GLOSSARY

AOCS	American Oil Chemists' Society
ASTM	American Society for Testing and Materials
AN	Acid Number
BHT	Butylated Hydroxytoluene
Binary antioxidants	The usage of two antioxidants
EN	European Standard
FAME	Fatty Acid Methyl Ester
GMS	Glycerol Monostearate
Gt	Gross tonnage
IEA	International Energy Agency
IP	Induction Period
IV	Iodine Value
KI	Potassium Iodide
KOH	Potassium Hydroxide
NZE	Net Zero Emission
POB	Palm Oil Biodiesel
PPM	Parts per million
PY	Pyrogallol
SNI	Indonesian National Standard
TBHQ	Tert-butylhydroquinone
UV/VIS	UV–visible spectrophotometry

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APPENDIX

Appendix A. Kinematic Viscosity at 40 °C Laboratory Result Week 0

1. B100

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT
No. 00368/BBM/SO/IV/23

Customer Name	: SWISS GERMAN UNIVERSITY	Unit No/SN	:
Address	:	Eng. Type/Model	:
For Customer	: SWISS GERMAN UNIVERSITY	Sample Name	: B100
Eng Location	:	Typical	: BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00359/F/23		
Sample Date					
Receive Date			2023-04-04		
Analysis Date					
Report Date			2023-04-06		
Hours on Oil					
Hours on Unit					
Sample Name			B100		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21	4.417	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022
**Worldwide Fuel Character 2013
Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.
Notes : N=Normal, B=Attention, C=Urgent, D=Severe
[7] Di luar ruang lingkup Akreditasi
[+0] Parameter Subcontract

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2. B100-TBHQ

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT
No. 00370/BBM/SO/IV/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00361/F/23		
Sample Date					
Receive Date			2023-04-04		
Analysis Date					
Report Date			2023-04-06		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21	4.400	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022
**Worldwide Fuel Character 2013
Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.
Notes : N=Normal, B=Attention, C=Urgent, D=Severe
*) Di luar ruang lingkup Akreditasi
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Page 1 of 1

3. B100 + BHT

PT PETROLAB SERVICES
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ANALYSIS REPORT
No. 00369/BBM/SO/IV/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + BHT
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00360/F/23		
Sample Date					
Receive Date			2023-04-04		
Analysis Date					
Report Date			2023-04-06		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + BHT		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21	4.386	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

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Page 1 of 1

4. B100 + binary

PT PETROLAB SERVICES
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ANALYSIS REPORT

No. 00371/BBM/SO/IV/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ : BHT
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00362/F/23		
Sample Date					
Receive Date			2023-04-04		
Analysis Date					
Report Date			2023-04-06		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ : BHT		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21	4.489	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

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Page 1 of 1

5. B100 + Binary + GMS

PT PETROLAB SERVICES
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ANALYSIS REPORT

No. 00372/BBM/SO/IV/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ : HBT + GMS
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00363/F/23		
Sample Date					
Receive Date			2023-04-04		
Analysis Date					
Report Date			2023-04-06		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ : HBT + GMS		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21	4.481	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

*) Di luar ruang lingkup Akreditasi

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Page 1 of 1

Appendix B. Kinematic Viscosity at 40 °C Laboratory Result Week 8

1. B100

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT
No. 00546/BBM/SO/V/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00546/F/23		
Sample Date					
Receive Date			2023-05-26		
Analysis Date					
Report Date			2023-05-31		
Hours on Oil					
Hours on Unit					
Sample Name			B100		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21e2	4.505	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022
**Worldwide Fuel Character 2013
Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.
Notes : N=Normal, B=Attention, C=Urgent, D=Severe
*) Di luar ruang lingkup Akreditasi
**) Parameter Subcontract

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Page 1 of 1

2. B100 + TBHQ

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT
No. 00549/BBM/SO/V/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00549/F/23		
Sample Date					
Receive Date			2023-05-26		
Analysis Date					
Report Date			2023-05-31		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21e2	4.524	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022
**Worldwide Fuel Character 2013
Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.
Notes : N=Normal, B=Attention, C=Urgent, D=Severe
*) Di luar ruang lingkup Akreditasi
**) Parameter Subcontract

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Page 1 of 1

3. B100 + BHT

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT

No. 00548/BBM/SO/V/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + BHT
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00548/F/23		
Sample Date					
Receive Date			2023-05-26		
Analysis Date					
Report Date			2023-05-31		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + BHT		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21e2	4.536	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

*) Di luar ruang lingkup Akreditasi

**) Parameter Subcontract

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Page 1 of 1

4. B100 + binary

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT

No. 00547/BBM/SO/V/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ : BHT
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00547/F/23		
Sample Date					
Receive Date			2023-05-26		
Analysis Date					
Report Date			2023-05-31		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ : BHT		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21e2	4.481	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Endriastuti, S.Si

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

*) Di luar ruang lingkup Akreditasi

**) Parameter Subcontract

RK/7.8/04

PT Petrolab Services
Jl Pisangan Lama III No 28 - Jakarta Timur 13230; Telp: +62 21 2968 8694; Fax: +62 21 2968 8693
customerservice@petrolab.co.id; http://www.petrolab.co.id

Page 1 of 1

5. B100 + binary + GMS

PT PETROLAB SERVICES
Independent Laboratory

ANALYSIS REPORT

No. 00550/BBM/SO/V/23

Customer Name	:	SWISS GERMAN UNIVERSITY	Unit No/SN	:	
Address	:		Eng. Type/Model	:	
For Customer	:	SWISS GERMAN UNIVERSITY	Sample Name	:	B100 + TBHQ : BHT GMS
Eng Location	:		Typical	:	BIODIESEL (EBTKE No. 195 .K/EK.05/DJE/2022)

Test Detail				Overall Analysis Result	
Lab Number			00550/F/23		
Sample Date					
Receive Date			2023-05-26		
Analysis Date					
Report Date			2023-05-31		
Hours on Oil					
Hours on Unit					
Sample Name			B100 + TBHQ : BHT GMS		
No	**Parameter**	**Unit**	**Method**	**Result**	**Typical**
1	Kinematic Viscosity at 40°C	cSt	ASTM D445-21e2	4.510	2.3-6.0

Berdasarkan Standar dan Mutu Spesifikasi Bahan Bakar Nabati Jenis Biodiesel Sebagai Bahan Bakar Lain Yang Dipasarkan Di Dalam Negeri No. 195 .K/EK.05/DJE/2022

**Worldwide Fuel Character 2013

Remark

Manager Teknis

Catatan : Data analisa hanya berlaku untuk sample yang diuji di laboratorium PT. Petrolab Services
Pengaduan tidak dilayani setelah 30 hari dari tanggal report di terbitkan
Report tidak boleh digandakan tanpa persetujuan tertulis dari laboratorium.

Notes : N=Normal, B=Attention, C=Urgent, D=Severe

*) Di luar ruang lingkup Akreditasi

Endriastuti, S.Si

+*) Parameter Subcontract

RK/7.8/04

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Page 1 of 1

Appendix C. Rancimat Laboratory Result Week 4

1. B100

DIREKTORAT PENGELOLAAN LABORATORIUM, FASILITAS RISET, DAN KAWASAN SAINS TEKNOLOGI
Gedung B.J. Habibie, Jalan M.H. Thamrin Nomor 8
Jakarta Pusat 10340
Telepon/WA: 0811 8612 392
https://www.brin.go.id

LAPORAN HASIL UJI LABORATORIUM
REPORT OF LABORATORY TEST RESULT

LABORATIUM PENGUJI/*LABORATORY*:
Nama/*Name* : **Laboratorium Bahan Bakar dan Rekayasa Desain**
Alamat/*Address* : Gedung 480 Kawasan Puspiptek Tangerang Selatan, Indonesia 15314

DATA PERCONTOH/*SAMPLE DATA*:
Nomor ID ELSA /*Transaction Number* : **90423**
Jenis/*Type* : Biodiesel
Identifikasi/*Identification* : Biodiesel
Jumlah/*Quantity* (*volume*) : 100 mL
Pengambil Sampel/*Sampler* : Pelanggan
Tanggal Pengambilan/*Sampling Date* : -
Tanggal Diterima/*Received Date* : 18 April 2023
Tanggal Analisis/*Date of Analysis* : 4 - 15 Mei 2023

HASIL PENGUJIAN/*TEST RESULT*

NO	PARAMETER	SATUAN/ *UNIT*	NILAI/ *RESULT*	METODE/ *METHOD*
			2634-90423-1	
1	Stabilitas Oksidasi	jam	23.68	EN 15751

Manajer Laboratorium,

TT ELEKTRONIK

Maharani Dewi Solikhah, S.T., M.Sc.
NIP. 197804212001122002

Catatan/*Note*:
Hasil analisa ini hanya berlaku untuk sampel yang diuji. Sertifikat tidak boleh diperbanyak tanpa izin dari Laboratorium Bahan Bakar dan Rekayasa Desain - BRIN. Daftar sampel yang dilakukan pengujian terdapat di lembar pengesahan. Penamaan sampel sesuai dengan penamaan pada saat permohonan pengajuan layanan.
Terima kasih sudah melakukan pengujian/ penyewaan alat/ proses riset dengan fasilitas yang tersedia di Laboratorium Bahan Bakar dan Rekayasa Desain - BRIN. Jika di kemudian hari, hasil pengujian atau analisis ini akan dipublikasikan, mohon kiranya bisa menambahkan dalam Ucapan Terima Kasih atau Acknowledgement di dalam publikasi Anda, seperti dalam contoh format berikut:

Dalam bahasa Indonesia : "Penelitian ini didukung oleh fasilitas riset, dan dukungan ilmiah serta teknis dari Laboratoium Bahan Bakar dan Rekayasa Desain di Badan Riset dan Inovasi Nasional".
Dalam bahasa Inggris : "The authors acknowledge the facilities, scientific and technical support from Laboratory for Fuel and Engineering Design, National Research and Innovation Agency through E-Layanan Sains, Badan Riset dan Inovasi Nasional.

Dokumen ini ditandatangani secara elektronik menggunakan sertifikat dari BSrE, silahkan lakukan verifikasi pada dokumen elektronik yang dapat diunduh dengan melakukan scan QR Code

2. B100+binary and B100+binary+GMS

With notes 2634-89645-1 is B100-binary and 2634-89645-2 is B100-binary+GMS

DIREKTORAT PENGELOLAAN LABORATORIUM, FASILITAS RISET, DAN KAWASAN SAINS TEKNOLOGI
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LAPORAN HASIL UJI LABORATORIUM
REPORT OF LABORATORY TEST RESULT

LABORATIUM PENGUJI/*LABORATORY*:
Nama/*Name* : **Laboratorium Bahan Bakar dan Rekayasa Desain**
Alamat/*Address* : Gedung 480 Kawasan Puspiptek Tangerang Selatan, Indonesia 15314

DATA PERCONTOH/*SAMPLE DATA*:
Nomor ID ELSA /*Transaction Number* : **89645**
Jenis/*Type* : Biodiesel
Identifikasi/*Identification* : Biodiesel dengan campuran antioxidant
Jumlah/*Quantity* (*volume*) : 100 mL
Pengambil Sampel/*Sampler* : Pelanggan
Tanggal Pengambilan/*Sampling Date* : -
Tanggal Diterima/*Received Date* : 12 April 2023
Tanggal Analisis/*Date of Analysis* : 4 - 15 Mei 2023

HASIL PENGUJIAN/*TEST RESULT*

NO	PARAMETER	SATUAN/ *UNIT*	NILAI/ *RESULT*	METODE/ *METHOD*
			2634-89645-1	
1	Stabilitas Oksidasi	jam	163.74 *)	EN 15751
			2634-89645-2	
1	Stabilitas Oksidasi	jam	160.68 *)	EN 15751

*) Perhitungan presisi tidak tercakup dalam ketentuan presisi metode EN 15751 karena melebihi 48 jam.

Manajer Laboratorium,

TT ELEKTRONIK

Maharani Dewi Solikhah, S.T., M.Sc.
NIP. 197804212001122002

Catatan/*Note*:
Hasil analisa ini hanya berlaku untuk sampel yang diuji. Sertifikat tidak boleh diperbanyak tanpa izin dari Laboratorium Bahan Bakar dan Rekayasa Desain - BRIN. Daftar sampel yang dilakukan pengujian terdapat di lembar pengesahan. Penamaan sampel sesuai dengan penamaan pada saat permohonan pengajuan layanan.
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Dalam bahasa Indonesia : "Penelitian ini didukung oleh fasilitas riset, dan dukungan ilmiah serta teknis dari Laboratoium Bahan Bakar dan Rekayasa Desain di Badan Riset dan Inovasi Nasional".
Dalam bahasa Inggris : "The authors acknowledge the facilities, scientific and technical support from Laboratory for Fuel and Engineering Design, National Research and Innovation Agency through E-Layanan Sains, Badan Riset dan Inovasi Nasional.

Appendix D. Rancimat Laboratory Result Week 4

With notes that 2634-95648-1 is B100, 2634-95648-2 is B100+binary, and 2634-95648-3 is B100+binary+GMS

DIREKTORAT PENGELOLAAN LABORATORIUM, FASILITAS RISET, DAN KAWASAN SAINS TEKNOLOGI
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LAPORAN HASIL UJI LABORATORIUM
REPORT OF LABORATORY TEST RESULT

LABORATIUM PENGUJI/*LABORATORY*:
Nama/*Name* : **Laboratorium Bahan Bakar dan Rekayasa Desain**
Alamat/*Address* : Gedung 480 Kawasan Puspiptek Tangerang Selatan, Indonesia 15314

DATA PERCONTOH/*SAMPLE DATA*:
Nomor ID ELSA /*Transaction Number* : **95468**
Jenis/*Type* : Biodiesel
Identifikasi/*Identification* : Biodiesel yang ditambahkan bahan aditif
Jumlah/*Quantity* (*volume*) : 100 mL
Pengambil Sampel/*Sampler* : Pelanggan
Tanggal Pengambilan/*Sampling Date* : -
Tanggal Diterima/*Received Date* : 29 Mei 2023
Tanggal Analisis/*Date of Analysis* : 6 – 15 Juni 2023

HASIL PENGUJIAN/*TEST RESULT*

NO	PARAMETER	SATUAN/ *UNIT*	NILAI/ *RESULT*	METODE/ *METHOD*
			2634-95648-1	
1	Stabilitas Oksidasi	jam	16.81	EN 15751
			2634-95648-2*)	
1	Stabilitas Oksidasi	jam	170.29	EN 15751
			2634-95648-3*)	
1	Stabilitas Oksidasi	jam	167.28	EN 15751

*) Perhitungan presisi tidak tercakup dalam ketentuan presisi metode EN 15751 karena melebihi 48 jam.

Manajer Laboratorium,

TT ELEKTRONIK
BRIN

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Catatan/*Note*:
Hasil analisa ini hanya berlaku untuk sampel yang diuji. Sertifikat tidak boleh diperbanyak tanpa izin dari Laboratorium Bahan Bakar dan Rekayasa Desain - BRIN. Daftar sampel yang dilakukan pengujian terdapat di lembar pengesahan. Penamaan sampel sesuai dengan penamaan pada saat permohonan pengajuan layanan.
Terima kasih sudah melakukan pengujian/ penyewaan alat/ proses riset dengan fasilitas yang tersedia di Laboratorium Bahan Bakar dan Rekayasa Desain - BRIN. Jika di kemudian hari, hasil pengujian atau analisis ini akan dipublikasikan, mohon kiranya bisa menambahkan dalam Ucapan Terima Kasih atau Acknowledgement di dalam publikasi Anda, seperti dalam contoh format berikut:
Dalam bahasa Indonesia : "Penelitian ini didukung oleh fasilitas riset, dan dukungan ilmiah serta

CURRICULUM VITAE

CHELSELYN CHARISSA CHUACA

SUSTAINABLE ENERGY AND ENVIRONMENT

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Deutsch: basic

Computer skills
Ms. Word
Ms. PowerPoint
Ms. Excel
iMovie
Photoshop
Premiere Pro

HOBBIES

- Read self development book
- Editing
- Badminton

Updated on June 10, 2023

Chelselyn Charissa Chuaca

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2019-2023 | Swiss German University
Faculty: Life Sciences and Technology

2016-2019 | Petra 1 Christian Senior High School
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EXPERIENCE

Juli – August 2021 | Internship at P3TKEBTKE (The State Research and Development Center for Electricity Technology, Renewable Energy and Energy Conservation)

August 2021 | Oral presenter at "The 6th International Conference on Food, Agriculture, and Natural Resources (FANRes) 2021"

March - July 2023 | Internship at Institute for Biogas, Waste Management, and Energy

ORGANIZATIONAL EXPERIENCE

2021 | Vice President of the Bible Fellowship
2021 | Member of the Public Relations Department of the Life Sciences and Technology Students' Association for the "LST Charity" event
March – May 2021 | Head of event division of Virtual Innovative Chemistry Event (VICE)
2020 - 2021 | Head of Public Relations Department of Chemical Engineering Students Association (ACES)
2020 - 2021 | Member of Board of Executives Public Relation and Documentation Division
2019 - 2020 | Member of the events division Association of Chemical Engineering Students (ACES)
2020 | Head of the Creative Arts Division of the Bible Fellowship
December 2020 | Member of the committee for the event "Indonesian Fun Science Award 3.0"
2019-2020 | Member of Event club
2019 - 2023 | Student Ambassador of Swiss German University