



Organic Chemistry Research Unit

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awards this

QUALITY CERTIFICATION

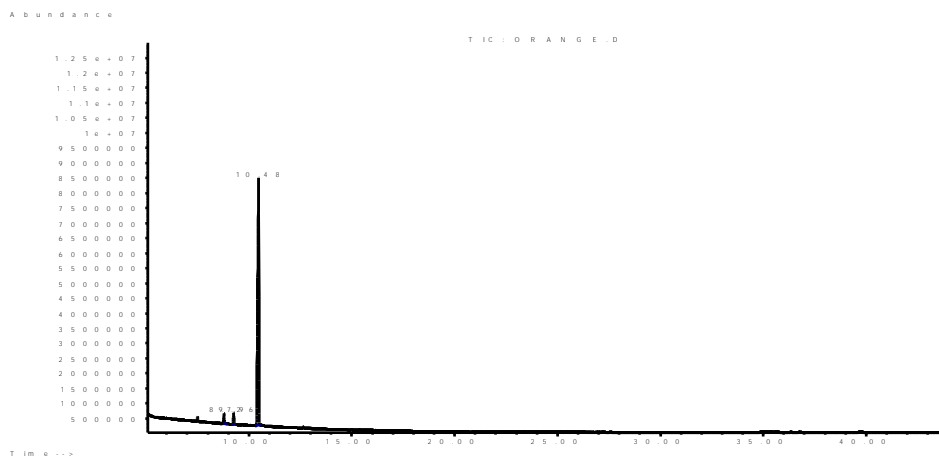
to

Mr. Panya Chaimala

For the GC-MS analysis of Orange Oil which was found to contain 95.40% Limonene, 2.18% beta-Pinene, and 2.42% beta-Myrcene.

Given this 16th day of March, 2007 at the Faculty of Science,
Maejo University, Thailand

Asst. Prof. Dr. Weerachai Phutdhawong
Chair



Data Path : C:\Documents and Settings\Waya Sengpracha\Desktop\Data File : ORANGE.D

Acq On : 12 Feb 2007 2:09

Operator :

Sample : orange oil 1%

Misc :

ALS Vial : 1 Sample Multiplier: 1

Search Libraries: C:\Database\NIST02.L Minimum Quality: 0

C:\Database\wiley7n.l Minimum Quality: 0

C:\Database\demo.l

Unknown Spectrum: Apex

Integration Events: Chemstation Integrator - events.e

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	8.79	2.18	C:\Database\NIST02.L			
			.beta.-Pinene	15146	000127-91-3 94	
			.beta.-Pinene	15149	000127-91-3 91	
			.beta.-Pinene	15150	000127-91-3 91	
2	9.26	2.42	C:\Database\NIST02.L			
			.beta.-Myrcene	15155	000123-35-3 91	
			Bicyclo[3.1.0]hex-2-ene, 4-methyl-	15349	028634-89-1 78	
			1-(1-methylethyl)-			
			Pyridine, 2-propyl-	9269	000622-39-9 64	
3	10.48	95.40	C:\Database\NIST02.L			
			Limonene	15128	000138-86-3 91	
			Limonene	15127	000138-86-3 91	
			D-Limonene	15138	005989-27-5 89	

DEFAULT.M Fri Mar 16 13:49:23 2007