

## APPENDIX 4

DRT Certificate of Analysis of beta sosterol

Chromatograph

RMN identification of the product



# les dérivés résiniques et terpéniques

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Société anonyme au  
 capital de 13 408 000 euros  
 Siret 985 520 154 00016  
 R.C.S. Dax  
 N° TVA FR 86985520154

## BULLETIN D'ANALYSE / CERTIFICATE OF ANALYSIS

Votre commande / Your order : N°FODS/GR/50034

Notre référence / Our reference : OC-DRT-05-00757

LIPOFOODS S.L.  
 POLIND. CAMI RAL  
 C/GALILEU 17  
 08850 GAVA  
 BARCELONA  
 ESPAGNE

A l'attention de / For the attention of :  
**MP00097 TALL OIL PHYTOSTEROLS**

Télécopie / Fax number :

Quantité commandée / Ordered quantity : 300,00 KG

Date : 07/02/2005

DT Batch	CARACTERISTIQUES Characteristics	UNITES Units	RESULTATS Results	SPECIFICATIONS		METHODES Methods
				Valeurs type Typical value	Minimum Maximum	
036486	Aspect		CONFORME			CONFORME DRT 6901
	Sterol title (%)		CONFORME		95	DRT 1210
	Campesterol	%	8,00	75,00	6,00 10,00	DRT 1210
	Campestanol	%	1,10		2,00	DRT 1210
	Beta-sitosterol	%	76,80		75,00 80,00	DRT 1210
	Beta-sitostanol	%	11,60		15,00	DRT 1210
	Other	%	2,50		2,50	DRT 1210
	Desiccation loss	%	0,50		3,50	DRT 4690
038722	Aspect		CONFORME			CONFORME DRT 6901
	Sterol title (%)		CONFORME		95	DRT 1210
	Campesterol	%	8,60	75,00	6,00 10,00	DRT 1210
	Campestanol	%	1,10		2,00	DRT 1210
	Beta-sitosterol	%	76,40		75,00 80,00	DRT 1210
	Beta-sitostanol	%	11,50		15,00	DRT 1210
	Other	%	2,40		2,50	DRT 1210
	Desiccation loss	%	0,80		3,50	DRT 4690

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# les dérivés résiniques et terpéniques

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N° TVA FR 86985520154

## BULLETIN D'ANALYSE / CERTIFICATE OF ANALYSIS

Votre commande / Your order : **FODS/GR/352**

**LIPOFOODS S.L.**  
POL.IND. CAMI RAL  
C/GALILEU 17  
08850 GAVA  
BARCELONA  
ESPAGNE

Notre référence / Our reference : **OC-DRT-05-00003**

Télécopie / Fax number :

A l'attention de / For the attention of :

**MP00097 TALL OIL PHYTOSTEROLS**

Quantité commandée / Ordered quantity : **100,00 KG**

Date : **05/01/2005**

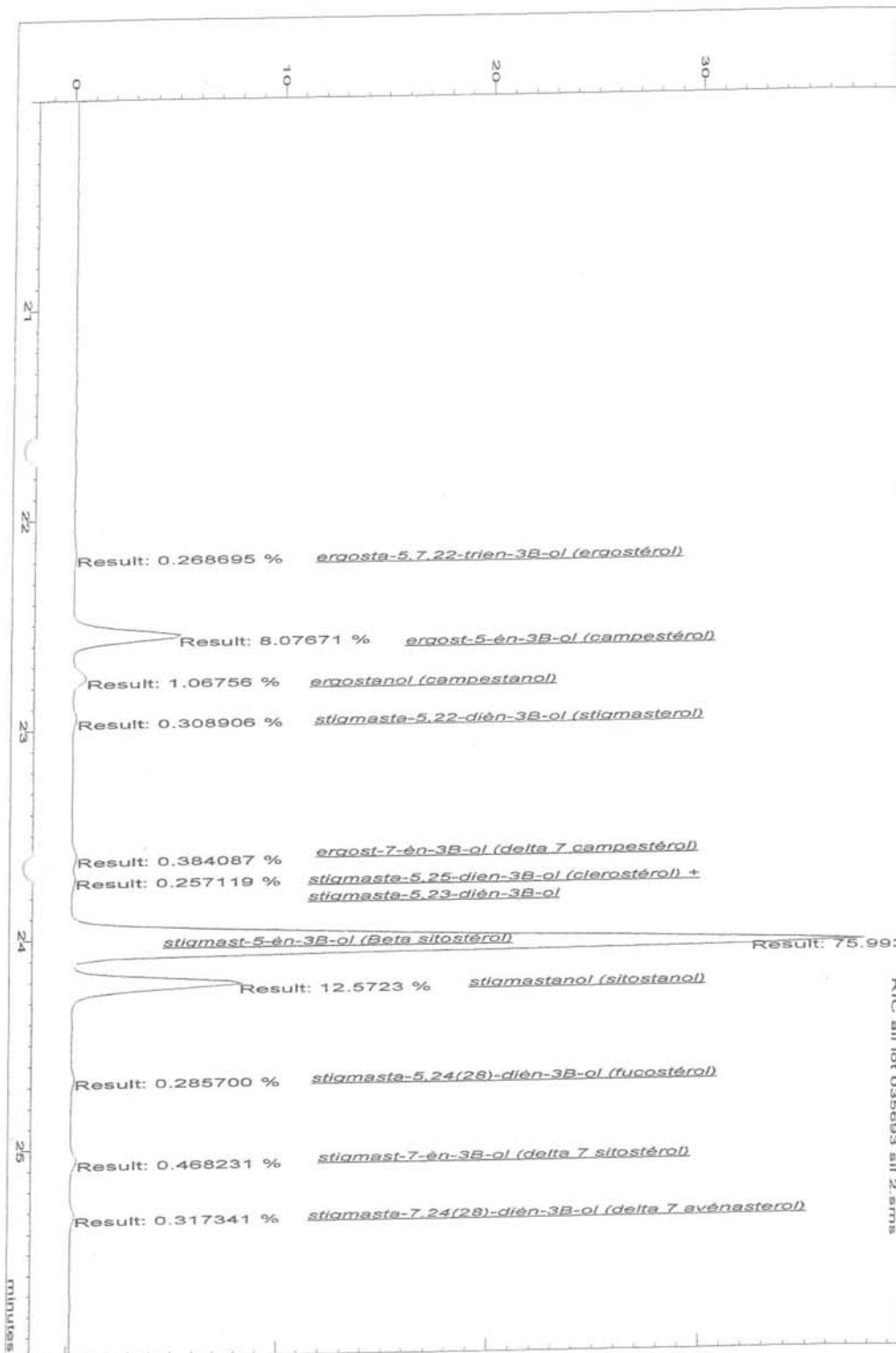
LOT Batch	CARACTERISTIQUES Characteristics	UNITES Units	RESULTATS Results	SPECIFICATIONS		METHODES Methods
				Valeurs type Typical value	Minimum Maximum	
<b>033650</b>	Aspect		CONFORME			CONFORME DRT 6901
	Sterol title (%)		CONFORME		95	DRT 1210
	Campesterol	%	9,10		6,00	10,00 DRT 1210
	Campestanol	%	1,20			2,00 DRT 1210
	Beta-sitosterol	%	75,90	75,00	75,00	80,00 DRT 1210
	Beta-sitostanol	%	11,30			15,00 DRT 1210
	Other	%	2,50			2,50 DRT 1210
	Desiccation loss	%	0,60			3,50 DRT 4690
<b>033652</b>	Aspect		CONFORME			CONFORME DRT 6901
	Sterol title (%)		CONFORME		95	DRT 1210
	Campesterol	%	9,30		6,00	10,00 DRT 1210
	Campestanol	%	1,20			2,00 DRT 1210
	Beta-sitosterol	%	75,90	75,00	75,00	80,00 DRT 1210
	Beta-sitostanol	%	11,10			15,00 DRT 1210
	Other	%	2,50			2,50 DRT 1210
	Desiccation loss	%	0,80			3,50 DRT 4690

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### Chromatogram Plot

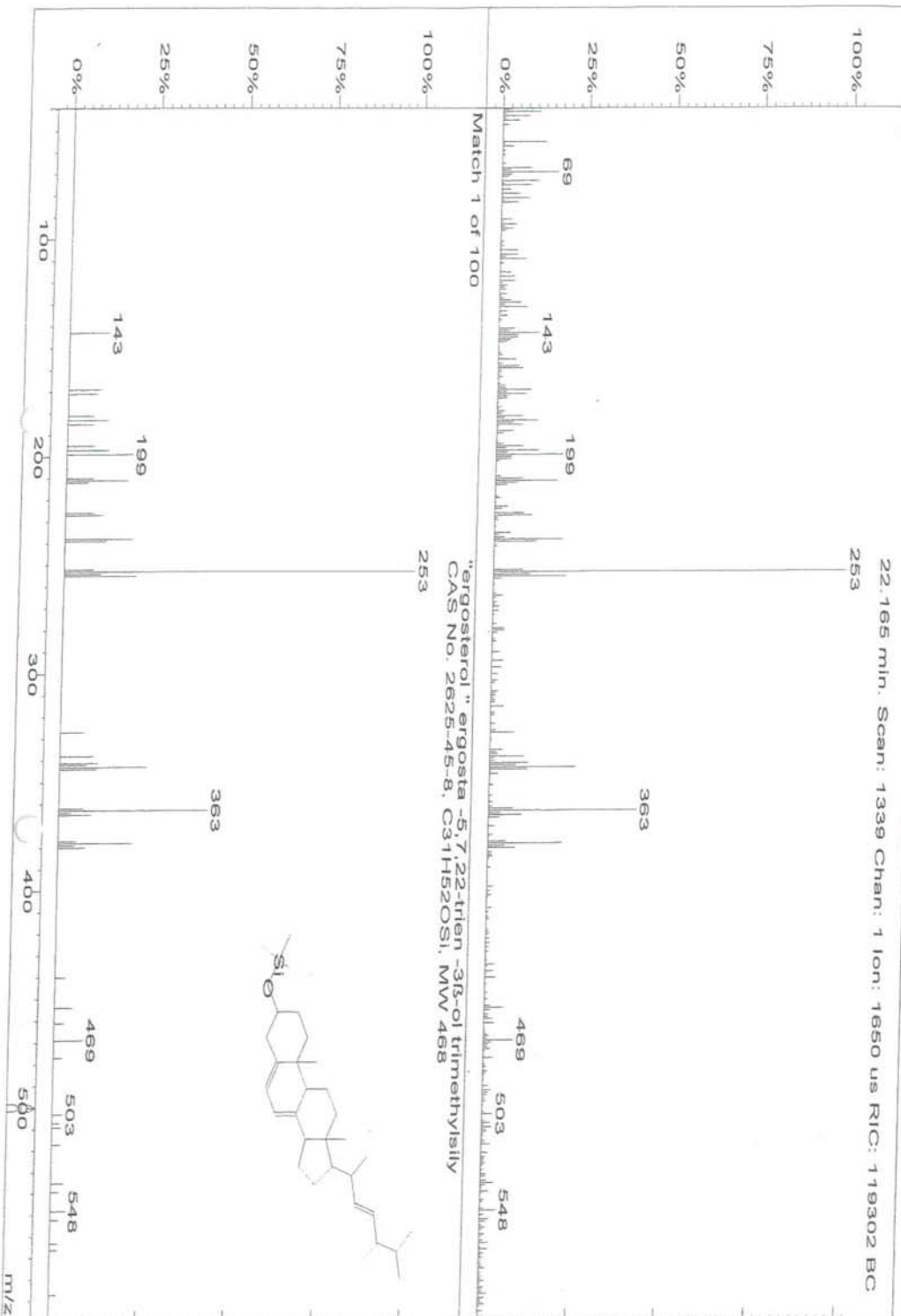
File: c:\... \chromatogrammes\sterols\station\nov 2004\lot 035693 sil 2.sms  
Sample: lot 035693 sil 2  
Scan Range: 1 - 2130 Time Range: 0.00 - 34.97 min.

Operator: D J P  
Date: 29/11/04 17:24  
RtC all lot 035693 sil 2.sms



Scan 1339 from c:\... \sterols\station\Nov 2004\lot 035693 sil 2.sms  
Entry 151 from drt2.lbr Saturn Library

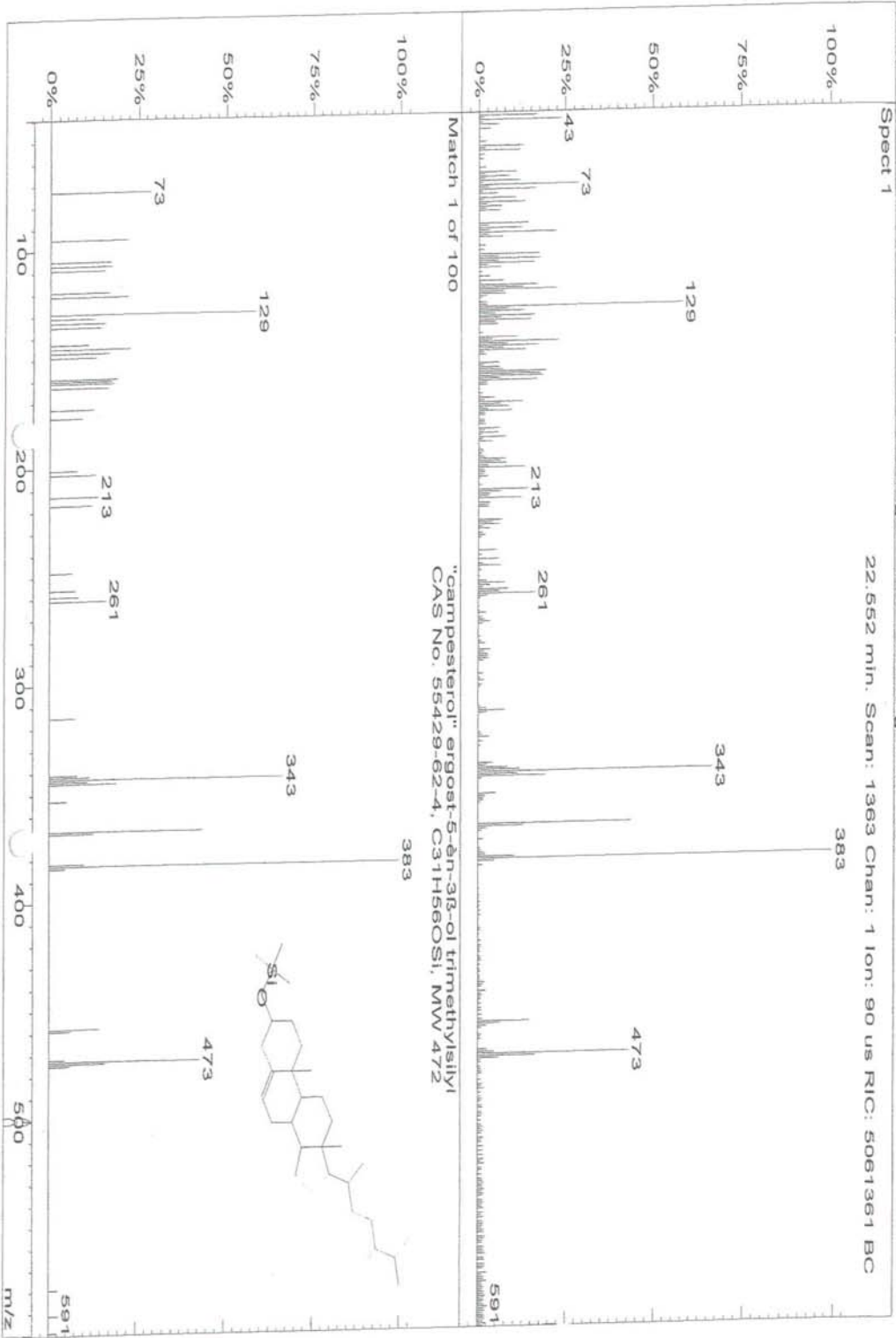
Purity = 649, Fit = 1000, RFit = 649, Average = 766, Ion Range: 40 - 600



# Scan 1363 from c:\... \sterols\station\nov 2004\lot 035693 sil 2.s.ms

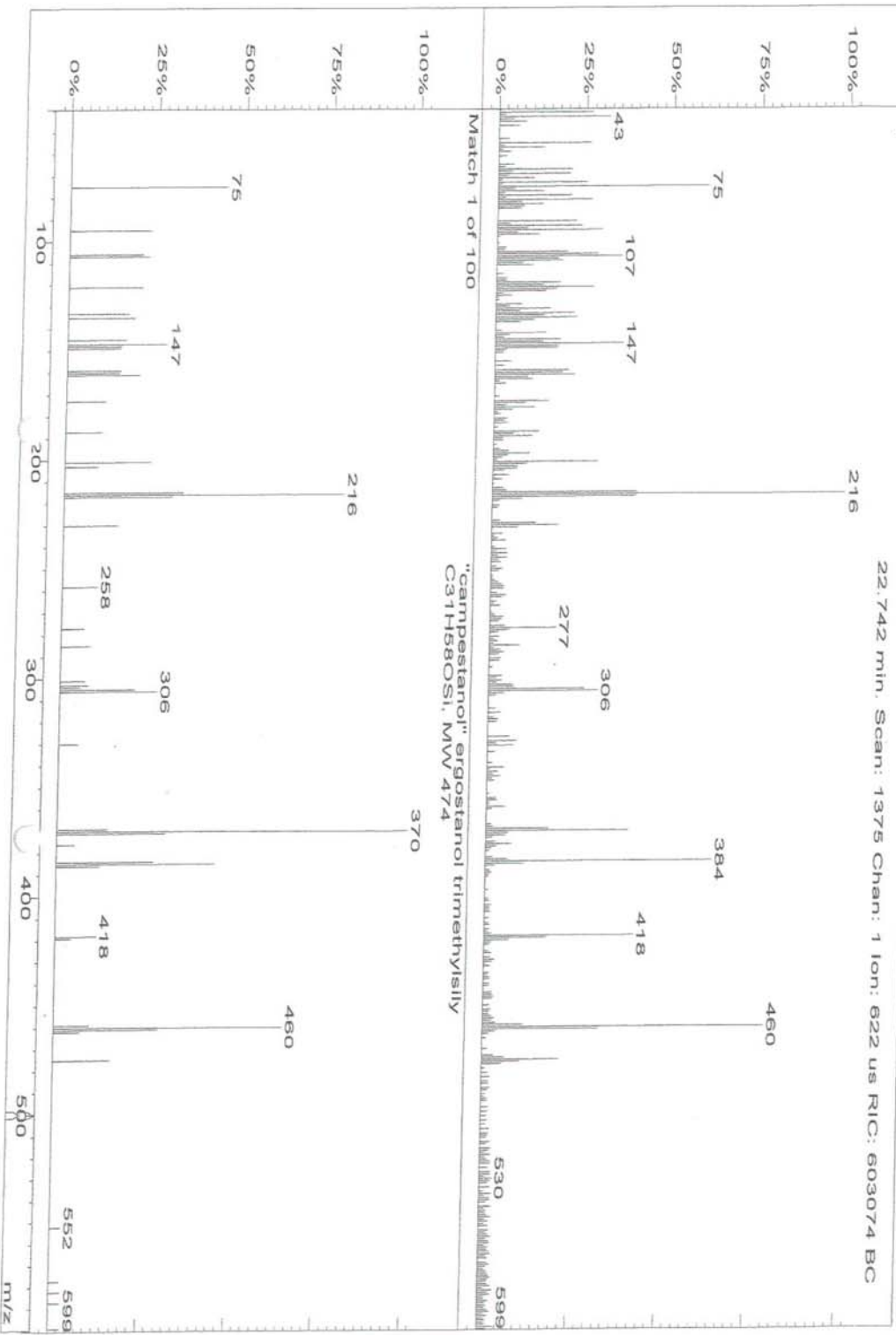
Entry 152 from drt2.lbr Saturn Library  
Purity = 679 Fit = 1000 RFI = 679 Average = 786 Ion Range: 40 - 600

22.652 min. Scan: 1363 Chan: 1 Ion: 90 us RIC: 5061361 BC



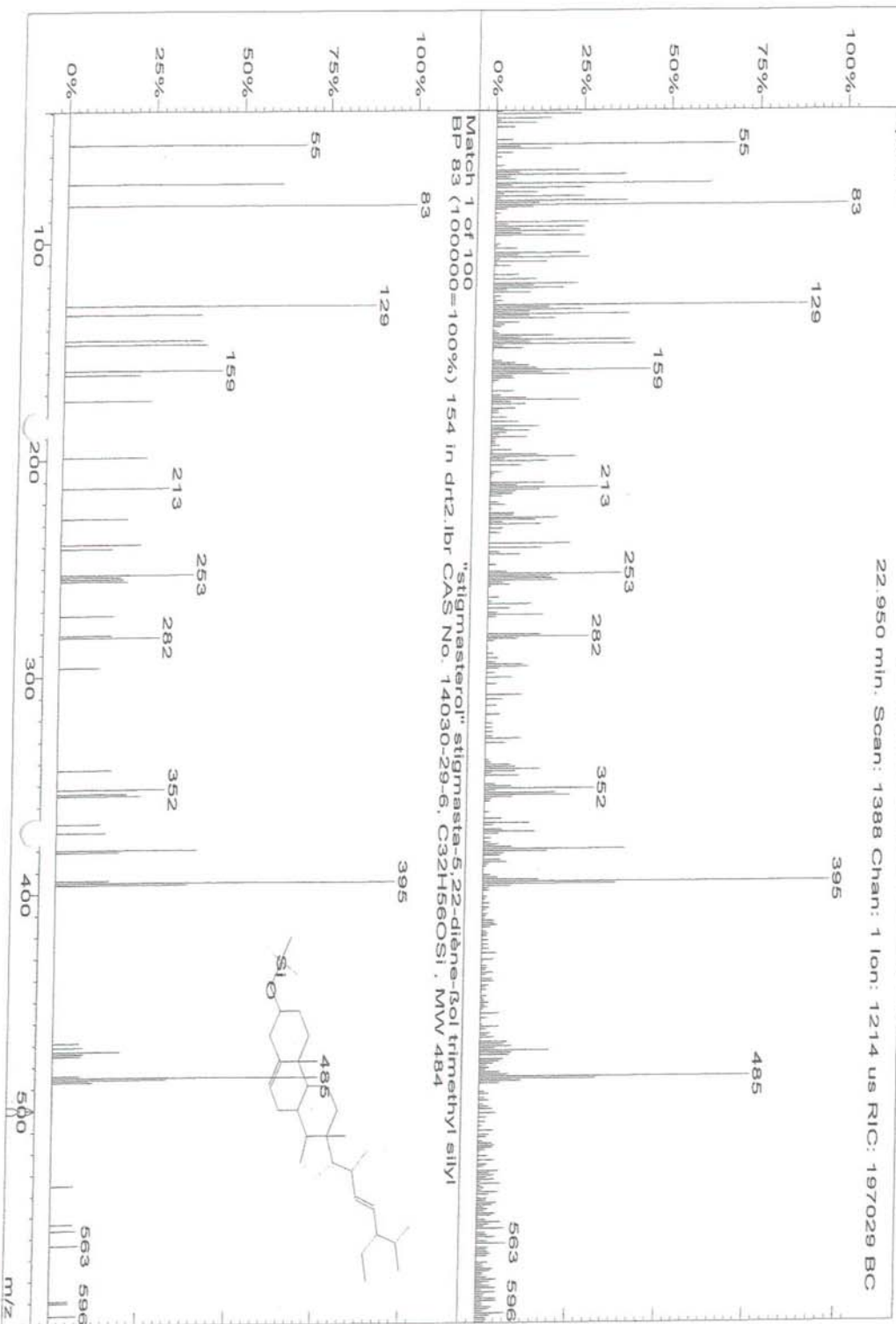
Scan 1375 from c:\... \sterols\station\Nov 2004\lot 035693 sil 2.sims  
Entry 167 from dht2.lbr Saturn Library

Purity = 529, Fit = 896, RFit = 536, Average = 654, Ion Range: 40 - 600



Scan 1388 from c:\... \sterols\station\ nov 2004\lot 035693 sll 2.sms  
Entry 154 from drt2.lbr Saturn Library

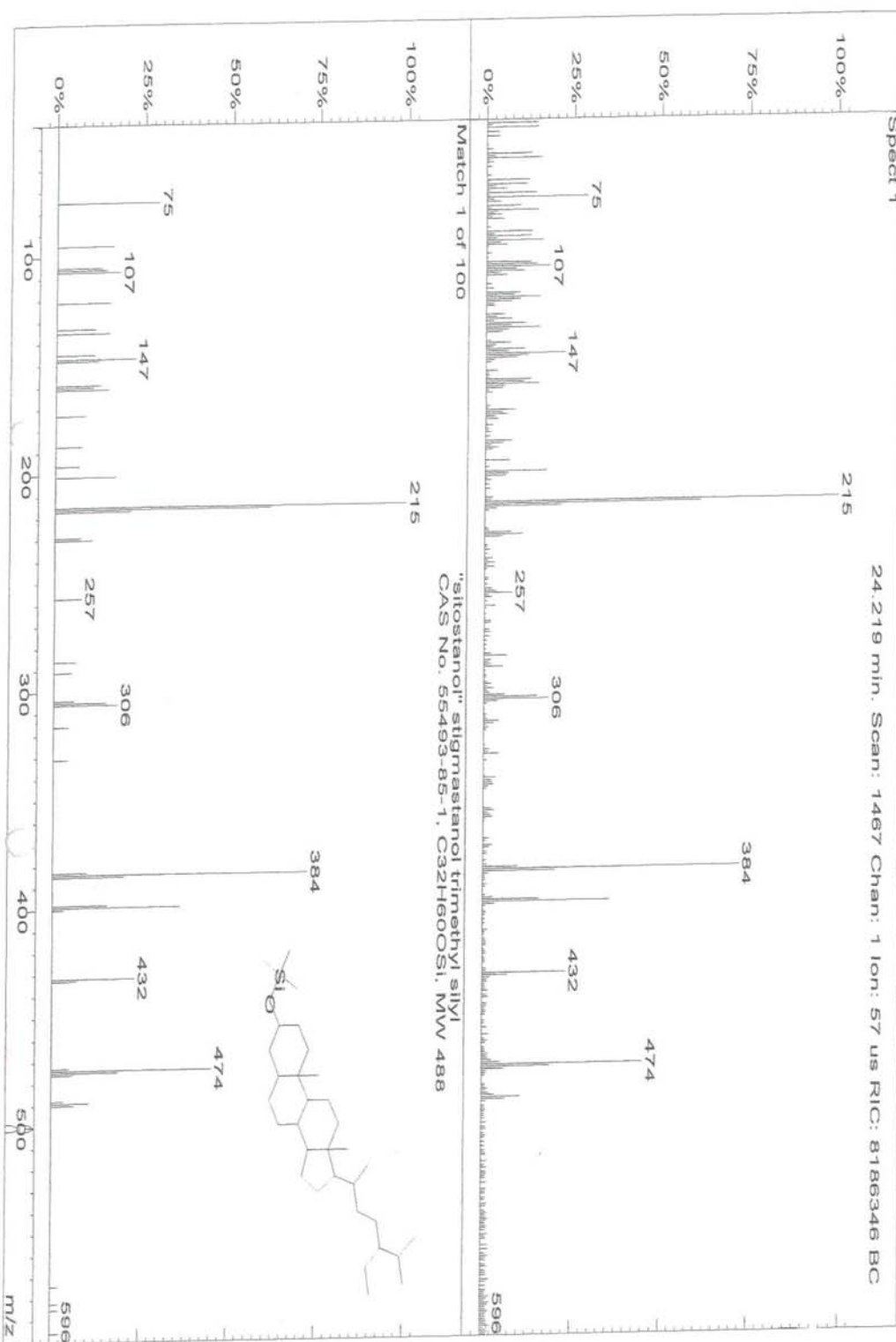
Purity = 589 Fit = 1000 RFit = 589 Average = 726 Ion Range: 40 - 600





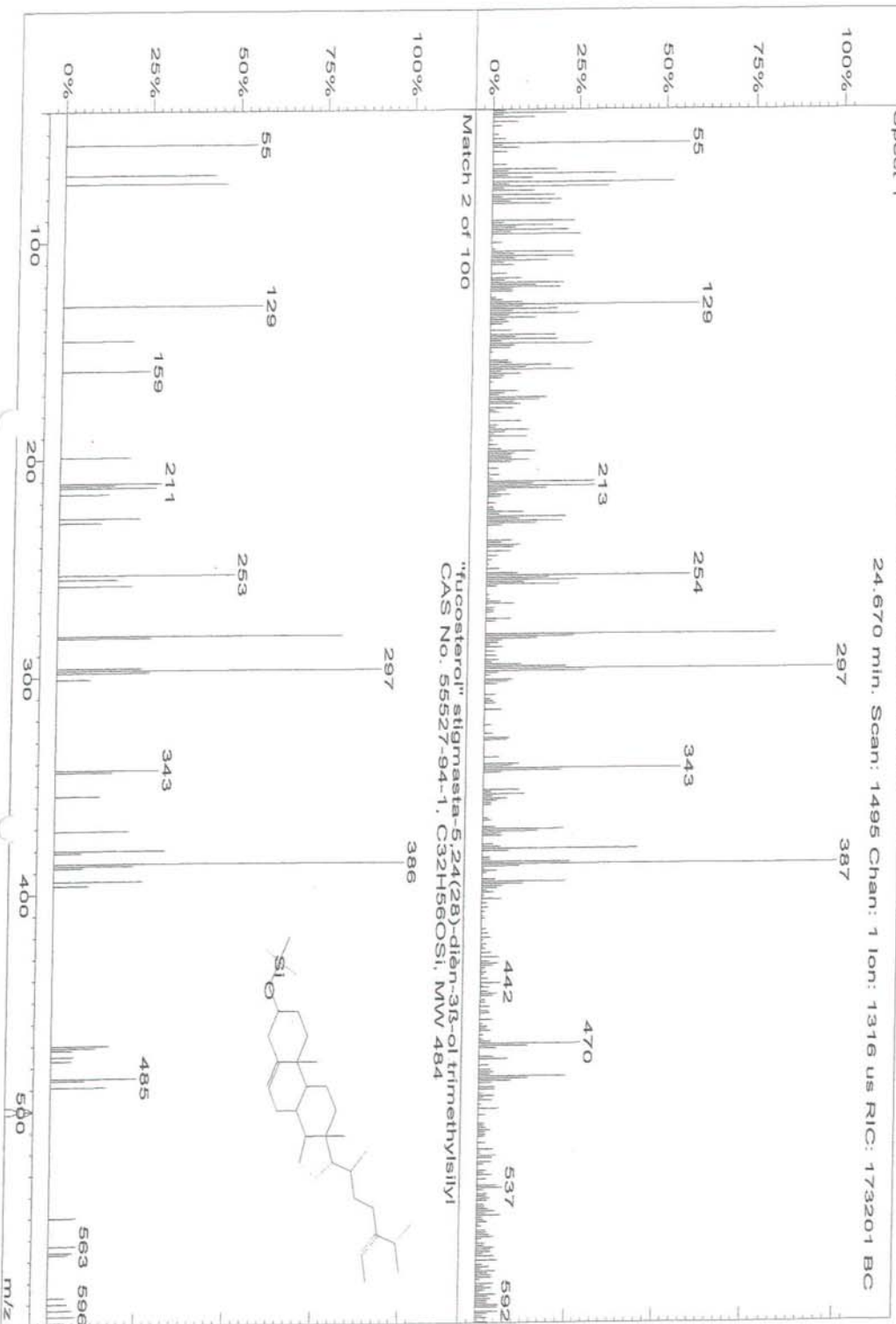
Scan 1467 from c:\... \sterols\station\Nov 2004\lot 035693 sll 2.s.ms  
Entry 158 from drt2.lbr Saturn Library

Purity = 679 Fit = 1000 Rfit = 679 Average = 786 Ion Range: 40 - 600



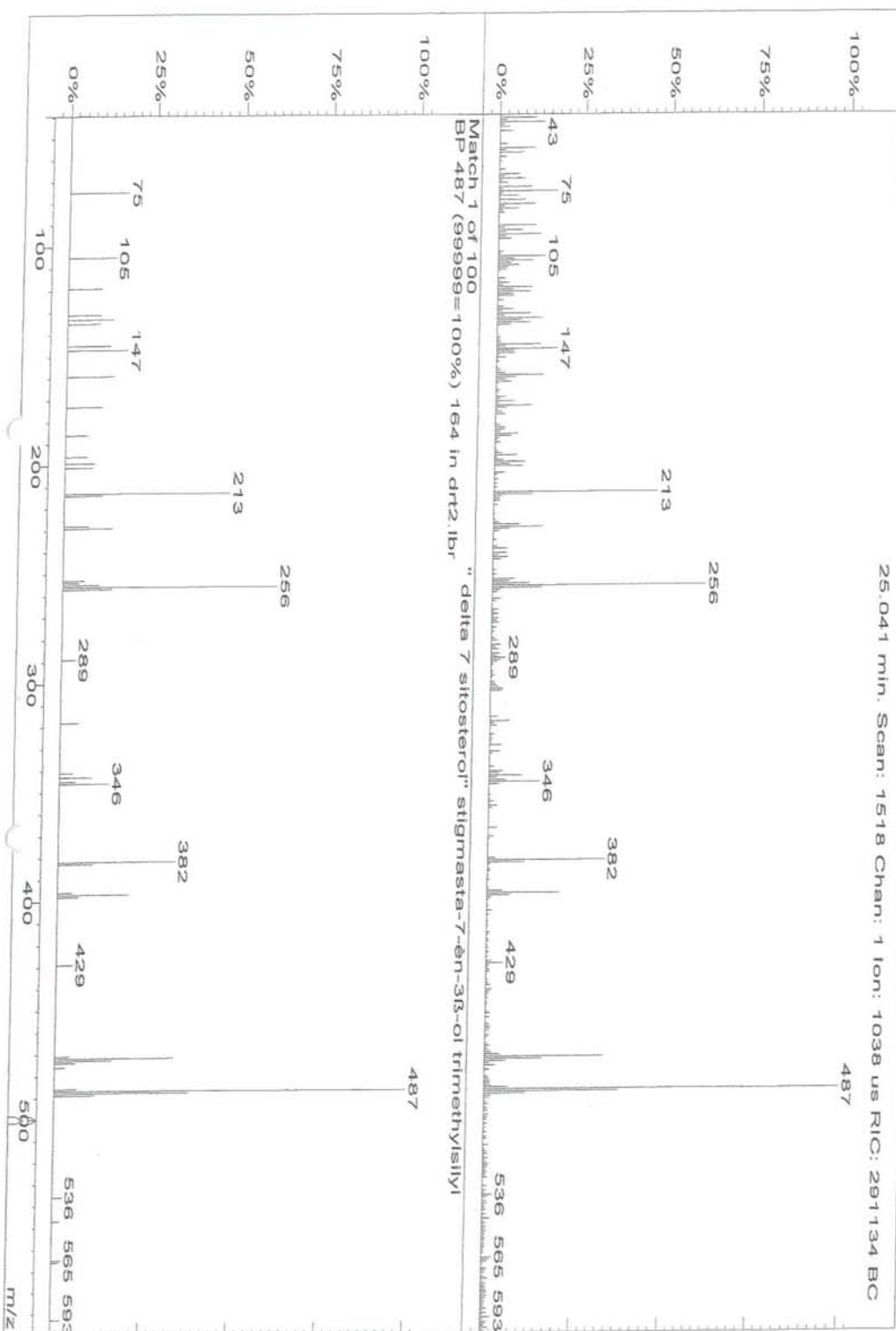
Scan 1495 from c:\... \sterols\station\Nov 2004\lot 035693 sil 2.sms  
Entry 168 from dft2.lbr Saturn Library

Purity = 402, Fit = 793, RFit = 460, Average = 552, Ion Range: 40 - 600



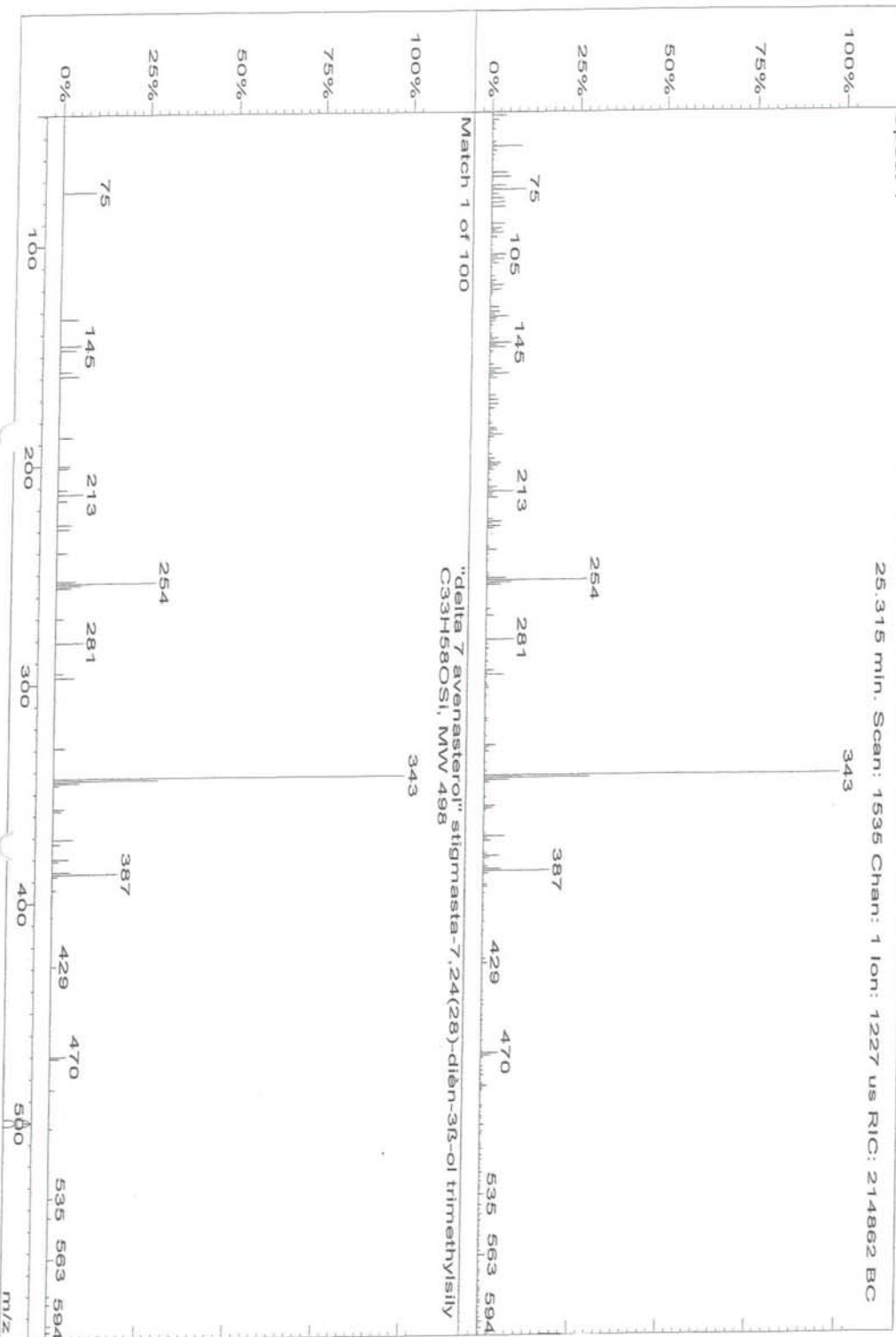
Scan 1518 from c:\... \sterols\station\ nov 2004\lot 0356993 sil 2.sims  
Entry 164 from dtt2.lbr Saturn Library

Purity = 727 Fit = 1000 RFit = 727 Average = 818 Ion Range: 40 - 600



Scan 1535 from c:\... \steroids\station\Nov 2004\lot 035693 s11 2.sms  
Entry 161 from drt2.lbr Saturn Library

Purity = 715 Fit = 1000 RFit = 715 Average = 810 Ion Range: 40 - 600

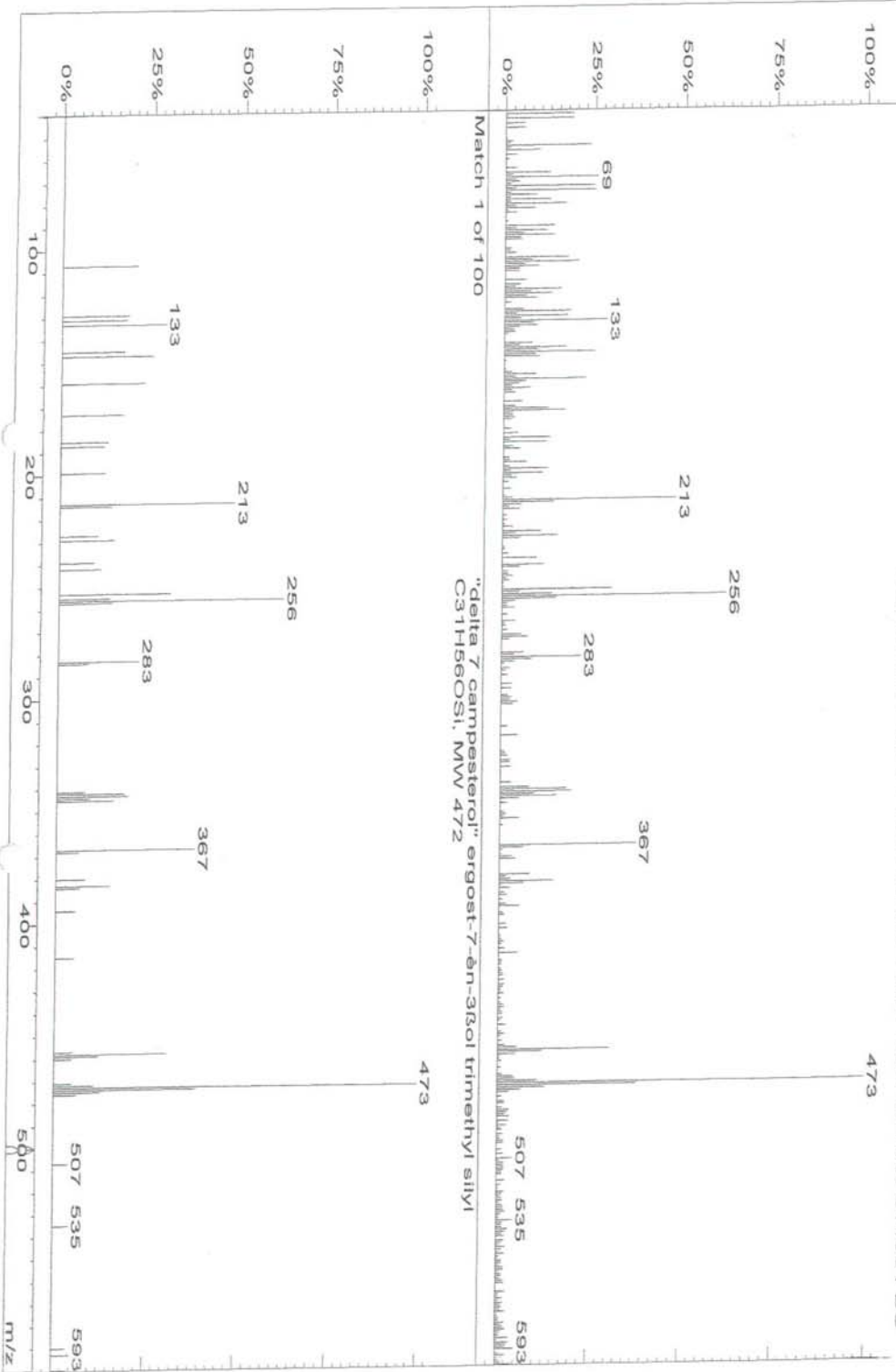


Scan 1428 from c:\... \sterols\station\nov 2004\lot 035693 sil 2.sms  
Entry 165 from drt2.lbr Saturn Library

Purity = 648 Fit = 1000 Rfit = 648 Average = 765 Ion Range: 40 - 600

Spect 1

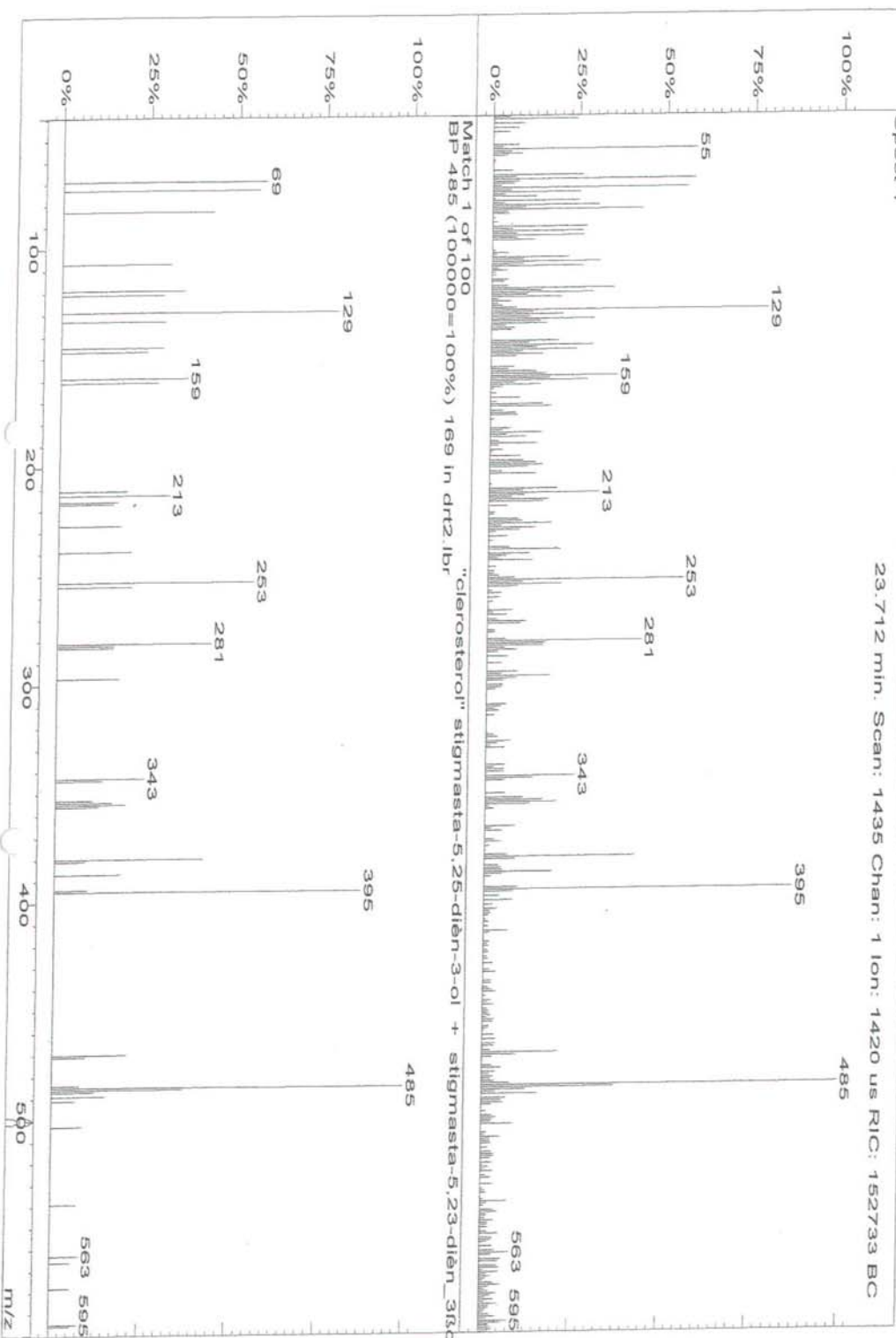
23.601 min. Scan: 1428 Chan: 1 Ion: 1205 us RIC: 214534 BC



Scan 1435 from c:\... \sterols\station\Nov 2004\lot 035693 sil 2.sms  
Entry 169 from drt2.lbr Saturn Library

Purity = 580 Fit = 1000 RFit = 580 Average = 720 Ion Range: 40 - 600

23.712 min. Scan: 1435 Chan: 1 Ion: 1420 us RIC: 152733 BC



Scan 1456 from c:\... \sterols\station\nov 2004\lot 035693 sil 2.sms  
Entry 163 from dft2.lbr Saturn Library

Purity = 696 Fit = 977 RFit = 707 Average = 794 Ion Range: 40 - 600  
Spect 1

24.048 min. Scan: 1456 Chan: 1 Ion: 17 us RIC: 37598443 BC

