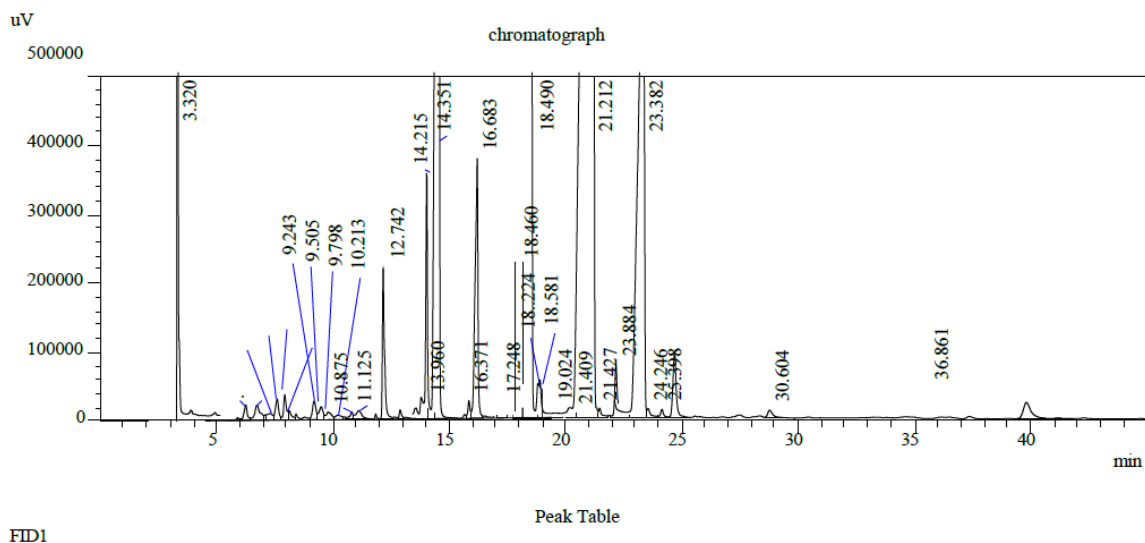


**Figure 1. GC FID Standard Chromatogram**

**Table 1: GC FID qualitative data for standards', retention times, peak area and time.**

FID1		QuantitativeResult				
ID#	Name	Ret. Time	Area	Height	Conc.	Unit
1	butyric	3.294	1004447583	161750874	0.000	ppm
2	caprylic	3.651	74979	13035	0.000	ppm
3	capric	4.246	131962	15510	0.000	ppm
4	lauric	5.438	183445	27642	0.000	ppm
5	tridecanoic	6.441	105302	11459	0.000	ppm
6	myristic	7.666	231571	24752	0.000	ppm
7	myristoleic	9.243	117844	10561	0.000	ppm
8	pentadecanoic	10.875	394590	40652	0.000	ppm
9	palmitic	12.742	262180	24575	0.000	ppm
10	palmitoleic	14.351	78996	13733	0.000	ppm
11	heptadecanoic	14.489	19848	4922	0.000	ppm
12	cis 10 heptadecanoic	14.617	488071	51501	0.000	ppm
13	stearic	16.371	120166	11900	0.000	ppm
14	oleic	16.683	162338	14729	0.000	ppm
15	elaidic	18.220	57374	5759	0.000	ppm
16	linoleic	18.460	338323	47709	0.000	ppm
17	linolenic	18.581	407230	39588	0.000	ppm
18	arachidic	19.024	437351	36506	0.000	ppm
19	eicosanoic	21.409	2549	259	0.000	ppm
20	cis eicosatrienoic	23.697	104374	6269	0.000	ppm
21	epa	24.246	94790	7676	0.000	ppm
22	euracic	24.332	87025	7461	0.000	ppm
23	unkwown	24.777	322482	22445	0.000	ppm
24	behenic	25.398	84319	6851	0.000	ppm
25	unkwown	25.693	351818	26216	0.000	ppm
26	dha	30.604	134689	7800	0.000	ppm
27	triosanoic	33.767	21842	1058	0.000	ppm
28	lignoceric	35.290	258226	10627	0.000	ppm
29	nervonic	36.861	286575	13053	0.000	ppm
Total			1009807843	162255123		



**Fig.2: Representative chromatogram of sample 1**

**Table 2 showing GC retention times and peak areas**

ID#	Name	Ret. Time	Area	Conc.	Unit
1	butyric	3.294	0	0	%
2	caprylic	3.651	0	0	%
3	capric	4.246	0	0	%
4	lauric	5.438	0	0	%
5	tridecanoic	6.441	0	0	%
6	myristic	7.666	0	0	%
7	myristoleic	9.243	7689568	1.16	%
8	pentadecanoic	10.875	5667788	0.84	%
9	palmitic	12.742	186944225	27.37	%
10	palmitoleic	14.351	25646783	3.57	%
11	heptadecanoic	14.489	0	0	%
12	cis 10 heptadecanoic	14.617	0	0	%
13	stearic	16.371	62936744	9.3	%
14	oleic	16.683	163726543	23.99	%
15	elaidic	18.220	47893445	7.22	%
16	linoleic	18.460	60756335	9.15	%
17	linolaidic	18.490	5567888	0.84	%
18	linolenic	18.581	33979865	5.49	%
19	arachidic	19.024	19673211	2.96	%
21	eicosanoic	21.409	6758999	1.01	%
24	epa	24.246	9218566	1.25	%
25	behenic	25.398	695777	0.1	%
28	dha	30.604	34786735	5.09	%
29	lignoceric	35.290	0	0	%
30	nervonic	36.861	5473533	0.66	%
Total			675374926	100	%

### How the FA content of any specific FA was calculated

The FAs were identified based on the retention times and relative abundances of the standard FID chromatograms. The sample's retention time were compared to that of the standards to identify the

fatty acids and the peak area to determine the % composition of the FAs. For example, from the table 2 and figure 2, the % fatty acid compositions of the most abundant 3 fatty acids in the sample namely palmitic, oleic and stearic acids are 27.37% at retention time of 12.74, 23.99% at retention time of 16.68 and 9.3% with retention time of 16.31 respectively. Similarly, the least abundant FA was behenic acid with a peak area of 0.1% at retention time of 25.39. Fatty acids such as butyric, caprylic and capric with retention times 3.29, 3.65 and 4.24 had 0% peak areas hence were considered absent in the sample.

**Table 3: Details of FAME Standards**

<b>Company Name</b>	<b>FAME Details</b>
SUPELCO, 595 North Harrison Road, Bellamonte PA 16823-0048 USA.	F.A.M.E Mix GLC-10 CRM 1891 IAMP
	F.A.M.E Mix GLC-20 1892 IAMP
	F.A.M.E Mix GLC-30 1893 IAMP
	F.A.M.E Mix GLC-40 1895 IAMP