

**PEJABAT TIMBALAN NAIB CANSELOR (PENYELIDIKAN DAN INOVASI)**  
OFFICE OF THE DEPUTY VICE CHANCELLOR (RESEARCH AND INNOVATION)

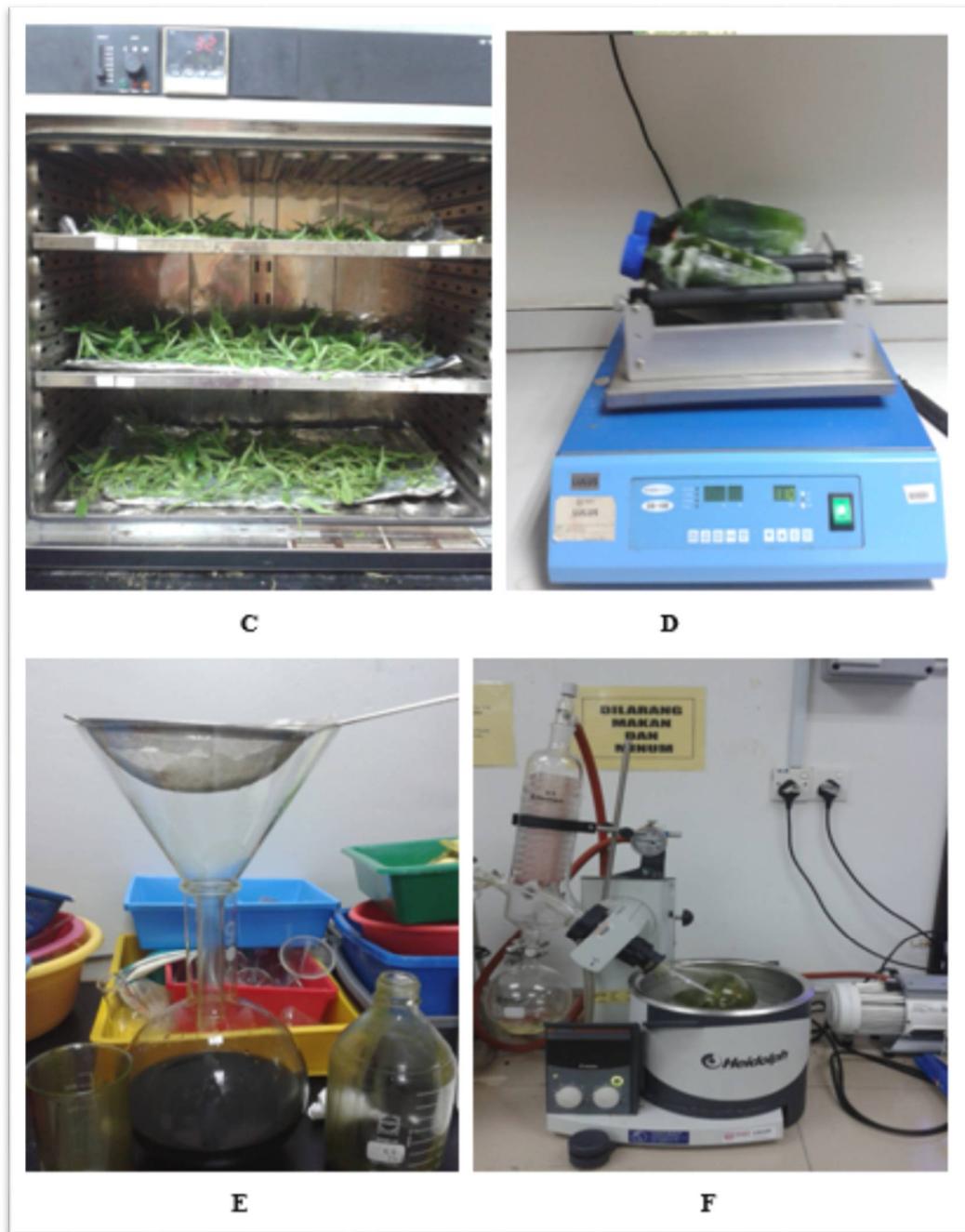
**INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE**

Date: 2 February 2017  
Ref.: UPM/IACUC/AUP- R083/2016  
Project Title: Effects of crude methanolic leaf extract of *Clinacanthus nutans* on male obese mice  
Principal Investigator: Assoc. Prof. Dr. Goh Yong Meng  
Associate: Dr. Mahdi Ebrahimi  
Student: Samiaa Jamil Abdulwahid  
Committee Decision: The committee has reviewed and approved the proposed animal utilization protocol  
AUP No.: R083/2016  
Project Classification: Chronic  
Category of Invasiveness: B  
Source of Animals: A Sapphire Enterprise, 45 Jalan Indah 1/22, Taman University Indah, 43300 Seri Kembangan Selangor  
Number of Animals Approved: 60 Mice  
Accommodation: Animal House, Faculty of Veterinary Medicine, Universiti Putra Malaysia  
Duration: 2 February 2017 – 2 February 2018

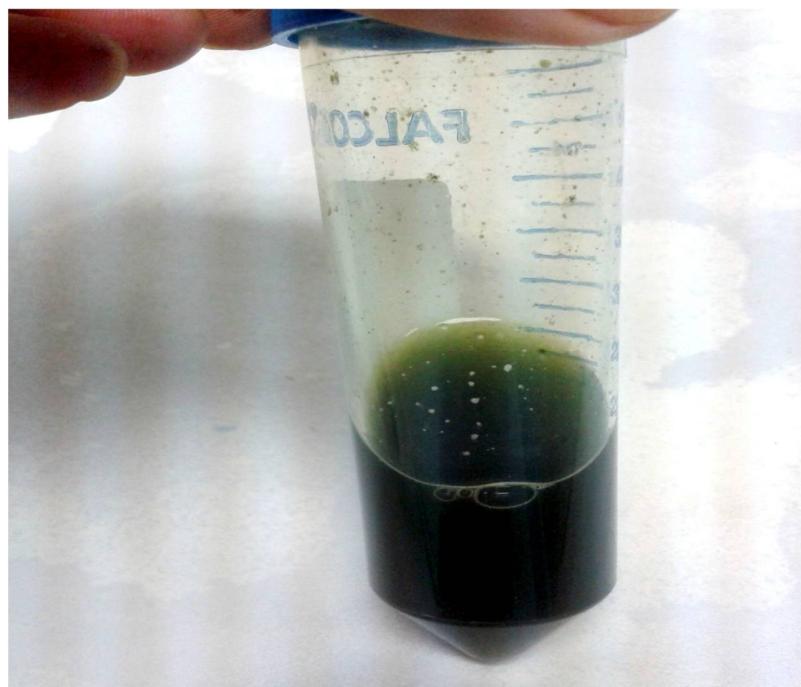
  
**(PROF. DR. MOHD HAIR BEJO)**  
Chairman  
Institutional Animal Care and Use Committee  
Universiti Putra Malaysia



**Figure 1. A: *C. nutans*; B: washing and drying**



**Figure 2.** *C. nutans* in oven for drying; D: shaking for 72 hours; E: filtration; F: rotary evaporated



**Figure 3. Preparation of crude methanolic *C. nutans* leaf extract**

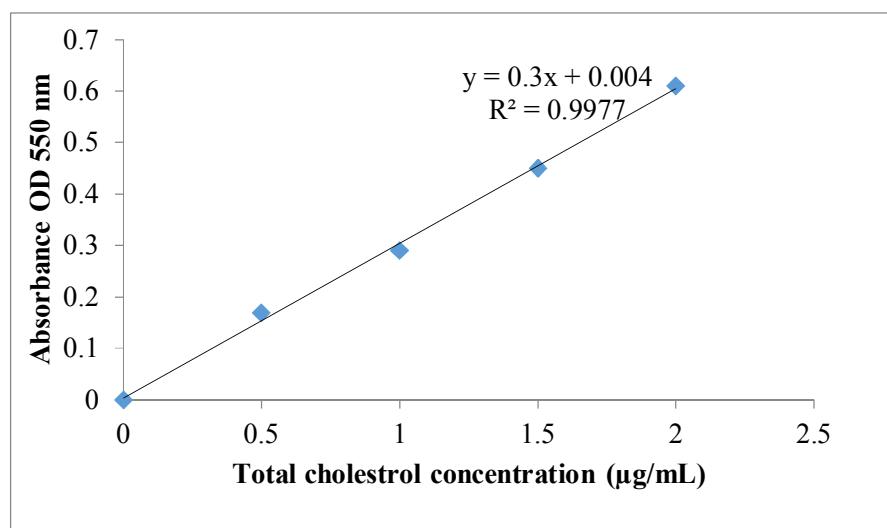
**Table 1. Actual concentrations of *C. nutans***

Nominal concentration (mg/kg)	Actual concentration (mg/ml)
500	19.5 (0.122)
1000	39 (0.244)
1500	58.5 (0.366)

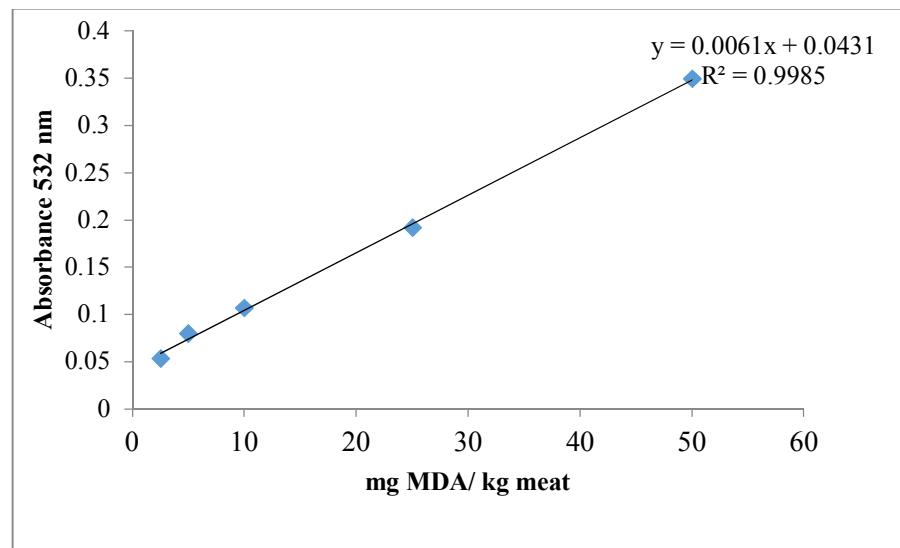
**Measurment of the Body Weight**

Weight decrease (g) = initial body weight (g) - final body weight (g).

Furthermore, weight decreased (%) = weight decrease (g) / initial body weight (g)  $\times$  100%.  
This equation was only used at the end of this study.



**Figure 4 Cholesterol standard curve**



**Figure 5 Standard curve of lipid peroxidation**

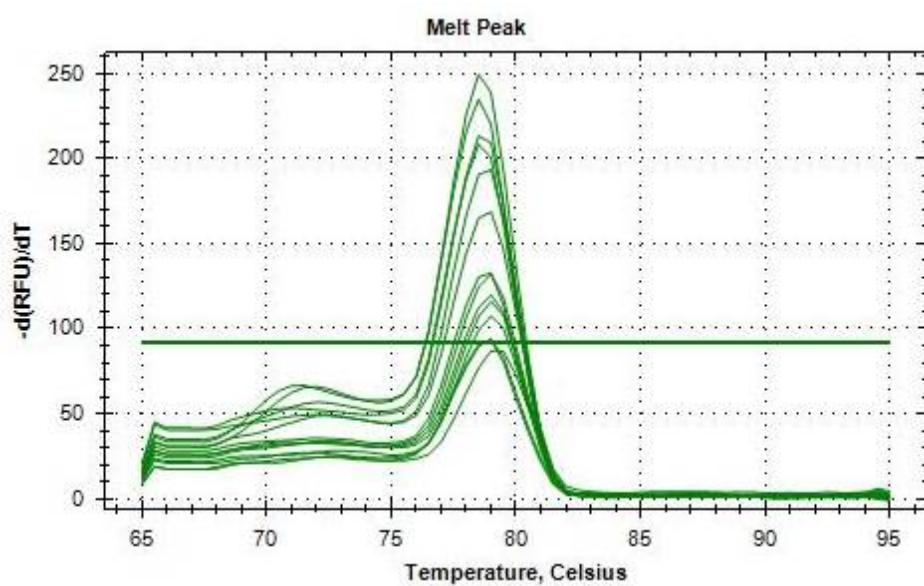
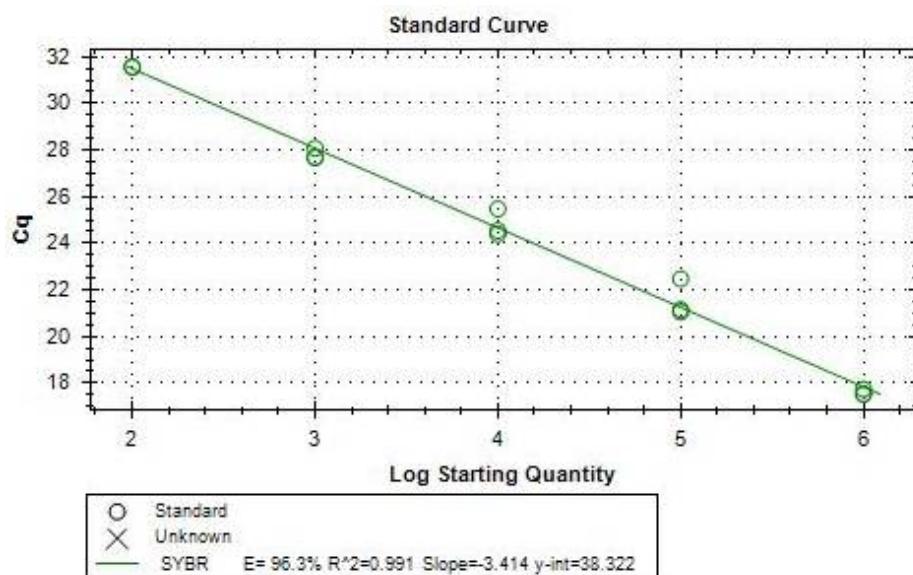


Figure 6 Real time qRT-PCR assay for **β actin** (A) Standard curve for HSL efficiency of HSL= 96.3%, R=0.99, slope =-3.41. (B) Melting peak of **β actin**. A single peak showed single PCR product produced for each diluted of Cdna. The melting temperature of the PCR product is 79.5°C.

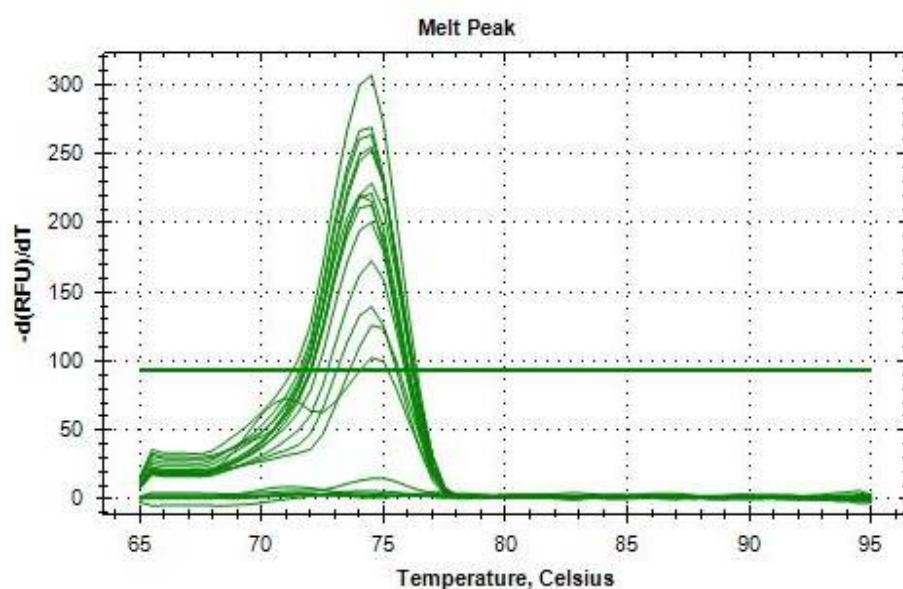
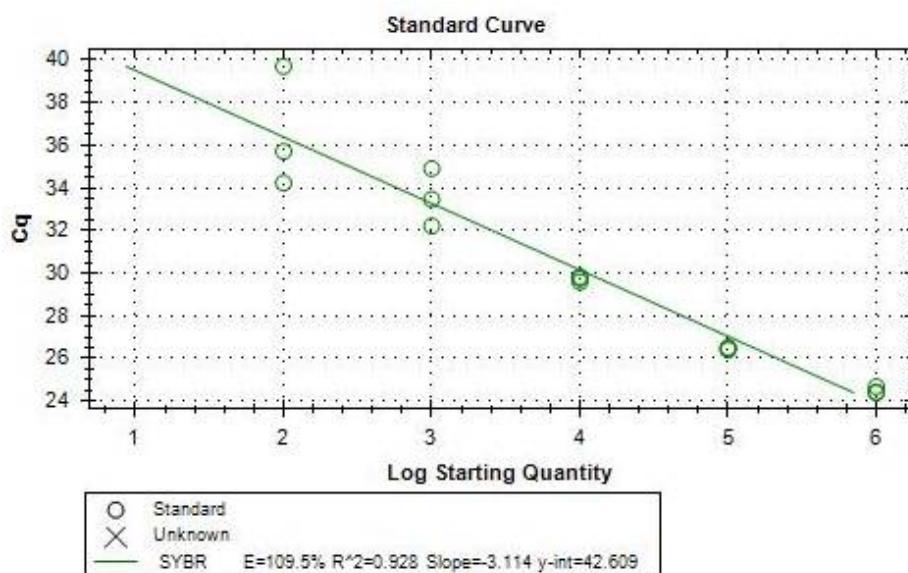


Figure 7 Real time qRT-PCR assay for **PPAR $\alpha$**  (A) Standard curve for **PPAR $\alpha$**  efficiency of **PPAR $\alpha$**  = 109.5%, R=0.92, slope =-3.11. (B) Melting peak of **PPAR $\alpha$** . A single peak showed single PCR product produced for each diluted of Cdna. The melting temperature of the PCR product is 75°C.

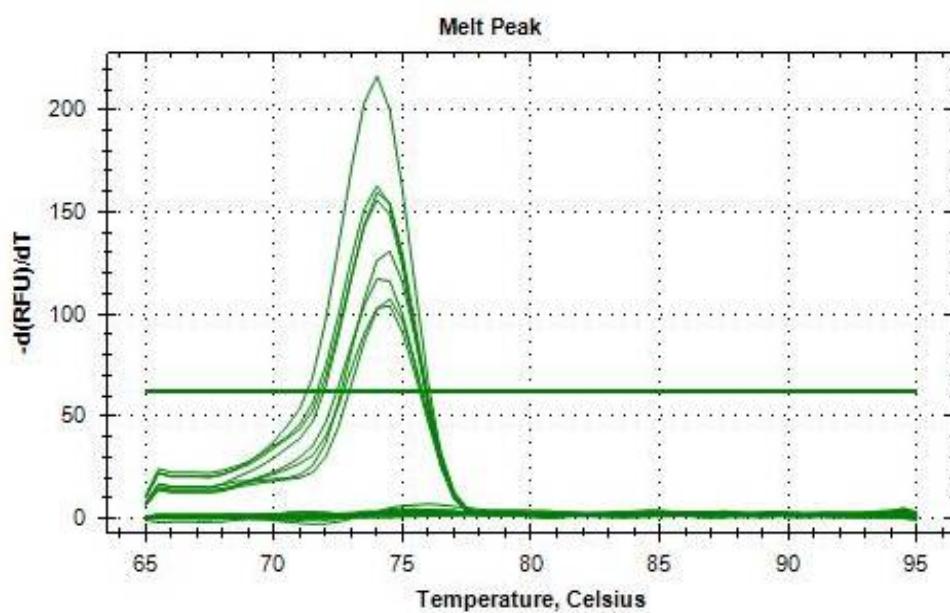
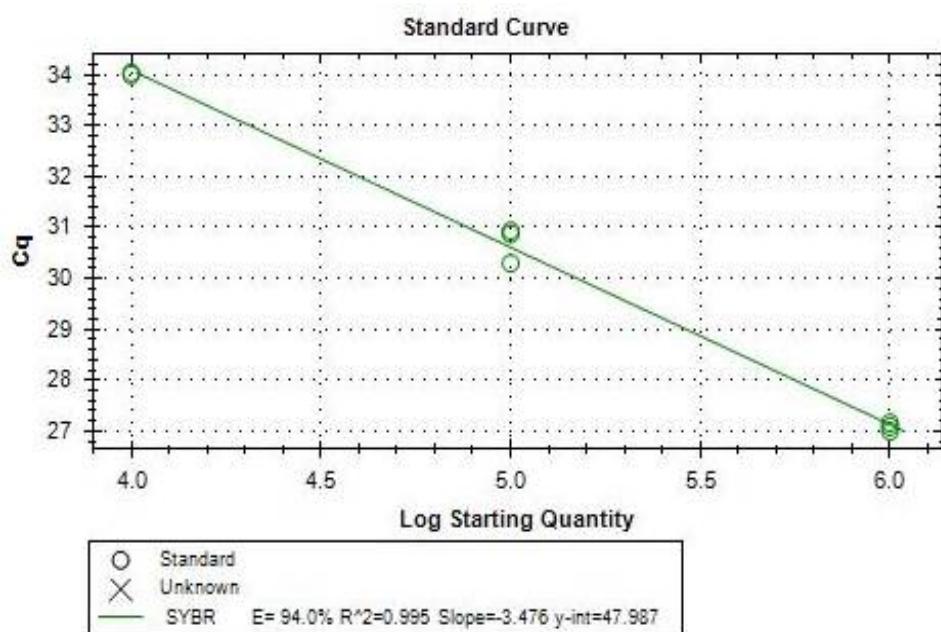


Figure 8 Real time qRT-PCR assay for PPAR $\gamma$  (A) Standard curve for PPAR $\gamma$  efficiency of PPAR $\gamma$  = 94.0%, R=0.99, slope =-3.47. (B) Melting peak of PPAR $\gamma$ . A single peak showed single PCR product produced for each diluted of cDNA. The melting temperature of the PCR product is 74.5°C.

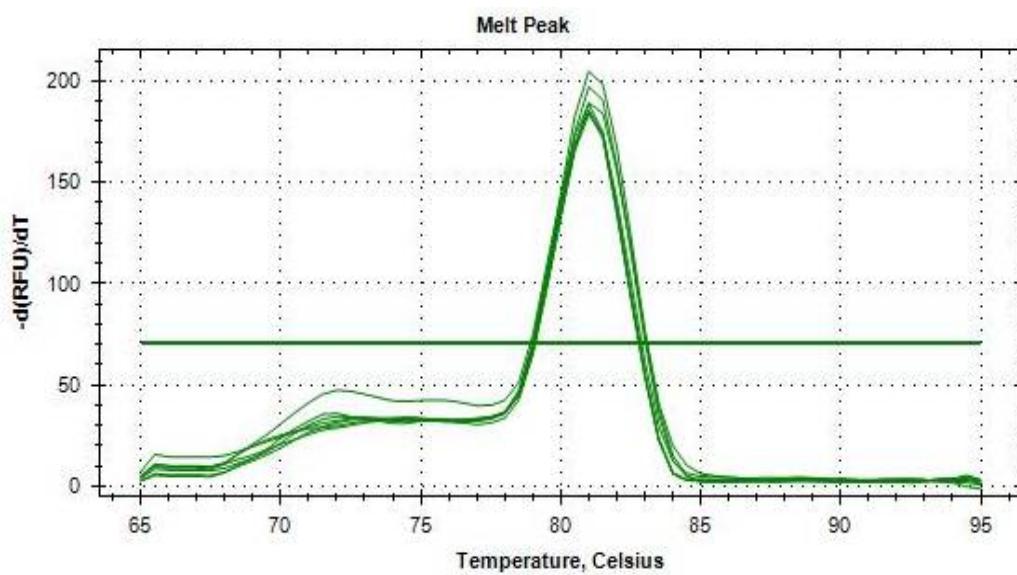
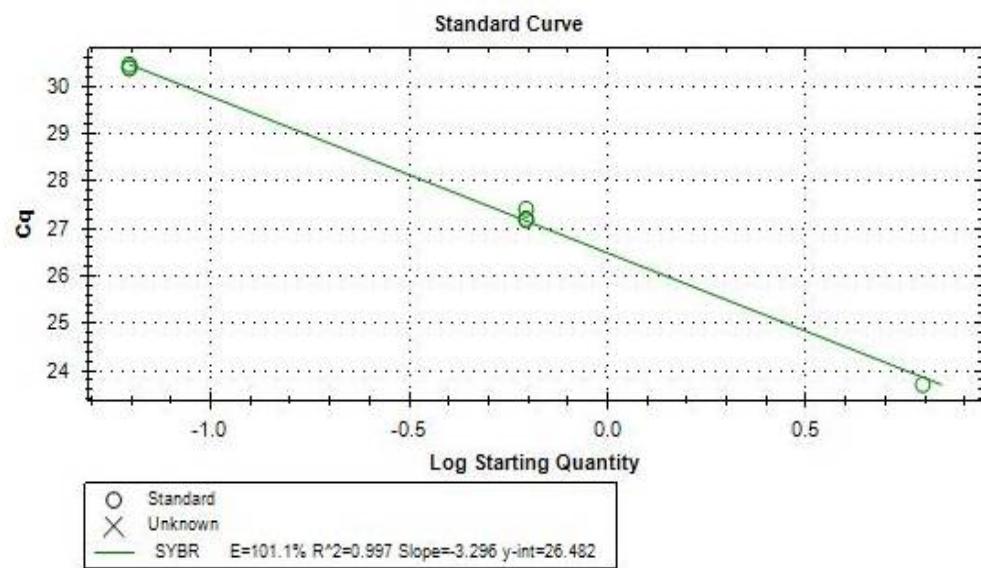


Figure 9 Real time qRT-PCR assay for SREBP<sub>2</sub> (A) Standard curve for SREBP<sub>2</sub>, efficiency of SREBP<sub>2</sub>= 101.1%, R=0.99, slope =-3.29. (B) Melting peak of SREBP<sub>2</sub>. A single peak showed single PCR product produced for each diluted of cDNA. The melting temperature of the PCR product is 74.5°C.

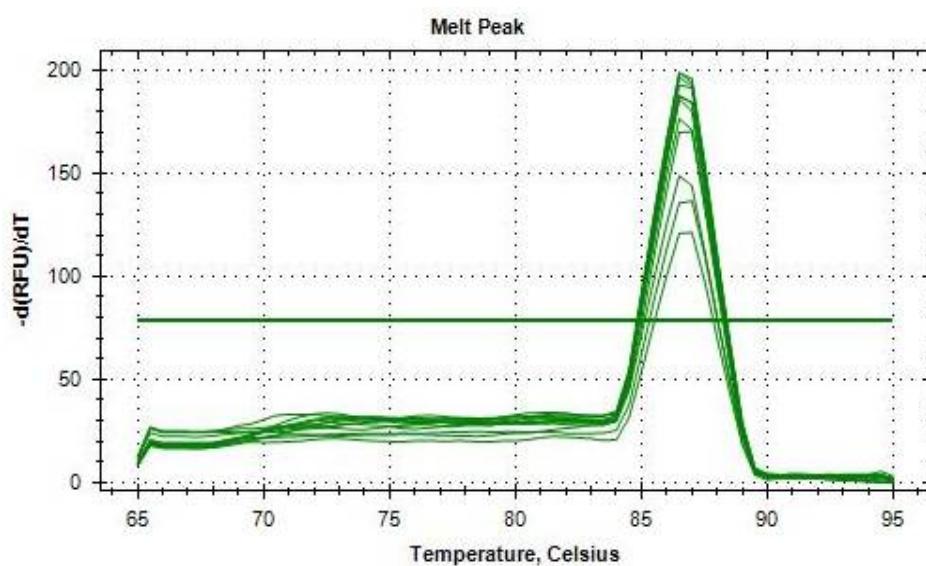
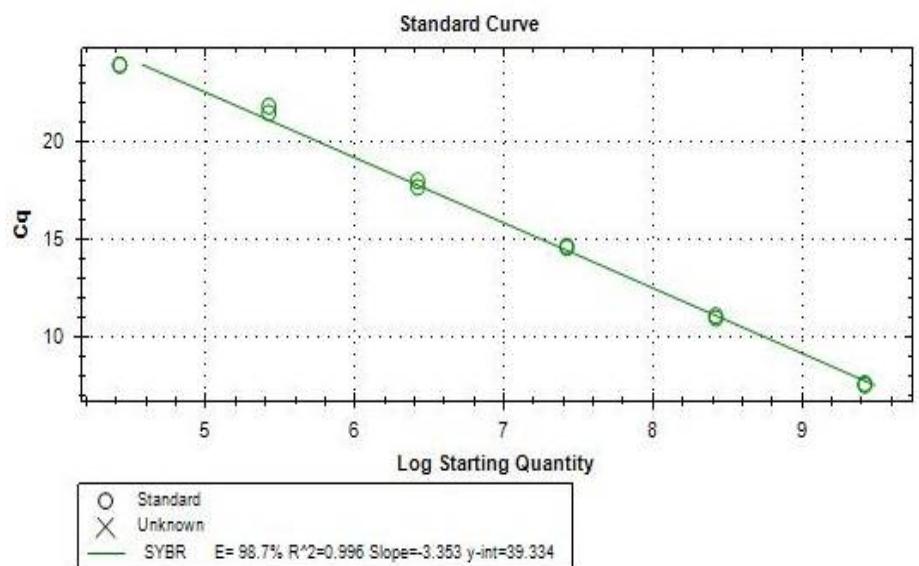


Figure 10 Real time qRT-PCR assay for SCD (A) Standard curve for SCD efficiency of SCD = 98.7%, R=0.99, slope =-3.35.(B) Melting peak of SCD. A single peak showed single PCR product produced for each diluted of Cdna. The melting temperature of the PCR product is 87°C.

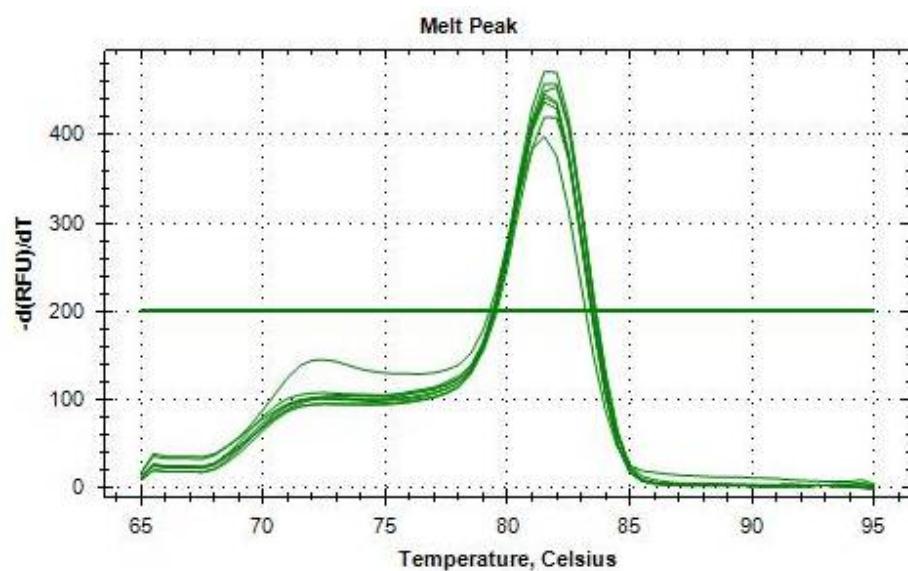
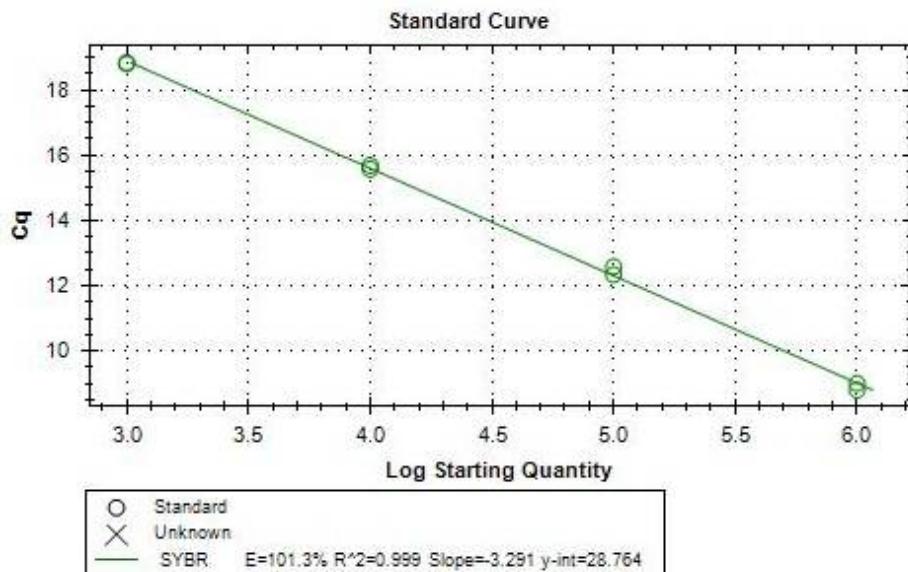


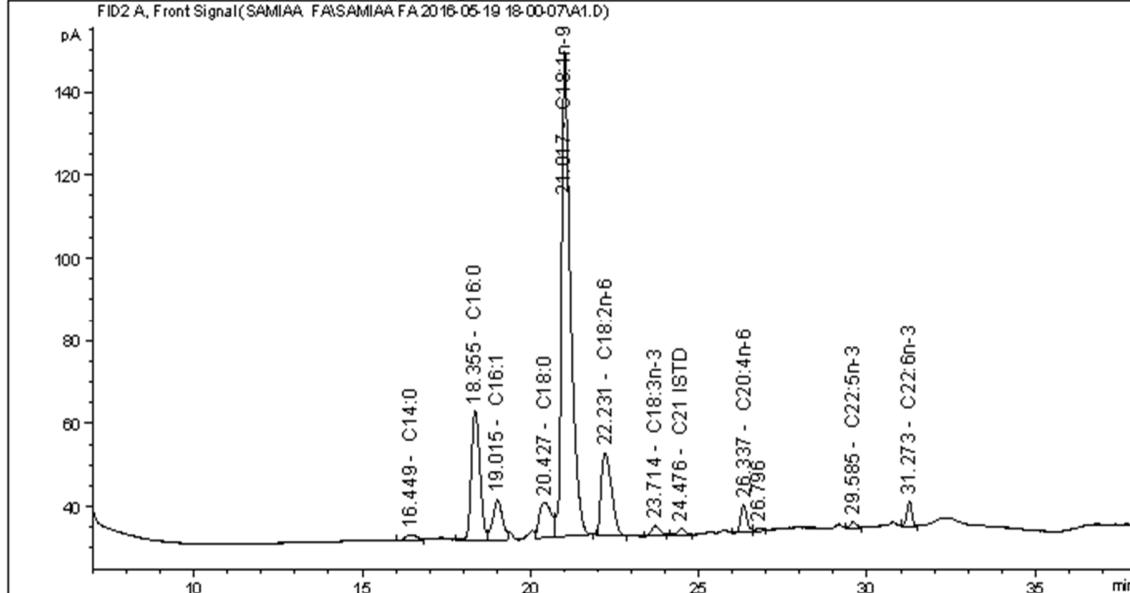
Figure11 Real time Qrt-PCR assay for HSL (A) Standard curve for HSL efficiency of HSL= 101.3%, R=0.99, slope =-3.291. (B) Melting peak of HSL. A single peak showed single PCR product produced for each diluted of Cdna. The melting temperature of the PCR product is 82°C.

**Sample A=HFD+CN500**

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\A1.D  
Sample Name: A1

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Acq. Operator : Dr Mahdi          Seq. Line : 1
Acq. Instrument : Instrument 1  Location : Vial 1
Injection Date : 5/19/2016 6:02:52 PM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA_FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method: C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
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Additional Info : Peak(s) manually integrated

**Area Percent Report**

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Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.000000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
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**Signal 1: FID2 A, Front Signal**

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.449	BV	0.2868	35.16843	0.92334	C14:0
2	18.355	VV	0.2124	550.36731	14.44974	C16:0
3	19.015	VV	0.2319	193.00941	5.06741	C16:1
4	20.427	VV	0.2871	203.89761	5.35327	C18:0
5	21.017	VB	0.2207	2156.92407	56.62943	C18:ln-9
6	22.231	BB	0.2522	420.13907	11.03063	C18:2n-6
7	23.714	BV	0.2134	42.87360	1.12563	C18:3n-3
8	24.476	VV	0.1947	25.75826	0.67628	C21 ISTD
9	26.337	VV	0.1543	85.60136	2.24744	C20:4n-6

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\A1.D  
Sample Name: A1

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.810	VV	0.0000	0.00000	0.00000	C20:5n-3
11	29.585	VV	0.1591	21.53872	0.56549	C22:5n-3
12	31.273	BV	0.1281	63.77293	1.67434	C22:6n-3

Totals : 3799.05078 99.7430

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

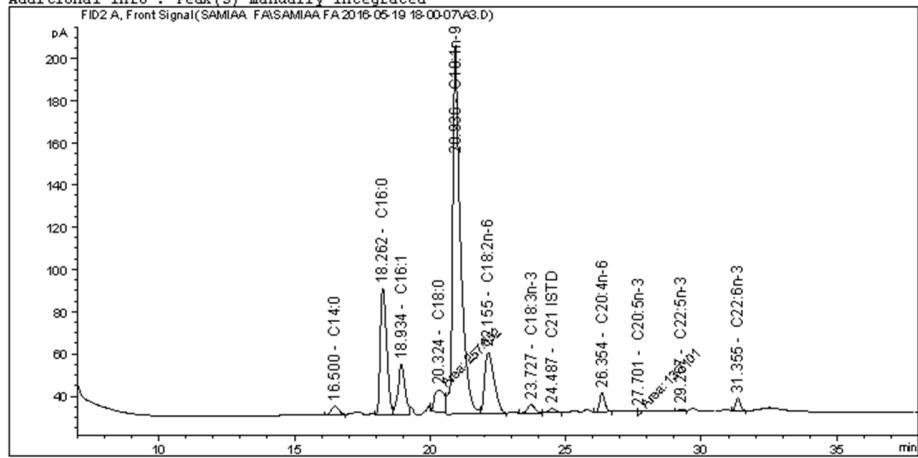
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Final Summed Peaks Report  
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Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

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Acq. Instrument : Instrument 1   Location : Vial 3
Injection Date : 5/19/2016 7:28:21 PM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
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Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.500	BV	0.2402	85.36057	1.35960	C14:0
2	18.262	VV	0.1970	993.03131	15.81668	C16:0
3	18.934	VV	0.2132	426.34695	6.79072	C16:1
4	20.324	MM	0.4122	257.65176	4.10379	C18:0
5	20.936	BV	0.2437	3489.70068	55.58284	C18:1n-9
6	22.155	BV	0.2837	701.67816	11.17611	C18:2n-6
7	23.727	VV	0.2157	71.34158	1.13631	C18:3n-3
8	24.487	VV	0.2063	37.10663	0.59102	C21 ISTD
9	26.354	VV	0.1600	115.74066	1.84348	C20:4n-6

Instrument 1 7/1/2016 11:12:27 AM Dr Mahdi

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Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.701	MM	0.1232	13.71011	0.21837	C20:5n-3
11	29.267	VV	0.1621	11.56752	0.18424	C22:5n-3
12	31.355	VV	0.1474	75.14233	1.19684	C22:6n-3

Totals : 6278.37827 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

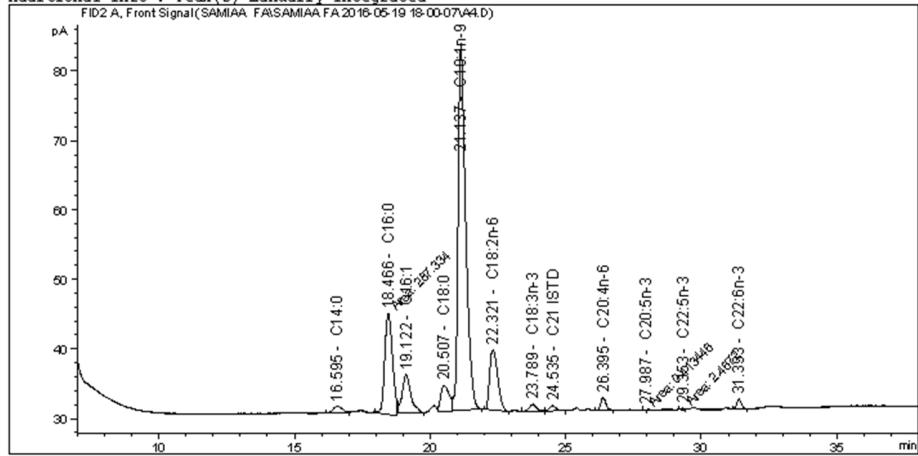
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Final Summed Peaks Report  
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Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A4.D  
Sample Name: A4

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=====
Acq. Operator : Dr Mahdi          Seq. Line : 4
Acq. Instrument : Instrument 1   Location : Vial 4
Injection Date : 5/19/2016 8:11:03 PM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
                                                (modified after loading)
Additional Info : Peak(s) manually integrated
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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.595	EV	0.2818	24.19019	1.35984	C14:0
2	18.466	MM	0.3296	287.33365	16.15226	C16:0
3	19.122	VB	0.2634	119.41744	6.71297	C16:1
4	20.507	VV	0.2525	80.03360	4.49903	C18:0
5	21.137	VB	0.2282	1016.17047	57.12333	C18:ln-9
6	22.321	BB	0.2415	177.37985	9.97129	C18:2n-6
7	23.789	VV	0.2154	17.60420	0.98961	C18:3n-3
8	24.535	VV	0.2033	12.16496	0.68385	C21 ISTD
9	26.395	VB	0.1557	23.94263	1.34592	C20:4n-6

Instrument 1 7/1/2016 11:12:50 AM Dr Mahdi

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Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A4.D  
Sample Name: A4

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.987	MM	0.0448	4.13446e-1	0.02324	C20:5n-3
11	29.353	MM	0.1371	2.46720	0.13869	C22:5n-3
12	31.393	VV	0.1502	17.78863	0.99998	C22:6n-3

Totals : 1778.90627 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

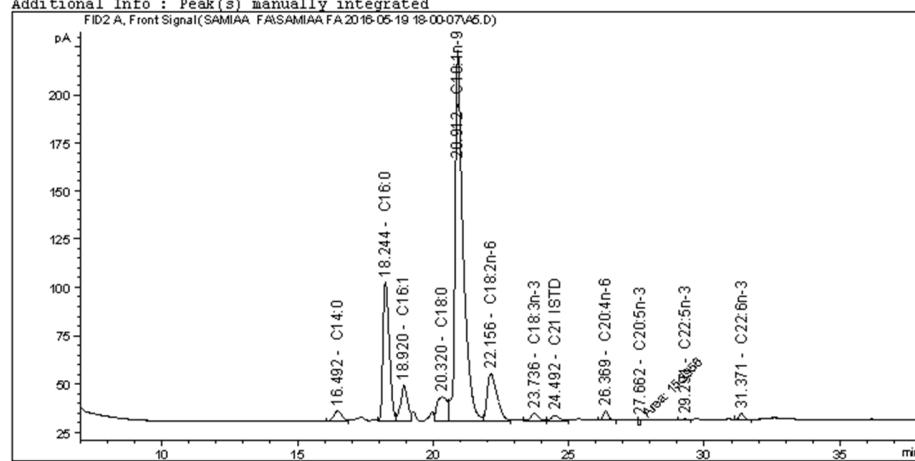
===== Final Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\A5.D  
Sample Name: A5

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Acq. Instrument : Instrument 1    Location : Vial 5
Injection Date : 5/19/2016 8:53:51 PM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
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Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.492	EV	0.2410	105.07143	1.56499	C14:0
2	18.244	VV	0.1898	1157.21497	17.23615	C16:0
3	18.920	VV	0.2107	326.25220	4.85937	C16:1
4	20.320	VV	0.3016	313.92719	4.67579	C18:0
5	20.912	VB	0.2450	3956.68311	58.93285	C18:1n-9
6	22.156	EV	0.2977	608.21600	9.05908	C18:2n-6
7	23.736	VV	0.2265	69.72490	1.03852	C18:3n-3
8	24.492	VV	0.2228	51.43192	0.76605	C21 ISTD
9	26.369	VV	0.1563	62.50320	0.93095	C20:4n-6

Instrument 1 7/1/2016 11:13:04 AM Dr Mahdi

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Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\A5.D  
Sample Name: A5

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	27.662	MM	0.1132	15.39559	0.22931	C20:5n-3
11	29.291	BV	0.1703	7.83141	0.11664	C22:5n-3
12	31.371	BV	0.1512	39.63202	0.59030	C22:6n-3

Totals : 6713.88392 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

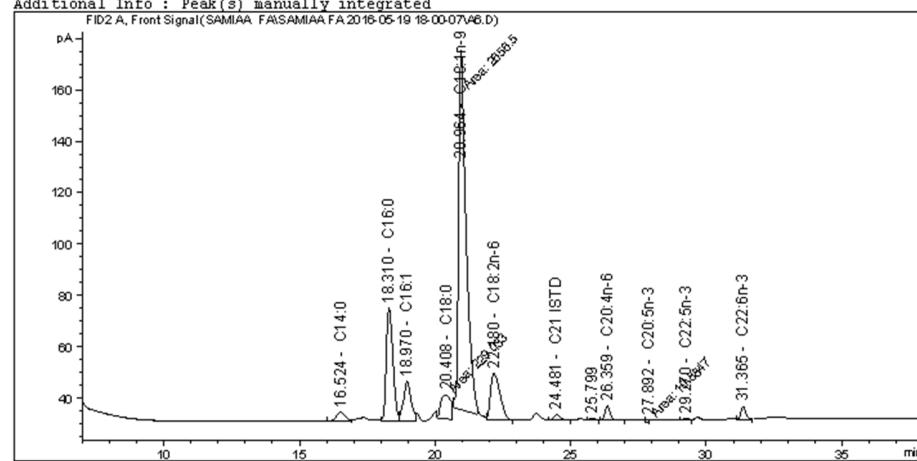
Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\A6.D  
Sample Name: A6

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Acq. Operator : Dr Mahdi          Seq. Line : 6
Acq. Instrument : Instrument 1   Location : Vial 6
Injection Date : 5/19/2016 9:36:34 PM Inj : 1
                                                Inj Volume : 1 ul
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
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Area Percent Report
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.524	VV	0.2621	76.59245	1.64945	C14:0
2	18.310	VV	0.2005	740.70770	15.95147	C16:0
3	18.970	VV	0.2297	295.85101	6.37128	C16:1
4	20.408	MM	0.4147	229.03307	4.93233	C18:0
5	20.964	MM	0.3169	2656.50293	57.20897	C18:1n-9
6	22.180	VV	0.2878	444.72211	9.57729	C18:2n-6
7	23.500		0.0000	0.00000	0.00000	C18:3n-3
8	24.481	BV	0.1980	35.64333	0.76759	C21 ISTD
9	26.359	VB	0.1611	74.47244	1.60380	C20:4n-6

Instrument 1 7/1/2016 11:13:20 AM Dr Mahdi

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Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A6.D  
Sample Name: A6

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.892	MM	0.1578	10.88466	0.23441	C20:5n-3
11	29.270	VV	0.1660	8.14781	0.17547	C22:5n-3
12	31.365	VB	0.1514	61.99995	1.33520	C22:6n-3

Totals : 4634.55746 99.8072

7 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

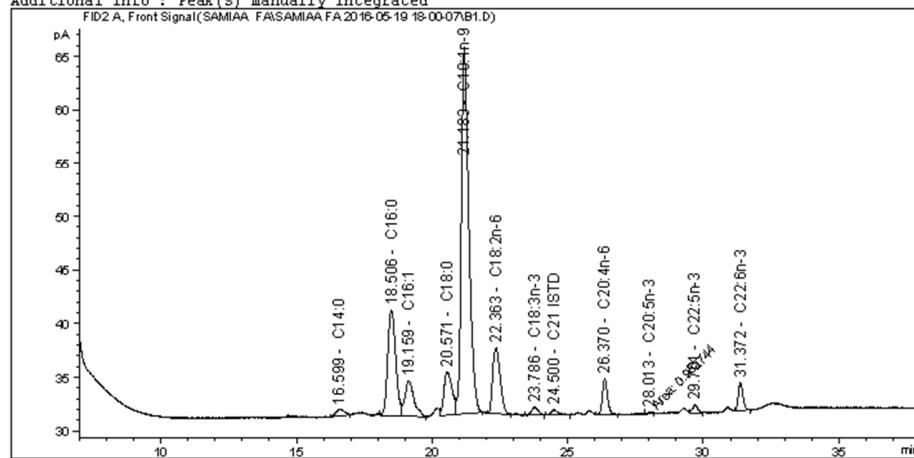
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

### Sample B= HFD+1000 mg/kg

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B1.D  
Sample Name: B1

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 7
Acq. Instrument : Instrument 1   Location : Vial 7
Injection Date : 5/19/2016 10:19:23 PM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



#### Area Percent Report

```
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

#### Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.599	BB	0.2608	13.51862	1.07793	C14:0
2	18.506	VV	0.2484	201.97397	16.10472	C16:0
3	19.159	VB	0.2722	76.47923	6.09820	C16:1
4	20.571	VV	0.2456	83.73181	6.67649	C18:0
5	21.183	VB	0.2264	653.37372	52.09782	C18:1n-9
6	22.363	BV	0.2236	116.87086	9.31889	C18:2n-6
7	23.786	VV	0.2088	12.65981	1.00945	C18:3n-3
8	24.500	VB	0.2268	9.72008	0.77505	C21 ISTD
9	26.370	VB	0.1558	43.58773	3.47554	C20:4n-6

Instrument 1 7/1/2016 11:13:35 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B1.D  
Sample Name: B1

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	28.013	MM	0.1832	9.82744e-1	0.07836	C20:5n-3
11	29.701	VV	0.1628	9.41171	0.75046	C22:5n-3
12	31.372	VB	0.1453	31.81837	2.53709	C22:6n-3

Totals : 1254.12865 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

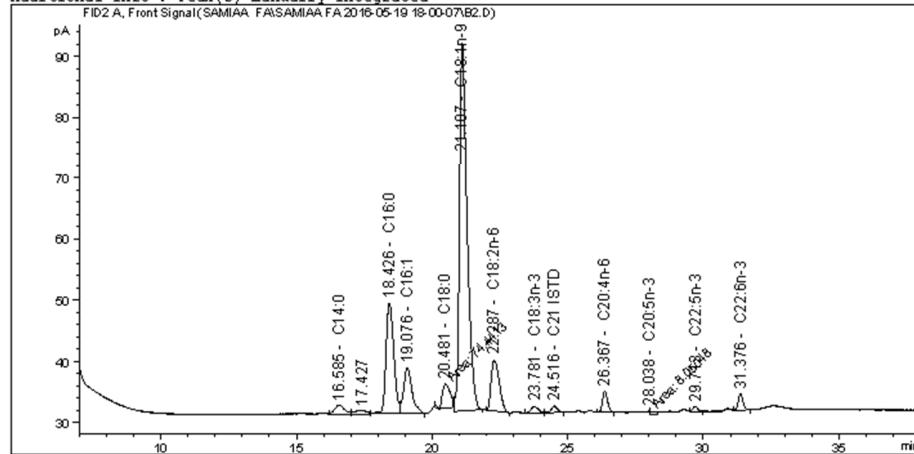
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B2.D  
 Sample Name: B2

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 8
Acq. Instrument : Instrument 1   Location : Vial 8
Injection Date : 5/19/2016 11:02:04 PM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method: C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

#### Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.585	BV	0.2863	34.77602	1.64315	C14:0
2	18.426	VV	0.2372	358.45895	16.93701	C16:0
3	19.076	VB	0.2552	163.96143	7.74804	C16:1
4	20.481	MM	0.3231	74.44135	3.51732	C18:0
5	21.107	VB	0.2310	1161.33093	54.87232	C18:ln-9
6	22.287	BB	0.2460	172.84622	8.16690	C18:2n-6
7	23.781	BV	0.2111	18.72569	0.88478	C18:3n-3
8	24.516	VV	0.1860	16.55481	0.78221	C21 ISTD
9	26.367	VB	0.1583	46.00758	2.17384	C20:4n-6

Instrument 1 7/1/2016 11:13:47 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B2.D  
Sample Name: B2

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	28.038	MM	0.2303	8.05048	0.38038	C20:5n-3
11	29.713	VV	0.1619	10.89538	0.51480	C22:5n-3
12	31.376	VB	0.1481	33.64418	1.58967	C22:6n-3

Totals : 2099.71303 99.2104

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

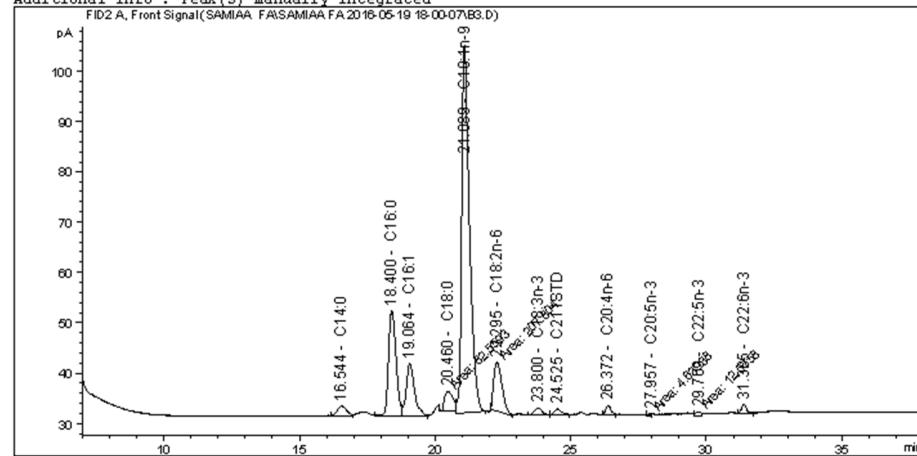
Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B3.D  
Sample Name: B3

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 9
Acq. Instrument : Instrument 1    Location : Vial 9
Injection Date : 5/19/2016 11:44:53 PM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



=====
Area Percent Report
=====

```
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.544	BV	0.2705	43.30397	1.73612	C14:0
2	18.400	VV	0.2301	401.11743	16.08137	C16:0
3	19.064	VV	0.2485	213.76836	8.57028	C16:1
4	20.460	MM	0.3530	82.55927	3.30992	C18:0
5	21.089	VB	0.2357	1441.08679	57.77523	C18:ln-9
6	22.295	MM	0.3588	207.80382	8.33115	C18:2n-6
7	23.800	VV	0.2148	24.29253	0.97392	C18:3n-3
8	24.525	VV	0.1966	18.21588	0.73030	C21 ISTD
9	26.372	BV	0.1558	24.12448	0.96718	C20:4n-6

Instrument 1 7/1/2016 11:14:05 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B3.D  
Sample Name: B3

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	27.957	MM	0.1766	4.63938	0.18600	C20:5n-3
11	29.709	MM	0.2305	12.07578	0.48414	C22:5n-3
12	31.385	VB	0.1448	21.31088	0.85438	C22:6n-3

Totals : 2494.29857 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

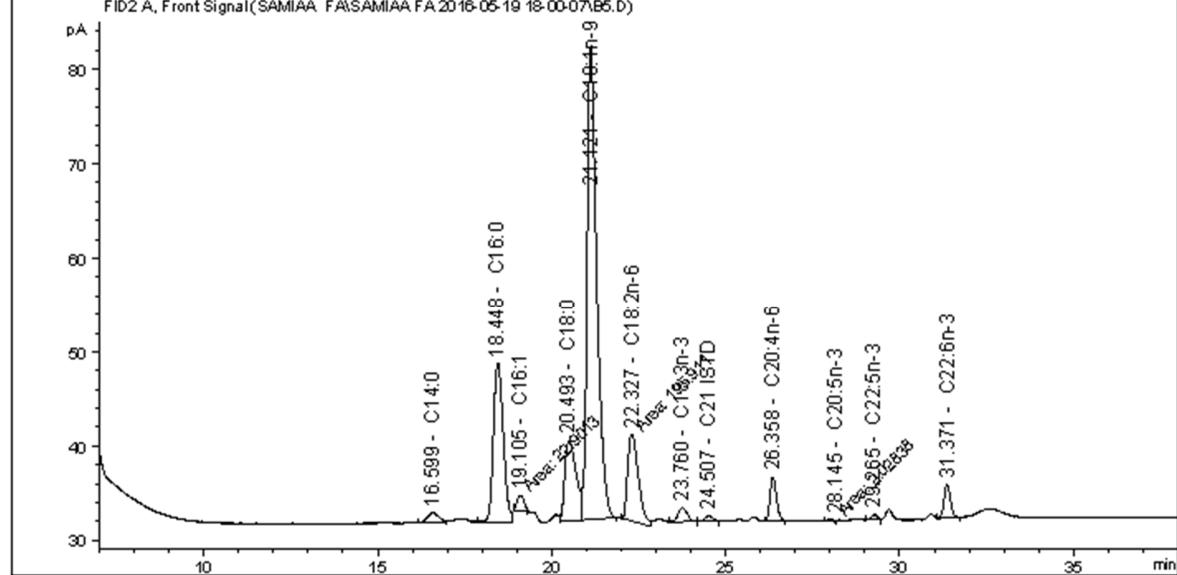
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\B5.D  
Sample Name: B5

```
=====
Acq. Operator   : Dr Mahdi           Seq. Line : 11
Acq. Instrument : Instrument 1       Location : Vial 11
Injection Date  : 5/20/2016 1:10:24 AM   Inj : 1
                                         Ini Volume : 1  $\mu$ l
Acq. Method    : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA_FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed   : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed   : 7/1/2016 11:11:06 AM by Dr Mahdi
                                         (modified after loading)
Additional Info : Peak(s) manually integrated
```

Additional Info : Peak(s) manually integrated



```
=====  
                         Area Percent Report  
=====  
  
Sorted By           :      Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier:        :      1.0000  
Dilution:          :      1.0000  
Sample Amount:     :      1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.599	BV	0.2673	22.01955	1.16966	C14:0
2	18.448	BV	0.2319	331.00018	17.58243	C16:0
3	19.105	MM	0.2297	22.90125	1.21649	C16:1
4	20.493	VV	0.2654	190.56412	10.12259	C18:0
5	21.121	VB	0.2301	970.81183	51.56864	C18:ln-9
6	22.327	MM	0.3567	195.91066	10.40660	C18:2n-6
7	23.760	VV	0.2104	26.07114	1.38488	C18:3n-3
8	24.507	VV	0.1848	8.35252	0.44368	C21 ISTD
9	26.358	VV	0.1541	60.29056	3.20258	C20:4n-6

Instrument 1 7/1/2016 11:14:36 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B5.D  
Sample Name: B5

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	28.145	MM	0.1659	2.02838	0.10775	C20:5n-3
11	29.265	BV	0.1582	7.09162	0.37670	C22:5n-3
12	31.371	VB	0.1517	45.52070	2.41802	C22:6n-3

Totals : 1882.56251 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

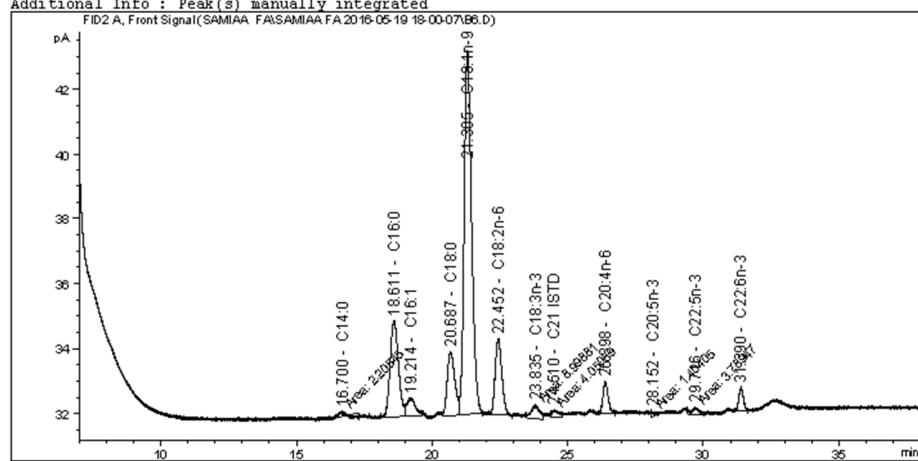
Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B6.D  
Sample Name: B6

=====  
Acq. Operator : Dr Mahdi Seq. Line : 12  
Acq. Instrument : Instrument 1 Location : Vial 12  
Injection Date : 5/20/2016 1:53:07 AM Inj : 1  
Inj Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.700	MM	0.2401	2.20545	0.54085	C14:0
2	18.611	BV	0.2544	62.98857	15.44685	C16:0
3	19.214	VB	0.2646	12.65439	3.10327	C16:1
4	20.687	VV	0.2286	37.93367	9.30257	C18:0
5	21.305	VB	0.2237	212.52498	52.11804	C18:ln-9
6	22.452	BB	0.2090	40.06107	9.82428	C18:2n-6
7	23.835	MM	0.3617	8.99881	2.20680	C18:3n-3
8	24.510	MM	0.2670	4.05089	0.99341	C21 ISTD
9	26.398	BB	0.1554	12.72753	3.12120	C20:4n-6

Instrument 1 7/1/2016 11:15:08 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\B6.D  
Sample Name: B6

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	28.152	MM	0.1472	1.40405	0.34432	C20:5n-3
11	29.716	MM	0.2715	3.78947	0.92930	C22:5n-3
12	31.390	BV	0.1435	8.43732	2.06911	C22:6n-3

Totals : 407.77621 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

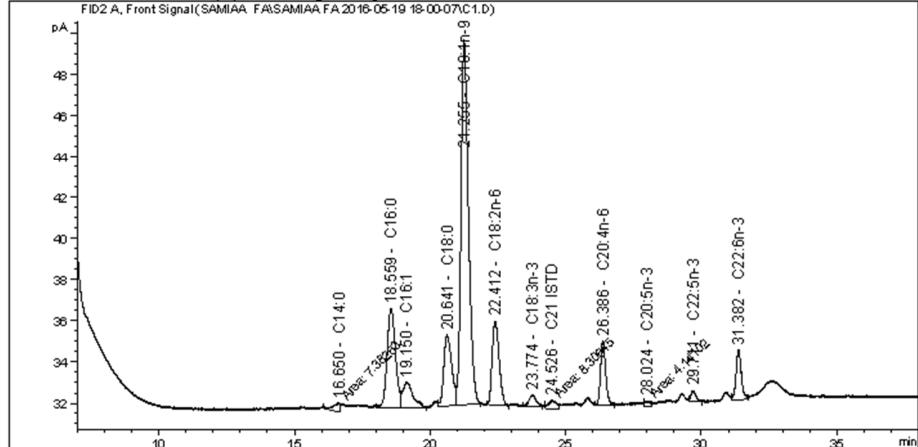
Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

### Sample C= HFD+1500 mg/kg

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18:00:07\Cl.D  
Sample Name: Cl

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 13
Acq. Instrument : Instrument 1   Location : Vial 13
Injection Date : 5/20/2016 2:35:52 AM   Inj : 1
                                      Ini Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18:00:07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
```

Additional Info : Peak(s) manually integrated



### Area Percent Report

```
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.000000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.650	MM	0.2795	7.38263	1.02167	C14:0
2	18.559	VV	0.2519	103.03841	14.25932	C16:0
3	19.150	VB	0.3091	31.68864	4.38534	C16:1
4	20.641	VV	0.2431	69.59349	9.63093	C18:0
5	21.255	VB	0.2231	335.17380	46.38418	C18:ln-9
6	22.412	BB	0.2114	72.53200	10.03759	C18:2n-6
7	23.774	VV	0.2036	9.19260	1.27215	C18:3n-3
8	24.526	MM	0.3311	8.30645	1.14952	C21 ISTD
9	26.386	VB	0.1579	40.72181	5.63543	C20:4n-6

Instrument 1 7/1/2016 11:15:26 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\Cl.D  
Sample Name: Cl

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	28.024	MM	0.2261	4.14102	0.57307	C20:5n-3
11	29.711	VV	0.1587	7.35145	1.01736	C22:5n-3
12	31.382	VV	0.1624	33.48139	4.63344	C22:6n-3

Totals : 722.60369 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

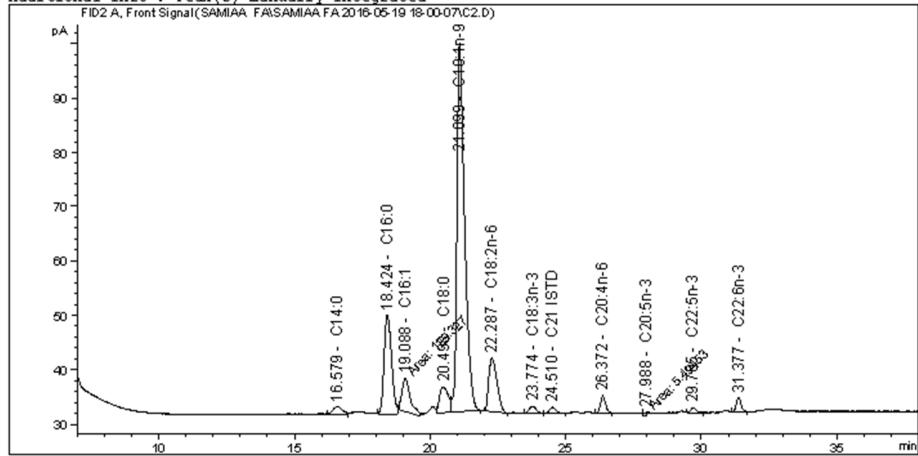
===== Final Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\C2.D  
Sample Name: C2

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 14
Acq. Instrument : Instrument 1  Location : Vial 14
Injection Date : 5/20/2016 3:18:33 AM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



=====
Area Percent Report
=====

```
Sorted By : Signal
Calib. Date Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.579	BV	0.2770	32.29134	1.42114	C14:0
2	18.424	VV	0.2245	346.49377	15.24917	C16:0
3	19.088	MM	0.3514	129.32690	5.69167	C16:1
4	20.498	VV	0.2673	104.71326	4.60843	C18:0
5	21.099	VB	0.2334	1322.11963	58.18642	C18:ln-9
6	22.287	BB	0.2516	206.35832	9.08182	C18:2n-6
7	23.774	VV	0.2105	23.85121	1.04969	C18:3n-3
8	24.510	VB	0.1876	16.95040	0.74599	C21:ISTD
9	26.372	VB	0.1542	41.28127	1.81679	C20:4n-6

Instrument 1 7/1/2016 11:15:40 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C2.D  
Sample Name: C2

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.988	MM	0.1311	5.49453	0.24181	C20:5n-3
11	29.705	VB	0.1577	12.21144	0.53742	C22:5n-3
12	31.377	BV	0.1434	31.12145	1.36965	C22:6n-3

Totals : 2272.21352 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

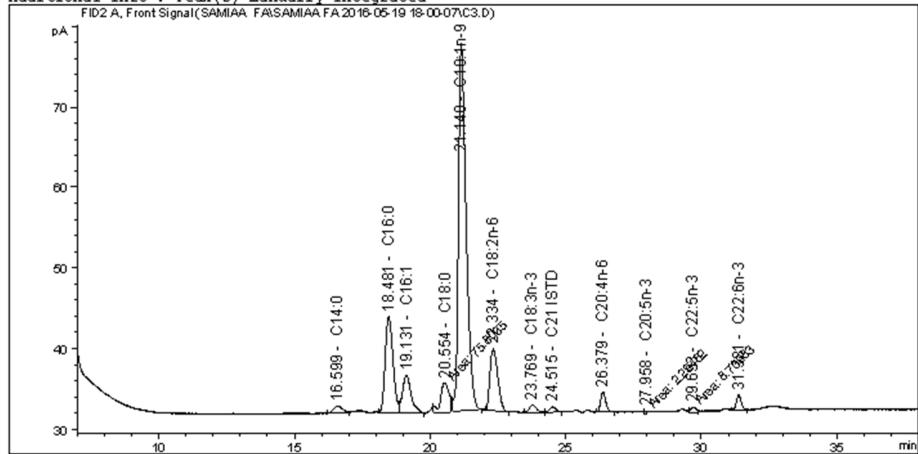
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C3.D  
Sample Name: C3

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 15
Acq. Instrument : Instrument 1    Location : Vial 15
Injection Date : 5/20/2016 4:01:19 AM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
                                                (modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====

Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.599	VV	0.2754	20.46780	1.29930	C14:0
2	18.481	VV	0.2383	237.99663	15.10807	C16:0
3	19.131	VV	0.2675	106.11951	6.73649	C16:1
4	20.554	MM	0.3481	75.80354	4.81202	C18:0
5	21.148	VB	0.2300	888.08569	56.37584	C18:ln-9
6	22.334	BB	0.2383	151.69058	9.62935	C18:2n-6
7	23.769	BV	0.2077	15.57892	0.98895	C18:3n-3
8	24.515	VV	0.1965	10.88985	0.69129	C21:ISTD
9	26.379	BV	0.1606	33.49829	2.12648	C20:4n-6

Instrument 1 7/1/2016 11:15:54 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C3.D  
Sample Name: C3

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.958	MM	0.0998	2.29462	0.14566	C20:5n-3
11	29.693	MM	0.2241	8.73983	0.55481	C22:5n-3
12	31.381	VV	0.1513	24.12946	1.53174	C22:6n-3

Totals : 1575.29474 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

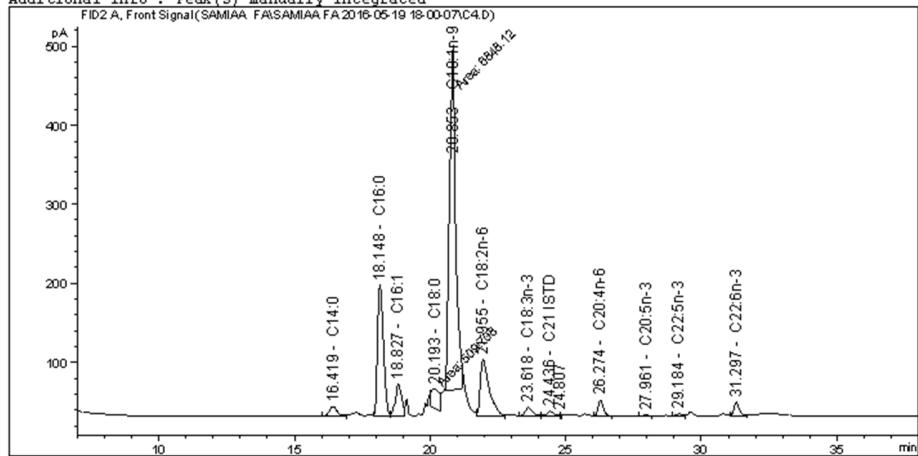
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C4.D  
Sample Name: C4

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 16
Acq. Instrument : Instrument 1   Location : Vial 16
Injection Date : 5/20/2016 4:44:01 AM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.419	VV	0.2417	251.01326	1.89759	C14:0
2	18.148	VV	0.1805	2517.40552	19.03084	C16:0
3	18.827	VV	0.1954	650.49536	4.91755	C16:1
4	20.193	MM	0.3448	509.70850	3.85324	C18:0
5	20.853	MM	0.2624	6848.12061	51.76975	C18:1n-9
6	21.955	VV	0.2706	1619.00916	12.23923	C18:2n-6
7	23.618	VV	0.2229	198.80815	1.50293	C18:3n-3
8	24.436	VV	0.2069	97.58797	0.73774	C21 ISTD
9	26.274	VB	0.1604	261.80106	1.97914	C20:4n-6

Instrument 1 7/1/2016 11:16:27 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C4.D  
Sample Name: C4

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.961	BV	0.1465	7.67503	0.05802	C20:5n-3
11	29.184	VV	0.1660	31.59854	0.23888	C22:5n-3
12	31.297	VB	0.1661	231.70003	1.75158	C22:6n-3
Totals :			1.32249e4	99.9765		

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

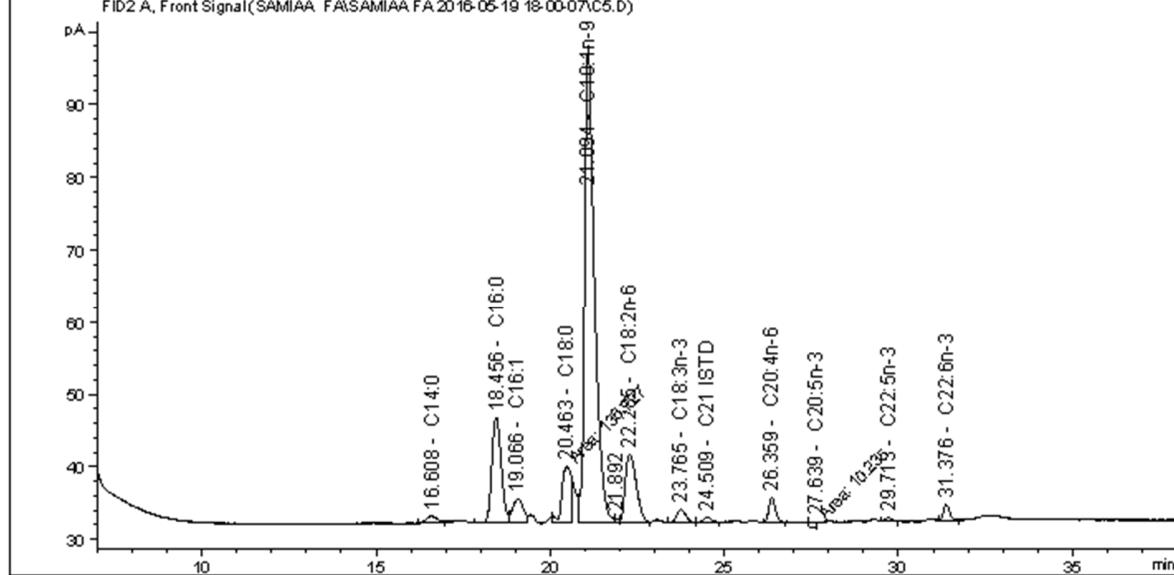
Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\ SAMIAA FA\ SAMIAA FA 2016-05-19 18-00-07\ C5.D  
Sample Name: C5

=====  
Acq. Operator : Dr Mahdi Seq. Line : 17  
Acq. Instrument : Instrument 1 Location : Vial 17  
Injection Date : 5/20/2016 5:26:47 AM Inj : 1  
Inj Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated

Additional Info : Peak(s) manually integrated



## Area Percent Report

Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [\*] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.608	BV	0.2670	19.43147	0.91054	C14:0
2	18.456	VV	0.2224	272.85870	12.78587	C16:0
3	19.066	VV	0.2577	73.45361	3.44196	C16:1
4	20.463	MM	0.2990	136.72675	6.40687	C18:0
5	21.094	VB	0.2304	1280.63293	60.00912	C18:ln-9
6	22.285	VV	0.2630	209.18715	9.80229	C18:2n-6
7	23.765	BV	0.2229	33.12486	1.55220	C18:3n-3
8	24.509	VV	0.2062	12.68435	0.59438	C21 ISTD
9	26.359	VV	0.1618	45.90746	2.15118	C20:4n-6

Instrument 1 7/1/2016 11:16:41 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C5.D  
Sample Name: C5

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.639	MM	0.1900	10.23500	0.47960	C20:5n-3
11	29.713	VV	0.1589	7.67566	0.35967	C22:5n-3
12	31.376	VB	0.1491	27.49090	1.28819	C22:6n-3

Totals : 2129.40885 99.7819

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

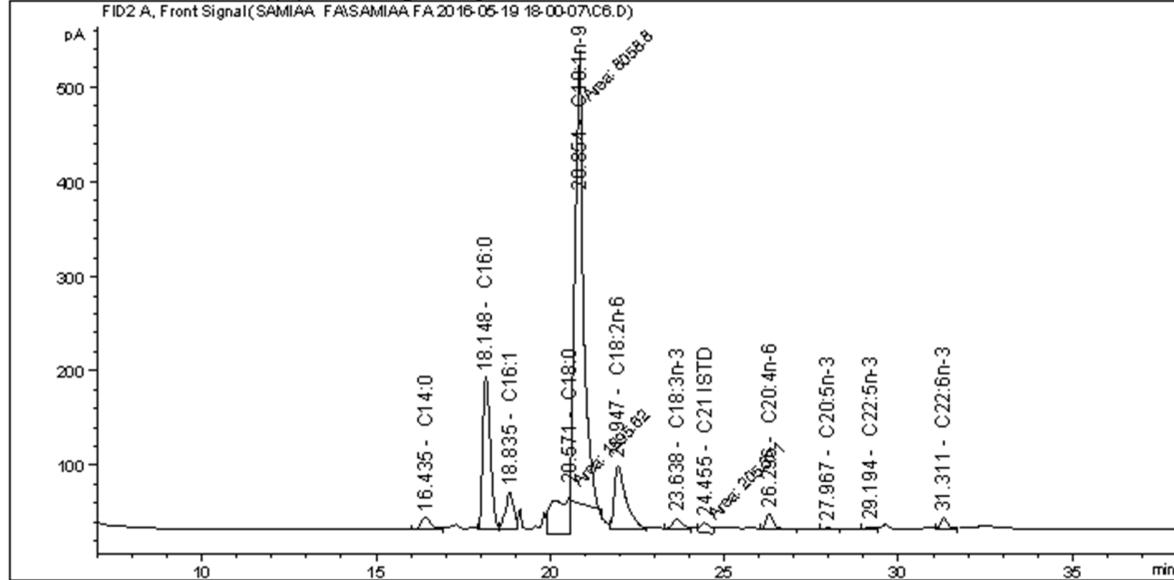
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C6.D  
Sample Name: C6

```
=====
Acq. Operator   : Dr Mahdi                               Seq. Line : 18
Acq. Instrument : Instrument 1                         Location : Vial 18
Injection Date  : 5/20/2016 6:09:42 AM                  Inj : 1
                                                       Inj Volume : 1 ul
Acq. Method    : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA_FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed   : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed   : 7/1/2016 11:11:06 AM by Dr Mahdi
                           (modified after loading)
Additional Info : Peak(s) manually integrated
```

Additional Info : Peak(s) manually integrated



## Area Percent Report

Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.435	VV	0.2357	251.00543	1.66794	C14:0
2	18.148	VV	0.1819	2428.91797	16.14026	C16:0
3	18.835	VV	0.1968	643.36554	4.27519	C16:1
4	20.571	MM	0.4695	1295.61865	8.60944	C18:0
5	20.854	MM	0.2806	8058.79736	53.55105	C18:ln-9
6	21.947	VV	0.2756	1553.12256	10.32057	C18:2n-6
7	23.638	VV	0.2351	213.72981	1.42024	C18:3n-3
8	24.455	MM	0.3472	205.37114	1.36470	C21 ISTD
9	26.296	VB	0.1709	218.85522	1.45430	C20:4n-6

Instrument 1 7/1/2016 11:17:11 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\C6.D  
Sample Name: C6

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.967	BB	0.1527	9.50140	0.06314	C20:5n-3
11	29.194	VV	0.1704	29.61548	0.19680	C22:5n-3
12	31.311	VB	0.1590	140.91237	0.93637	C22:6n-3

Totals : 1.50488e4 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

===== Final Summed Peaks Report =====

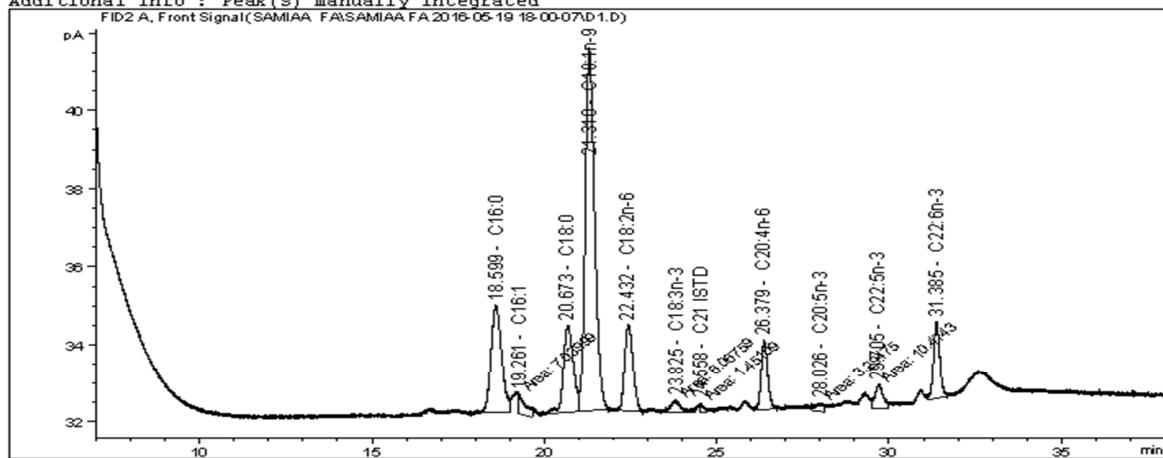
Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

## Sample D= HFD+orlistat

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\D1.D  
Sample Name: D1

=====  
Acq. Operator : Dr Mahdi Seq. Line : 19  
Acq. Instrument : Instrument 1 Location : Vial 19  
Injection Date : 5/20/2016 6:52:29 AM Inj : 1  
Inj Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.000000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.650	BV	0.0000	0.00000	0.00000	C14:0
2	18.599	BV	0.2537	59.43208	15.04286	C16:0
3	19.261	MM	0.2286	7.03999	1.78189	C16:1
4	20.673	BV	0.2364	45.01530	11.39382	C18:0
5	21.310	VB	0.2233	175.99504	44.54611	C18:ln-9
6	22.432	BV	0.2021	37.81973	9.57255	C18:2n-6
7	23.825	MM	0.3259	6.06759	1.53577	C18:3n-3
8	24.558	MM	0.1024	1.45109	0.36729	C21 ISTD
9	26.379	VV	0.1562	23.46805	5.94000	C20:4n-6

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D1.D  
Sample Name: D1

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.026	MM	0.2468	3.29475	0.83393	C20:5n-3
11	29.705	MM	0.2750	10.47429	2.65115	C22:5n-3
12	31.385	VV	0.1529	25.02715	6.33462	C22:6n-3

Totals : 395.08507 100.0000

7 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

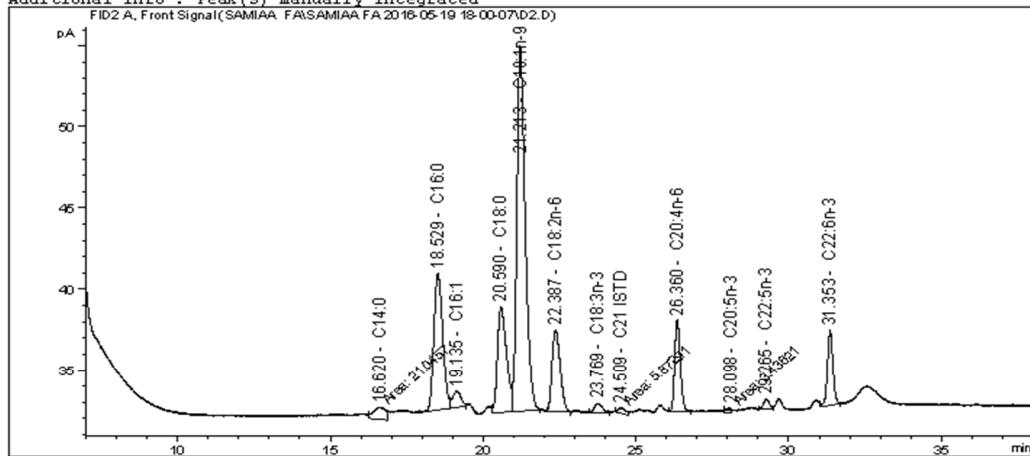
===== Final Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D2.D  
Sample Name: D2

=====  
Acq. Operator : Dr Mahdi Seq. Line : 20  
Acq. Instrument : Instrument 1 Location : Vial 20  
Injection Date : 5/20/2016 7:35:09 AM Inj : 1  
                  Init Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.620	MM	0.4568	21.04575	2.05778	C14:0
2	18.529	VV	0.2392	171.39038	16.75799	C16:0
3	19.135	VV	0.2251	19.33800	1.89081	C16:1
4	20.590	VV	0.2401	133.29091	13.03275	C18:0
5	21.213	VB	0.2227	425.27106	41.58162	C18:1n-9
6	22.387	BV	0.2161	92.81897	9.07554	C18:2n-6
7	23.769	BV	0.2037	9.60251	0.93890	C18:3n-3
8	24.509	MM	0.2727	5.87291	0.57423	C21 ISTD
9	26.360	VB	0.1580	73.90343	7.22604	C20:4n-6

Instrument 1 7/1/2016 11:17:45 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D2.D  
Sample Name: D2

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.098	MM	0.1586	3.43621	0.33598	C20:5n-3
11	29.265	BV	0.1661	8.44703	0.82592	C22:5n-3
12	31.353	VV	0.1503	58.32095	5.70243	C22:6n-3

Totals : 1022.73809 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

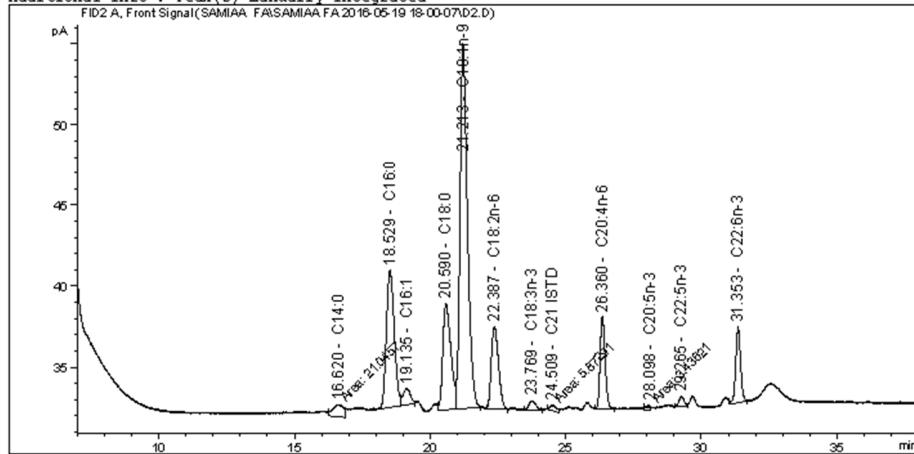
===== Final Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D2.D  
Sample Name: D2

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 20
Acq. Instrument : Instrument 1    Location : Vial 20
Injection Date : 5/20/2016 7:35:09 AM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====
```

```
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.620	MM	0.4568	21.04575	2.05778	C14:0
2	18.529	VV	0.2392	171.39038	16.75799	C16:0
3	19.135	VV	0.2251	19.33800	1.89081	C16:1
4	20.590	VV	0.2401	133.29091	13.03275	C18:0
5	21.213	VB	0.2227	425.27106	41.58162	C18:ln-9
6	22.387	BV	0.2161	92.81897	9.07554	C18:2n-6
7	23.769	BV	0.2037	9.60251	0.93890	C18:3n-3
8	24.509	MM	0.2727	5.87291	0.57423	C21 ISTD
9	26.360	VB	0.1580	73.90343	7.22604	C20:4n-6

Instrument 1 7/1/2016 11:17:45 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D2.D  
Sample Name: D2

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	28.098	MM	0.1586	3.43621	0.33598	C20:5n-3
11	29.265	BV	0.1661	8.44703	0.82592	C22:5n-3
12	31.353	VV	0.1503	58.32095	5.70243	C22:6n-3

Totals : 1022.73809 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

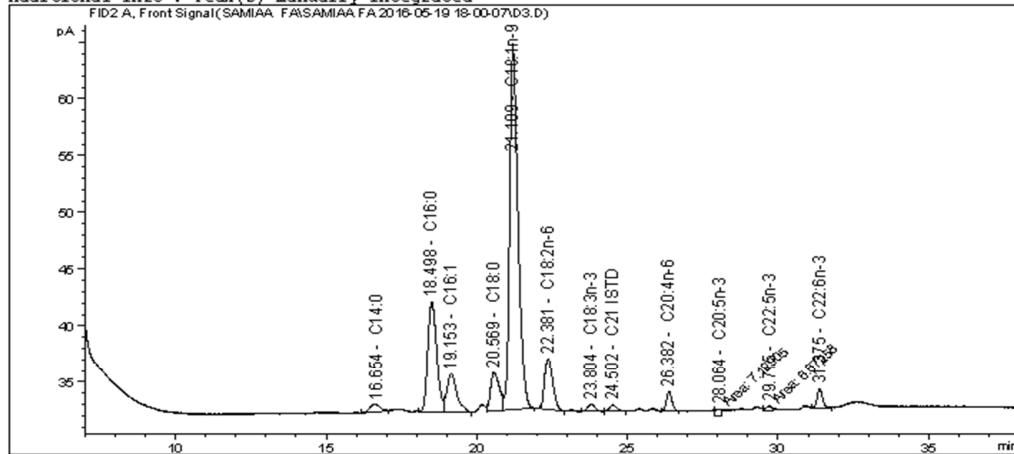
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\D3.D  
Sample Name: D3

=====  
Acq. Operator : Dr Mahdi Seq. Line : 21  
Acq. Instrument : Instrument 1 Location : Vial 21  
Injection Date : 5/20/2016 8:17:53 AM Inj : 1  
Init Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.654	BV	0.2797	16.23161	1.41038	C14:0
2	18.498	VV	0.2435	202.92180	17.63201	C16:0
3	19.153	VV	0.2790	80.54428	6.99855	C16:1
4	20.569	VV	0.2396	69.88495	6.07235	C18:0
5	21.189	VB	0.2285	617.82910	53.68359	C18:1n-9
6	22.381	BB	0.2294	85.88630	7.46272	C18:2n-6
7	23.804	BV	0.2015	10.45348	0.90831	C18:3n-3
8	24.502	VB	0.1930	9.06861	0.78798	C21 ISTD
9	26.382	BV	0.1530	22.21577	1.93034	C20:4n-6

Instrument 1 7/1/2016 11:18:00 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\D3.D  
Sample Name: D3

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name %
10	28.064	MM	0.1839	7.12905	0.61945	C20:5n-3
11	29.715	MM	0.2250	6.67258	0.57978	C22:5n-3
12	31.375	VB	0.1486	22.03390	1.91454	C22:6n-3

Totals : 1150.87143 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

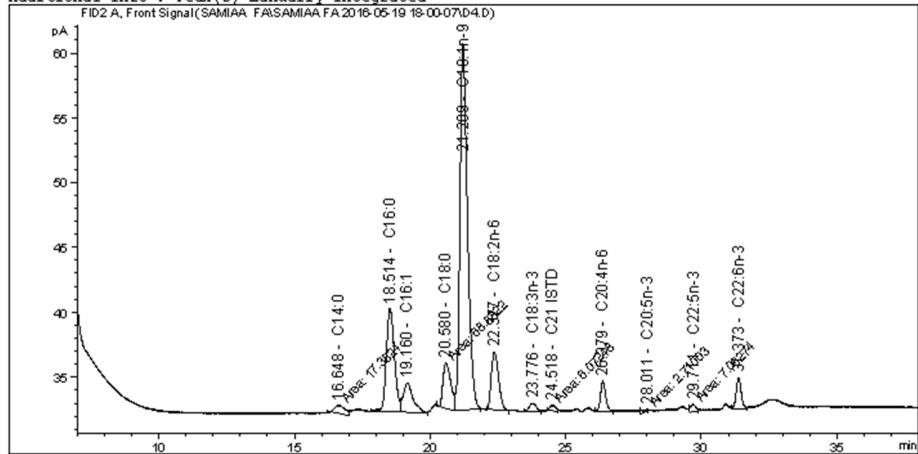
Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D4.D  
Sample Name: D4

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 22
Acq. Instrument : Instrument 1    Location : Vial 22
Injection Date : 5/20/2016 9:00:29 AM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.648	MM	0.4612	17.38241	1.70029	C14:0
2	18.514	BV	0.2458	165.92252	16.22996	C16:0
3	19.160	VV	0.2905	55.65021	5.44351	C16:1
4	20.580	MM	0.3294	68.88221	6.73782	C18:0
5	21.209	VV	0.2270	543.09021	53.12319	C18:ln-9
6	22.377	BB	0.2264	82.86333	8.10540	C18:2n-6
7	23.776	BV	0.2083	10.99033	1.07504	C18:3n-3
8	24.518	MM	0.2255	6.07248	0.59399	C21 ISTD
9	26.379	VB	0.1576	29.59464	2.89484	C20:4n-6

Instrument 1 7/1/2016 11:18:19 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D4.D  
Sample Name: D4

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.011	MM	0.3931	2.71003	0.26509	C20:5n-3
11	29.711	MM	0.2097	7.06274	0.69085	C22:5n-3
12	31.373	VV	0.1589	32.10112	3.14002	C22:6n-3

Totals : 1022.32224 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

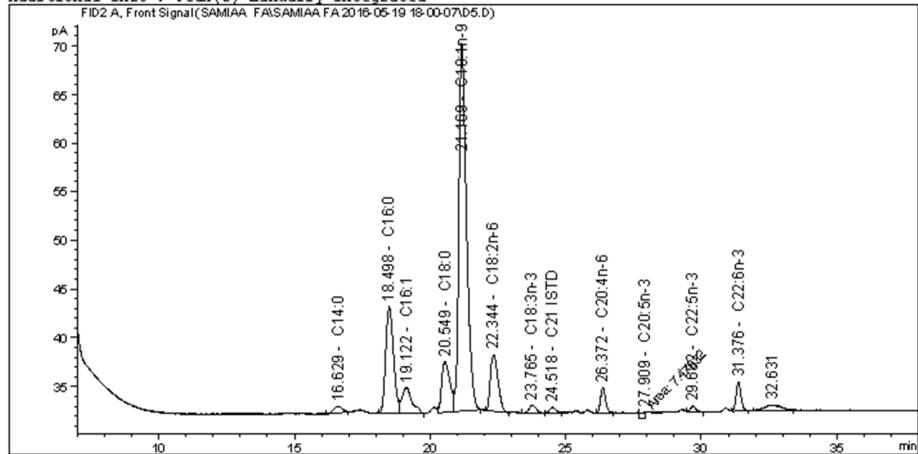
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\DS.D  
Sample Name: DS

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 23
Acq. Instrument : Instrument 1  Location : Vial 23
Injection Date : 5/20/2016 9:43:14 AM  Inj : 1
                                                Ini Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



=====
Area Percent Report
=====

```
Sorted By : Signal
Calib. Date Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.629	BV	0.2741	14.93068	1.07748	C14:0
2	18.498	BV	0.2379	216.86888	15.65047	C16:0
3	19.122	BV	0.3043	68.20333	4.92193	C16:1
4	20.549	VV	0.2521	110.43978	7.96995	C18:0
5	21.169	VV	0.2316	729.07153	52.61386	C18:ln-9
6	22.344	BB	0.2324	113.39867	8.18348	C18:2n-6
7	23.765	BV	0.2183	14.53435	1.04888	C18:3n-3
8	24.518	VV	0.1880	9.18814	0.66307	C21 ISTD
9	26.372	BB	0.1550	33.21678	2.39711	C20:4n-6

Instrument 1 7/1/2016 11:18:30 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D5.D  
Sample Name: D5

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.909	MM	0.2084	7.47632	0.53953	C20:5n-3
11	29.682	VV	0.1655	8.88426	0.64114	C22:5n-3
12	31.376	VB	0.1514	37.22287	2.68621	C22:6n-3

Totals : 1363.43559 98.3931

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

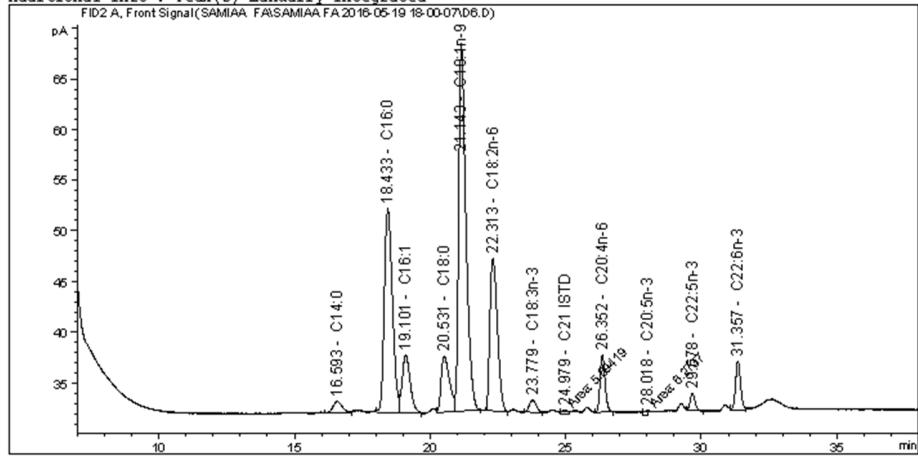
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D6.D  
Sample Name: D6

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 24
Acq. Instrument : Instrument 1    Location : Vial 24
Injection Date : 5/20/2016 10:25:43 AM  Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
=====
Area Percent Report
=====

Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.593	VV	0.2866	26.96041	1.48002	C14:0
2	18.433	VV	0.2447	415.95798	22.83447	C16:0
3	19.101	VB	0.2432	116.78521	6.41105	C16:1
4	20.531	VV	0.2511	117.74133	6.46354	C18:0
5	21.143	VB	0.2191	668.48285	36.69710	C18:ln-9
6	22.313	BB	0.2307	287.37869	15.77597	C18:2n-6
7	23.779	BV	0.2037	20.38370	1.11899	C18:3n-3
8	24.979	MM	0.2641	5.69419	0.31259	C21 ISTD
9	26.352	VB	0.1552	72.45551	3.97753	C20:4n-6

Instrument 1 7/1/2016 11:18:41 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\D6.D  
Sample Name: D6

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.018	MM	0.1936	6.27370	0.34440	C20:5n-3
11	29.678	BV	0.1444	19.82045	1.08807	C22:5n-3
12	31.357	VV	0.1578	63.68897	3.49628	C22:6n-3

Totals : 1821.62299 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

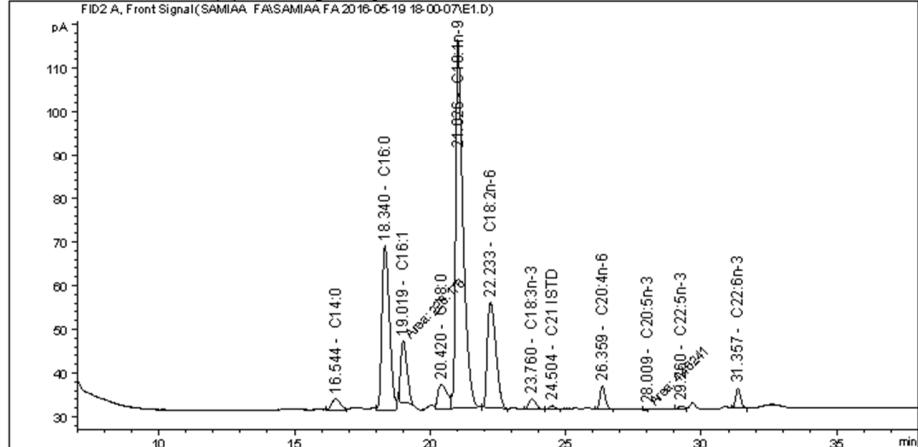
\*\*\* End of Report \*\*\*

## Sample E=High fat diet (HFDC)

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18:00:07\E1.D  
Sample Name: E1

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 25
Acq. Instrument : Instrument 1  Location : Vial 25
Injection Date : 5/20/2016 11:08:23 AM  Inj : 1
                                                Ini Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18:00:07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method: C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi
(modified after loading)
```

Additional Info : Peak(s) manually integrated



### Area Percent Report

```
=====
Sorted By : Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.000000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.544	VV	0.2554	55.41048	1.60769	C14:0
2	18.340	VV	0.2279	722.91058	20.97467	C16:0
3	19.019	MM	0.2670	226.17630	6.56232	C16:1
4	20.420	VV	0.2856	133.74139	3.88040	C18:0
5	21.026	VB	0.2241	1590.51074	46.14739	C18:1n-9
6	22.233	BB	0.2571	525.67310	15.25198	C18:2n-6
7	23.760	BV	0.2073	39.68839	1.15153	C18:3n-3
8	24.504	VV	0.1685	10.71035	0.31075	C21 ISTD
9	26.359	VB	0.1560	70.23016	2.03767	C20:4n-6

Instrument 1 7/1/2016 11:19:00 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E1.D  
Sample Name: E1

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.009	MM	0.1675	4.46241	0.12947	C20:5n-3
11	29.260	BV	0.1564	9.07513	0.26331	C22:5n-3
12	31.357	VB	0.1489	57.99989	1.68282	C22:6n-3

Totals : 3446.58893 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

-----  
Summed Peaks Report  
-----

Signal 1: FID2 A, Front Signal

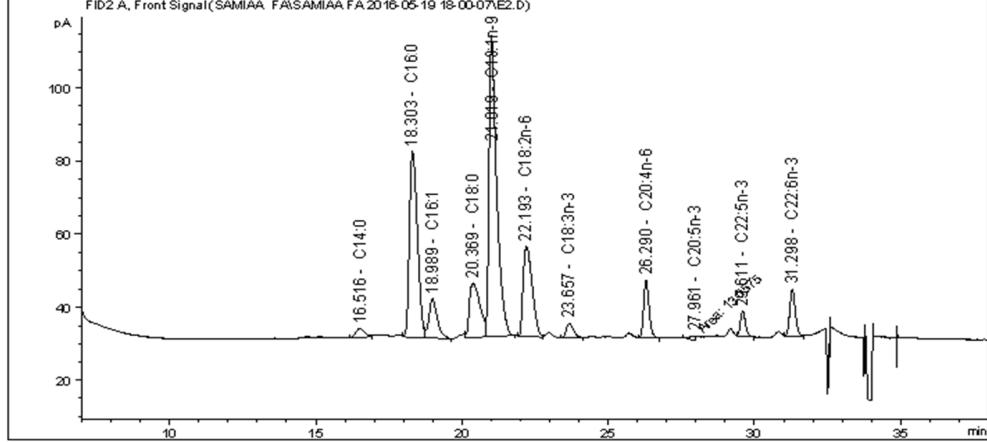
-----  
Final Summed Peaks Report  
-----

Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\E2.D  
Sample Name: E2

=====  
Acq. Operator : Dr Mahdi Seq. Line : 26  
Acq. Instrument : Instrument 1 Location : Vial 26  
Injection Date : 5/20/2016 11:50:57 AM Inj : 1  
Int Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:11:06 AM by Dr Mahdi  
(modified after loading)

Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By : Signal  
Calib. Data Modified : 6/20/2016 4:41:54 PM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.000000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.516	VV	0.2492	52.42464	1.25951	C14:0
2	18.303	VV	0.2265	966.20026	23.21318	C16:0
3	18.989	VV	0.2357	210.78088	5.06406	C16:1
4	20.369	VV	0.2955	373.14078	8.96479	C18:0
5	21.019	VB	0.2161	1490.77502	35.81620	C18:2n-9
6	22.193	BV	0.2549	530.78961	12.75234	C18:2n-6
7	23.657	VV	0.2061	68.89052	1.65511	C18:3n-3
8	24.600		0.0000	0.00000	0.00000	C21 ISTD
9	26.290	VB	0.1524	201.86470	4.84984	C20:4n-6

Instrument 1 7/1/2016 11:19:17 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E2.D  
Sample Name: E2

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.961	MM	0.1725	13.05747	0.31371	C20:5n-3
11	29.611	VB	0.1472	85.11295	2.04486	C22:5n-3
12	31.298	VB	0.1559	169.25574	4.06641	C22:6n-3

Totals : 4162.29256 100.0000

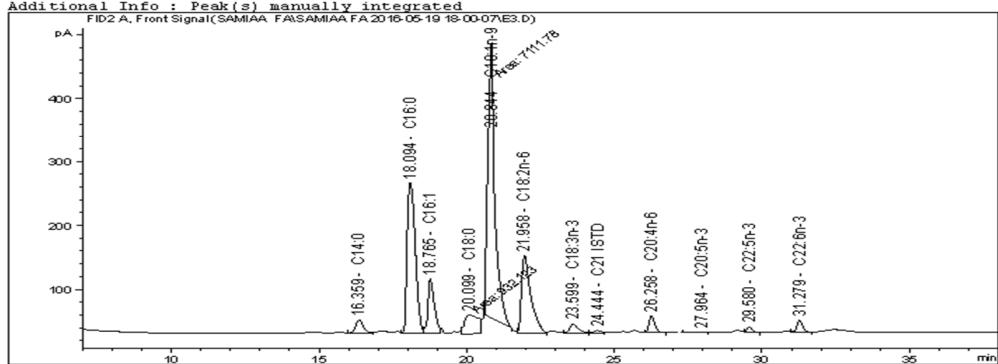
6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====  
Signal 1: FID2 A, Front Signal  
=====  
Final Summed Peaks Report  
=====  
Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\E3.D  
Sample Name: E3

=====  
Acq. Operator : Dr Mahdi Seq. Line : 27  
Acq. Instrument : Instrument 1 Location : Vial 27  
Injection Date : 5/20/2016 12:33:36 PM Inj : 1  
Init Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:20:28 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



Sorted By : Signal  
Calib. Data Modified : 7/1/2016 11:20:27 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.359	VV	0.2100	374.60516	2.08975	C14:0
2	18.094	VV	0.2259	4504.98877	25.13129	C16:0
3	18.765	VV	0.1861	1267.27136	7.06953	C16:1
4	20.099	MM	0.5198	932.12256	5.19989	C18:0
5	20.844	MM	0.2747	7111.77588	39.67337	C18:ln-3
6	21.958	VV	0.2697	2643.18774	14.74515	C18:2n-6
7	23.599	VV	0.2466	266.95145	1.48920	C18:3n-3
8	24.444	VV	0.2208	56.90865	0.31747	C21 ISTD
9	26.258	VB	0.1791	361.31781	2.01563	C20:4n-6

Instrument 1 7/1/2016 11:20:35 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E3.D  
Sample Name: E3

Peak #	RetTime	Type	Width [min]	Area [min]	Area [pA*s]	Name %
10	27.964	BV	0.2395	17.96986	0.10025	C20:5n-3
11	29.580	VV	0.1694	116.19919	0.64822	C22:5n-3
12	31.279	VB	0.1851	272.51688	1.52025	C22:6n-3

Totals : 1.79258e4 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

===== Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

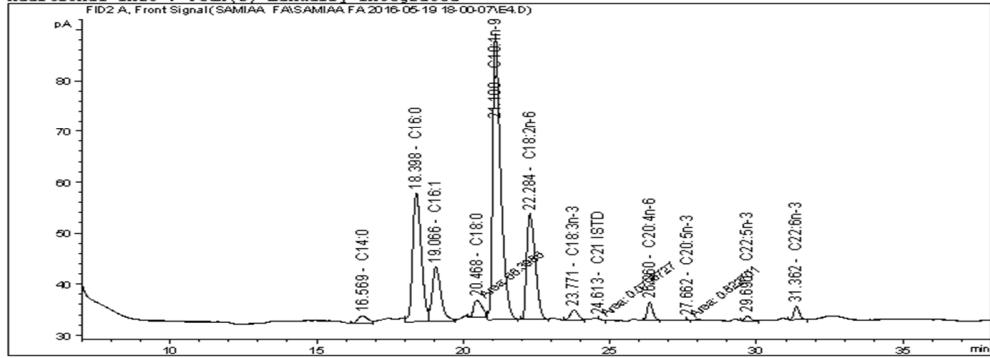
===== Final Summed Peaks Report =====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\E4.D  
Sample Name: E4

=====  
Acq. Operator : Dr Mahdi Seq. Line : 28  
Acq. Instrument : Instrument 1 Location : Vial 28  
Injection Date : 5/20/2016 1:16:10 PM Inj : 1  
Init Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method: C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:21:00 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By : Signal  
Calib. Data Modified : 7/1/2016 11:20:59 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.569	BV	0.2671	32.21893	1.32999	C14:0
2	18.398	VV	0.2403	514.16211	21.22454	C16:0
3	19.066	VV	0.2419	218.26752	9.01005	C16:1
4	20.468	MM	0.3236	66.39861	2.74093	C18:0
5	21.100	VB	0.2209	1042.84790	43.04862	C18:1n:3
6	22.284	BV	0.2438	419.95691	17.33576	C18:2n:6
7	23.771	BV	0.2211	35.90330	1.48208	C18:3n:3
8	24.613	MM	0.0217	7.96727e-2	0.00329	C21 ISTD
9	26.360	BB	0.1588	45.66700	1.88513	C20:4n:6

Instrument 1 7/1/2016 11:21:13 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E4.D  
Sample Name: E4

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.662	MM	0.0763	8.2270e-1	0.03396	C20:5n-3
11	29.690	VV	0.1545	12.27688	0.50679	C22:5n-3
12	31.362	VV	0.1530	33.88722	1.39886	C22:6n-3

Totals : 2422.48875 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

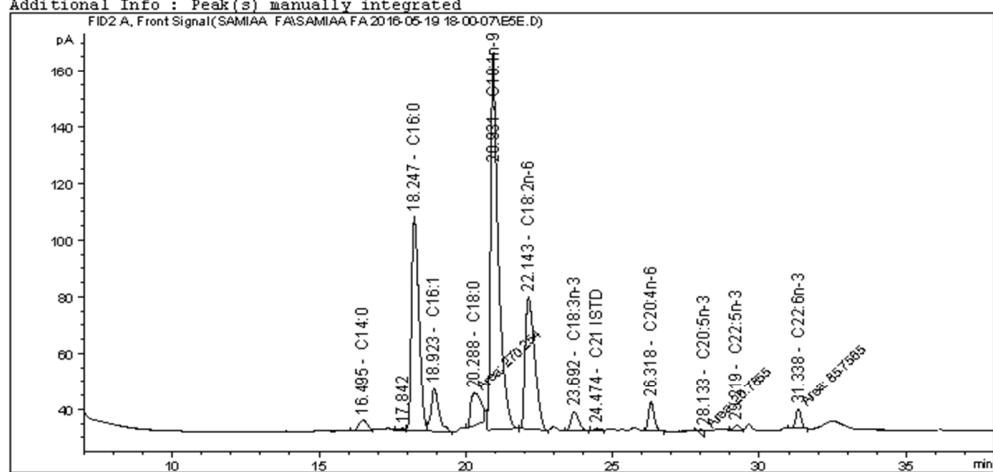
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\E5E.D  
Sample Name: E5

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 29
Acq. Instrument : Instrument 1    Location : Vial 29
Injection Date : 5/20/2016 1:58:51 PM Inj : 1
                                                Ini Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA_FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:21:00 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
Sorted By : Signal
Calib. Data Modified : 7/1/2016 11:20:59 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.495	VV	0.2319	70.10934	1.20226	C14:0
2	18.247	VV	0.2085	1323.27490	22.69206	C16:0
3	18.923	VV	0.2258	280.89462	4.81690	C16:1
4	20.288	MM	0.3909	270.25397	4.63443	C18:0
5	20.931	VB	0.2158	2410.37817	41.33415	C18:1n-9
6	22.143	BV	0.2682	1056.76660	18.12186	C18:2n-6
7	23.692	BB	0.2153	124.14899	2.12896	C18:3n-3
8	24.474	BV	0.1602	8.63970	0.14816	C21 ISTD
9	26.318	VB	0.1612	137.79599	2.36298	C20:4n-6

Instrument 1 7/1/2016 11:21:34 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E5E.D  
Sample Name: E5

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.133	MM	0.1457	20.78552	0.35644	C20:5n-3
11	29.219	VV	0.1937	35.40912	0.60721	C22:5n-3
12	31.338	MM	0.2020	85.75652	1.47059	C22:6n-3
Totals :				5824.21346	99.8760	

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

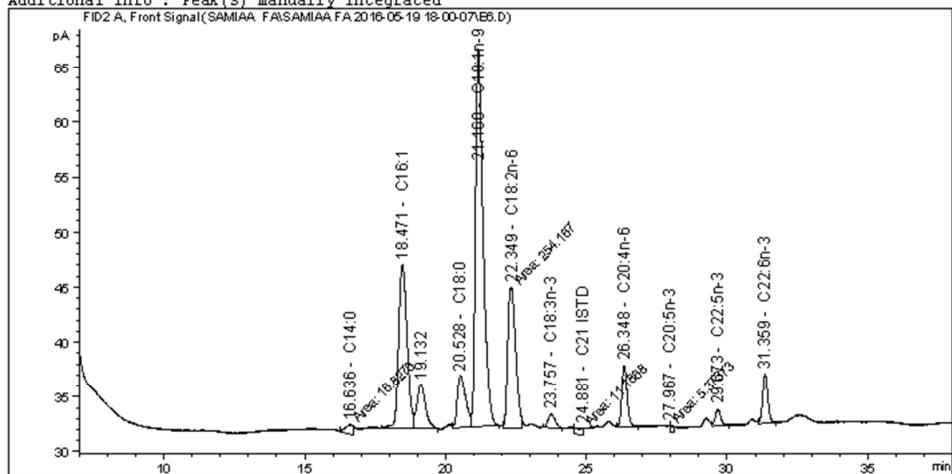
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\E6.D  
Sample Name: E6

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 30
Acq. Instrument : Instrument 1    Location : Vial 30
Injection Date : 5/20/2016 2:41:21 PM   Inj : 1
                                      Init Volume : 1  $\mu$ l
Acq. Method : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed : 7/1/2016 11:21:00 AM by Dr Mahdi
(modified after loading)
Additional Info : Peak(s) manually integrated
```



```
Sorted By : Signal
Calib. Data Modified : 7/1/2016 11:20:59 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Sample Amount: : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.636	MM	0.3182	16.82763	1.05186	C14:0
2	18.100		0.0000	0.00000	0.00000	C16:0
3	18.471	BV	0.2451	311.00662	19.44031	C16:1
4	20.528	VV	0.2478	97.13303	6.07156	C18:0
5	21.160	VB	0.2293	642.95117	40.18940	C18:ln-9
6	22.349	MM	0.3294	254.16650	15.88736	C18:2n-6
7	23.757	BV	0.2058	21.44231	1.34031	C18:3n-3
8	24.881	MM	0.2818	11.18683	0.69926	C21 ISTD
9	26.348	VB	0.1613	75.02365	4.68956	C20:4n-6

Instrument 1 7/1/2016 11:21:53 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\E6.D  
Sample Name: E6

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.967	MM	0.1515	5.37373	0.33590	C20:5n-3
11	29.673	VV	0.1607	20.87773	1.30502	C22:5n-3
12	31.359	VB	0.1511	57.25043	3.57859	C22:6n-3

Totals : 1513.23964 94.5891

7 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

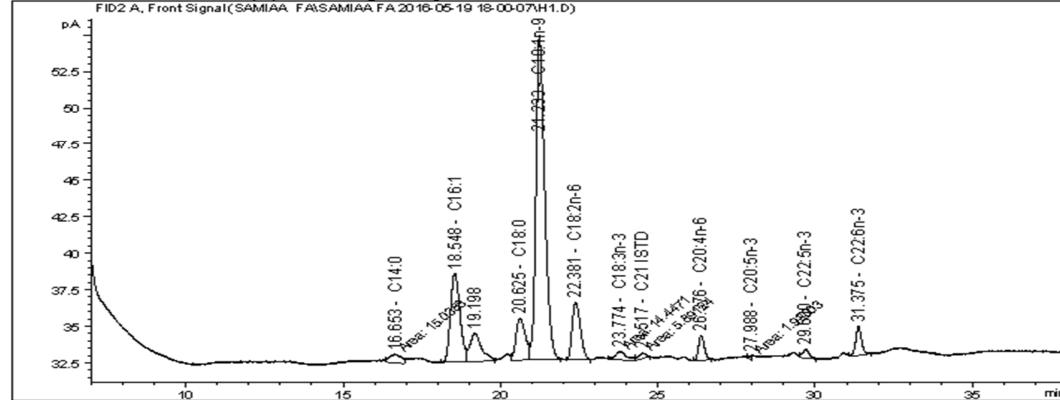
Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

### Sample H= Normal chow diet (NC)

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\H1.D  
Sample Name: H1

=====  
Acq. Operator : Dr Mahdi Sed. Line : 31  
Acq. Instrument : Instrument 1 Location : Vial 31  
Injection Date : 5/20/2016 3:24:03 PM Inj. : 1  
Int. Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:21:00 AM by Dr Mahdi  
(modified after loading)

Additional Info : Peak(s) manually integrated



#### Area Percent Report

Sorted By : Signal  
Calib. Data Modified : 7/1/2016 11:20:59 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

#### Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.653	MM	0.4341	15.03883	1.80926	C14:0
2	18.100		0.0000	0.00000	0.00000	C16:0
3	18.548	BV	0.2477	127.79469	15.37443	C16:1
4	20.625	VV	0.2437	59.28229	7.13200	C18:0
5	21.233	BV	0.2263	429.50848	51.67233	C18:1n-9
6	22.381	BV	0.2149	71.09995	8.55373	C18:2n-6
7	23.774	MM	0.4154	14.44711	1.73807	C18:3n-3
8	24.517	MM	0.2663	5.89124	0.70875	C21 ISTD
9	26.376	BV	0.1533	21.77713	2.61991	C20:4n-6

Instrument 1 7/1/2016 11:22:07 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18:00:07\H1.D  
Sample Name: H1

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.988	MM	0.0959	1.92003	0.23099	C20:5n-3
11	29.690	VB	0.1670	8.40412	1.01106	C22:5n-3
12	31.375	VB	0.1599	26.30722	3.16491	C22:6n-3
Totals :				781.47112	94.0154	

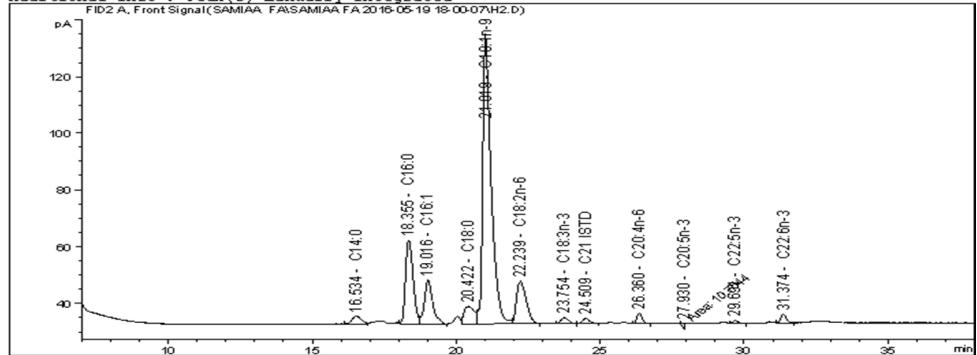
7 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Calibrated compound(s) not found  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====  
Signal 1: FID2 A, Front Signal  
=====  
Final Summed Peaks Report  
=====  
Signal 1: FID2 A, Front Signal  
\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\H2.D  
Sample Name: H2

=====  
Acq. Operator : Dr Mahdi Seq. Line : 32  
Acq. Instrument : Instrument 1 Location : Vial 32  
Injection Date : 5/20/2016 4:06:37 PM Inj : 1  
Inj. Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:21:00 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====  
Sorted By Signal  
Calib. Data Modified : 7/1/2016 11:20:59 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.534	BV	0.2662	61.46471	1.68901	C14:0
2	18.355	VV	0.2178	540.34381	14.84831	C16:0
3	19.016	VB	0.2343	306.31366	8.41731	C16:1
4	20.422	VV	0.2902	149.10374	4.09728	C18:0
5	21.019	VB	0.2391	2058.80615	56.57471	C18:ln-9
6	22.239	BB	0.2779	347.59464	9.55168	C18:2n-6
7	23.754	BV	0.2133	37.18278	1.02176	C18:3n-3
8	24.509	VB	0.1892	28.53251	0.78406	C21 ISTD
9	26.360	VB	0.1555	46.81867	1.28655	C20:4n-6

Instrument 1 7/1/2016 11:22:23 At Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\H2.D  
Sample Name: H2

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.930	MM	0.0814	10.76440	0.29580	C20:5n-3
11	29.691	VB	0.1619	13.34007	0.36658	C22:5n-3
12	31.374	VB	0.1537	38.82728	1.06695	C22:6n-3

Totals : 3639.09242 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

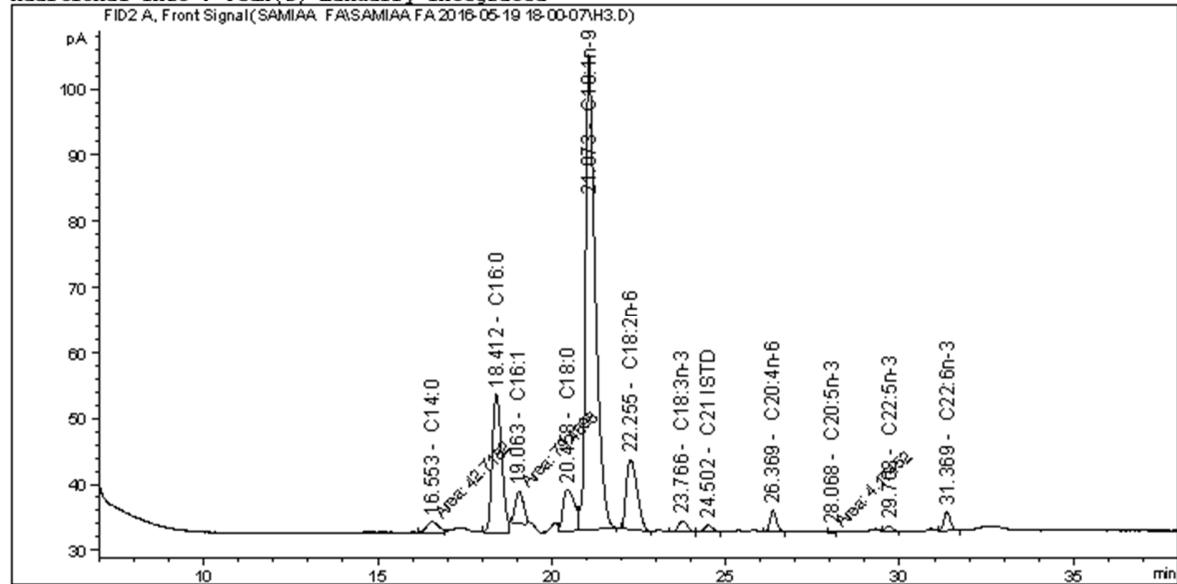
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\H3.D  
Sample Name: H3

=====  
Acq. Operator : Dr Mahdi Seq. Line : 33  
Acq. Instrument : Instrument 1 Location : Vial 33  
Injection Date : 5/20/2016 4:49:19 PM Inj : 1  
Inj Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:23:01 AM by Dr Mahdi  
(modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Calib. Data Modified : 7/1/2016 11:23:00 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.00000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.553	MM	0.4099	42.71821	1.75229	C14:0
2	18.412	VV	0.2248	397.64929	16.31148	C16:0
3	19.063	MM	0.2687	79.46984	3.25983	C16:1
4	20.458	VV	0.2685	142.21829	5.83376	C18:0
5	21.073	VB	0.2331	1407.42651	57.73231	C18:ln-9
6	22.255	BB	0.2533	228.19640	9.36056	C18:2n-6
7	23.766	BV	0.2099	29.45240	1.20813	C18:3n-3
8	24.502	VV	0.1965	16.46512	0.67540	C21 ISTD
9	26.369	VV	0.1584	42.02425	1.72382	C20:4n-6

Instrument 1 7/1/2016 11:23:32 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\H3.D  
Sample Name: H3

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	28.068	MM	0.1880	4.17452	0.17124	C20:5n-3
11	29.708	VV	0.1619	10.72942	0.44012	C22:5n-3
12	31.369	VV	0.1558	37.32470	1.53105	C22:6n-3

Totals : 2437.84895 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

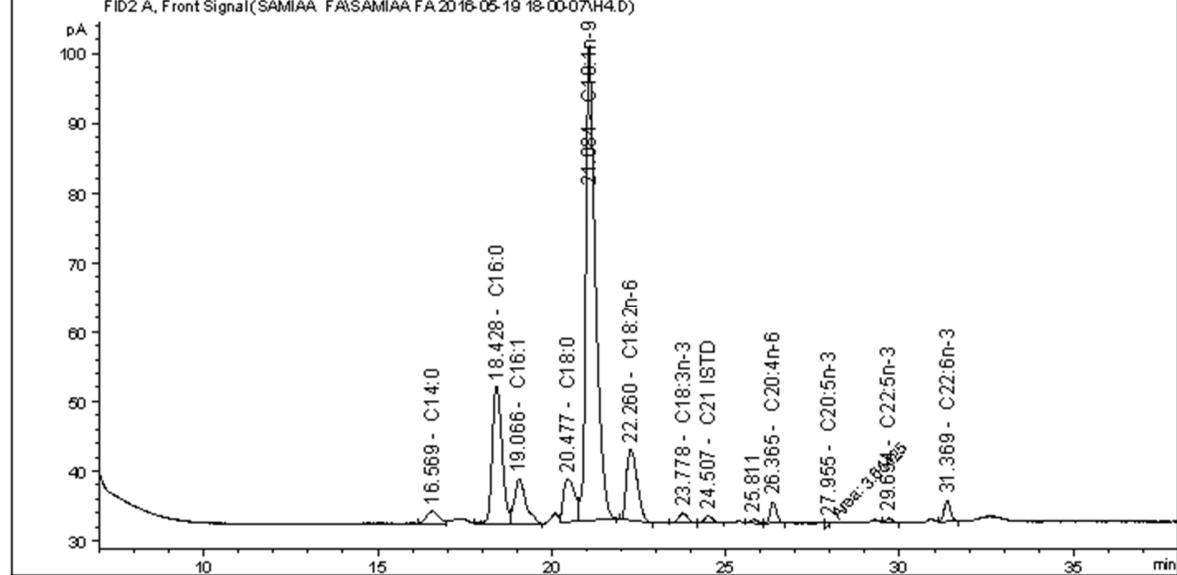
Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\H4.D  
Sample Name: H4

```
=====
Acq. Operator   : Dr Mahdi           Seq. Line : 34
Acq. Instrument : Instrument 1       Location : Vial 34
Injection Date  : 5/20/2016 5:31:53 PM   Inj : 1
                                                Ini Volume : 1  $\mu$ l
Acq. Method    : C:\CHEM32\1\DATA\SAMIAA_FA\SAMIAA_FA 2016-05-19 18-00-07\NAZIM_FA3.M
Last changed   : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method : C:\CHEM32\1\METHODS\NAZIM_FA3.M
Last changed   : 7/1/2016 11:23:01 AM by Dr Mahdi
                                                (modified after loading)
Additional Info : Peaks(s) manually integrated
```

Additional Info : Peak(s) manually integrated



Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.569	BV	0.2815	42.20461	1.76668	C14:0
2	18.428	VV	0.2316	384.61475	16.09997	C16:0
3	19.066	VV	0.2703	148.60600	6.22065	C16:1
4	20.477	VV	0.2698	140.50418	5.88150	C18:0
5	21.084	VB	0.2302	1316.29004	55.09990	C18:ln-9
6	22.260	BB	0.2526	216.37669	9.05753	C18:2n-6
7	23.778	BV	0.2163	25.82303	1.08095	C18:3n-3
8	24.507	VV	0.1917	17.07506	0.71476	C21 ISTD
9	26.365	VB	0.1576	40.04224	1.67617	C20:4n-6

Instrument 1 7/1/2016 12:22:58 PM Dr. Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\H4.D  
Sample Name: H4

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.955	MM	0.1789	3.61425	0.15129	C20:5n-3
11	29.694	VV	0.1550	8.28180	0.34668	C22:5n-3
12	31.369	VB	0.1500	38.55769	1.61402	C22:6n-3

Totals : 2381.99034 99.7101

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

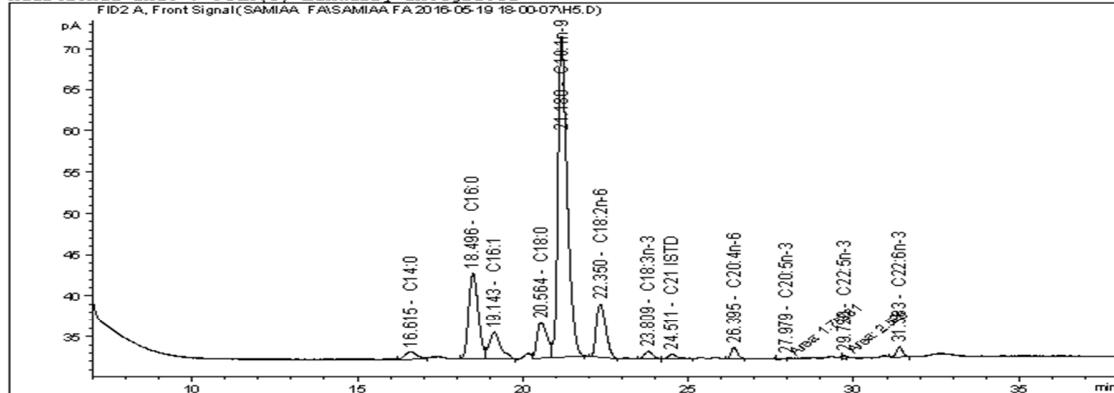
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\H5.D  
Sample Name: H5

=====  
Acq. Operator : Dr Mahdi Seq. Line : 35  
Acq. Instrument : Instrument 1 Location : Vial 35  
Injection Date : 5/20/2016 6:14:54 PM Inj : 1  
                  Ini Volume : 1  $\mu$ l  
Acq. Method : C:\CHEM32\1\DATA\SAMIAA\_FA\SAMIAA\_FA 2016-05-19 18-00-07\NAZIM\_FA3.M  
Last changed : 5/16/2016 4:23:12 PM by Dr Mahdi  
Analysis Method : C:\CHEM32\1\METHODS\NAZIM\_FA3.M  
Last changed : 7/1/2016 11:23:01 AM by Dr Mahdi  
                  (modified after loading)  
Additional Info : Peak(s) manually integrated



=====  
Area Percent Report  
=====

Sorted By : Signal  
Calib. Data Modified : 7/1/2016 11:23:00 AM  
Multiplier: : 1.0000  
Dilution: : 1.0000  
Sample Amount: : 1.000000 [%] (not used in calc.)  
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area	Name
1	16.615	BV	0.2983	22.66994	1.68252	C14:0
2	18.496	BV	0.2374	210.76010	15.64226	C16:0
3	19.143	BV	0.2827	77.27690	5.73536	C16:1
4	20.564	VV	0.2468	91.28044	6.77468	C18:0
5	21.180	BV	0.2356	753.56793	55.92854	C18:ln-9
6	22.350	BV	0.2325	128.99231	9.57359	C18:2n-6
7	23.809	VV	0.2068	16.00403	1.18779	C18:3n-3
8	24.511	BV	0.2002	8.90172	0.66067	C21 ISTD
9	26.395	BV	0.1601	17.61063	1.30703	C20:4n-6

Instrument 1 7/1/2016 12:23:15 PM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\H5.D  
Sample Name: H5

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
10	27.979	MM	0.3711	1.78281	0.13232	C20:5n-3
11	29.720	MM	0.1068	2.52600	0.18748	C22:5n-3
12	31.383	VV	0.1536	16.00363	1.18776	C22:6n-3

Totals : 1347.37643 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*





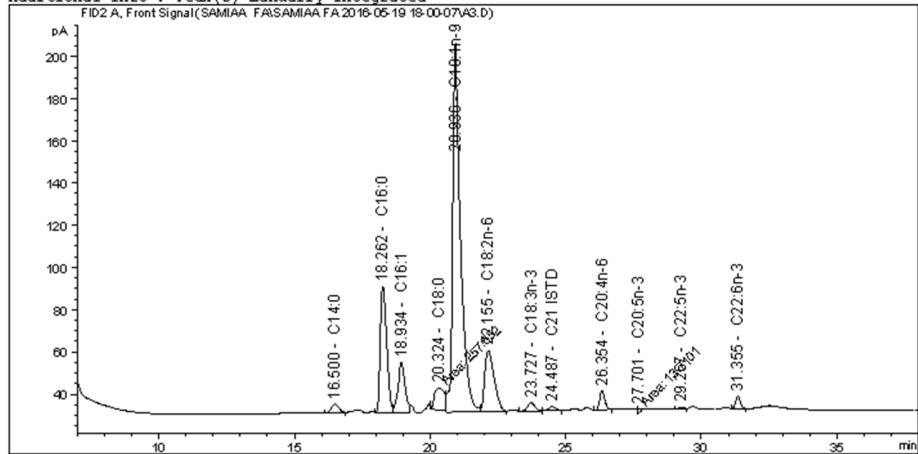






Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 3
Acq. Instrument : Instrument 1   Location : Vial 3
Injection Date : 5/19/2016 7:28:21 PM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method    : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed   : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method: C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed   : 7/1/2016 11:11:06 AM by Dr Mahdi
                                                (modified after loading)
Additional Info : Peak(s) manually integrated
```



```
Sorted By      :      Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier:      : 1.0000
Dilution:        : 1.0000
Sample Amount:   : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.500	BV	0.2402	85.36057	1.35960	C14:0
2	18.262	VV	0.1970	993.03131	15.81668	C16:0
3	18.934	VV	0.2132	426.34695	6.79072	C16:1
4	20.324	MM	0.4122	257.65176	4.10379	C18:0
5	20.936	BV	0.2437	3489.70068	55.58284	C18:1n-9
6	22.155	BV	0.2837	701.67816	11.17611	C18:2n-6
7	23.727	VV	0.2157	71.34158	1.13631	C18:3n-3
8	24.487	VV	0.2063	37.10663	0.59102	C21 ISTD
9	26.354	VV	0.1600	115.74066	1.84348	C20:4n-6

Instrument 1 7/1/2016 11:12:27 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.701	MM	0.1232	13.71011	0.21837	C20:5n-3
11	29.267	VV	0.1621	11.56752	0.18424	C22:5n-3
12	31.355	VV	0.1474	75.14233	1.19684	C22:6n-3

Totals : 6278.37827 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
Warning : Invalid calibration curve, (C21 ISTD)  
Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

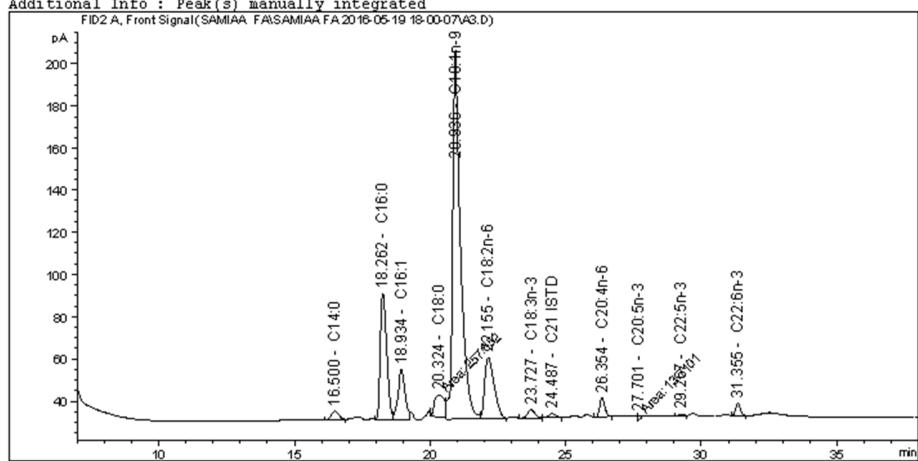
=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

```
=====
Acq. Operator : Dr Mahdi          Seq. Line : 3
Acq. Instrument : Instrument 1   Location : Vial 3
Injection Date : 5/19/2016 7:28:21 PM Inj : 1
                                                Inj Volume : 1  $\mu$ l
Acq. Method    : C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\NAZIM FA3.M
Last changed   : 5/16/2016 4:23:12 PM by Dr Mahdi
Analysis Method: C:\CHEM32\1\METHODS\NAZIM FA3.M
Last changed   : 7/1/2016 11:11:06 AM by Dr Mahdi
                                                (modified after loading)
Additional Info : Peak(s) manually integrated
```



```
Sorted By      :      Signal
Calib. Data Modified : 6/20/2016 4:41:54 PM
Multiplier:      : 1.0000
Dilution:       : 1.0000
Sample Amount:  : 1.00000 [%] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs
```

Signal 1: FID2 A, Front Signal

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	16.500	BV	0.2402	85.36057	1.35960	C14:0
2	18.262	VV	0.1970	993.03131	15.81668	C16:0
3	18.934	VV	0.2132	426.34695	6.79072	C16:1
4	20.324	MM	0.4122	257.65176	4.10379	C18:0
5	20.936	BV	0.2437	3489.70068	55.58284	C18:ln-9
6	22.155	BV	0.2837	701.67816	11.17611	C18:2n-6
7	23.727	VV	0.2157	71.34158	1.13631	C18:3n-3
8	24.487	VV	0.2063	37.10663	0.59102	C21 ISTD
9	26.354	VV	0.1600	115.74066	1.84348	C20:4n-6

Instrument 1 7/1/2016 11:12:27 AM Dr Mahdi

Page 1 of 2

Data File C:\CHEM32\1\DATA\SAMIAA FA\SAMIAA FA 2016-05-19 18-00-07\A3.D  
Sample Name: A3

Peak	RetTime	Type	Width	Area	Area	Name
#	[min]		[min]	[pA*s]	%	
10	27.701	MM	0.1232	13.71011	0.21837	C20:5n-3
11	29.267	VV	0.1621	11.56752	0.18424	C22:5n-3
12	31.355	VV	0.1474	75.14233	1.19684	C22:6n-3

Totals : 6278.37827 100.0000

6 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)  
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Warning : Invalid calibration curve, (C20:4n-6)  
Warning : Invalid calibration curve, (C20:5n-3)  
Warning : Invalid calibration curve, (C22:5n-3)  
Warning : Invalid calibration curve, (C22:6n-3)

=====  
Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

=====  
Final Summed Peaks Report  
=====

Signal 1: FID2 A, Front Signal

\*\*\* End of Report \*\*\*