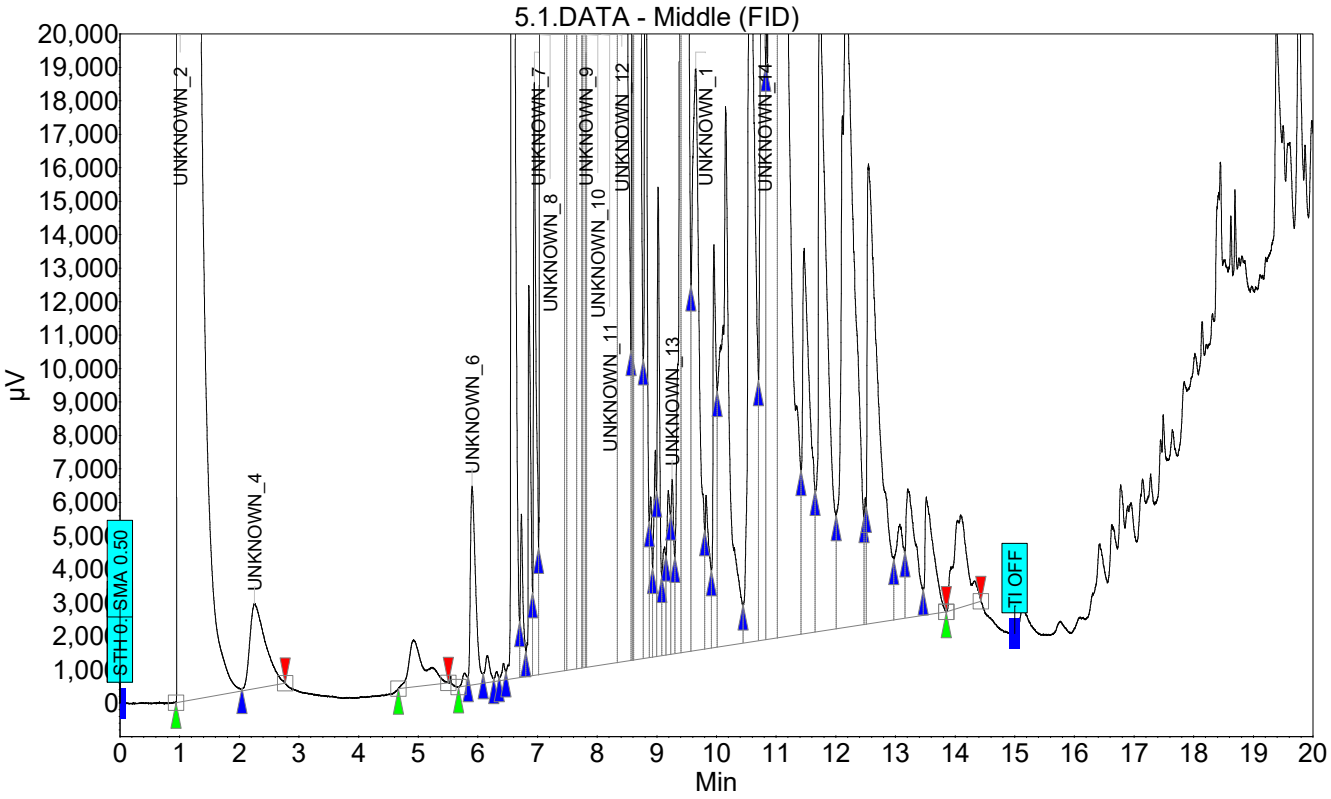
Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.



CHROMATOGRAM METHOD REPORT :

Control method :

Scion/Bruker/Varian 400-GC Series (Exclu

Autosampler (8410)

Autosampler	ENABLED
First injector used	Position 2
Syringe volume	10 uL
Advance tray	NO
Clean between injections	NO
Use injection delay	NO
Delay between injections	1.0 min
Injection mode	Std (Split/Splitless)
Sample penetration depth	90 %
Solvent penetration depth	90 %

Abort clean

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Vial	I
Volume	5.0 uL
Strokes	1
Drawup speed	5.0 uL/s

Clean mode

Pre-injection solvent flushes	3
Pre-injection sample flushes	0
Post-injection solvent flushes	5
Clean solvent source	I

Injectors

Front (PWOC)

EFC 23 - Flow program	Rate (mL/min/min)	Step (mL/min)	Time (min)
	Initial	10.0	0.00
		Total time	0.00

EFC 23

Enabled	OFF

Heat-only zone 1

Heater	OFF
Setpoint	50 °C

Middle (S/SL)

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Split event table	Time (min)	Split state	Split ratio
	Initial	ON	25

EFC 25

Enabled	ON

Heat-only zone 2

Heater	ON
Setpoint	230 °C

Column oven

Stabilization time	0.50 min

Column oven zone

Heater	ON

Temperature program	Rate (°C/min)	Step (°C)	Time (min)
	Initial	100	4.00
	25.0	200	8.00
	20.0	250	5.00
		Total time	23.50

Valve oven

Rear (Small valve oven)

Heat-only zone 3

Heater	OFF
Setpoint	50 °C

Columns

Front

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Carrier gas	Helium
Length	15.00 m
Inside diameter	200 um
Type	WCOT

Middle

Carrier gas	Helium
Length	30.00 m
Inside diameter	320 um
Type	PLOT

Pressure mode	Constant flow
Column flow	2.20 mL/min
Pressure pulse	DISABLED

Detectors

Heat-only zone 4

Heater	OFF
Setpoint	50 °C

Front (TCD)

Electronics	OFF
Time constant	Fast
Data rate	10 Hz

Filament temp. limit	390 °C
Filament temperature	50 °C

TCD event table	Time (min)	Range	Autozero	Polarity
	Initial	0.05	YES	POSITIVE

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

EFC 14

Enabled	OFF
Make-up (Helium) flow	25 mL/min
Reference (Helium) flow	30.0 mL/min

Heat-only zone 5

Heater	ON
Setpoint	250 °C

Middle (FID)

Electronics	ON
Time constant	Fast
Data rate	10 Hz

FID event table	Time (min)	Range	Autozero
	Initial	12	YES

EFC 11

Enabled	ON
Make-up (Nitrogen) flow	28 mL/min
Combustion (H2) flow	30.0 mL/min
Combustion (Air) flow	300.0 mL/min

Ouput ports

Front

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Front	0

Middle

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Middle	0

Rear

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Rear	0

Valves

Valve event table	Time (min)	Gas Sample Valve
	Initial	Fill

Miscellaneous

Start automatically when ready	NO

Acquisition :
Run Name : 5.1
Run Id. : -1
Run Time : 24.00

Integration method :
Reduce Noise : Yes
Spike Parameter : 1
Use Relative Threshold ? : Yes
Peak saturation level : min = 0 max = 0

Integration events :

Active	Time	Event	ON	Value
Yes	0.00	Set Peak Width		0.5
Yes	0.00	Set Threshold		0.05
Yes	0.00	Set Minimal Area		0.5
Yes	15.00	Turn Integration	OFF	

Manual actions :

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Manual integration action count : 20
Action #1 : 27/10/2025 01:17:51 p. m. : MOVE stop baseline # 2 from t=5.267 y=1029.214 to t=5.513 y=610.238
Action #2 : 27/10/2025 01:17:51 p. m. : MOVE stop peak # 3 from t=5.267 to t=5.504
Action #3 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 4 at 5.83
Action #4 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 8 at 6.70
Action #5 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 9 at 6.92
Action #6 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 14 at 8.87
Action #7 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 16 at 9.15
Action #8 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 37 at 9.23
Action #9 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 15 at 8.99
Action #10 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 18 at 9.80
Action #11 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 28 at 12.51
Action #12 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 12 at 7.80
Action #13 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 42 at 7.82
Action #14 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 12 at 7.74
Action #15 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 44 at 7.76
Action #16 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 43 at 8.34
Action #17 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 13 at 8.59
Action #18 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 17 at 9.40
Action #19 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 11 at 7.49
Action #20 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 47 at 8.61

Peak Identification table :

Peak Name	RT [min]	Abs.Window[min]	Window %	Ref?	Mode
UNKNOWN_2	1.14	0.20	0.00		Nearest
heptano	1.48	0.20	0.00		Nearest
UNKNOWN_4	2.11	0.20	0.00		Nearest
UNKNOWN_5	4.10	0.20	0.00		Nearest
UNKNOWN_6	5.86	0.20	0.00		Nearest
UNKNOWN_7	6.93	0.20	0.00		Nearest
UNKNOWN_8	6.96	0.20	0.00		Nearest
UNKNOWN_9	7.71	0.20	0.00		Nearest
UNKNOWN_10	7.84	0.20	0.00		Nearest
UNKNOWN_11	8.04	0.20	0.00		Nearest
UNKNOWN_12	8.41	0.20	0.00		Nearest
UNKNOWN_13	9.32	0.20	0.00		Nearest
UNKNOWN_1	9.54	0.20	0.00		Nearest
UNKNOWN_14	10.71	0.20	0.00		Nearest

Resolve with references : No

Group Identification table :

Group Name	Group type	Parameters

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Peak results :

Index	Name	Time [Min]	Quantity [% Area]	Height [µV]	Area [µV.Min]	Area % [%]
1	UNKNOWN_2	0.96	45.59	269139544.0	1882359.4	45.587
2	UNKNOWN_4	2.26	0.02	2534.1	767.8	0.019
3	UNKNOWN	4.92	0.01	1407.1	423.7	0.010
4	UNKNOWN	5.78	0.00	383.1	34.3	0.001
33	UNKNOWN_6	5.90	0.01	5944.8	600.8	0.015
5	UNKNOWN	6.16	0.00	792.3	76.5	0.002
6	UNKNOWN	6.31	0.00	277.3	16.5	0.000
7	UNKNOWN	6.43	0.00	494.3	31.5	0.001
8	UNKNOWN	6.57	0.08	46505.3	3301.1	0.080
34	UNKNOWN	6.73	0.01	4865.4	259.6	0.006
9	UNKNOWN	6.85	0.01	11678.0	595.6	0.014
35	UNKNOWN_7	6.95	0.02	17730.9	962.3	0.023
10	UNKNOWN_8	7.04	4.46	1233653.3	184258.0	4.462
11	UNKNOWN	7.48	0.06	88368.4	2288.8	0.055
49	UNKNOWN	7.51	1.12	444760.2	46198.7	1.119
12	UNKNOWN_9	7.71	0.58	474873.8	23909.8	0.579
44	UNKNOWN	7.75	0.10	529906.4	4268.5	0.103
45	UNKNOWN	7.78	2.05	2750223.2	84760.3	2.053
42	UNKNOWN_10	7.82	1.68	2929892.1	69376.2	1.680
43	UNKNOWN_11	8.07	40.89	4761698.6	1688316.6	40.888
46	UNKNOWN_12	8.35	1.22	598492.7	50196.5	1.216
13	UNKNOWN	8.59	0.03	151227.8	1441.8	0.035
47	UNKNOWN	8.60	0.12	324698.1	4895.2	0.119
50	UNKNOWN	8.62	0.50	325997.6	20639.7	0.500
14	UNKNOWN	8.80	0.04	38667.3	1770.3	0.043
36	UNKNOWN	8.90	0.01	4793.1	228.7	0.006
15	UNKNOWN	8.98	0.01	6152.6	310.2	0.008
39	UNKNOWN	9.02	0.02	14023.3	674.0	0.016
16	UNKNOWN	9.13	0.01	3235.6	209.3	0.005
37	UNKNOWN	9.19	0.01	4905.1	325.1	0.008
38	UNKNOWN_13	9.26	0.01	5226.3	296.4	0.007
17	UNKNOWN	9.39	0.05	78599.2	2122.5	0.051
48	UNKNOWN	9.42	0.29	144409.8	11801.1	0.286
18	UNKNOWN_1	9.65	0.06	17394.9	2496.2	0.060
40	UNKNOWN	9.83	0.01	4593.3	382.8	0.009
19	UNKNOWN	9.96	0.02	12044.1	790.7	0.019
20	UNKNOWN	10.15	0.06	16123.6	2647.7	0.064
21	UNKNOWN	10.56	0.07	20085.9	3058.1	0.074
22	UNKNOWN_14	10.77	0.06	25131.4	2353.3	0.057
23	UNKNOWN	10.97	0.15	42324.0	6044.9	0.146
24	UNKNOWN	11.07	0.19	47042.0	7862.4	0.190
25	UNKNOWN	11.47	0.04	11517.7	1759.9	0.043
26	UNKNOWN	11.73	0.08	19139.3	3355.9	0.081
27	UNKNOWN	12.17	0.12	20482.1	4984.5	0.121
28	UNKNOWN	12.50	0.00	3793.3	126.8	0.003
41	UNKNOWN	12.55	0.07	13752.7	3042.3	0.074
29	UNKNOWN	13.07	0.01	2839.6	435.6	0.011
30	UNKNOWN	13.21	0.02	3856.5	728.9	0.018
31	UNKNOWN	13.52	0.01	3525.4	590.2	0.014
32	UNKNOWN	14.09	0.02	2754.7	751.6	0.018
Total			100.00	284412361.6	4129128.5	100.000

CHROMATOGRAM METHOD REPORT :

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Control method :

Scion/Bruker/Varian 400-GC Series (Exclu

Autosampler (8410)

Autosampler	ENABLED
First injector used	Position 2
Syringe volume	10 uL
Advance tray	NO
Clean between injections	NO
Use injection delay	NO
Delay between injections	1.0 min
Injection mode	Std (Split/Splitless)
Sample penetration depth	90 %
Solvent penetration depth	90 %

Abort clean

Vial	I
Volume	5.0 uL
Strokes	1
Drawup speed	5.0 uL/s

Clean mode

Pre-injection solvent flushes	3
Pre-injection sample flushes	0
Post-injection solvent flushes	5
Clean solvent source	I

Injectors

Front (PWOC)

EFC 23 - Flow program	Rate (mL/min/min)	Step (mL/min)	Time (min)
	Initial	10.0	0.00
		Total time	0.00

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

EFC 23

Enabled	OFF

Heat-only zone 1

Heater	OFF
Setpoint	50 °C

Middle (S/SL)

Split event table	Time (min)	Split state	Split ratio
	Initial	ON	25

EFC 25

Enabled	ON

Heat-only zone 2

Heater	ON
Setpoint	230 °C

Column oven

Stabilization time	0.50 min

Column oven zone

Heater	ON

Temperature program	Rate (°C/min)	Step (°C)	Time (min)
	Initial	100	4.00
	25.0	200	8.00

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Temperature program	Rate (°C/min)	Step (°C)	Time (min)
	20.0	250	5.00
		Total time	23.50

Valve oven

Rear (Small valve oven)

Heat-only zone 3

Heater	OFF
Setpoint	50 °C

Columns

Front

Carrier gas	Helium
Length	15.00 m
Inside diameter	200 um
Type	WCOT

Middle

Carrier gas	Helium
Length	30.00 m
Inside diameter	320 um
Type	PLOT

Pressure mode	Constant flow
Column flow	2.20 mL/min
Pressure pulse	DISABLED

Detectors

Heat-only zone 4

Heater	OFF
Setpoint	50 °C

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Front (TCD)

Electronics	OFF
Time constant	Fast
Data rate	10 Hz

Filament temp. limit	390 °C
Filament temperature	50 °C

TCD event table	Time (min)	Range	Autozero	Polarity
	Initial	0.05	YES	POSITIVE

EFC 14

Enabled	OFF
Make-up (Helium) flow	25 mL/min
Reference (Helium) flow	30.0 mL/min

Heat-only zone 5

Heater	ON
Setpoint	250 °C

Middle (FID)

Electronics	ON
Time constant	Fast
Data rate	10 Hz

FID event table	Time (min)	Range	Autozero
	Initial	12	YES

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

EFC 11

Enabled	ON
Make-up (Nitrogen) flow	28 mL/min
Combustion (H2) flow	30.0 mL/min
Combustion (Air) flow	300.0 mL/min

Ouput ports

Front

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Front	0

Middle

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Middle	0

Rear

ENABLED	NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Rear	0

Valves

Valve event table	Time (min)	Gas Sample Valve
	Initial	Fill

Miscellaneous

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Start automatically when ready	NO

Acquisition :
System : 456-GC
Project : Aceites
Run Name : 5.1
Description
Run Id. : -1
Run Time : 24.00
Vial : 9
Rack : 0
Analysis : Unknown
Injection volume : 1.00

Scale :
RT Min : 0.00
RT Max : 20.00
Y Min : -1,000.00
Y Max : 20,000.00
Divisor factor : 1.00
Multiplier factor : 1.00
Sample mass : 0.00

Run log :

Injection report for Position 2

Injection occured at 24/10/2025 01:23:33 p. m.

Scion/Bruker/Varian 400-GC Series (Exclu [Scion/Bruker/Varian 400-GC Series (Excluding 430)]
Wrapper 5.0.8.31952
Firmware 32834
Driver 4.1.0.394

Preprocessing :
Blank Subtract :
File:
N.A.

Integration method :
Reduce Noise : Yes
Spike Parameter : 1
Use Relative Threshold ? : Yes
Peak saturation level : min = 0 max = 0

Integration events :

Active	Time	Event	ON	Value
Yes	0.00	Set Peak Width		0.5
Yes	0.00	Set Threshold		0.05
Yes	0.00	Set Minimal Area		0.5
Yes	15.00	Turn Integration	OFF	

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Manual actions :
Manual integration action count : 20
Action #1 : 27/10/2025 01:17:51 p. m. : MOVE stop baseline # 2 from t=5.267 y=1029.214 to t=5.513 y=610.238
Action #2 : 27/10/2025 01:17:51 p. m. : MOVE stop peak # 3 from t=5.267 to t=5.504
Action #3 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 4 at 5.83
Action #4 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 8 at 6.70
Action #5 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 9 at 6.92
Action #6 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 14 at 8.87
Action #7 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 16 at 9.15
Action #8 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 37 at 9.23
Action #9 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 15 at 8.99
Action #10 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 18 at 9.80
Action #11 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 28 at 12.51
Action #12 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 12 at 7.80
Action #13 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 42 at 7.82
Action #14 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 12 at 7.74
Action #15 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 44 at 7.76
Action #16 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 43 at 8.34
Action #17 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 13 at 8.59
Action #18 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 17 at 9.40
Action #19 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 11 at 7.49
Action #20 : 27/10/2025 01:17:51 p. m. : SPLIT peak # 47 at 8.61

Peak Identification table :

Peak Name	RT [min]	Abs.Window[min]	Window %	Ref?	Mode
UNKNOWN_2	1.14	0.20	0.00		Nearest
heptano	1.48	0.20	0.00		Nearest
UNKNOWN_4	2.11	0.20	0.00		Nearest
UNKNOWN_5	4.10	0.20	0.00		Nearest
UNKNOWN_6	5.86	0.20	0.00		Nearest
UNKNOWN_7	6.93	0.20	0.00		Nearest
UNKNOWN_8	6.96	0.20	0.00		Nearest
UNKNOWN_9	7.71	0.20	0.00		Nearest
UNKNOWN_10	7.84	0.20	0.00		Nearest
UNKNOWN_11	8.04	0.20	0.00		Nearest
UNKNOWN_12	8.41	0.20	0.00		Nearest
UNKNOWN_13	9.32	0.20	0.00		Nearest
UNKNOWN_1	9.54	0.20	0.00		Nearest
UNKNOWN_14	10.71	0.20	0.00		Nearest

Resolve with references : No

Group Identification table :

Group Name	Group type	Parameters

Calibration Method :

Method type : Response %
Response : Area
Standard Unit : g/l
Calibration curve file name :

Factors : Curve
Subtract internal standard mass
Response unit : Curve

Unknown mode : None

Calibration components :

Chromatogram : 5.1_channel1

System : 456-GC
Method : Biodiesel FAME 2023
User : User1

Acquired : 24/10/2025 01:23:33 p. m.
Processed : 27/10/2025 01:17:51 p. m.
Printed : 27/10/2025 01:32:15 p. m.

Component	Level 1	Level 2	Level 3	Level 4	Control Sample

Suitability tests :

Export :
File 1 :
Export type : EXCEL
Format
Add a new sheet.
Destination :
  File name : SEQNAME
  File path : DEFAULT
  File ext. : .XLS
Content :
  - Peak results (format :)

Post Run :

Print Method :
File name : : default_standard
Copies : 0

Summary :