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APPENDIX A

DRAWING OF THE DRYER

APPENDIX B

GAS CHROMATOGRAPHY ANALYSIS RESULTS

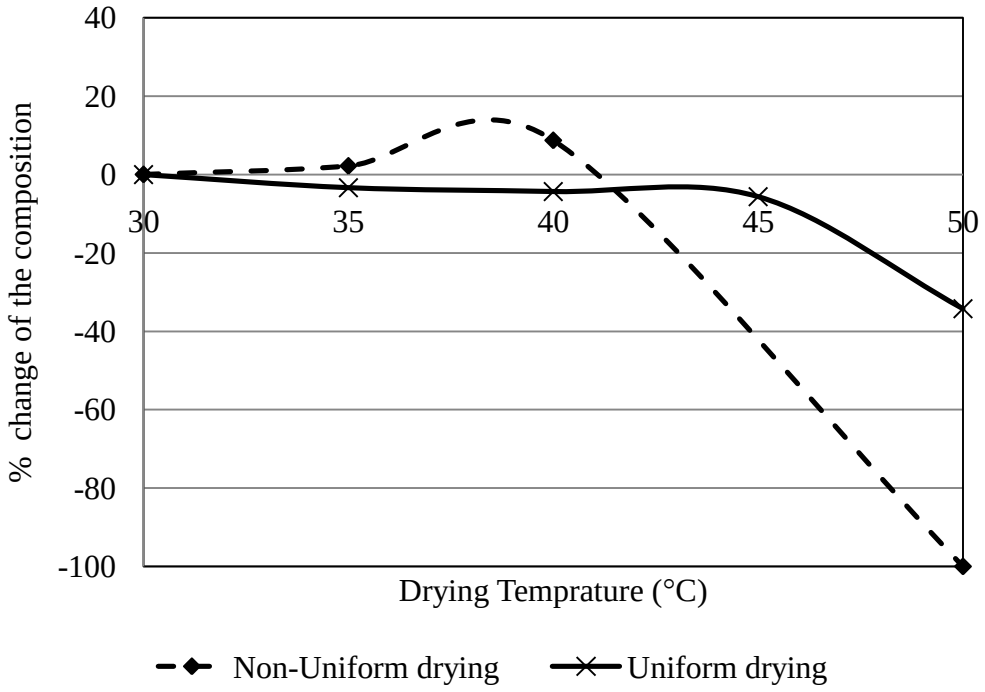


Figure B 1: Analysis of variation of Campnene

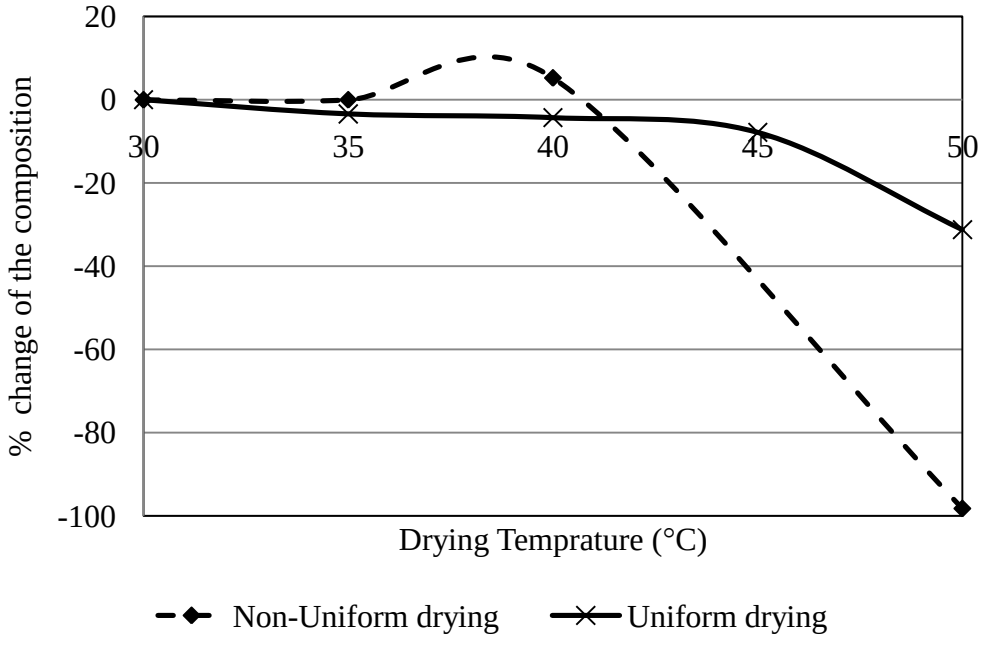


Figure B 2: Analysis of variation of β-pinene

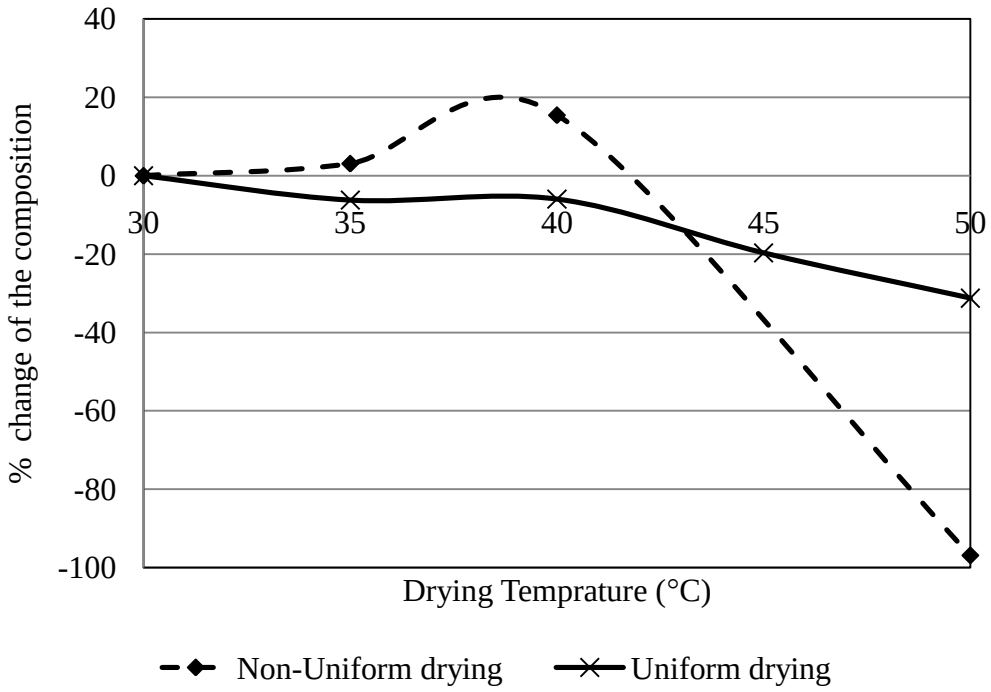
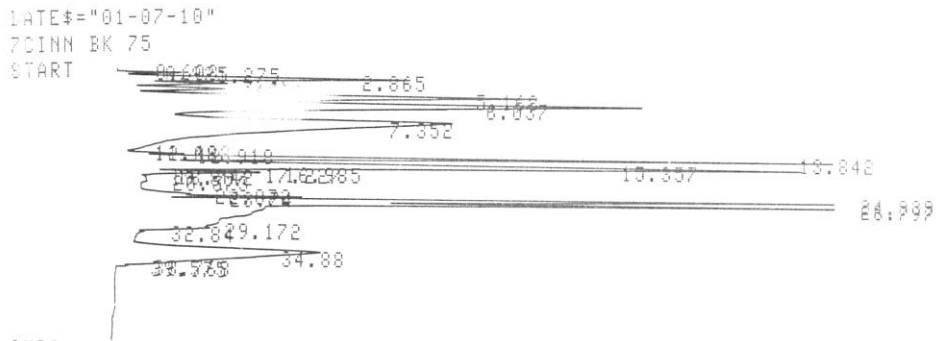


Figure B 3: Analysis of variation of Myrcene

APPENDIX C

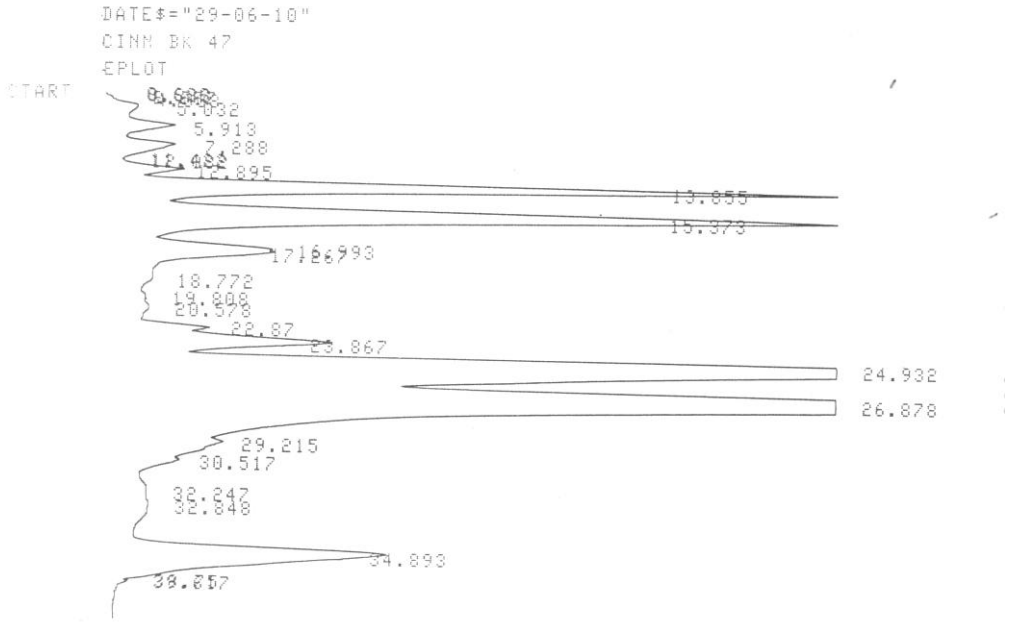
GC DATA SHEETS



CHROMATOPAC C-R6A FILE 0
SAMPLE NO 0 METHOD 41
REPORT NO 2775

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	1.275	17459			0.4729	
2	2.865	47985			1.2998	- α-Pinene
3	3.45	17262	V		0.4676	- Camphene
4	4.12	20884			0.5657	- b-Pinene
5	5.168	110725			2.9993	- Myrcene
6	6.037	147093	V		3.9844	- 1-8-Cineol
7	7.352	92787			2.5134	
8	12.083	240			0.0065	
9	12.918	13541			0.3668	
10	13.842	281363			7.6214	- Linalool
11	15.357	217969			5.9043	- b-caryophelene
12	16.985	24574			0.6656	
13	17.227	31913	V		0.8644	
14	18.742	730			0.0198	
15	19.807	658			0.0178	
16	20.573	1648			0.0446	
17	22.872	17264			0.4676	
18	23.74	49810	V		1.3492	
19	24.838	1589187			43.0472	- Cinnamaldehyde
20	26.797	869668	V		23.5572	- Eugenol
21	29.172	7218			0.1955	
22	32.84	8582			0.2325	
23	34.88	120387			3.261	- Benzyl Benzoate
24	38.768	1851			0.0501	
25	39.575	928			0.0251	
	TOTAL	3691726			100	

Figure C 1: Chromatogram of cinnamon oil, which was steam distilled in non-uniform drying at temperature of 35 °C

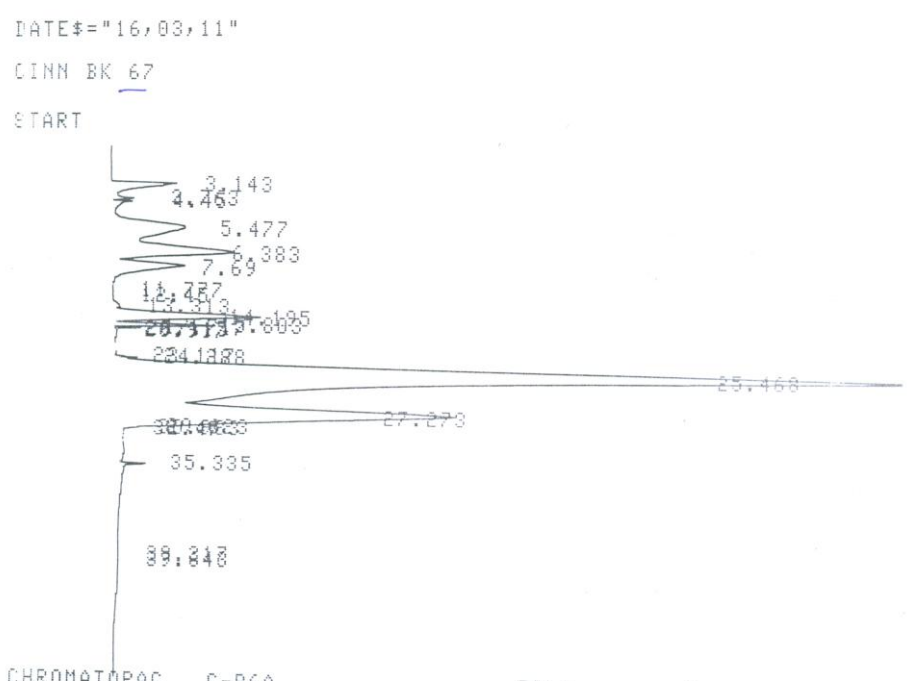


CHROMATOPAC C-R6A FILE 0
SAMPLE NO 0 METHOD 41
REPORT NO 2771

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	4.008	540			0.0133	– b-Pinene
2	5.032	3732			0.0921	– Myrcene
3	5.913	13237			0.3268	– 1-8 - cineol
4	7.288	21203			0.5235	
5	12.082	265			0.0065	
6	12.895	14880			0.3674	
7	13.855	262502			6.4808	– Linalool
8	15.373	237083			5.8533	– b - caryophylene
9	16.993	30081			0.7427	
10	17.267	35120	V		0.8671	
11	18.772	1042			0.0257	
12	19.808	1080			0.0267	
13	20.578	2185			0.0539	
14	22.87	21342			0.5269	
15	23.867	52701	V		1.3011	
16	24.932	2113063			52.1688	– Cinnamaldehyde
17	26.878	1074653	V		26.5318	– Eugenol
18	29.215	3558			0.0878	
19	30.517	2917			0.072	
20	32.247	1139			0.0281	
21	32.848	3334			0.0823	
22	34.893	151627			3.7435	– Benzyl Benzoate
23	38.75	1980			0.0489	
24	39.617	1174			0.029	
	TOTAL	4050437			100	

50C

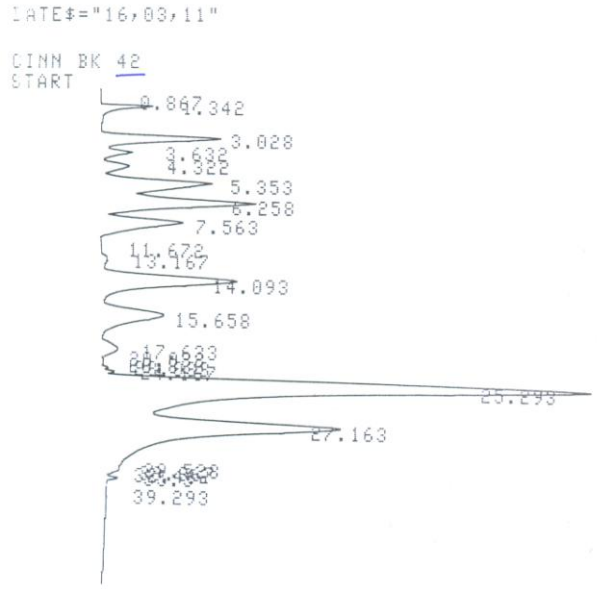
Figure C 2: Chromatogram of cinnamon oil, which was steam distilled in non-uniform drying at temperature of 50 °C



CHROMATOPAC C-R6A FILE 0
SAMPLE NO 0 METHOD 41
REPORT NO 2812

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	3.143	10304			1.4992	- α-pinene
2	3.763	3023			0.4399	- camphene
3	4.45	4170			0.6067	- b-pinene
4	5.477	20539			2.9885	- Myrcene
5	6.383	33040	V		4.8075	- 1-8 cineol
6	7.69	19033			2.7694	
7	13.313	1800			0.2619	
8	14.195	39430			5.7372	- Linalool
9	15.803	35674			5.1908	- b-caryophelene
10	17.717	10556			1.5359	
11	20.115	739			0.1076	
12	20.917	252			0.0366	
13	23.117	3569			0.5194	
14	24.288	4882			0.7103	
15	25.468	354988			51.6521	- cinnamaldehyde
16	27.273	126077	V		18.3447	- Eugenol
17	29.623	756			0.1101	
18	30.983	607			0.0883	
19	32.47	1991			0.2897	
20	35.335	15837			2.3043	- Benzyl Benzoate
	TOTAL	687267			100	

Figure C 3 :Chromatogram of cinnamon oil, which was steam distilled in uniform drying at temperature of 35 °C (sample 1)

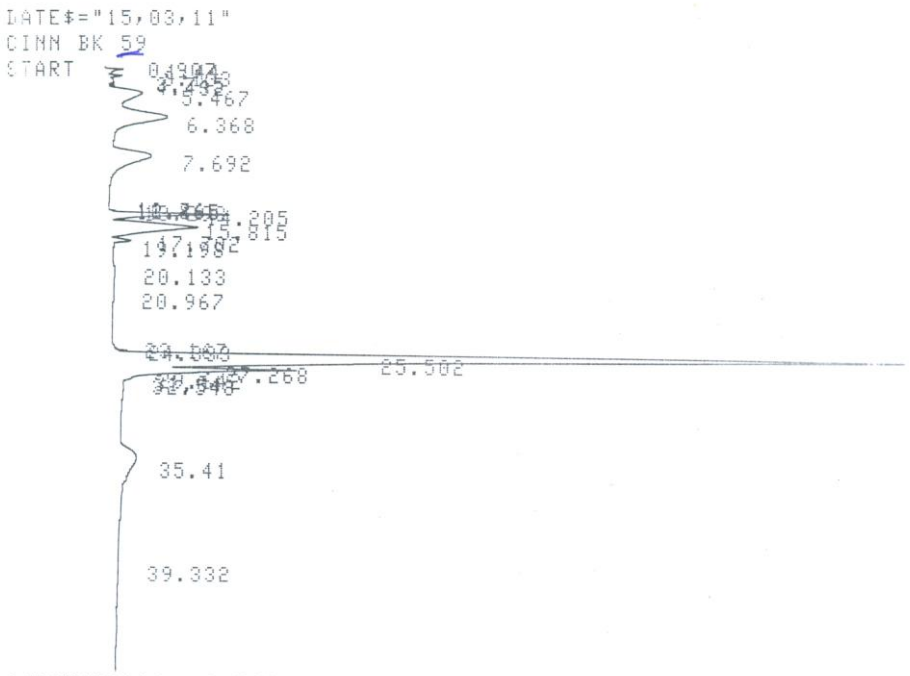


CHROMATOPAC C-R6A FILE 0
SAMPLE NO 0 METHOD 41
REPORT NO 2810

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	1.342	6780			1.2559	
2	3.028	20480			3.7939	- α-pinene
3	3.632	4476			0.8291	- camphene
4	4.322	6595			1.2218	- b-pinene
5	5.353	34020			6.3023	- Myrcene
6	6.258	44006	V		8.1522	- 1-8 cineol
7	7.563	22246			4.1212	
8	13.167	1480			0.2742	
9	14.093	38607			7.1521	- Linalool
10	15.658	22460			4.1608	- b-caryophelene
11	17.633	7294			1.3512	
12	20.032	506			0.0937	
13	23.033	2610			0.4834	
14	24.167	3331			0.6172	
15	25.293	209193			38.7535	- Cinnamaldehyde
16	27.163	102132	V		18.9202	- Eugenol
17	29.528	319			0.0592	
18	30.867	320			0.0592	
19	32.462	1405			0.2604	
20	35.3	9290			1.721	- Benzyl Benzoate
21	39.293	2253			0.4174	
	TOTAL	539803			100	

DATE$="16/03/"
ERROR 2:ILLEGAL QUANTITY

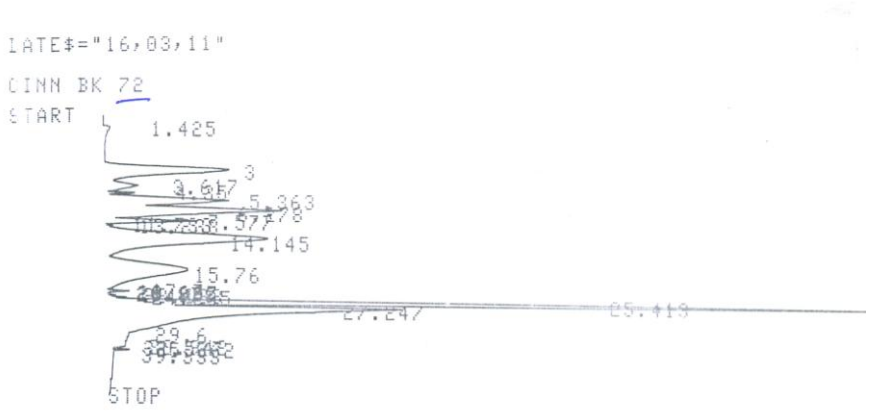
Figure C 4: Chromatogram of cinnamon oil, which was steam distilled in uniform drying at 35 °C temperature (sample 2)



CHROMATOPAC C-R6A FILE 0
SAMPLE NO 0 METHOD 41
REPORT NO 2807

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	1.44	2588			0.4938	
2	3.133	2248			0.4289	- α pinene
3	3.745	808			0.1542	- camphene
4	4.432	1298			0.2476	- b-pinene
5	5.467	6328			1.2074	- myrcene
6	6.368	12190			2.3258	- 1-8-cenool
7	7.692	11452			2.1851	
8	13.298	1500			0.2861	
9	14.205	31377			5.9866	- Linalool
10	15.815	29752			5.6765	- b-caryophelene
11	17.702	8635			1.6476	
12	20.133	687			0.131	
13	23.167	2213			0.4223	
14	24.333	3302			0.6299	
15	25.502	323020			61.6306	- cinnamaldehyde
16	27.268	73670	V		14.0558	- Eugenol
17	29.642	339			0.0648	
18	31.04	405			0.0772	
19	32.548	1486			0.2836	
20	35.41	10354			1.9756	- Benzyl-Benzoate
21	39.332	470			0.0896	
	TOTAL	524122			100	

Figure C 5: Chromatogram of cinnamon oil, which was steam distilled in uniform drying at 50 °C temperature (sample 1)



CHROMATOPAC C-R6A FILE 0
METHOD 41

SAMPLE NO 0
REPORT NO 2813

PKNO	TIME	AREA	MK	IDNO	CONC	NAME
1	1.425	1002			0.1509	
2	3	21495			3.2382	- α-pinene
3	3.617	4707			0.709	- Camphene
4	4.35	7000			1.0545	- b-pinene
5	5.363	37203			5.6045	- Myrcene
6	6.278	47798	V		7.2005	- 1-8-Cineol
7	7.577	24315			3.663	
8	13.233	1678			0.2528	
9	14.145	44788			6.7471	- Linalool
10	15.76	28877			4.3502	- b-caryophell
11	17.7	9188			1.3841	
12	20.097	594			0.0894	
13	23.133	2745			0.4135	
14	24.265	4095			0.6169	
15	25.413	293338			44.1897	- cinnamaldeh
16	27.247	117843	V		17.7524	- Eugenol
17	29.6	310			0.0466	
18	30.942	432			0.065	
19	32.527	1906			0.2872	
20	35.362	11793			1.7765	- Benzyl Benzo
21	39.333	2708			0.4079	
	TOTAL	663815			100	

Figure C 6: Chromatogram of cinnamon oil, which was steam distilled in uniform drying at 50 °C temperature (sample 2)