

L

A

M

P






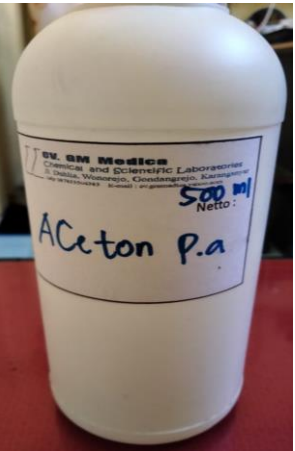
I

R

A

N

Lampiran 1. Gambar alat dan bahan

Alat	Bahan
<p>Alat KCKT</p> 	<p>A-tokoferol</p> 
<p>Injektor pada KCKT</p> 	<p>Extra Virgin Olive Oil</p> 
<p>Sonikator</p> 	<p>Aseton</p> 

Spektrofotometer UV-VIS



Metanol P.a

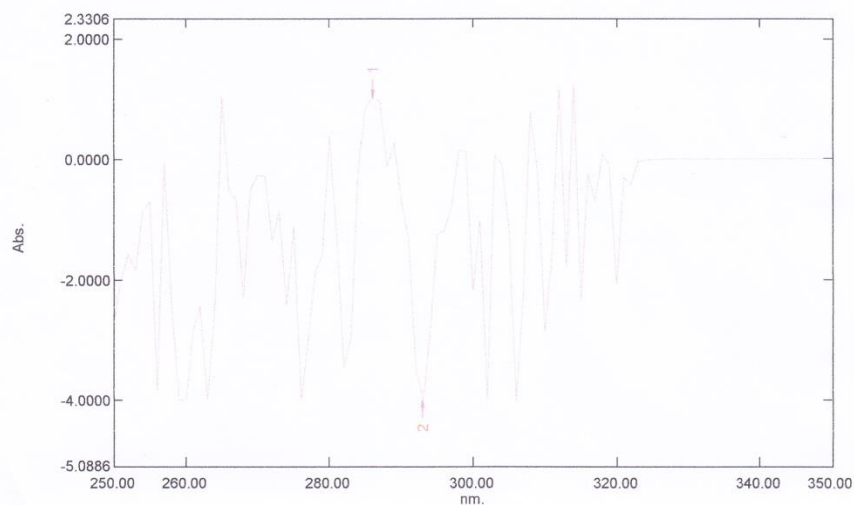
Filter Syringe 0.45 μm 

Lampiran 2. Hasil penentuan panjang gelombang pada larutan baku

Spectrum Peak Pick Report

03/16/2021 02:54:57 PM

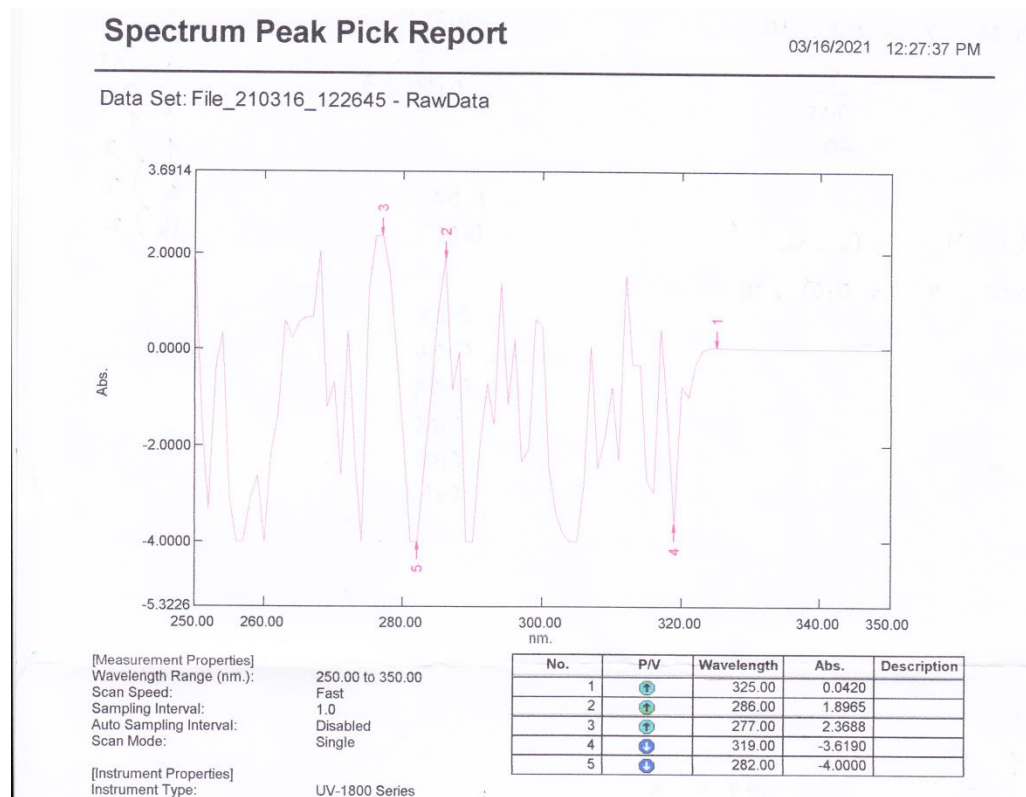
Data Set: File_210316_145414 - RawData



[Measurement Properties]
 Wavelength Range (nm.): 250.00 to 350.00
 Scan Speed: Fast
 Sampling Interval: 1.0
 Auto Sampling Interval: Disabled
 Scan Mode: Single

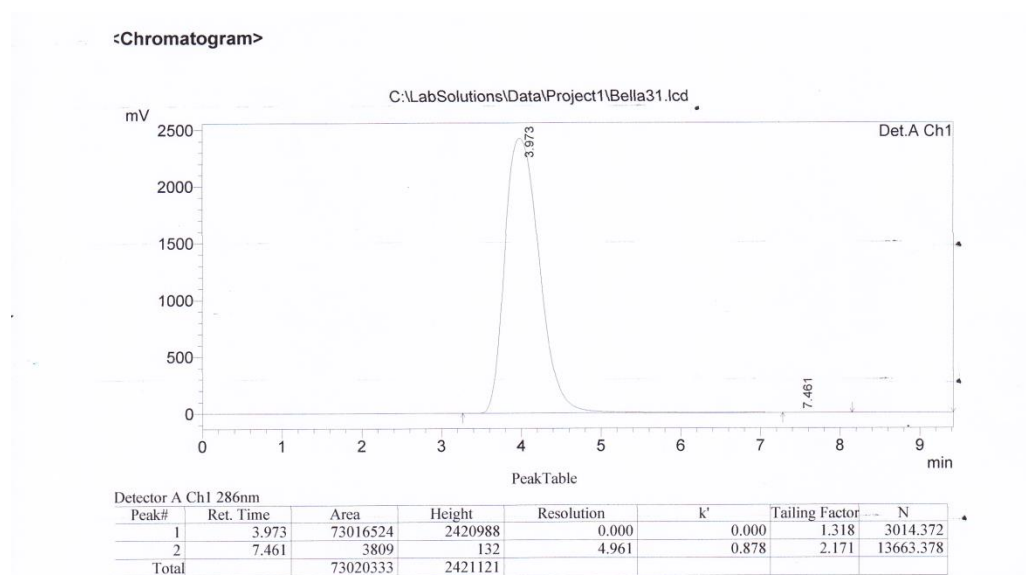
No.	P/V	Wavelength	Abs.	Description
1	⊕	286.00	1.0322	
2	⊖	293.00	-4.0000	

Lampiran 3. Hasil penentuan panjang gelombang pada sampel

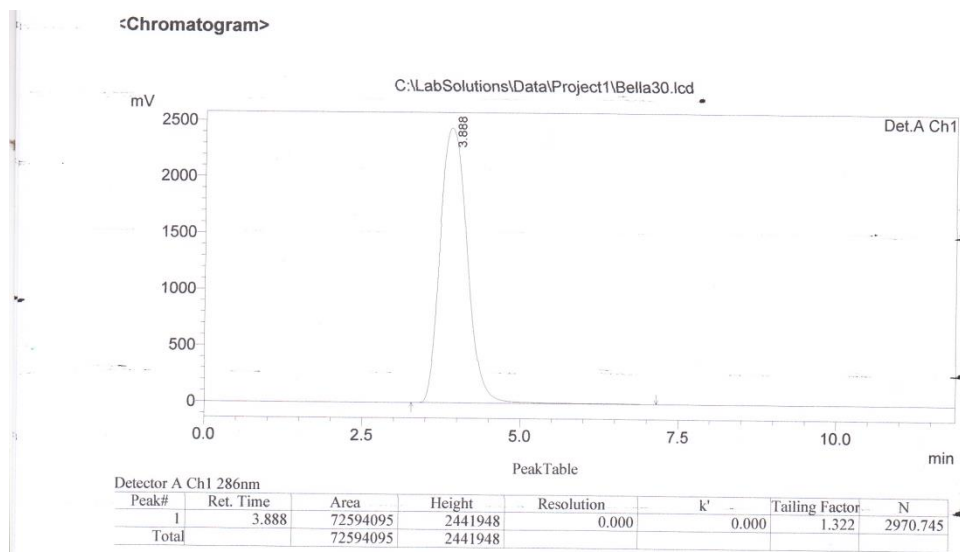


Lampiran 4. Hasil kromatogram pada sampel menggunakan KCKT

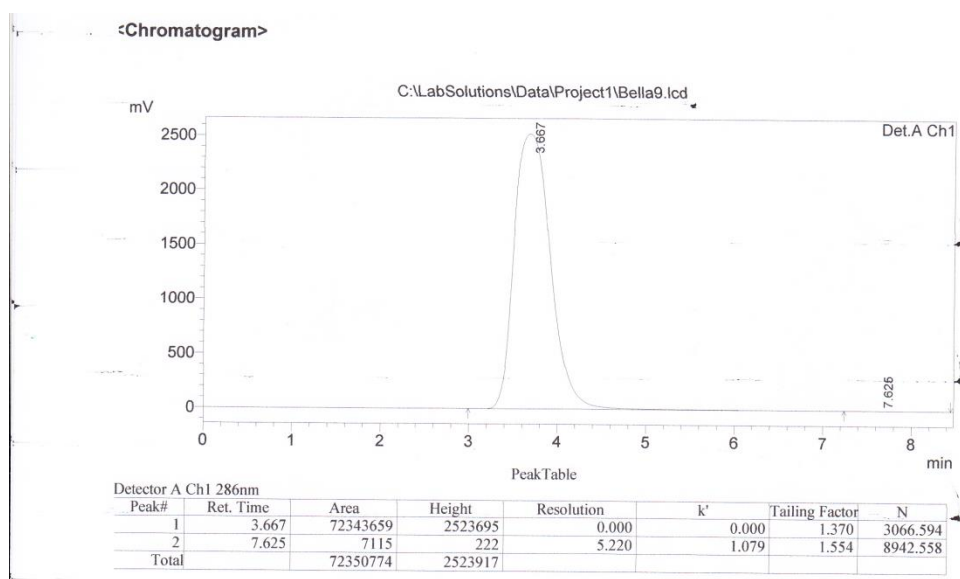
Replikasi 1



Replikasi 2

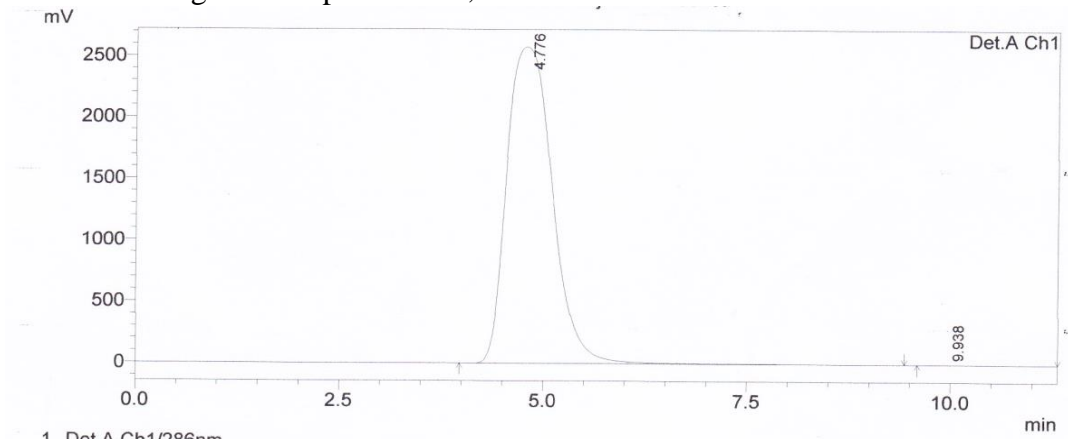


Replikasi 3



Lampiran 5. Kromatogram uji kecepatan alir

1. Kromatogram kecepatan alir 0,8mL/menit

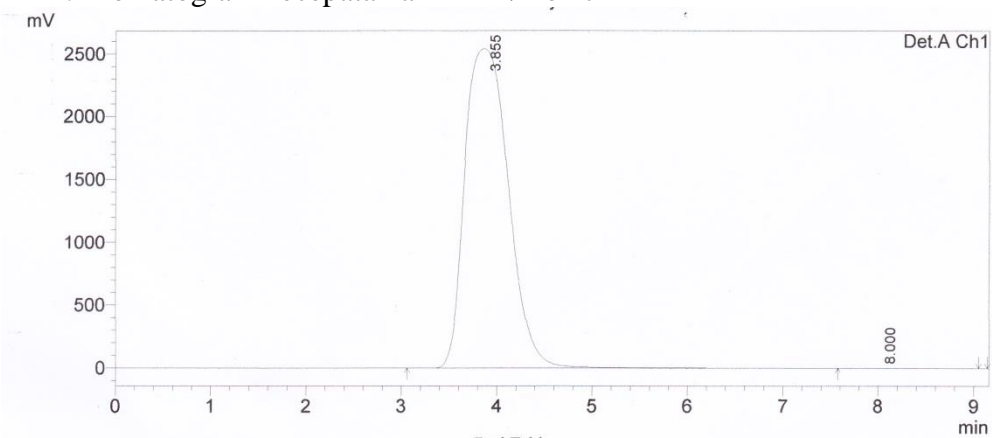


1 Det.A Ch1/286nm

PeakTable

Peak#	Ret. Time	Area	Height	Resolution	k'	Tailing Factor	N
1	4.776	100058140	2575896	0.000	0.000	1.348	2822.302
2	9.938	8828	192	5.106	1.081	2.440	8813.261
Total		100066968	2576088				

2. Kromatogram kecepatan alir 1mL/menit

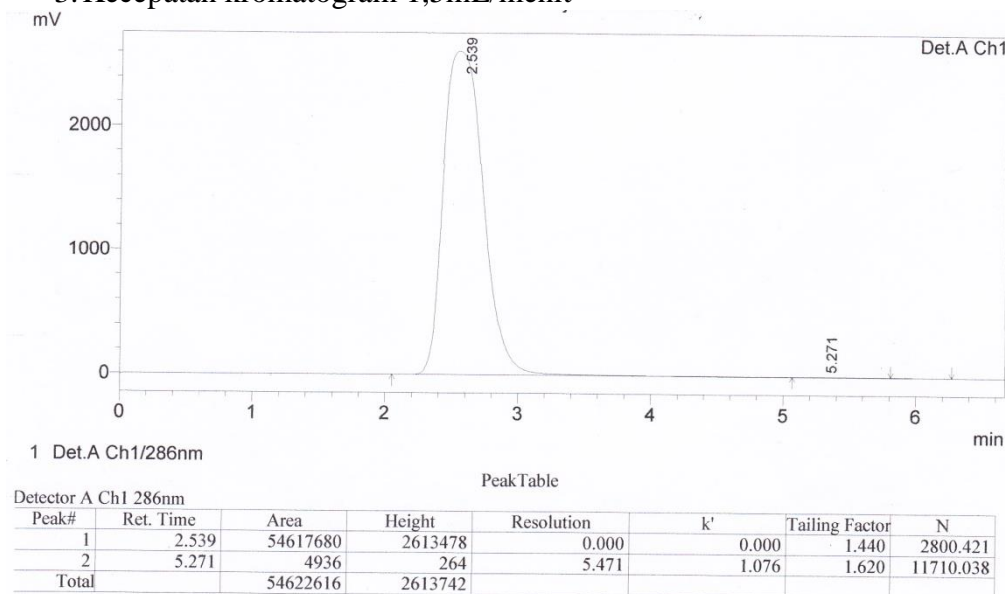


Detector A Ch1 286nm

PeakTable

Peak#	Ret. Time	Area	Height	Resolution	k'	Tailing Factor	N
1	3.855	80878614	2541607	0.000	0.000	1.305	2763.938
2	8.000	9215	259	4.897	1.075	1.701	7802.567
Total		80887830	2541867				

3. Kecepatan kromatogram 1,5mL/menit



Lampiran 6. Perhitungan pengenceran kurva baku

Pengenceran kurva baku

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.1 \times 10\text{mL}$$

$$V_1 = 0.02\text{mL} = 20\mu\text{L}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.2 \times 10\text{mL}$$

$$V_1 = 0.04\text{mL} = 40\mu\text{L}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.3 \times 10\text{mL}$$

$$V_1 = 0.06\text{mL} = 60\mu\text{L}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.4 \times 10\text{mL}$$

$$V_1 = 0.08\text{mL} = 80\mu\text{L}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.5 \times 10\text{mL}$$

$$V_1 = 0.1\text{mL} = 100\mu\text{L}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.6 \times 10\text{mL}$$

$$V_1 = 0.12\text{mL} = 120\mu\text{L}$$

Lampiran 7. Perhitungan pengenceran pada akurasi

$$0.2\text{ppm} \times 80\% = 0.16\text{ppm}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.16 \times 10\text{mL}$$

$$V_1 = 0.032\text{mL} = 32\mu\text{L}$$

$$0.2\text{ppm} \times 100\% = 0.2\text{ppm}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.2 \times 10\text{mL}$$

$$V_1 = 0.04\text{mL} = 40\mu\text{L}$$

$$0.2\text{ppm} \times 120\% = 0.24\text{ppm}$$

$$C_1 \times V_1 = C_2 \times V_2$$

$$50\text{ppm} \times V_1 = 0.24 \times 10\text{mL}$$

$$V_1 = 0.048\text{mL} = 50\mu\text{L}$$

Lampiran 8. Hasil perhitungan presisi

Konsentrasi (mg/L)	Luas Area (A)($\mu\text{V/s}$)	Kadar sebenarnya (mg/L)	Rata-rata	SD	% KV
0.2	73340912	0.205	0.205	0.003	1.53
	73321043	0.203			
	73340212	0.205			
	73309867	0.202			
	73330432	0.204			
	73412521	0.211			

$$\text{Rata - rata} = \frac{0.205+0.203+0.205+0.202+0.204+0.211}{6} = 0.205$$

$$\text{SD} = \sqrt{\frac{(\sum(\mathbf{X} - \bar{\mathbf{X}})^2)}{n - 1}}$$

$$\text{SD} = \sqrt{\frac{0 + 0.000004 + 0 + 0.000009 + 0.000001 + 0.000036}{6 - 1}}$$

$$= \sqrt{0.00001} = 0.003$$