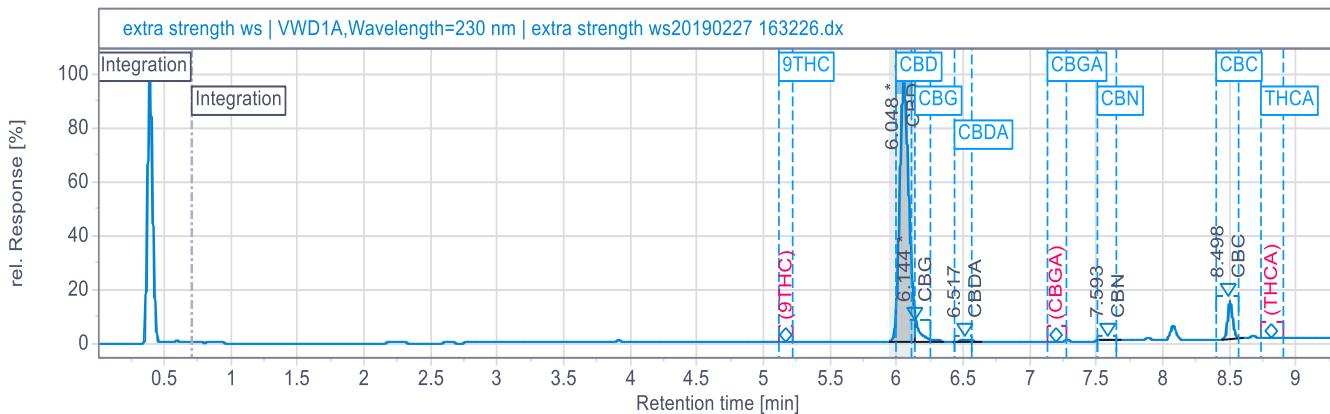
Lab Address: 2405 Southwest Blvd, Kansas City, MO 64108

### CANNABINOID PROFILE w/w%

THC	CBD	THCA	CBDA	CBGA	CBG	CBN	CBC
N/D	3.027%	0.002%	N/D	N/D	0.021%	N/D	0.045%



### CHROMATOGRAM



CBD Content	THC Content
30.27 mg/ml	<2.0 mg/ml

The total or partial reproduction of this document is not allowed without permit from CBD American Shaman. Results are limited to the analyzed sample not being applicable to the whole batch or variety. The purpose of the data contained on this report is strictly for informational purposes and should not be used for treatment or prevention of any symptoms or illness.

Spec: %RSD: ≤ 2.0 Spec: USP Tailing: ≤ 2.0

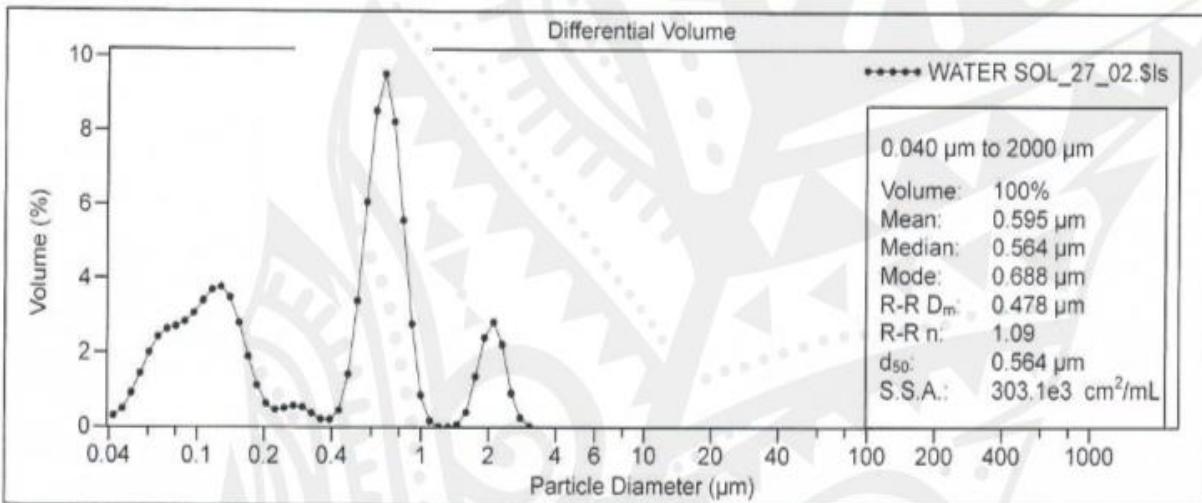
Spec: Check STD Diff.: ≤ ±2.0%

Spec: Tangent Resolution: ≥ 2.0



# American Shaman

File name: C:\LS13320\DATA\WATER SOL\_27\_02.\$ls  
File ID: WATER SOL\_27\_02.\$ls  
Optical model: Fraunhofer.rf780d PIDS: Submicron-only  
Start time: 1:03



Volume Statistics (Arithmetic)		WATER SOL_27_02.\$ls				
Calculations from 0.040 μm to 2000 μm						
Volume:	100%					
Mean:	0.595 μm					
Median:	0.564 μm					
Mean/Median ratio:	1.054					
Mode:	0.688 μm					
d <sub>50</sub> :	0.564 μm	d <sub>90</sub> :	1.671 μm			
<10%	<25%	<50%	<75%	<90%		
0.076 μm	0.120 μm	0.564 μm	0.748 μm	1.671 μm		
>10%	>25%	>50%	>75%	>90%		
1.671 μm	0.748 μm	0.564 μm	0.120 μm	0.076 μm		
<1 μm	<10 μm	<100 μm	<1000 μm			
88.9%	100%	100%	100%			
>1 μm	>10 μm	>100 μm	>1000 μm			
11.1%	0%	0%	0%			



## Particle Sizer analyzer

CBD American shaman utilizes a particle size analyzer to ensure that the batches created are at the correct particle size to increase the bioavailability of the product.

Particle size analysis is an important test and is used for quality control in many different industries. In just about every industry where milling or grinding is used, particle size is a critical factor in determining the efficiency of manufacturing processes and performance of the final product. Some industries and product types where particle sizing is used includes:

- Pharmaceuticals
- Building materials
- Paints and coatings
- Food and beverages
- Aerosols

The most commonly used metrics when describing particle size distributions are the D-values (d10, d50, d90) which are the intercepts for 10% 50% and 90% of the cumulative mass.

D-values can be thought of as the diameter of the sphere which divides the sample's mass into a specified percentage when the particles are arranged on an ascending mass basis.

For example, the D10 is the diameter at which 10% of the sample's mass is comprised of particles with a diameter less than this value. The D50 is the diameter of the particle that 50% of a sample's mass is smaller than and 50% of a sample's mass is larger than.

\*\*On the Report given the d50 value is 0.564um (0.564-microns). Which converts to 56.4 nanometer, hence, why its called nano technology. So, if you were explaining it to someone: of the entire homogenous solution produced half of the particles are at 56.4 nanometers.

\*\*Each peak represents clusters of particle sizes.

\*\*All batch results have metrics taken on the particle size to maintain a consistent product to our customers. Once the batch has reached the desired particle size the batch is finalized and transferred to the quality control department to ensure the quality of the material.

THC	CBD	THCA	CBDA	CBGA	CBG	CBN	CBC
N/D	3.027%	0.002%	N/D	N/D	0.021%	N/D	0.045%