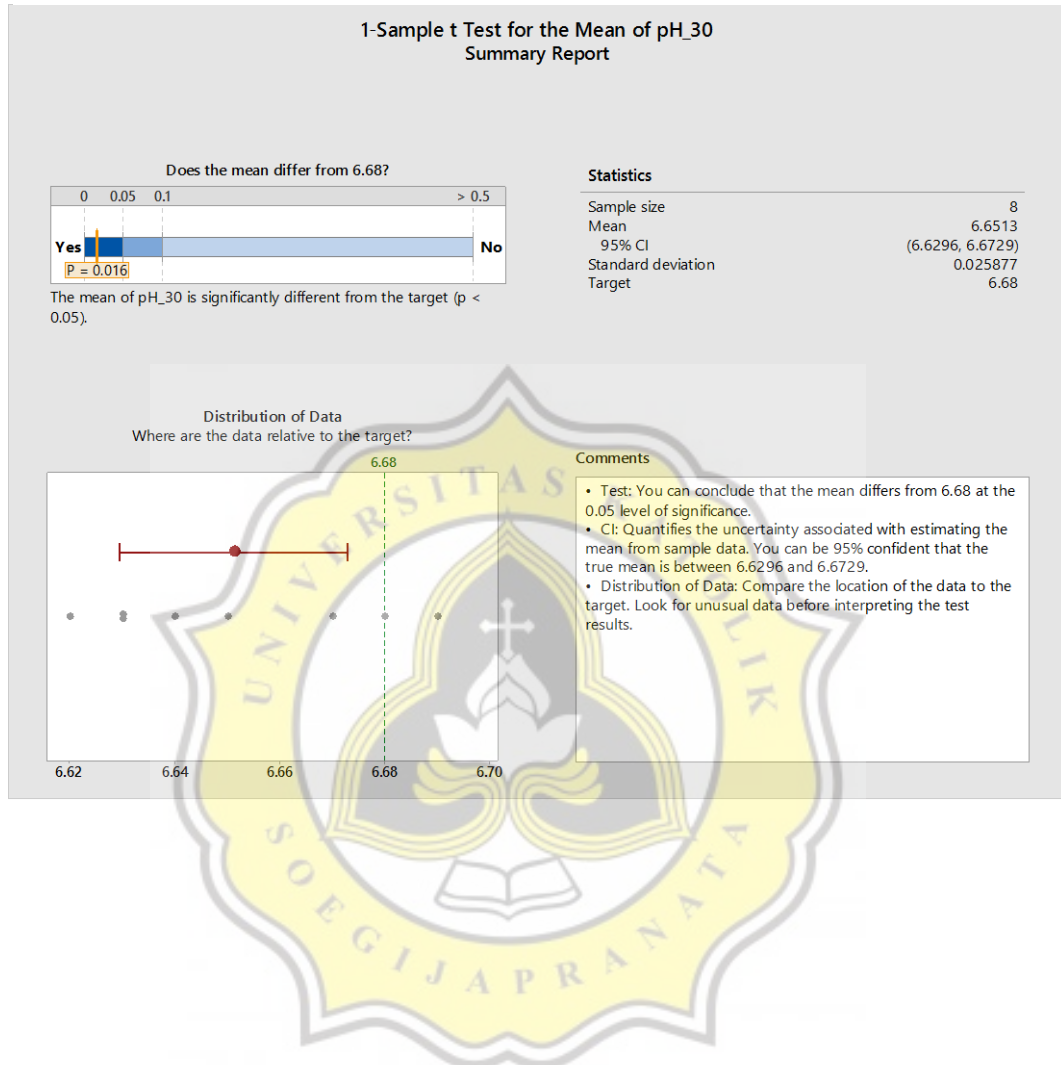


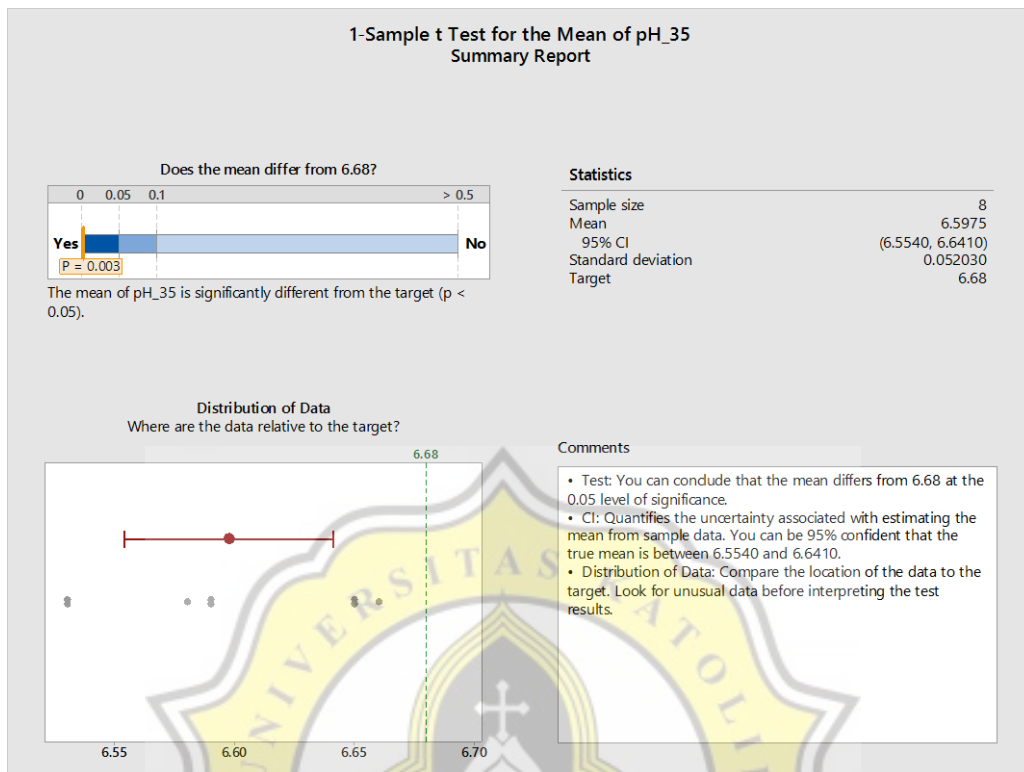
7. LAMPIRAN

7.1. Pengujian Data Secara Statistika

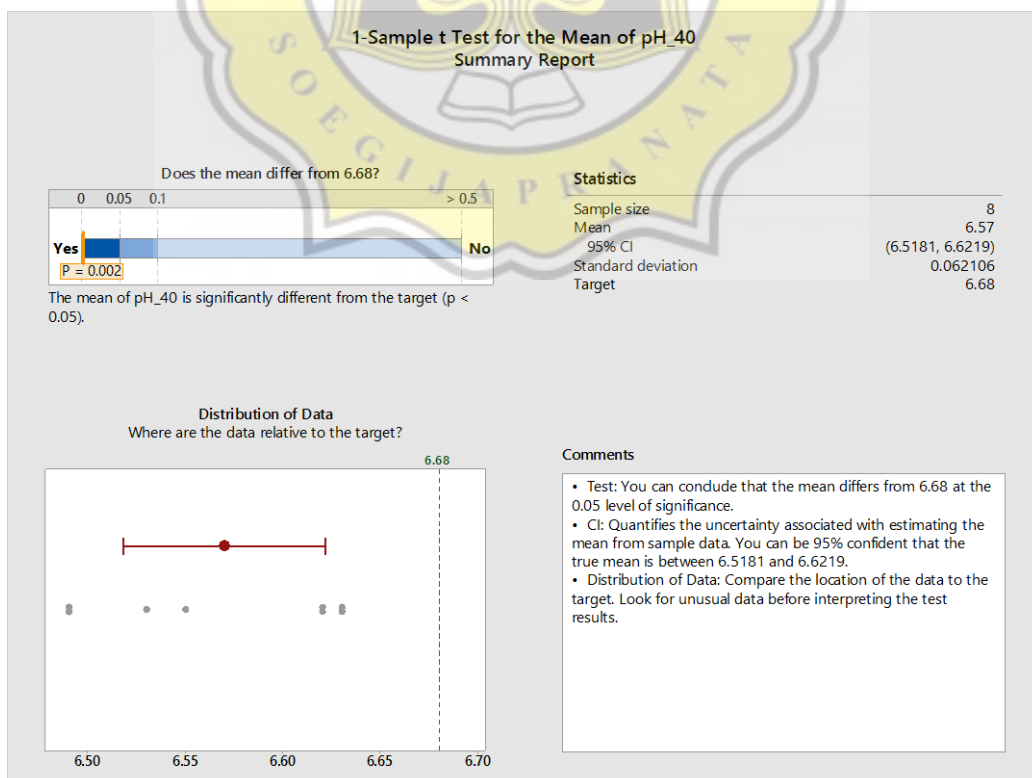
Lampiran 1. Pengujian data statistika pH pada suhu 30°C



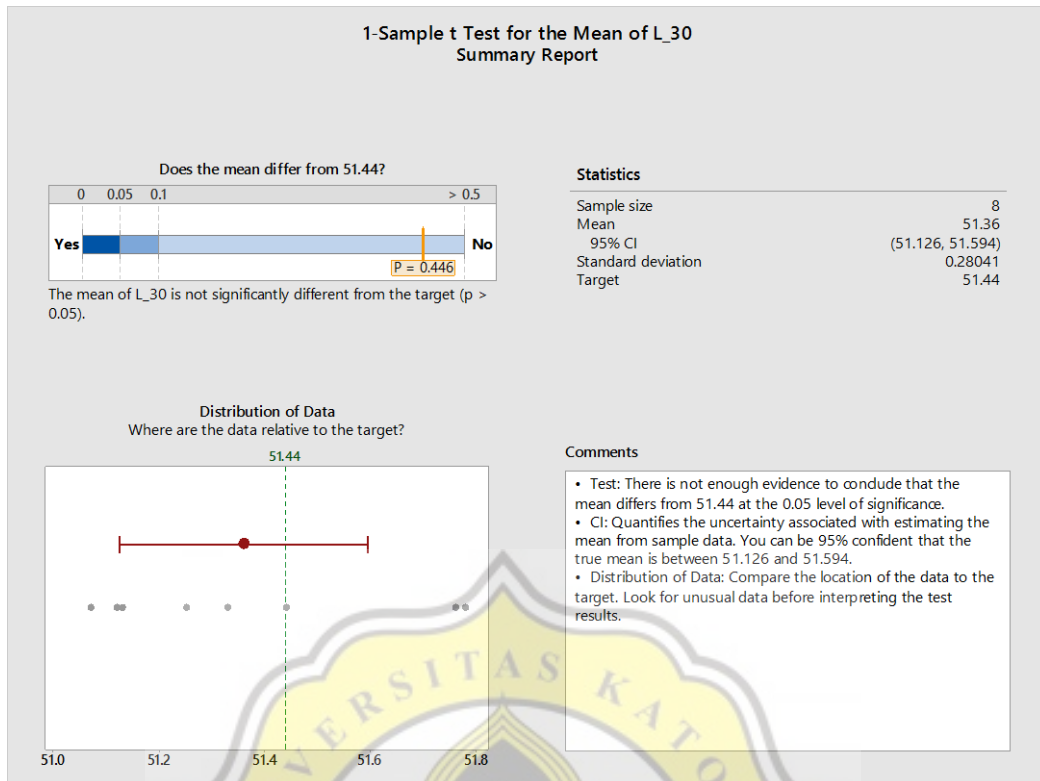
Lampiran 3. Pengujian data statistika pH pada suhu 35°C



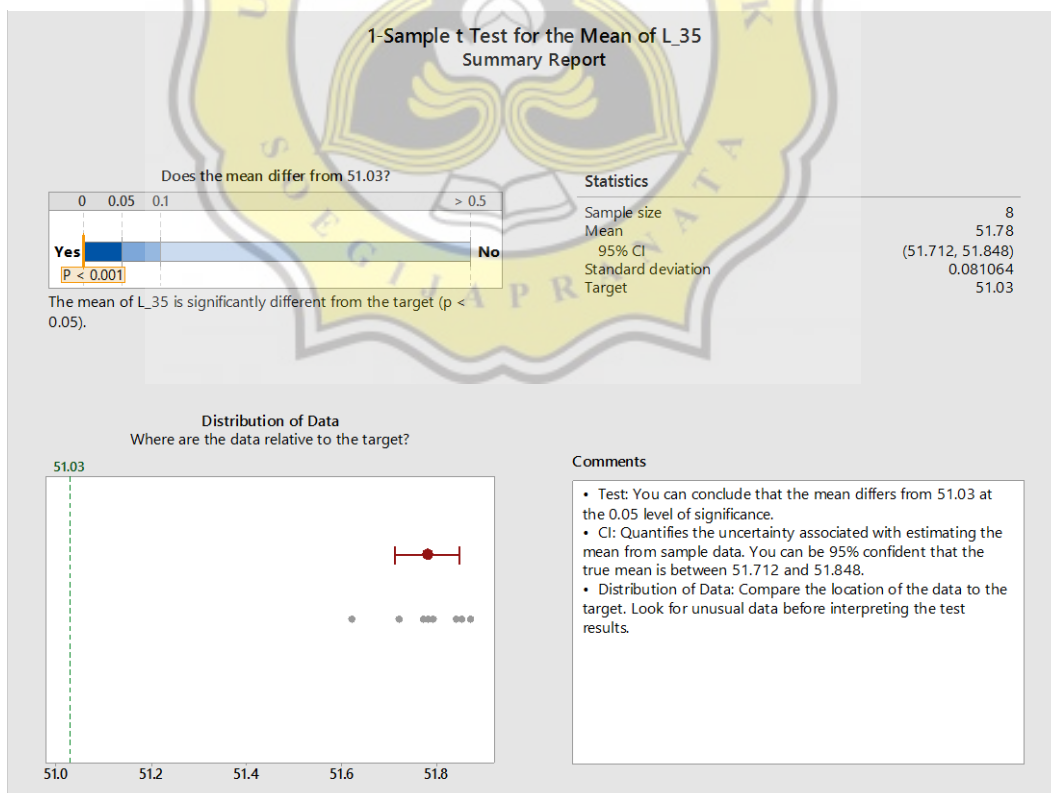
Lampiran 2. Pengujian data statistika pH pada suhu 40°C



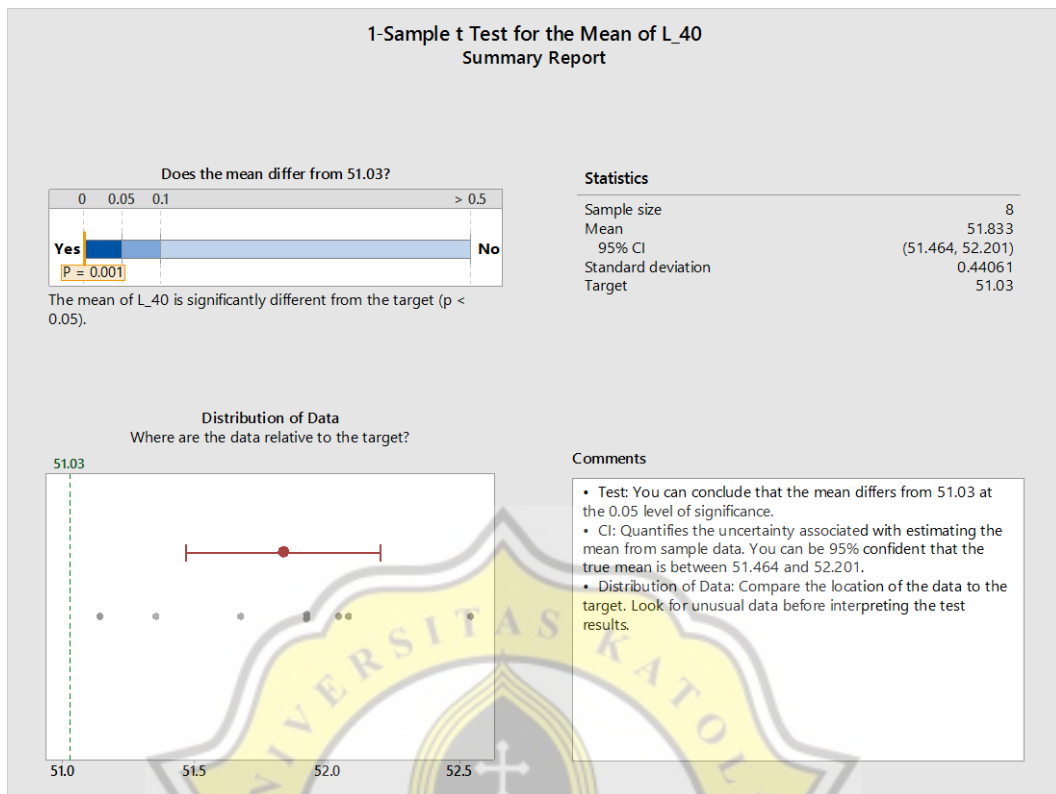
Lampiran 5. Pengujian data statistika nilai L pada suhu 30°C



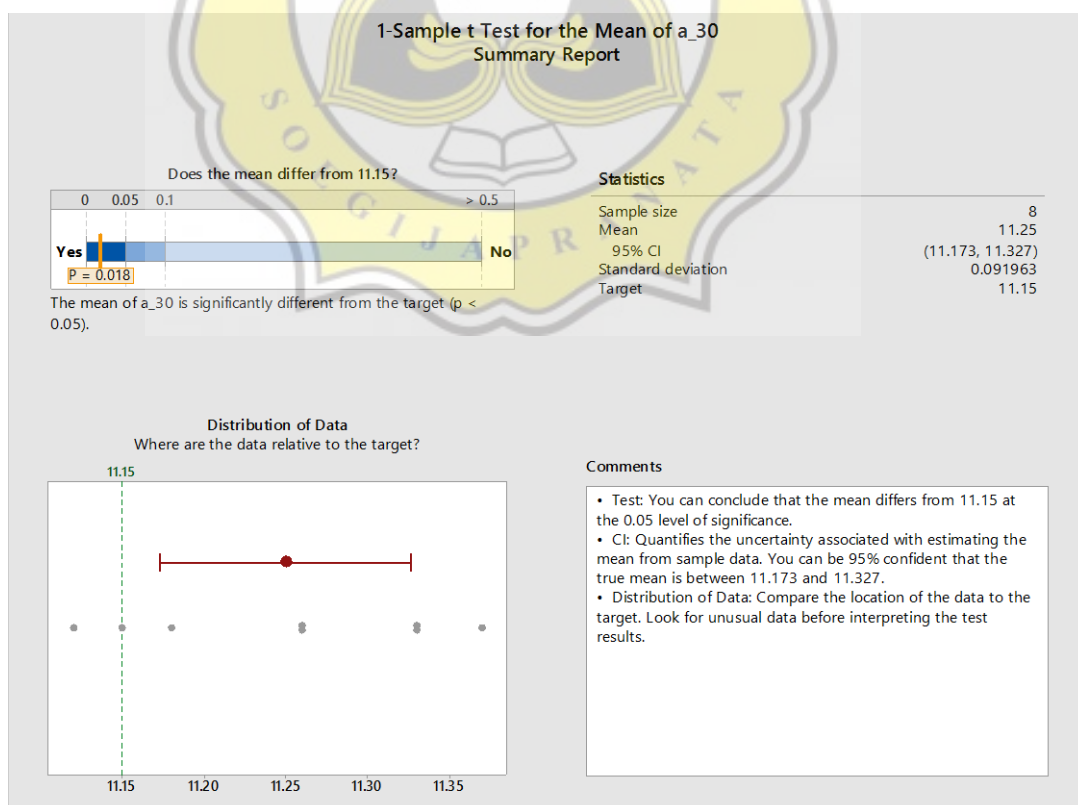
Lampiran 4. Pengujian data statistika nilai L pada suhu 35°C



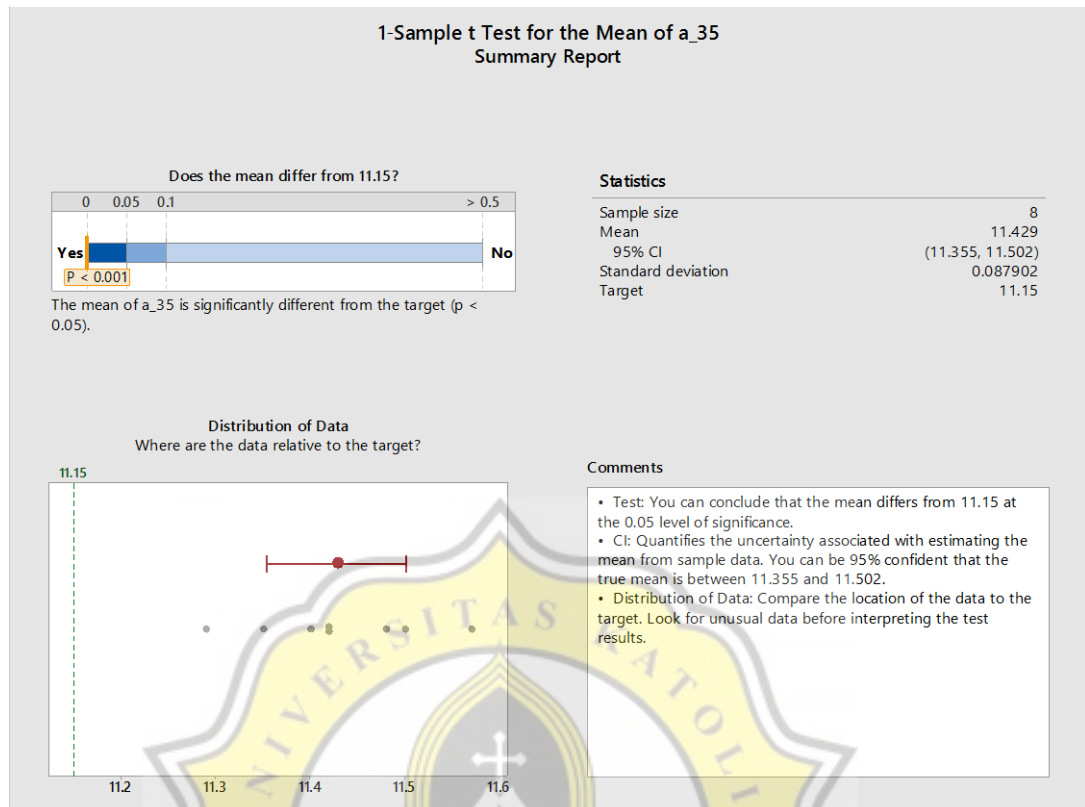
Lampiran 7. Pengujian data statistika nilai L pada suhu 40°C



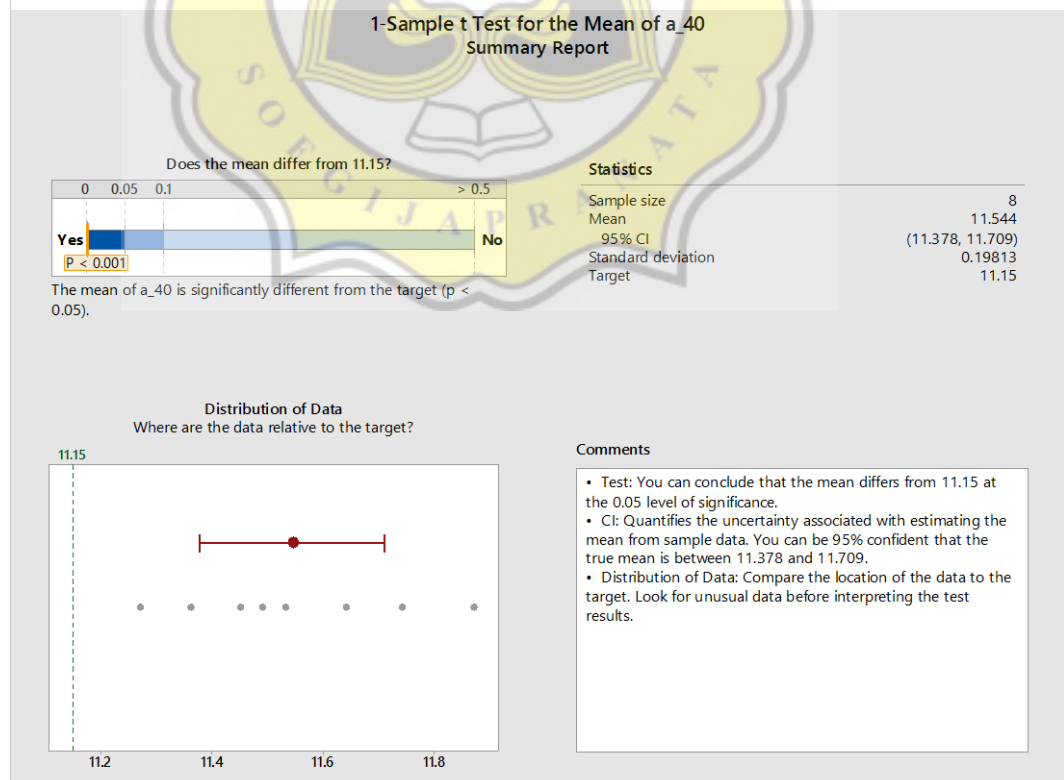
Lampiran 6. Pengujian data statistika nilai a pada suhu 30°C



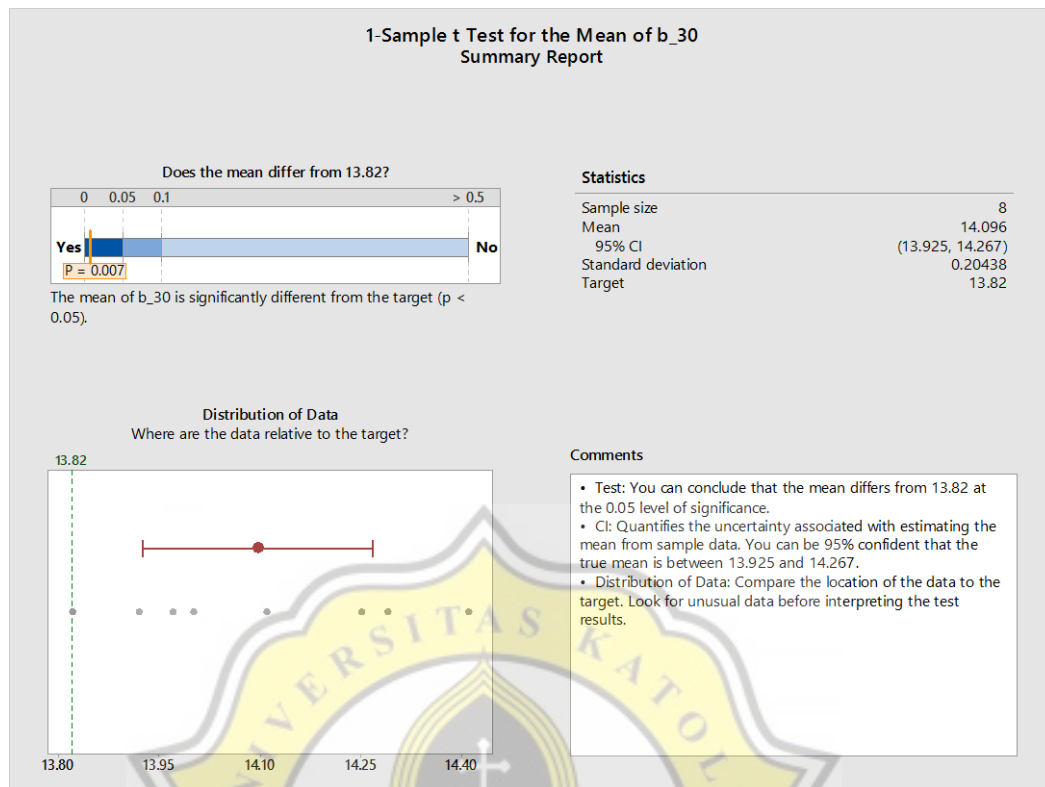
Lampiran 9. Pengujian data statistika nilai a pada suhu 35°C



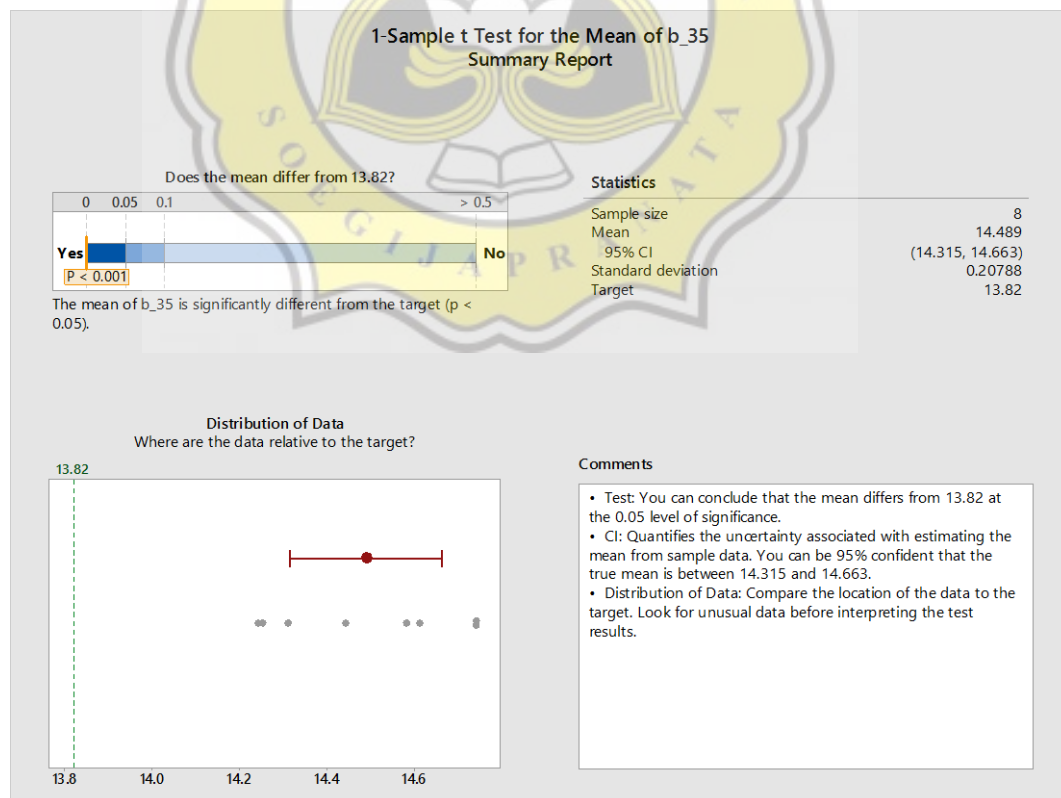
Lampiran 8. Pengujian data statistika nilai a pada suhu 40°C



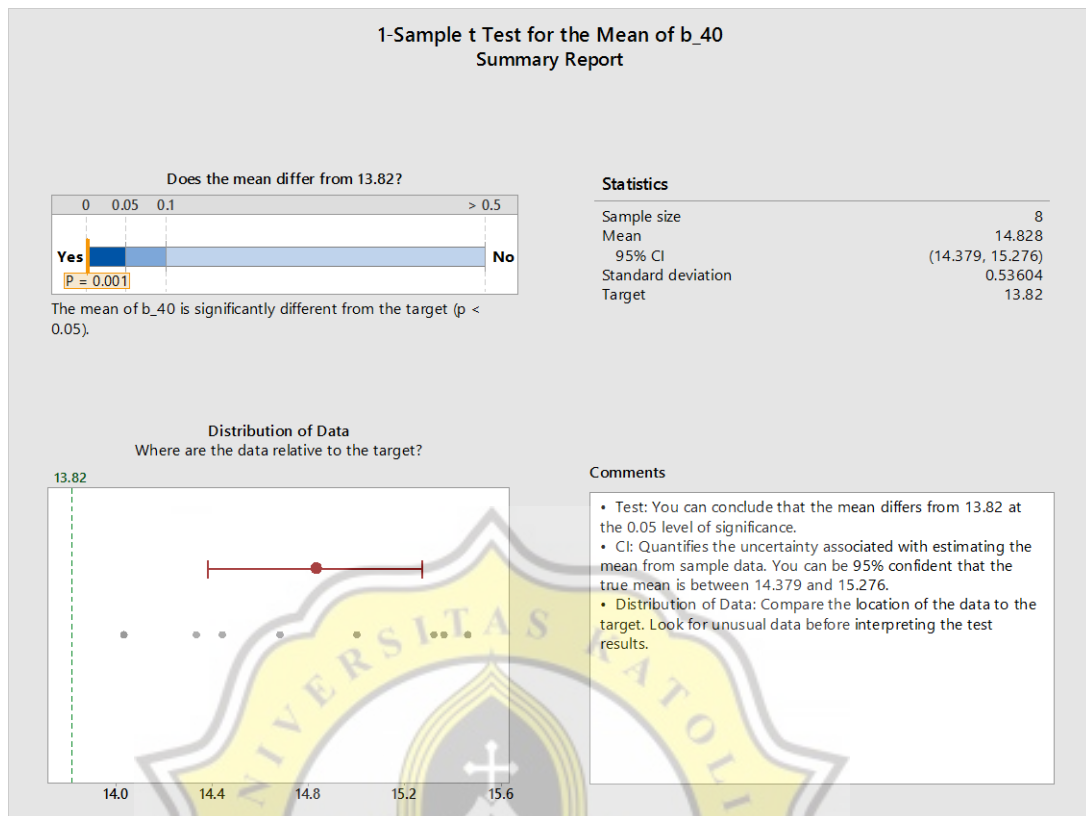
Lampiran 11. Pengujian data statistika nilai b pada suhu 30°C



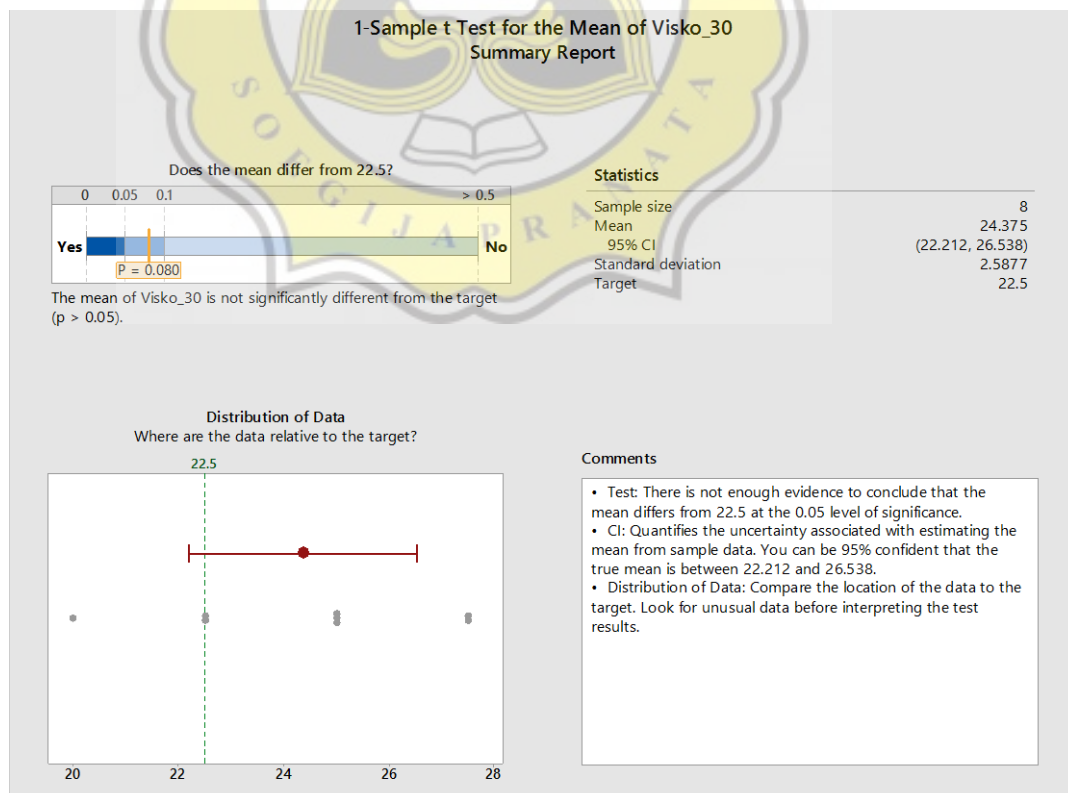
Lampiran 10. Pengujian data statistika nilai b pada suhu 35°C



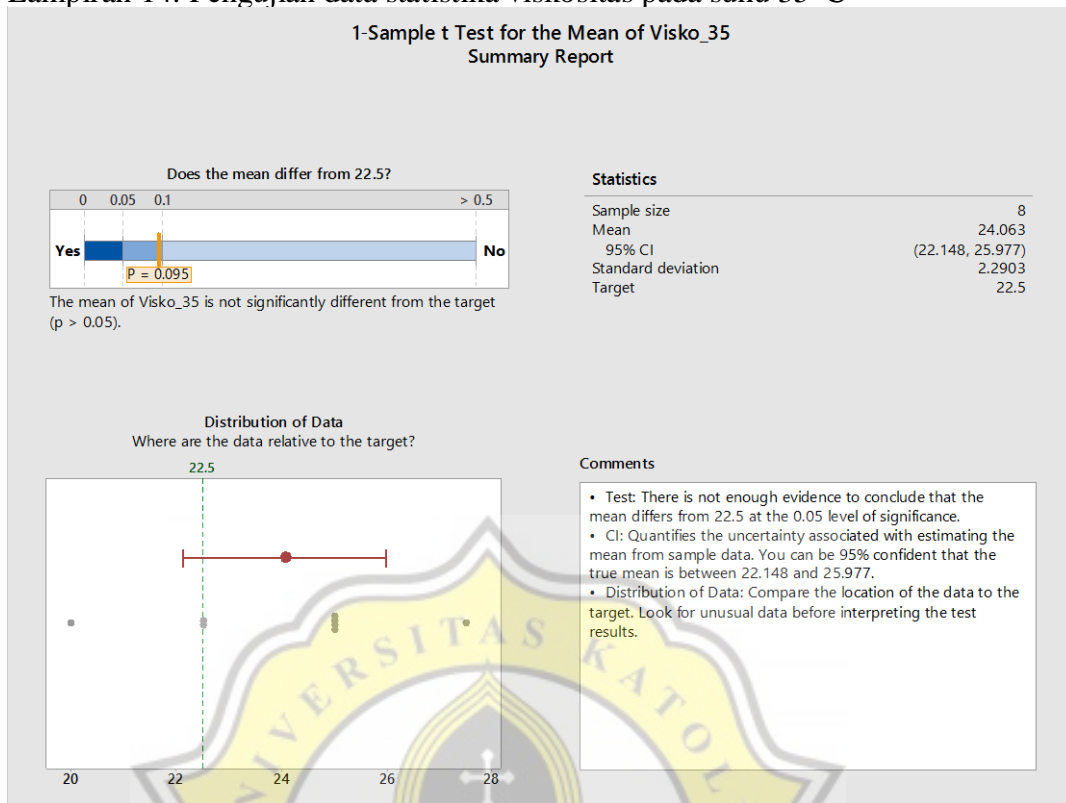
Lampiran 13. Pengujian data statistika nilai b pada suhu 40°C



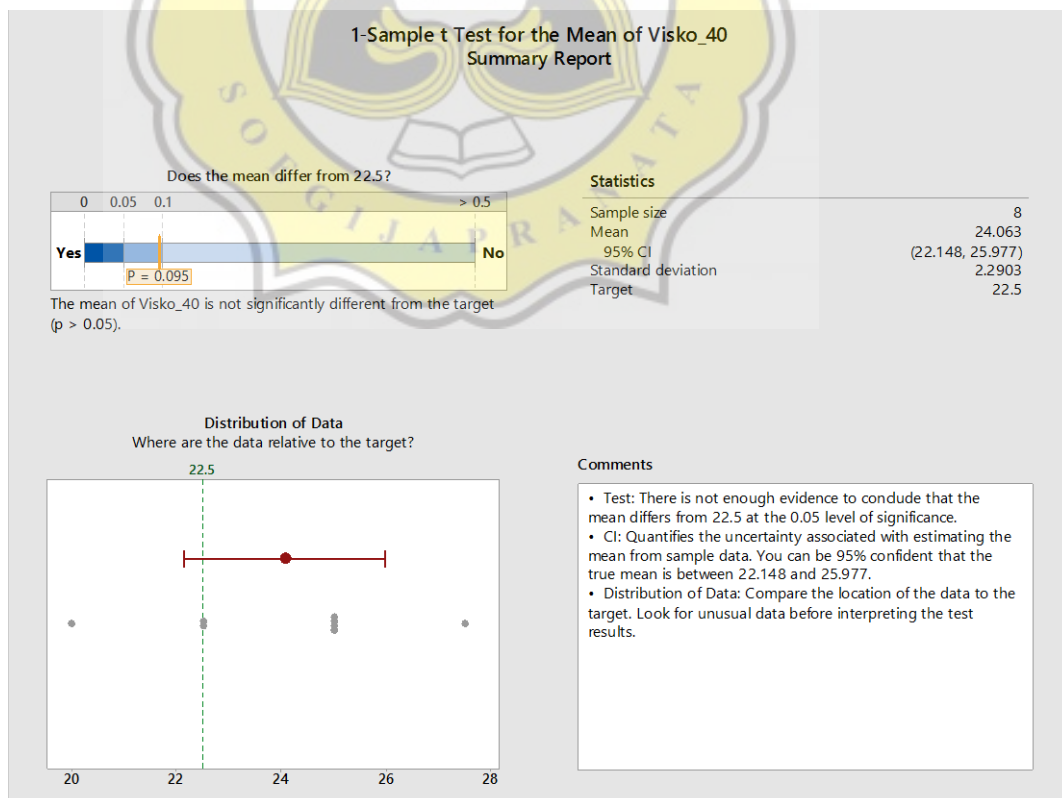
Lampiran 12. Pengujian data statistika viskositas pada suhu 30°C



Lampiran 14. Pengujian data statistika viskositas pada suhu 35°C



Lampiran 15. Pengujian data statistika viskositas pada suhu 40°C



Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
pH	Equal variances assumed	3.923	.068	2.616	14	.020	.05375	.02055	.00969	.09781
	Equal variances not assumed			2.616	10.263	.025	.05375	.02055	.00813	.09937
L	Equal variances assumed	9.525	.008	4.070	14	.001	-.42000	.10320	-.64134	-.19866
	Equal variances not assumed			4.070	8.162	.003	-.42000	.10320	-.65716	-.18284
a	Equal variances assumed	.137	.717	3.974	14	.001	-.17875	.04498	-.27522	-.08228
	Equal variances not assumed			3.974	13.972	.001	-.17875	.04498	-.27524	-.08226
b	Equal variances assumed	.050	.826	3.808	14	.002	-.39250	.10307	-.61356	-.17144
	Equal variances not assumed			3.808	13.996	.002	-.39250	.10307	-.61356	-.17144
visko	Equal variances assumed	.124	.730	.256	14	.802	.31250	1.22178	-2.30796	2.93296
	Equal variances not assumed			.256	13.796	.802	.31250	1.22178	-2.31159	2.93659

Lampiran 16. Analisa Statistika Suhu 30 dan 35°C

7.2. Hubungan Korelasi antar variable

Lampiran 17. Hubungan korelasi antar variable

	Suhu	Waktu	pH	L	a	b
Waktu	0.000					
	1.000					
pH	-0.582	-0.729				
	0.003	0.000				
L	0.543	0.299	-0.617			
	0.006	0.156	0.001			
a	0.684	0.497	-0.841	0.674		
	0.000	0.014	0.000	0.000		
b	0.671	0.400	-0.785	0.757	0.866	
	0.000	0.053	0.000	0.000	0.000	
Visko	-0.057	0.932	-0.595	0.192	0.386	0.289
	0.792	0.000	0.002	0.368	0.062	0.171

Cell Contents

Pearson correlation

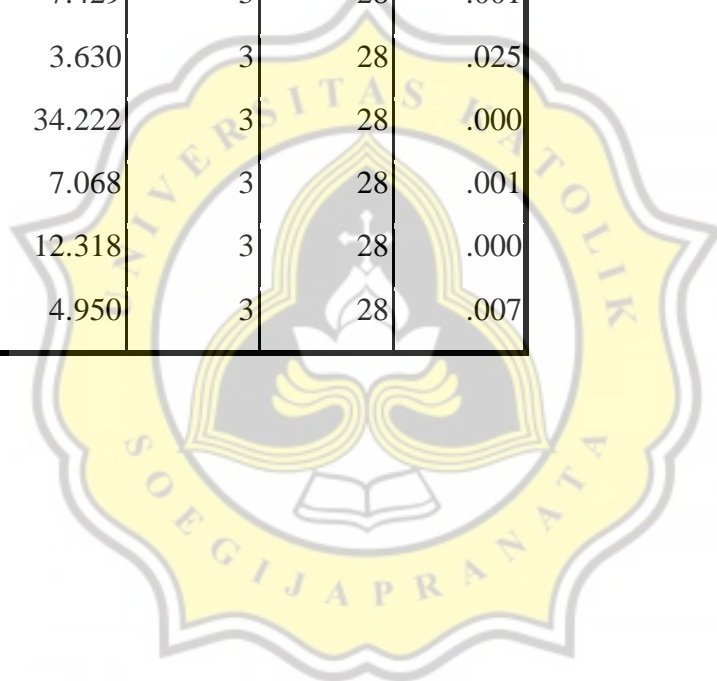
P-Value

7.3. Analisa Statistika Sensori

Lampiran 18. Tes homogenitas sensori

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Week_1	5.444	3	28	.004
Week_2	2.333	3	28	.096
Week_3	7.429	3	28	.001
Week_4	3.630	3	28	.025
Week_5	34.222	3	28	.000
Week_6	7.068	3	28	.001
Week_7	12.318	3	28	.000
Week_8	4.950	3	28	.007



ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Week_1					
Between Groups	.094	3	.031	1.000	.407
Within Groups	.875	28	.031		
Total	.969	31			
Week_2					
Between Groups	.000	3	.000	.000	1.000
Within Groups	2.000	28	.071		
Total	2.000	31			
Week_3					
Between Groups	.625	3	.208	.805	.502
Within Groups	7.250	28	.259		
Total	7.875	31			
Week_4					
Between Groups	.250	3	.083	1.333	.283
Within Groups	1.750	28	.063		
Total	2.000	31			
Week_5					
Between Groups	.594	3	.198	.662	.583
Within Groups	8.375	28	.299		
Total	8.969	31			
Week_6					
Between Groups	5.344	3	1.781	12.871	.000
Within Groups	3.875	28	.138		
Total	9.219	31			

Week_7	Between Groups	4.844	3	1.615	9.274	.000
	Within Groups	4.875	28	.174		
	Total	9.719	31			
Week_8	Between Groups	5.594	3	1.865	7.594	.001
	Within Groups	6.875	28	.246		
	Total	12.469	31			

Lampiran 19. Tes ANOVA sensori



Multiple Comparisons

Dunnnett t (2-sided)

Dependent Variable	(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Week_1	30C	5C	.00000	.08839	1.000	-.2195	.2195
	35C	5C	.12500	.08839	.369	-.0945	.3445
	40C	5C	.00000	.08839	1.000	-.2195	.2195
Week_2	30C	5C	.00000	.13363	1.000	-.3318	.3318
	35C	5C	.00000	.13363	1.000	-.3318	.3318
	40C	5C	.00000	.13363	1.000	-.3318	.3318
Week_3	30C	5C	-.12500	.25443	.928	-.7568	.5068
	35C	5C	.12500	.25443	.928	-.5068	.7568
	40C	5C	-.25000	.25443	.642	-.8818	.3818
Week_4	30C	5C	.00000	.12500	1.000	-.3104	.3104
	35C	5C	-.12500	.12500	.630	-.4354	.1854
	40C	5C	.12500	.12500	.630	-.1854	.4354
Week_5	30C	5C	.00000	.27345	1.000	-.6790	.6790
	35C	5C	.25000	.27345	.689	-.4290	.9290
	40C	5C	-.12500	.27345	.940	-.8040	.5540
Week_6	30C	5C	.00000	.18601	1.000	-.4619	.4619
	35C	5C	-.37500	.18601	.131	-.8369	.0869
	40C	5C	-1.00000*	.18601	.000	-1.4619	-.5381
Week_7	30C	5C	-.12500	.20863	.880	-.6430	.3930
	35C	5C	-.50000	.20863	.060	-1.0180	.0180
	40C	5C	-1.00000*	.20863	.000	-1.5180	-.4820
Week_8	30C	5C	.00000	.24776	1.000	-.6152	.6152

35C	5C	-.12500	.24776	.923	-.7402	.4902
40C	5C	-1.00000*	.24776	.001	-1.6152	-.3848


*. The mean difference is significant at the 0.05 level.

Lampiran 20. Uji beda sensori




7.4. Laporan Kalibrasi pH Meter

Lampiran 21. Tes Kalibrasi pH Meter



PT. TRI ARTHA MANUNGGAL
LABORATORY OF CALIBRATION - REPAIR - NDT-TRAINING SERVICES

LAMPIRAN SERTIFIKAT
Attachment of Certificate



Komite Akreditasi Nasional
Laboratorium Kalibrasi
LK - 099 - ICM

Laboratorium : Panorama Serpong Blok C2/12, Bakti Jaya Setu,
Tangerang Selatan 15315.
Telp. : (021) 7564916, (021) 29308235

Metoda dan Standar Kalibrasi
Calibration Method and Standard Technical Specification

Alat ini di kalibrasi dengan menggunakan SRM pH-buffer, Hanna: HI-7004, HI-7007, dan HI-7010 yang tertelusur ke Satuan Internasional (SI) melalui Hanna Instruments.
This instrument is calibrated using Hanna: HI-7004, HI-7007, and HI-7010 pH-buffer SRM traceable to International System of unit (SI) through Hanna Instruments.

Metode kalibrasi yang digunakan sesuai dengan Prosedur Kerja No. PK-AI-02. Penunjukan pH-meter (DUT) dibandingkan terhadap SRM pH-buffer.
Calibration method used in accordance with the Working Procedures No. PK-AI-02, pH-meter display (DUT) is compared to the pH-buffer SRM.

Perhitungan ketidakpastian pengukuran mengacu pada JCGM 100:2008, "Evaluation of Measurement Data, Guide to The Expression of Uncertainty in Measurement", dengan tingkat kepercayaan 95 %.
Calculation of measurement uncertainty refers to JCGM 100:2008, "Evaluation of Measurement Data, Guide to The Expression of Uncertainty in Measurement", with a 95% confidence level.

Temperatur Ruang / Room Temperature	Kelembaban Relatif / Relative Humidity
(24.5 ± 0.1) °C	(58 ± #) %

HASIL KALIBRASI
Calibration Result

Nama Alat : pH METER
Instrument Name
Merk : WTW
Manufacture
Nomor Seri : 19140633
Serial Number

Temp. pH buffer (°C)	Penunjukan Standard (pH)	Penunjukan Alat (pH)	Ketidakpastian ± (pH)
26.2	4.01	4.009	0.013
26.2	7.01	7.014	0.013
26.2	10.00	9.986	0.020

The Uncertainty is taken a Confidence Level 95 % and Coverage Factor (k) = **2.00**

Nomor : S-19063507
Number
Halaman : 2 dari 2
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Branch Office : Perumahan Puri Jingga Hunian Indah Kav. Royal Enfield. Jl. PIHI - Batakan - Balikpapan Timur



7.9% PLAGIARISM
APPROXIMATELY

Report #10453248

RINGKASAN Produk pangan pada umumnya memiliki batas masa penyimpanan yang biasa disebut dengan *expired date*. Pengujian umur simpan sendiri dilakukan untuk memberikan informasi kepada konsumen mengenai tingkat kesegaran produk tersebut dan keamanan produk itu sendiri. Selama proses penyimpanan makanan, umumnya terdapat beberapa perubahan yang terjadi, baik dari segi kimiawi maupun segi fisiknya. Susu merupakan salah satu produk pangan yang mudah mengalami kerusakan. Susu umumnya memiliki umur simpan kurang lebih 5 jam pada suhu ruang. Kerusakan susu dapat disebabkan karena adanya kontaminasi dari mikroba atau perubahan dari segi kimianya. Susu dapat diperpanjang umur simpannya dengan dilakukannya proses lebih lanjut, salah satunya adalah produk susu Ultra High Temperature (UHT), dimana susu akan diproses lebih lanjut dengan menggunakan proses pemanasan dan dikemas secara aseptik. Pengujian umur simpan sendiri dapat dilakukan dengan menggunakan dua metode yaitu *Extended Storage Studies (ESS)* dan *Accelerated Shelf Life Test (ASLT)*. Metode ASLT dilakukan dengan menciptakan kondisi se - ekstrem mungkin sehingga kerusakan dapat terjadi lebih cepat, sehingga pada produk pangan yang memiliki umur simpan lama, lebih efektif menggunakan metode ini. PT XYZ telah melakukan pengujian umur